TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Sea Ray Boats, Inc.
350 Sea Ray Drive
Merritt Island, Florida 32953

Cape Canaveral Plant
Facility ID No. 0090238

PROJECT

Project No. 0090238-001-AC
Application for Minor Source Air Construction Permit
Woodshop, Coating and Curing Operation

COUNTY

Brevard County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

December 5, 2012

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Chapters 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations in Rule 62-204.800, F.A.C.

Glossary of Common Terms

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

Facility Description and Location

Sea Ray conducts operations in three facilities on Merritt Island: the Sykes Creek facility, a Project Development and Engineering (PD&E) facility, and the Cape Canaveral facility. The Cape Canaveral Plant is approximately 1.2 miles away from the Sykes Creek and PD&E facilities, which are owned by Sea Ray. Sea Ray used to own the Cape Canaveral facility, but has since sold the property and leases two warehouses back from the buyer. Sea Ray once owned a fourth facility, the Merritt Island facility, contiguously located to Sykes Creek and PD&E. Sea Ray sold Merritt Island facility property in 2011 and the property is no longer being used to manufacture boats.

In 1999, Sea Ray developed the Cape Canaveral facility property with the intention of manufacturing boats. Sea Ray applied for a permit for the Cape Canaveral facility and the Cape Canaveral facility was deemed to be a single facility for PSD purposes with the Sykes Creek, Merritt Island and PD&E facilities. The Department found the facilities were under common control, shared the same SIC code and were adjacent. As provided in their application, Sea Ray did not complete construction under the permit and did not conduct boat manufacturing operations at the Cape Canaveral facility.

In 2004, Sea Ray applied for and received a permit to conduct boat repair operations at the Cape Canaveral facility, which was subject to NESHAP Subpart VVVV. Sea Ray repaired boats at the Cape Canaveral facility until 2009. In 2006, Sea Ray applied for and received a permit to conduct wood coating operations at the Cape Canaveral facility. Wood coating operations are conducted to this day.

The Cape Canaveral Plant is an existing facility with a woodshop and ultraviolet wood coating and curing operations contained in Buildings 102 and 103. These activities are categorized under Standard Industrial Classification Nos. 2499 and 2599. The existing facility is located in Brevard County at 1200 Sea Ray Drive in Merritt Island, Florida. The UTM coordinates are Zone 17, 531.83 km East and 3142.3 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- For purposes of NESHAP Subpart VVVV, this facility is a major source of hazardous air pollutants (HAP) based on EPA's "Once In Always In" policy and will remain as such. However, upon issuance of this final

permit, the facility will become a synthetic minor HAP source for potentially applicable NESHAP categories in the future.

- Based on EPA's "Once In Always In" policy, the facility is a major HAP source for purposes of NESHAP Subpart VVVV. As such, a Title V air operation permit is required in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

On October 15, 2012, the Department received a complete application for an air construction permit for the woodshop, wood coating, and curing operations at the Cape Canaveral Plant. These operations are contained in buildings 102 and 103 on the leased property. Specifically, the current operations consist of: woodworking shop with a Joe Hill Custom dust collector system equipped with a Ligna-Con Dust Collection Unit Model 14.5-500-12 filter or equivalent dust collector; a manual spray booth; an automated ultra-violet top coat booth; a hot water package boiler (Copper-Fin II, Model CHN126) fired with natural gas at a rate of 1.26 MMBtu/hour; a roll coating/curing line; and stacking and laminar air ovens. The facility emits particulate matter from the woodshop and volatile organic compounds (VOC) including regulated hazardous air pollutants (HAP) from the coating and curing operation.

Based on a recent market survey and industry feedback, the applicant proposes to expand operations to include coated wood products marketed to other end users such as surface coating for wood furniture, wood building products, and other miscellaneous wood products. Specifically, the application requests authorization of the Cape Canaveral Plant as a separate facility from the Merritt Island Complex's fiberglass boat building facility. The application also requests specific emissions limits to establish the Cape Canaveral Plant as a synthetic minor source of VOC and HAP emissions.

Based on EPA's "Once In Always In" policy, this facility is a major HAP source and will remain as such for the purposes of NESHAP Subpart VVVV in 40 CFR Part 63. However, based on the application, none of the other potentially applicable NESHAP categories for major sources apply because the Cape Canaveral Plant has not conducted the type of work regulated by the provisions and, upon issuance of this permit, will become an area source of HAP for any proposed new activities in the future. In addition, the application states that none of the potentially applicable NESHAP categories for area sources are applicable because the Cape Canaveral Plant has not conducted the type of work regulated by the provisions. Appropriate air permits must be obtained prior to conducting any work that will be regulated by a newly applicable NESHAP. See discussion in Section 3 of this report.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or

- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the designated 28 PSD-major facility categories. This facility does not belong to any of the PSD categories.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); VOC; lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission equals or exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Pollutant	Actual Emissions (TPY)	Major Source Threshold (TPY)	Subject to PSD?
$PM/PM_{10}/PM_{2.5}$	18	250	No
VOC	30	250	No

As shown in the above table, total potential emissions are well below the threshold for a PSD major stationary source.

3. DEPARTMENT REVIEW

The applicant identifies the Cape Canaveral coating operation as a separate facility from the Sykes Creek and PD&E facilities (collectively "Merritt Island Complex"). The Florida Administrative Code defines "facility" as "… (a)ll of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control)."[1] The Cape Canaveral facility is not contiguously located to the Merritt Island Complex, nor has there has been an argument refuting that all three Sea Ray facilities are under common control. Thus, the Department's decision will be based on the adjacency of the facilities.

Adjacency is defined as "close to; lying near." Three factors indicate the Cape Canaveral facility is not adjacent to Sykes Creek. First, the Cape Canaveral facility is approximately 1.2 miles away from the Merritt Island Complex. Such a distance is not in itself dispositive of whether the facilities are adjacent, but is indicative of a considerable distance between the facilities. The same distance between facilities existed in 1999 when the Department initially determined the facilities to be a single source; however, the existing Merritt Island Complex and future Cape Canaveral facilities were also similarly-sized emissions sources. Also, the two Sea Ray-owned properties have since been sold. In its initial determination, the Department noted that the combined frontage of the facilities along Sea Ray drive was on the order of the distance between them. This is no longer the case.

[1] Rule 62-210.200 (Definitions), F.A.C.

Second, the two facilities perform substantially different work. The Merritt Island Complex manufactures boats, while Cape Canaveral is a wood coating operation. If these facilities were under separate ownership, it is likely that one facility would not be aware of the existence of the other.

Third, the two facilities have vastly different emissions and relative impacts. Emissions from the Merritt Island Complex are mostly styrene, while Cape Canaveral has small emissions of miscellaneous VOC. The potential VOC emissions from the Merritt Island Complex are 326.0 tons/year while the Cape Canaveral facility will be restricted to 30.0 tons/year of VOC and 9.0 tons/year of HAPs. Two facilities conducting similar work, with similar emissions, within a mile-and-a-half of each other, more easily lends itself to a single facility finding. That is not the case in the instant matter.

It should also be noted that the Cape Canaveral facility was originally permitted in 1999 as a boat manufacturing operation. However, boat manufacturing operations never occurred at the Cape Canaveral facility while under Sea Ray ownership. Sea Ray did not avail itself of the permissions allowed in the 1999 permit which found the Cape Canaveral facility to be a single facility with the Merritt Island Complex (i.e., an expansion of the existing Merritt Island Complex). However, due to subsequent permits and operations, the Cape Canaveral facility will remain subject to NESHAP Subpart VVVV pursuant to EPA's "Once In, Always In" policy. As such, the facility requests a Title V air operation permit. Because the Cape Canaveral facility is not currently performing boat manufacturing related activities covered under the provisions of 40 CFR Part 63 Subpart VVVV, there are no applicable requirements at this time including but not limited to the monitoring, recordkeeping, work practices, HAP-content limits of boat building materials, written implementation plan and reporting requirements.

Therefore, based on the current facts and the specific requests in this application, the Department determines that the Cape Canaveral coating operation is a separate facility. This determination is consistent with Florida regulations and:

- Restricts emissions at the Cape Canaveral Plant below the major source thresholds for HAPs and VOC;
- Is consistent with EPA's "Once In, Always In" policy with regard to NESHAP Subpart VVVV; and
- Requires a Title V air operation permit for the Cape Canaveral coating operation.

Brief Discussion of Emissions

Emissions from the Cape Canaveral facility consist of particulate matter from woodshop operations, VOC and HAP from the UV coating and curing operations, and products of combustion from the firing of natural gas in the boiler. Particulate matter emissions from the woodshop are estimated at 18 tons per year. VOC and HAPs emissions from the coating and curing operations will be limited to 30 and 9 tons per year, respectively, based on the content of all coatings, adhesives, and solvents used. The emissions from the small gas-fired package boiler are estimated by the Department to be 0.50 tons/year NO_X, 0.42 tons/year CO, 0.04 tons/year PM, 0.003 tons/year SO_2 and 0.028 tons/year VOC.

State Requirements

There are currently no state unit specific requirements applicable to the woodshop or coating and curing operations. The small gas-fired package boiler is exempt from permitting under the categorical and conditional exemptions because it meets all of the requirements of Rule 62-210.300(3)(a)33., F.A.C. for fossil fuel steam generators, hot water generators, and other external combustion heating units with a heat input capacity less than 10 million Btu per hour. The woodshop and coating and curing operations are subject to Rule 62-210.300, F.A.C., Permits Required.

The woodshop will be required to install and operate a dust collection and control system to achieve a design of 99.9% removal efficiency using a reverse air filter system using felt media based on the vendor specifications. Compliance with this design specification will be demonstrated by maintaining records of the performance specification sheets from the equipment vendor or other certification by an independent environmental consultant based on evaluation of the dust collector and filter. The operator is required to periodically inspect the dust

collector to ensure proper operation and control of the equipment. If there are visible emissions from the dust collector, the operator will investigate and take corrective action. It is not necessarily a violation to have visible emissions from the dust collector, but continued failure to take corrective action could be considered poor operation and circumvention of a control device. No initial or periodic visible emissions compliance tests (EPA Method 9) are required.

HAP and VOC emissions from the coating and curing operations will be limited to 9.0 and 30.0 tons during any consecutive 12 months, respectively. Compliance will be determined on a monthly basis from records of the monthly material use (e.g., coatings, adhesives, solvents, etc.) and records of the HAP and VOC material contents.

Federal NSPS Provisions

There are currently no federal NSPS provisions applicable to operations at the Cape Canaveral Plant.

Federal NESHAP Provisions

The following paragraphs of NESHAP Subpart VVVV and NESHAP Subpart A illustrate that the current wood coating activities at the facility are not covered by the boat manufacturing NESHAP.

40 CFR Part 63, Subpart VVVV - National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing

§ 63.5680 What is the purpose of this subpart?

(a) This subpart establishes national emission standards for hazardous air pollutants (HAP) for new and existing boat manufacturing facilities with resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.5689 What parts of my facility are covered by this subpart?

The affected source (the portion of your boat manufacturing facility covered by this subpart) is the combination of all of the boat manufacturing operations listed in paragraphs (a) through (f) of this section.

(a) Open molding resin and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin).

(b) Closed molding resin operations.

(c) Resin and gel coat mixing operations.

(d) Resin and gel coat application equipment cleaning operations.

(e) Carpet and fabric adhesive operations.

(f) Aluminum hull and deck coating operations, including solvent wipedown operations and paint spray gun cleaning operations, on aluminum recreational boats.

{Permitting Note: Wood coating is not identified as an operation regulated by NESHAP Subpart VVVV. Adhesives used in carpet and fabric operations are covered.}

§ 63.5683 Does this subpart apply to me?

(a) This subpart applies to you if you meet both of the criteria listed in paragraphs (a)(1) and (2) of this section.

(1) You are the owner or operator of a boat manufacturing facility that builds fiberglass boats or aluminum recreational boats.

(2) Your boat manufacturing facility is a major source of HAP either in and of itself, or because it is collocated with other sources of HAP, such that all sources combined constitute a major source.

(b) A boat manufacturing facility is a facility that manufactures hulls or decks of boats from fiberglass or aluminum, or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers is not considered a boat manufacturing facility for the purpose of this subpart.

(c) A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP.

(d) This subpart does not apply to aluminum coating operations on aluminum boats intended for commercial or military (nonrecreational) use, antifoulant coatings, assembly adhesives, fiberglass hull and deck coatings, research and development activities, mold sealing and release agents, mold stripping and cleaning solvents, *and wood coatings as defined in §63.5779*. This subpart does not apply to materials contained in handheld aerosol cans.

§ 63.5779 What definitions apply to this subpart?

Assembly adhesive means any chemical material used in the joining of one fiberglass, metal, foam, or wood parts to another to form a temporary or permanently bonded assembly. Assembly adhesives include, but are not limited to, methacrylate adhesives and putties made from polyester or vinylester resin mixed with inert fillers or fibers.

Carpet and fabric adhesive means any chemical material that permanently attaches carpet, fabric, or upholstery to any surface of a boat.

Wood coatings means coatings applied to wooden parts and surfaces of boats, such as paneling, cabinets, railings, and trim. Wood coatings include, but are not limited to, primers, stains, sealers, varnishes, and enamels. Polyester and vinylester resins or gel coats applied to wooden parts to encapsulate them or bond them to other parts are not wood coatings.

NESHAP Subpart A, General Provisions

§ 63.1 Applicability.

(c) *Applicability of this part after a relevant standard has been set under this part.*

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

Other Federal NESHAP Provisions

The application identified the following *potentially applicable* major source and area source NESHAP categories.

<u>Major Source NESHAP</u>

- Surface coating for shipbuilding and ship repair (NESHAP Subpart II);
- Surface coating for wood furniture (NESHAP Subpart JJ)
- Plywood and composite wood products (NESHAP Subpart DDDD)
- Surface coating for automobiles and light-duty trucks (NESHAP Subpart IIII)
- Surface coating for metal parts and products (NESHAP Subpart MMMM)
- Surface coating for plastic parts and products (NESHAP Subpart PPPP)
- Surface coating for wood building products (NESHAP Subpart QQQQ)

- Surface coating for metal furniture (NESHAP Subpart RRRR)
- Miscellaneous coating manufacture (NESHAP Subpart HHHHH)

The applicant concluded that none of these major source NESHAP categories are applicable because the Cape Canaveral Plant has not conducted the type of work regulated by the provisions and, upon issuance of this permit, will be considered an area source of HAP for any proposed new activities in the future.

Area Source NESHAP

- Paint stripping and miscellaneous surface coating (potential NESAHP Subpart HHHHHH)
- Wood preserving area sources (potential NESHAP Subpart QQQQQQ)
- Chemical manufacturing area sources (potential NESHAP Subpart VVVVVV)
- Chemical preparations industry (potential NESHAP Subpart BBBBBBB)
- Paints and allied products manufacturing (potential NESHAP Subpart CCCCCCC)

The applicant concluded that none of these area source NESHAP categories are applicable because the Cape Canaveral Plant has not conducted the type of work regulated by the provisions. The applicant must obtain the appropriate air permits prior conducting any work that will be regulated under an area source NESHAP category.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Edward Svec is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Office of Permitting and Compliance at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.