**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

# DRAFT PERMITS

**PERMITTEE**

Jupiter Marine International, Inc.
1103 12th Avenue East
Palmetto, Florida 34221

Authorized Representative:
Mr. Carl Herndon, President

Air Permit Nos. 0810212-004-AO
0810212-005-AC
Permits Expire: xx/xx/2018 (AO)
12/31/2014 (AC)

Palmetto Plant
Minor Air Operation and Construction Permits
Operation Permit Renewal and AC Modification

These are the final air construction and operation permits, in one document. Operation Permit No. 0810212-004-AO is to renew the current operation permit. Construction Permit No. 0810212-005-AC modifies and replaces Air Construction Permit No. 0810212-002-AC. The work is conducted at the Jupiter Marine – Palmetto Plant (Standard Industrial Classification No. 3732). The facility is located in Manatee County at 1103 12th Avenue East in Palmetto, Florida. The UTM coordinates are Zone 17, 346.58 kilometers (km) East, and 3045.36 km North. As noted in the Final Determination provided with this final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements and Facility-wide Specific Conditions

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Due to the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution 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 conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida

*DRAFT*

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Kelley M. Boatwright Date
District Air Program Administrator
Southwest District

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on the date indicated below to the persons listed below.

Carl Herndon, President, Jupiter Marine, carl@jupitermarine.com

Veronica N. Sgro, P.E., Koogler and Associates, vsgro@kooglerassociates.com

Erin DiBacco, SWD Compliance Manager (erin.dibacco@dep.state.fl.us

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

*DRAFT*

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(Clerk) (Date)

## FACILITY AND PROJECT DESCRIPTION

### Existing Facility

The existing facility is a fiberglass boat manufacturing plant which consists of laminating, gelcoating, painting, and trimming operations. Ventilation is provided by four exhaust stacks, large garage doors and miscellaneous fans/vents throughout the facility.

The facility consists of fugitive emissions of particulate matter (PM), volatile organic compounds (VOC) and hazardous air pollutants (HAPs) from all building openings. To control emissions of PM, the exhaust stacks are equipped with fabric filters on the stack intake vents adjacent to the gelcoat area. HAPs, VOC and styrene emissions are controlled by material usage limitations and work practice requirements. Recordkeeping and reporting are used to document compliance with emission limitations. The existing facility consists of the following emissions unit (EU).

| **Facility ID No. 0810212** | |
|---|---|
| **EU No.** | **Emission Unit Description** |
| 001 | Boat Manufacturing Facility |

### Project Description and Affected Emission Unit

Air Construction Permit No. 0810212-005-AC modifies and replaces Air Construction Permit No. 0810212-002-AC by including only the installation of a paint spray booth. The facility did not expand the physical size or increase the production rate of the plant. With the installation of the paint spray booth emissions of VOC, HAPs or styrene did not meet or exceed the Title V permitting threshold. Therefore, the post expansion and Title V permitting requirements from Air Construction Permit No. 0810212-002-AC were removed. This project will modify the following emissions unit (EU).

| **Facility ID No. 0810212** | |
|---|---|
| **EU No.** | **Emission Unit Description** |
| 001 | Boat Manufacturing Facility |

***NOTE:*** *Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.*

## FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of 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 62-213, F.A.C.
- The facility is not a Prevention of Significant Deterioration (PSD) major stationary source of air pollution pursuant to Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for VOC, total HAP, and styrene emissions. The emission limitations in this permit will ensure that the facility's VOC, total HAP and styrene emissions will be below the threshold for a Title V source.

## PERMIT HISTORY/AFFECTED PERMITS

Operation Permit No. 0810212-004-AO replaces Operation Permit No. 0810212-003-AO and incorporates the terms and conditions of Construction Permit No. 0810212-005-AC. Construction Permit No. 0810212-005-AC modifies and replaces Construction Permit No. 0810212-002-AC.

## ADMINISTRATIVE REQUIREMENTS

**1.** Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District's Air Resource Management Section. The Southwest District's mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Air Resource Management Section
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-632-7600

All documents related to applications for permits shall be submitted to the above address.

**2.** Compliance Authority - The compliance authority for this project is the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance and Enforcement Section - Attention: AIR. The mailing address and phone number is:

Florida Department of Environmental Protection
Southwest District Office
Compliance and Enforcement Section – Attention: AIR
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-632-7600

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the above address.

**3.** 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; and

d. Appendix D. Common Testing Requirements.

**4.** Applicable Regulations, Forms and Application Procedures - Unless otherwise specified in this permit, the construction and 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, 62-213, 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.

**5.** 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.]

**6.** Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
[Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

**7.** Annual Operating Report - On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

**8.** Operation Permit Renewal Application - A completed application for renewal of the operation permit shall be submitted to the Permitting Authority no later than 60 days prior to the expiration date of the operation permit. To properly apply for an operation permit, the applicant shall submit the following:

a. The appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*.

b. The appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.

c. Copies of the VOC/HAP records for most recent three months specified in Specific Condition No. A.6.

[Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

## FACILITY-WIDE REQUIREMENTS

**9.** 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. An "Objectionable Odor" is defined as 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. Doors and windows shall be closed whenever feasible during production activities that use materials with VOC. If the Department receives a valid odor complaint, the Department reserves the right to require additional odor control measures/work practices be implemented.
[Rules 62-210.200 and 62-296.320(2), F.A.C.; Construction Permit No. 0810212-005-AC]

**10.** VOC/Organic Solvent Precautions – In addition to the requirements of Section 4. Appendix C, paragraph 5, the permittee shall comply with the following:

a. all resin activities shall be conducted inside the building;

b. all equipment, pipes, hoses, lids, fittings, etc., shall be operated/maintained in such a manner as to minimize leaks, fugitive emissions, and spills of solvent materials;

c. all solvent from solvent washings (equipment clean-up) shall be directed into containers that prevent evaporation into the atmosphere;

d. tightly cover or close all VOC and/or solvent containing vessels, drums, totes, etc., when they are

not in use;

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

f. used cleanup solvents shall be captured and stored in closed containers and recycled or disposed of as required by the appropriate waste disposal regulations.

[Rule 62-296.320(1), F.A.C.; Construction Permit No. 0810212-005-AC]

## A. EU No. 001 – Fiberglass Boat Manufacturing

This section of the permit addresses the following emissions unit.

| EU No. | Emission Unit Description |
|---|---|
| 001 | Fiberglass Boat Manufacturing - This boat manufacturing facility uses open and closed molding processes. Closed molding resin infusion processes are used for hull and other major parts (e.g., liners) laminations. Separate molds will be used for the boat hull, deck, and other miscellaneous small fiber reinforced plastic parts.<br><br>Gelcoat containing styrene is applied to a waxed mold surface. After the gelcoat hardens, chopped strand mat is applied by hand in layers with styrene containing resin (with internally mixed catalyst).<br><br>Each layer of the fiberglass substrate is saturated with the thermosetting liquid polyester resin mixed with a catalyst and is applied until the desired thickness is achieved. The catalyzed resin will form a rigid shape.<br><br>Painting operations take place in a 24'4" by 56' Global Finishing Solutions dry filter crossflow paint spray booth (Model #OWCDG-2016-PTD-54-OUTDOOR). Particulate matter emissions are controlled by 20" by 20" exhaust filters.<br><br>The preparation for assembly includes trimming (to eliminate sharp fibers), trim flange, and the application of an interior grade gelcoat (for certain visible areas). Foam is used where necessary for flotation and stability. The installation of electrical and mechanical systems, engine, hardware, upholstery, carpet, etc., is then performed. Various adhesives, waxes, oils, paints and cleaners are used in the assembly area. Molds are cleaned and repaired as necessary for reuse.<br><br>An integrated woodshop utilizes routers, saws, drills and other industrial grade woodworking tools to make all necessary reinforcements and cabinetry. Sawdust generated by the woodworking equipment is collected daily for disposal.<br><br>The above processes result in fugitive emissions of particulate matter, volatile organic compounds and hazardous air pollutants from all building openings. There are no specific designated emission points. |

### PERFORMANCE RESTRICTIONS

**A.1.** Hours of Operation - This emissions unit is allowed to operate continuously (8,760 hours/year). [Rules 62-4.070(3) and 62-210.200 ("Potential to Emit"), F.A.C.]

**A.2.** Control of Unconfined Particulate Matter - Unconfined particulate emissions from trimming and other similar activities such as cutting, shaping, grinding, and sanding operations performed by hand tools and tabletop equipment shall, in general, be controlled by normal "good housekeeping" procedures. As an indicator that the precautions to control unconfined particulate emissions are adequate, visible emissions from the facility should not exceed 5% opacity. If this value is exceeded it will not be considered a violation in and of itself, but may be a violation of the precautions stated above and serve as justification to the Department to require additional controls or work practices.
[Rule 62-296.320(4)(c), F.A.C.; Construction Permit No. 0810212-005-AC]

**A.3.** Circumvention of Control Equipment - The permittee shall not circumvent the air pollution control equipment (paint spray booth filters) or allow the emission of air pollutants without this equipment

operating properly. Paint spray booth filters must be in place during all painting operations inside the paint spray booth. In order to provide reasonable assurance that the filters are properly installed and maintained, visible emissions from the paint spray booth exhaust should not exceed 5% opacity. Exceedance of the 5% opacity shall not be considered a violation in and of itself, but an indication that additional maintenance, control precautions and/or practices may be necessary.
[Rules 62-4.070(3) and Rule 62-210.650, F.A.C.]

**EMISSIONS STANDARDS**

**A.4.** Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) Emissions Limitations - The VOC and HAP emissions from this emissions unit shall not exceed the following:

| Pollutant | Maximum Tons per any Consecutive 12-Month Period |
|---|---|
| Styrene | 9.5 |
| Total HAPs | 24.0 |
| VOC (including Styrene) | 24.9 |

*(Permitting Notes:*

*Based on these requested allowable emissions, the Generic and Temporary Exemptions in Rule 62-210.300(3)(b), F.A.C., may not be available. This includes all equipment not addressed in this permit such as space heaters, gas powered air compressors, etc.*

*The styrene and total HAP emission limits of Specific Condition No. A.5. are very close to the Title V thresholds of 10 tons/year and 25 tons/year, respectively. Please be aware that if either of the Title V thresholds are exceeded, the facility will become a Title V and will be required to obtain a Title V permit.)*

[62-210.200 ("Potential to Emit"), F.A.C.; Construction Permit No. 0810212-005-AC]

**A.5.** Emission Calculation Requirements – Emissions of styrene, Methyl Methacrylate (MMA), and other VOC shall be determined as follows until notified by the Department. Note, styrene and MMA are each considered a VOC and a HAP.

a. 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 (pound (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:

**A. EU No. 001 – Fiberglass Boat Manufacturing**

| % Monomer | Resin[2] Hand (Non-Spray) Layup | Resin[2] Mechanical Atomized Spray Layup | Resin Mechanical Nonatomized[1] Spray Layup | Gel Coat[2] Mechanical Atomized Spray Layup | Gelcoat Mechanical Nonatomized[1] 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 |
| **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 |

1) Nonatomized is defined as *"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."*

2) 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. 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.

b. MMA emissions shall be determined by the following equations:

$$\text{Emissions(tons)} = \text{Mmma} \times \text{Cmma} \times 0.75$$

where:

Mmma = amount of MMA containing material used (in tons)

Cmma = MMA content (percent/100)

c. Other VOC emissions shall be determined by the following equation for each material. These values shall be used in conjunction with the above styrene and MMA emissions to determine total VOC:

$$\text{Emissions (tons)} = M_{voc} \text{ x } 1.00^* \text{ x } C_{voc}$$

where:

$M_{voc}$ = amount of VOC containing material used (in tons)

$C_{voc}$ = VOC content (percent/100)

The following "Emission Factors" may be used for the chemicals listed below.

| Chemical | Emission Factor |
|---|---|
| Di-isocyanates, when used as a catalyst for foam production | 0.00021 |
| Dimethyl Phthalate, when used with resins/gelcoats | 0.001 |
| Methyl Ethyl Ketone Peroxide, when used with resins/gelcoats | 0.001 |

[Rules 62-212.300 and 62-210.200 “(Potential to Emit”), F.A.C.; Construction Permit No. 0810212-005-AC]

## RECORD KEEPING REQUIREMENTS

**A.6.** VOC and HAP Recordkeeping Requirements - A monthly log based on the tracking of all styrene, HAP, and/or VOC containing material used in association with boat manufacturing activities shall be kept for this facility to document compliance with the emission limitations of Specific Condition No. A.5. Usage of materials may be based upon an inventory at the beginning of the month, receipt of material during the month, and inventory of the materials at the end of the month. Additionally, usage of materials may be based upon purchases, provided no materials are used which are not purchased. At a minimum, the logs shall contain the following:

a. facility name, facility ID No., emission unit ID No., and description (i.e., Jupiter Marine International, Inc., 0810212, EU No. 001, fiberglass boat manufacturing);

b. monthly quantity and identity of each resin, coating, solvent, chemical, etc. used at the facility that contains styrene, HAPs, and/or VOC, per application method;

c. the appropriate emission factor(s), per application method(s), used to determine styrene emissions;

d. VOC and HAP content (percentage by weight) for each material identified in b., above;

e. monthly total of styrene emissions (tons/month);

f. monthly total of HAP emissions (tons/month);

g. monthly total of VOC (including styrene) emissions (tons/month);

h. most recent consecutive 12-month total tons of styrene emissions (tons/consecutive 12-month period) based on d. above;

i. most recent consecutive 12-month total tons of HAP emissions (tons/consecutive 12-month period) based on e. above; and

j. most recent consecutive 12-month total tons of VOC (including styrene) emissions for the period (tons/consecutive 12-month period) based on f. above.

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 percent of solids in the recovered materials shall be documented and accounted for in the emission calculations, if applicable. Supporting documentation such as styrene/VOC content, styrene/VOC emission factors used, Material Safety Data Sheets (MSDS), purchase orders, "As Supplied" data sheets, etc. shall be kept for each chemical and associated products, which include sufficient information to determine emissions.

The monthly logs shall be completed by the end of the 15$^{th}$ day of the following month. The records shall be maintained in a form suitable for inspection by the Department upon request and shall be retained for at least three years.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 0810212-005-AC]