

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

N676929606

FACILITY: Sunsation Products Inc		SRN / ID: N6769
LOCATION: 9635 Kretz Dr, ALGONAC		DISTRICT: Southeast Michigan
CITY: ALGONAC		COUNTY: SAINT CLAIR
CONTACT: Diane O'Reilly, Human Resource/Health & Safety Manager		ACTIVITY DATE: 04/16/2015
STAFF: Joyce Zhu	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: annual inspection		
RESOLVED COMPLAINTS:		

On 4/16, I conducted an annual air quality inspection at Sunsation Product, LLC, which is located on 9666 Kretz Dr., Algonac. Ms. Rebecca Loftus & Ms. Kerry Kelly from Air Quality Division accompanied me during the inspection. We arrived at the facility around 10:50 AM. Ms. Diane O'Reilly & Mr. Wayne Schaldenbrand from the company met with us. I explained the purpose of the inspection. Afterwards, they took us to see the operation.

### Inspection:

#### Permit # 459-99E

This permit covers the fiberglass boat manufacturing process. It involves gel-coat application, the fiberglass lamination process, the adhesive application, and the miscellaneous cleanup applications. First, plywood is used to make the desired boat shape. Gel-coat is applied onto the bare waxed mold surface, followed by the dry glass fiber reinforcement. The woven cloth fabrics of fiberglass is cut and fitted into or onto the open mold surface. They use a trowel to spread the resin, smooth down the reinforcement and remove trapped air bubble from the wet fiber glass. The adhesive is a bedding compound where is applied in the areas of sharp edges and areas hard to fit. The plywood is put on inside the boat with an atomized gel-coat application, which results in a smooth durable finish product. During the inspection, they didn't operate any of the processes because the workers were on lunch break. Wayne explained to us the resin application utilizes the fluid injection impingement technology. Because non-atomization is used for the resin to avoid overspray, the resin needs to be heated before coating. The paint transfer efficiency for the technology can be achieved as high as 99%. There are two types of resins, production resin & tooling resin. The tooling resin, which is a harder type of resin, is used to make modes. Spray nozzles & brushes are cleaned in the emulsifiers where only aqueous soap is used in the cleaning process. According to Wayne, they don't have to clean the spray nozzle used in the impingement technology. During the inspection, adhesive material, gelcoats, resins, putty materials, and bond materials, were stored in closed containers on site. Diane said they didn't keep much of the materials on site because she ordered them on weekly basis. I didn't see any spills in the plant area; however, upon entering the plant, I could smell a very strong solvent odor. I also saw a board was wetted with some type of adhesive lying on a table. Wayne said the board was used to apply adhesives to the fiberglass sheets. The operation hours are Monday to Thursday from 6:30 AM – 3:00 PM & Friday 6:30 AM – 2:30 PM. The company keeps the following information: a) styrene, MMA, acetone, and VOC contents of each chemical used; b) the daily usage rate of the chemicals; c) VOC, each single HAP present in the material used, aggregate HAPs, VOC, & acetone emission monthly as well as during the 12-month rolling time period. The record showed that the company has used materials with styrene as well

as MMA contents meeting the permit requirement during the week of 3/28 – 4/3, except for Polycor 8% wax solution which has higher styrene content; however, when I talked to Diane on April 22, 2015, she said that the wax solution was not part of gelcoat. She listed the wax there because she needed to track the HAP emission for the purpose of calculating facility wide HAPS. According to the company's emission calculation, the acetone emission in a 12-month rolling time period has been less than 2 ton since January 2011 (permit limit: 8.1 tons per 12-month rolling time period). During the same period, the total VOC emission in a 12-month rolling time period has been less than 2 tons (permit limit: 9.9 tons/12-month); and the total HAP emissions from all the processes have been less than 2 tons during the same time period. All the combined HAP emission has been less than 2 tons (permit limit for single HAP : 9.0 tons per 12-month rolling time period & for aggregate HAPs, 22.5 tons per 12-month rolling time period).

In conclusion, the company appears to operate in compliance with Air Quality Regulations and the permit requirements.

NAME



DATE

6/2/15

SUPERVISOR

CTE