Title V Air Operation Permit Renewal
Permit No. 1030223-012-AV

APPLICANT

The applicant for this project is Catalina Yachts, Morgan Division. The applicant's responsible official and mailing address are: Michael R. Quinn, Plant Manager.

FACILITY DESCRIPTION

The facility consists of a fiberglass boat manufacturing facility subject to the requirements of 40 CFR 63, Subpart VVVV-National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing. The facility is located at 7200 Bryan Dairy Road, Largo, FL 33777.

The facility consists of seven main buildings which include the Tooling Building, the Glass Building (Fiberglass Lamination Building), the Grinding Building, the Intermediate Assembly Building, the Final Assembly Building, the Varnishing Building, and the Storage Building for old and/or obsolete parts and other laminated components. The activities conducted in each of the six buildings are described below:

1) Tooling Building

   Molds for fiberglass reinforced boat and other related components are usually constructed in the tooling building. Once the molds have been completed, they are transferred to the Glass Building (Fiberglass Lamination Building). Approximately 5% of the fiberglass resin used at the facility is utilized in the tooling building. The tooling building is equipped with four exhaust fans.

   Note: Catalina Yachts uses resin closed molding (RTM) techniques for some parts fabrication conducted in the tooling building. The technique is true closed molding and there is no exposure of resin to the air from the mold at any time. Emissions from the closed molding activities are considered insignificant and are included on the insignificant list.

2) Glass Building (Fiberglass Lamination Building)

   In this building, a wax or other release agent is applied to the surface of the molds and the molds are then sprayed with a (typically pigmented) styrene based gelcoat. The mold and gelcoat surfaces must be kept extremely smooth and clean to avoid cosmetic flaws in the exterior surface of the boat. When the gelcoat has sufficiently solidified, fiberglass strands, chopped and mixed with styrene based resin, are applied to the mold using non atomized spray applicators. A portion of the glass material, typically in the form of a mat or cloth, may be "wet out" using the same non atomized resin application (without the chop) and placed in the mold by hand. Approximately 90% of the fiberglass resin used at the facility is utilized in the glass building. The glass building is equipped with 22 exhaust fans.

3) Grinding Building

   This is a three-sided (no east wall) building where the hardened fiberglass hull and deck parts are transferred to after curing and removal from their molds. The excess material ("flashing") is trimmed from the part, typically with a hand held air driven cut off tool. Imperfections in the deck and hull surfaces are removed by grinding the surface and reapplying gelcoat and/or resin. The north wall of the grinding building has a 60" exhaust fan which is equipped with a filter to control particulate matter generated from the activities occurring in the building.

The hulls and decks are then moved to the assembly building. The empty molds are cleaned, inspected and prepared for return to lamination in the "mold care" step, using waxes, release agents and other solvent based materials. Scratches and other imperfections observed on the mold surface are repaired if necessary, typically with resin or gelcoat tooling. In some situations, for example, a damaged mold or a new product line, larger quantities of tooling materials and possibly production or other resins will be utilized; these repairs are generally conducted in the tooling building.

4) Intermediate and Final Assembly Buildings

In these buildings, the interior component of the boats are installed, the power equipment is installed, the wood structures and trim are installed, painting is performed as required, rigging is in place, wiring is in place, small parts and components are added and the decks and hulls are connected using bonding agents including bonding putties and adhesives. Styrene based materials are also used to repair surface imperfections, fill gaps, and voids, and smooth and contour surfaces. Approximately 5% of the fiberglass used at this facility is utilized in the assembly building. The assembly building is equipped with 9 exhaust fans. Miscellaneous styrene or MMA-containing bonding or other materials, fillers, waxes and solvents may be used during and prior to final assembly. Adhesives and coatings, either water based or containing miscellaneous solvents will be utilized principally in this area. The boat striping and other miscellaneous painting activities are also performed in the assembly building. The paints are applied with a brush or roller; there are no particulate emissions from overspray. No painting of metal parts or products is conducted; however, the lead keels are typically sealed in epoxy to prevent water contact.

The wood shop is also located inside the assembly building. The wood shop is where the wooden parts, including cabinets, table tops, louvered doors, receptacle plates, exterior trim/rail etc. of the boats are manufactured. The wood, mostly teak and other hardwoods, is planed, ripped, sawed and sanded as necessary and fabricated into parts. Each major piece of stationary equipment with the potential to generate particulates is ducted through one of two cyclones which each exhausts to a central baghouse. The central baghouse is located outside the building and has 3 exhaust stacks.

5) Varnishing Building

In this building, wooden parts are varnished. Varnish and other coatings, including polyurethane and sealers, are applied in an enclosed booth in the building. The enclosed booth is equipped with incoming and existing air filters. Exiting air is discharged at a rate of 12,600 cfm through vertical stack, 2.5 feet in diameter terminating approximately 18 feet above ground level. The coated parts are transferred to an electrically heated drying booth, which is equipped with six blowers rated at 1500 cfm each to circulate the heated air over the parts to facilitate drying. The drying booth air exits through vertical stack, 0.83 feet in diameter terminating approximately 17 feet above ground level.

6) Storage Building

This building is mainly used for the storage of old and/or obsolete parts and other laminated components

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

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Renewed Title V Air Operation Permit No. 1030223-011-AV issued **December 8, 2009**
Application for a Title V Air Operation Permit Renewal received **April 7, 2014**
Additional Information Request dated **May 19, 2014**
Additional Information Response received **June 12, 2014**
Notice of Intent to Issue Air Permit issued ***(To be determined)***
Public Notice Published ***(To be determined)***

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does not operate emissions units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate emissions units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63, Subpart A (General Provisions), Subpart VVVV (Boat Manufacturing – for Open Molding Resin and Gel Coat Operations using Emissions Averaging Option and/or Compliant Materials Option).

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the emissions units at the facility.

PROJECT REVIEW

The permit was reformatted according to the current permitting template. The applicant has determined that a limit of 120 tons/year is a realistic maximum for the VOC emissions, as compared to the original permit limit of 240 tons/year VOC. As a result, the applicant is not required to keep daily logs for recordkeeping since the anticipated HAP/VOC emissions will not be within 10% of the PSD emission limit. The applicant has requested the deletion of the requirement to comply with the 40% capture rate, in accordance with Attachment C-Standard Operating Procedures for Clean-up Solvent Usage. The applicant stated that the cleanup solvent used is acetone, which is not a regulated species.

CONCLUSION

This project renews Title V Air Operation Permit No. 1030223-011-AV, which was issued on December 8, 2009. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.