

Amanda

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

B661939717

FACILITY: Tiara Yachts Division of S2 Yachts	SRN / ID: B6619
LOCATION: 725 E. 40th St., HOLLAND	DISTRICT: Kalamazoo
CITY: HOLLAND	COUNTY: ALLEGAN
CONTACT: Todd Grammatico , Employee Safety & Wellness Coordinator	ACTIVITY DATE: 05/09/2017
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance
SUBJECT: Scheduled inspection.	SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:	

This was not an announced inspection. Dennis Dunlap and Amanda Chapel were the inspectors for AQD. Todd Grammatico is the contact person for Tiara. Jeff Pfost was also present from Environmental Partners.

The facility employs about 425 people. There are 3 shifts Monday through Thursday. The 2nd and third shifts do not consist of full workloads. There may be some work done on Fridays until noon. The Energetex company is no longer operating here. All parts made at the facility are now boat parts.

WALKTHROUGH

The inspection began in the Wood Dept. This dept. makes all the wood products for the boats, including floors, shelves, cabinets, etc. Equipment includes a CNC router, a belt sander and other sanders, saws, etc. These machines are hooked up by ductwork to an outside dust collector. The dust collector emits back inside the building. The dust collector is covered by a CAM Plan that requires daily readings of the differential pressure gauge and visible emission checks. The gauge was reading 0.8. No visible emissions were seen. Daily inspection records from May, 2016 through April, 2017 appeared to be complete.

In the woodworking area there is a new robotic varnish machine. This is being operated under rule 287 (2)(c). This machine uses a water-based stain from Valspar. The VOC content is 0.03 pounds per gallon. There are two drying ovens operated at 120-140 degrees F. There is also a UV curing oven.

EULB3SANDCOAT booth is being relocated to the woodworking area. This is a rule 287(2)(c) booth but has been operating as a sanding booth. In the new location it will be utilized for wood finishes.

Fiberglass layup and gelcoat operations take place in the open floor arrangement constructed in 2006. At the time of the inspection fiberglass rollout was being done on a hull and also on a deck. Fiberglass sheets are placed on the substrate, sprayed with resin, and then rolled out by hand. Chop guns may also be used. Hulls and decks are done separately. Gel coating is generally done at night. Closed molding operations on small parts were not being done at the time. In this area there appeared to be some small plastic buckets with resin inside. This was mentioned to Mr. Grammatico later and he indicated that he would do some training to make sure covers were placed on any open containers.. There was also a 55 gallon drum that had an open bung. The bung was replaced during the inspection.

When the resin is dried the decks and hulls are lifted from the molds. They then may go into the large grinding booth EUHULLDECKGRINDING. This booth vents internally. no visible emissions were seen at this booth.

After leaving the large grinding booth the decks go to a touch-up area where buffing or sanding may occur.

In this area there are three spray booths: EUHULLPAINT, EUNBOOTH, and EULB2SOUTH. These are Rule 287(2)(c) booths. The north and south booths are used to apply solvent-based wood finishes. The hull booth is used to apply coatings to hulls. There is an enclosed area that is used to prep hulls for painting.

In this area there is a vacuum cleaning system exempt by Rule 281(2)(a).

Resin is applied from a bulk tank. It has a digital readout that is recorded daily. Resin deliveries are about twice per month.

Acetone is used as the cleanup solvent. Waste acetone is put in 55 gallons. These drums are then emptied into 330 gallon totes. These totes are picked up for transport offsite. New acetone is received in 55 gallon drums. The outside storage tanks for new and used acetone are no longer used.

There are three small boilers exempt by 282(2)(b)(l). Two are used for hot water and one is used for the snowmelt system. One of the boilers had a placard that indicated an output of 2.87 MMBtu/hr.

There are two trash compactors at the facility.

There are two lines for final assembly of the boats, the small boat line and the large boat line. Decks and hulls are brought here and receive the internal workings such as electrical components, tanks, engines, furniture etc. Caulks and adhesives are used in this assembly area. When ready the decks are glued to the hull. It appears that these adhesives are tracked with the resins because it appears they may contain styrene and/or methyl methacrylate. The hulls are painted after final assembly.

There is an upholstery area that is upstairs near the final assembly area. Cushions and fabrics used in the boats are made here. There is one Rule 287(2)(c) spray booth here (EUUPHOLSTRYADH). This booth is used to attach foam to substrates.

The engineering area (EUENGINEERING) is used to make molds. There are three booths here: one is a CNC router booth exempt by Rule 285(2)(l)(vi)(C). The other two booths are identified in the ROP as lay-up booths. During the inspection resin and fiberglass was being applied to a mold in one booth and a plug was being sprayed in the other booth. The filters appeared to be in good condition.

In the ROP there is a flexible group FGPARTICULATE. Originally, grinding operations were done in the older part of the facility in individual booths. It appears that grinding operations now take place in the large grinding booth EUHULLDECKGRINDING or as touch up operations on the open floor. Thus, this flexible group may be obsolete.

RECORDKEEPING

The facility is subject to 40 CFR Part 63 Subpart VVVV, the boat MACT. The facility is complying by using the MACT Model Point Value averaging approach as described in 63.5710. The facility submits semi-annual compliance reports. According to these reports the facility is in compliance. The facility may also comply with 40 CFR Part 63 Subpart WWWW by complying with VVVV. Currently all parts being produced are boat parts so the facility is complying with VVVV.

For Rule 287(2)(c), the facility has six emission units that require monthly recordkeeping: EUUPHOLSTRYADH, EUNBOOTH, EUFAPAINTS, EUHULLPAINT, and the new water-based lacquer booth. EULB3SANDCOAT has been used as a sanding booth. EUBLADEPAINT-1 and EUBLADEPAINT-2 were emission units from ENERGETX and are no longer used. It appears that the facility is in compliance for Rule 287 based on records from the last 12-months. Paints used in EUFAPAINTS include touch up paints on engines and antifouling coating. These are applied at assembly floor areas on an as needed basis.

For Rule 290 there are two emission units: EUFASEALANTS and EUFAWOODFINISH. The former group includes materials used in final assembly. The latter includes coatings and adhesives applied to wood surfaces during final assembly. Monthly recordkeeping sheets include all the materials used in the emission groups. It appears that each product has been checked for constituent screening levels. One of the adhesives was checked (5290027) and the correct VOC content based on the SDS is being used. The constituents did not have low screening levels. Based on records from the last 12-months the facility is in compliance with Rule 290.

Monthly recordkeeping for solvents (EUSOLVENT, acetone and VOC cleanup solvents) indicates compliance with the tons per year limits (12-month rolling time period) and also the tons per month limit for acetone.

Monthly recordkeeping for EUENGINEERING indicates compliance with the pounds per hour, pounds per day, and tons per year VOC limits (12-month rolling time period).

For EUMOLDINGEQUIP, monthly records are being kept for resin and gel coat usage amounts. The amount of resin used from the bulk tank is recorded daily. This is used to calculate the daily VOC (styrene) emission rate and the hourly emission rate based on hours of operation. The total VOC emission rate from resins and gel coats is calculated monthly along with the 12-month rolling time period calculation. Also on the monthly sheet the VOC pounds per hour and the VOC pounds per day is calculated based on total VOC for the month. The emission factor for resin is 0.13, for gel coats it is 0.33. These are from the ROP. For closed molding is emission factor is 0.01. On the monthly recordkeeping there are 21 gel coat part numbers listed (part numbers beginning with 207) and 13 resin part numbers listed (part numbers beginning with 208).

The SDS for the most used resin (Aropol Q 67700 t-22, part number 2082760) showed a styrene content of 33.41%, while the monthly record keeping sheet showed a volatile content of 34.21%. This was discussed with Mr. Grammatico after the inspection on the phone. He sent back an email that indicated that 33.41% is used for MACT reporting, but for EUMOLDINGEQUIP the VOC emissions were being over reported. He said that the monthly sheets would be corrected for 2017.

Information from the company on the most used gel coat (Fresh White Supershield, part number 2071250) indicated a styrene content of 26.15% and an MMA content of 5% for a total of 31.15%. This matched the recordkeeping sheet.

NAME Dennis Dardap

DATE 5/11/17

SUPERVISOR NO 5/11/2017