Florida Department of

Memorandum Environmental Protection

TO: J. Charles Harp

THROUGH: Armando I. Sarasua, P.E.

FROM: Angelia Jackson

DATE: April 9, 2013

SUBJECT: Evaluation Summary for Fabbro Marine Group 1130163-005-AV, Santa Rosa County

We recommend issuing a permit renewal Title V Operation Permit to Fabbro Marine Group for their Santa Rosa boat manufacturing facility. This permit follows permit 1130163-004-AV, effective October 7, 2008.

Process Description:
This facility consists of fiberglass boat manufacturing and associated activities. Boat-building activities are conducted inside two joined building and consist of a fiberglass lay-up area and rigging area.

The manufacturing process starts in the lay-up area with the application of a gel coat layer to the mold, and is followed by building up styrene based resins and chopped glass fiber and fiberglass mats to the required thickness for the particular structure (hull, liner, etc). After curing, the parts are removed from the molds, trimmed and finished.

The fiberglass lay-up area includes the lamination area where the hulls and decks are fabricated and the gel coat spray room where gel coat is applied to the hulls and decks. The equipment used to apply resin and gel coat is cleaned using acetone in both the lamination and gel coat areas. The acetone is filtered on site and reused. Ventilation is provided by one exhaust fan/stack in the gel coat area and there are seven exhaust fan/stacks in the lamination and machining areas. Styrene (which is the major HAP pollutant emitted) from the resin and gel coat application along with other VOCs, are emitted uncontrolled. The majority of the VOC emissions are expected from the lay-up area stacks and gel coat spray booth ventilating system stack. PM from overspray is controlled by filters on the stack intakes.

Boats are moved from the lay-up area to the rigging area for final assembly and are outfitted with hardware controls and motors as required by clients. Some minor touch-up fiberglass repair may be done in the rigging area as needed. Carpet and adhesive operations and aluminum recreational boat surface coating operations are not performed at this facility.

Cutting, shaping and sanding of the fiberglass hulls, decks and parts are done in a sanding booth in the rigging area, which is separated with a canvas entrance screen. Fugitive particulate emissions from these operations, primarily polystyrene and glass fiber dust are controlled by an exhaust fan and box filter. Molds and foam structural members are made in the woodworking shop.

Pollution Control Equipment:
All building exhaust fans are equipped with a fabric filter designed to catch paint, and fiberglass dust. PM from overspray is controlled by filters on the stack intakes. These filters are inspected on a daily basis and changed as required. Logs of all filter changes are maintained at the facility.

Environmental Impact:

Airborne Contaminant Emitted	FAC Rule	Estimated Emissions		Allowable Emissions	
		lbs/hr	T/yr	lb/hr	T/yr
*VOC	N/A	N/A	20	N/A	N/A
HAPs (total)	40 CFR 63 Subpart VVVV	N/A	20	N/A	N/A
HAPs(styrene)	40 CFR 63 Subpart VVVV	N/A	20	N/A	N/A
Objectionable Odors	62-296.320(2)	N/A	N/A	None allowed off plant property	
VE	N/A	N/A	N/A	Not more than 5% opacity	

Applicable Rules & Regulations:
The facility is subject to 40 CFR 63, Subpart VVVV, National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing.

Compliance Monitoring:
Prior to renewal VE testing for the gelcoat spray booth and lay-up area stacks (worst-case). Compliance with the emission limits included in Subpart VVVV by averaging emissions with the applicable MACT model point value equations and appropriate record keeping.

During this renewal the VE testing frequency is removed. The previous 5% visible emissions limit was changed in this permit to 20% per the general facility-wide VE standard because there was no rule-based emissions-unit specific requirement. Previous VE test results from 1999 – 2012 revealed opacity readings of 0.0 %

Compliance History:
2012-2008 Facility inspections noted the facility "In-Compliance".

Fee Summary:
No processing fee, existing Title V facility.
The construction permit was a AC1E for sources 5 T/yr but less than 25 T/yr fee = $1,000.00

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