

Twin Vee Catamarans, Inc.
Twin Vee Catamarans, Ft. Pierce

Facility ID No. 1110111
St. Lucie County

Title V Air Operation Permit Renewal

Permit No. 1110111-005-AV
Renewal of Title V Air Operation Permit No. 1110111-003-AV



Permitting Authority and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southeast District
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Title V Air Operation Permit Renewal

Permit No. 1110111-005-AV

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PERMITTEE:

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Ft. Pierce, Florida 34982

Permit No. 1110111-005-AV
Twin Vee Catamarans Ft. Pierce
Facility Id No. 1110111
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit for the above referenced facility. The existing plant is located in St. Lucie County at 3101 South Federal Highway, Fort Pierce, Florida. UTM Coordinates are: Zone 17, 565.87 km East and 3031.86 km North. Latitude is: 27° 24' 36" North; and, Longitude is: 80° 19' 37" West.

The Title V Air Operation Permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: DATE, 2013

Renewal Application Due Date: Exp. Date -225

Expiration Date: Eff. Date + 5 years-1day, 2018

Jill S. Creech, P.E.
Southeast District Director

Date

JSC/JKS/JL/lh/sdt

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The existing facility consists of Fiberglass boatbuilding, resin and gel coat application, miscellaneous solvents, related assembly and cleanup activities.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Fiberglass Boatbuilding Resin and Gelcoat Application Use of Miscellaneous Solvents Related Assembly Cleanup Activities

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Permit renewal application received March 1, 2013, this facility is a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No.
Federal Rule: 40 CFR 63, Subpart VVVV	001
Florida Administrative Code Rules: 62-4.040, 62-4.070, 62-204.800, 62-210.200, 62-210.370, 62-213.420, 62-213.430, 62-213.440, 62-213.900, 62-296.320.	

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “objectionable odor” means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. . [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Paving and maintenance of roads, parking areas and yards.
- b. Application of water or dust suppressants to control emission from such activities as demolition of buildings, grading roads, construction, and land clearing.
- c. Application of asphalt, water, or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- e. Landscaping or planting of vegetation.
- f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. Confining abrasive blasting where possible.
- h. Substitution of powdery materials with granular or pelletized materials, where possible.

[Rule 62-296.320(4)(c), F.A.C and 0850131-002-AC]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

SECTION II. FACILITY-WIDE CONDITIONS.

- FW7. Annual Emissions Fee Form and Fee.** The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]
- FW8. Annual Statement of Compliance.** The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]
- FW9. Prevention of Accidental Releases (Section 112(r) of CAA).** If and when the facility becomes subject to 112(r), the permittee shall:
- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
 - b. 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Fiberglass Boatbuilding Resin and Gelcoat Application Use of Miscellaneous Solvents Related Assembly/Cleanup Activities

{Permitting note(s): This emissions unit is regulated under 40 CFR 63 Subpart VVVV, “National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing”, adopted and incorporated by reference in Rule 62-204.800(10)(b)58, F.A.C..}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emission unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.2. HAP Emission: Emission of styrene shall not exceed 28.4 tons/year, and emission of total HAP (including styrene) shall not exceed 32.2 tons, in any consecutive 12-month period.
[Rule 62-4.070(3), F.A.C., and Application 1110111-005-AV]

A.3. HAP Content: The owner or operator shall determine the total and individual HAP contents of all materials, coatings, solvents, and shall monitor the usage of such materials.
[Rule 62-4.070(3), F.A.C.]

A.4. VOC Content: The owner or operator shall determine the VOC content of all materials, coatings, solvents, and shall monitor the usage of such materials.
[Rule 62-4.070(3), F.A.C., and Application 1110111-005-AV]

A.5. Material Usage: The owner or operator shall monitor the usage of resin, gel coat, catalyst, putty, and fillers.
[Rule 62-4.070(3), F.A.C.]

Test Methods and Procedures

A.6. The following emission factors shall be used in estimating compliance with the emission limits in Specific Conditions **A.2.** and **A.4.**

Product Type	Pollutant	Pollutant Concentration in Product	Emission Factor
Resin non-spray lay-up	Styrene	35% or less	0.11
		36% - 41%	0.11
		42% and above	0.12
Gel coat	Styrene	35% or less	0.48
		36% - 41%	0.51
		42% and above	0.54
	Methyl Methacrylate	All Concentrations	0.75
All Coatings	VOCs and other HAPs	All Concentrations	1.00

[Rules 62-4.070(3), and 62-210.200 (PTE), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

Recordkeeping and Reporting Requirements

- A.7. Records of Emission Required:** The permittee shall continuously keep and maintain a five-year ongoing compilation of the following records to demonstrate compliance with HAP emission limitations of Specific Condition **A.2** of this section. Records shall be completed no later than the 30th of the following month.
- Amounts in pounds of each material used each month that contains VOC and/or HAP.
 - Weight percentage of HAP in materials using the highest value listed on Manufacturer's Safety Data (MSD) Sheets. For non-HAP VOC the mid-point value may be used.
 - Amount in pounds of VOC/HAP emitted each month from each material used during the month, calculated by multiplying the amount of each material used by its VOC/HAP content and then by the appropriate emission factor.
 - Total amount in pounds of VOC/HAP emitted each month, calculated as the sum of VOC/HAP emitted from each material used during the month as determined above.
 - Rolling 12-month total amount in pounds and tons of VOC/Styrene/Total HAPs emitted in the most recent consecutive 12-month period, calculated as the sum of VOC/HAP emitted during month and the preceding eleven months.
 - Total VOC/HAP in tons per calendar year shall be determined and reported in the AOR (see facility-wide condition FW6).

[Rules 62-4.070(3), 62-213.440, F.A.C., and 1110089-004-AC]

- A.8. HAP Emission Limitation:** The permittee must limit organic HAP emissions from open molding operations to the limit specified by equation 1 of this section, based on a 12-month rolling average.

$$HAP\ Limit = [46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})] \quad (Eq. 1)$$

Where:

HAP Limit= total allowable organic HAP that can be emitted from the open molding operations, kilograms.

M_R = mass of production resin used in the past 12 months, in megagrams, excluding any materials exempt under paragraph (d) of 40CFR 63.5698, (see below).

M_{PG} =mass of pigmented gel coat used in the past 12 months, in megagrams, excluding any materials exempt under paragraph (d) of 40CFR 63.5698, (see below).

M_{CG} =mass of clear gel coat used in the past 12 months, in megagrams, excluding any materials exempt under paragraph (d) of 40CFR 63.5698, (see below).

M_{TR} =mass of tooling resin used in the past 12 months, in megagrams, excluding any materials exempt under paragraph (d) of 40CFR 63.5698, (see below).

M_{TG} =mass of tooling gel coat used in the past 12 months, in megagrams, excluding any materials exempt under paragraph (d) of 40CFR 63.5698, (see below).

40CFR 63.5698(d) The materials specified in paragraphs (d)(1) through (3) of this section are exempt from the open molding emission limit

- (1) Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 CFR subchapter Q or the construction of small passenger vessels regulated by 46 CFR subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. You must keep a record of the resins for which you are using this exemption.

- (2) Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at your

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

facility on a 12-month rolling-average basis. You must keep a record of the amount of gel coats used per month for which you are using this exemption and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.

- (3) Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at your facility on a 12-month rolling-average basis. You must keep a record of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used

[Rule 62-204.800(10)(b)58,F.A.C., and 40CFR 63.5698(b)]

Compliance Demonstration Using Emissions Averaging

- A.9.** Compliance using the emissions averaging option is demonstrated on a 12-month rolling-average basis and is determined at the end of every month (12 times per year). The first 12-month rolling-average period begins on the compliance date specified in § 63.5695.

At the end of the twelfth month after your compliance date and at the end of every subsequent month, use equation 1 of this section to demonstrate that the organic HAP emissions from those operations included in the average do not exceed the emission limit in § 63.5698 calculated for the same 12-month period. (Include terms in equation 1 of § 63.5698 and equation 1 of this section for only those operations and materials included in the average.)

$$HAP \text{ emissions} = \left[(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG}) \right] \quad (Eq. 1)$$

Where:

HAP emissions= Organic HAP emissions calculated using MACT model point values for each operation included in the average, kilograms.

PV_R = Weighted-average MACT model point value for production resin used in the past 12 months, kilograms per megagram.

M_R = Mass of production resin used in the past 12 months, megagrams.

PV_{PG} = Weighted-average MACT model point value for pigmented gel coat used in the past 12 months, kilograms per megagram.

M_{PG} = Mass of pigmented gel coat used in the past 12 months, megagrams.

PV_{CG} = Weighted-average MACT model point value for clear gel coat used in the past 12 months, kilograms per megagram.

M_{CG} = Mass of clear gel coat used in the past 12 months, megagrams.

PV_{TR} = Weighted-average MACT model point value for tooling resin used in the past 12 months, kilograms per megagram.

M_{TR} = Mass of tooling resin used in the past 12 months, megagrams.

PV_{TG} = Weighted-average MACT model point value for tooling gel coat used in the past 12 months, kilograms per megagram.

M_{TG} = Mass of tooling gel coat used in the past 12 months, megagrams.

- (c) At the end of every month, use equation 2 of this section to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the average.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 001

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)} \quad (Eq. 2)$$

Where:

PV_{OP} =weighted-average MACT model point value for each open molding operation (PV_R , PV_{PG} , PV_{CG} , PV_{TR} , and PV_{TG}) included in the average, kilograms of HAP per megagram of material applied.

M_i =mass of resin or gel coat i used within an operation in the past 12 months, megagrams.

n=number of different open molding resins and gel coats used within an operation in the past 12 months.

PV_i =the MACT model point value for resin or gel coat i used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

(d) You must use the equations in Table 3 to this subpart (40 CFR 63, Subpart VVVV) to calculate the MACT model point value (PV_i) for each resin and gel coat used in each operation in the past 12 months.

(e) If the organic HAP emissions, as calculated in paragraph (b) of this section, are less than the organic HAP limit calculated in § 63.5698(b) for the same 12-month period, then you are in compliance with the emission limit in § 63.5698 for those operations and materials included in the average.

[40 CFR 63.5710, Rule 62-204.800(10)(b)58, F.A.C.]

{Permitting Note: Within 60 days following the end of each 6-month calendar period (January - June and July - December), the permittee shall submit a semiannual compliance report due each year on March 1 for the preceding July - December and on September 1 for the preceding January - June. The compliance report must include the information specified in paragraphs (c)(1) through (7) of Section 63.5764 of the attached 40 CFR 63, Subpart VVVV }