

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

B202545819

|  |                               |                           |
|--|-------------------------------|---------------------------|
| FACILITY: Aquatic Co                       |                               | SRN / ID: B2025           |
| LOCATION: 888 W BROADWAY RD, THREE RIVERS  |                               | DISTRICT: Kalamazoo       |
| CITY: THREE RIVERS                         |                               | COUNTY: SAINT JOSEPH      |
| CONTACT: Joe Hutson , Plant Superintendent |                               | ACTIVITY DATE: 08/28/2018 |
| STAFF: Dennis Dunlap                       | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR       |
| SUBJECT: Scheduled inspection.             |                               |                           |
| RESOLVED COMPLAINTS:                       |                               |                           |

This was not an announced inspection. Joe Hutson is the contact person for Aquatic. Dennis Dunlap was the inspector for AQD. Aquatic employs 130 people. It operates 2 ten-hour shifts per day 4 days a week. The facility manufacturers fiberglass showers and tubs.

Resin is stored in a bulk tank outside the permanent total enclosure. From the bulk tank it is conveyed to two mixing tanks. Here fillers are added. From the mixers the resin goes to two day tanks. Here it is conveyed to the lamination area and chop guns, with catalyst added outside the day tanks. The amount of resin used from the bulk tank is recorded daily as well as the amount of fillers. These tanks are not part of the enclosure. These operations are exempt by Rule 287(2)(k).

Gel coat is applied from 55- gallon drums in a room next to the lamination room. Only white gel coat is being used now. The 55- gallon drums had the gaps covered with wood boards. This operation is exempt by Rule 287(2)(k).

The lamination process takes place in a permanent total enclosure. Testing conducted on 9/22/16 verified that this met the criteria for a permanent total enclosure (PTE). Omniwax is applied to the molds that are hanging on a conveyer line. This contains VOC and they are tracking the amount used and VOC. Gel coat is then applied to the molds. The next process is resin and chopped fiberglass application applied with chop guns. Three layers of resin are applied with reinforcement with wood. The completed product is then released from the mold and taken out of the PTE. Air flow into the PTE is periodically checked with velocity meters. Liquid green is used for cleanup.

There is grinding room where edges on the products are smoothed out. This room has filters and the filtered air is emitted inside the building. There is also a woodshop for cutting wood with internal dust collectors. There is a mold repair area.

The RTO has two concentrators. Monthly charts are kept on RTO combustion chamber, desorber supply temp., and desorber pressure drop. These charts were viewed from July, 2018 through May, 2018. RTO combustion chamber appeared to be 1600 degrees F and above and desorber temp. appeared to be 349 degrees and above as required. The desorber pressure drop recorded here is different from the pressure drop that is measured on the outside meters by each concentrator. It may be useful to add this parameter in the next ROP. On the outside meters by concentrator 2 the readings were: pressure drop desorber 2.2; pressure drop heat exchanger 1.5. These are within the required ranges. For concentrator 1 the readings were: pressure drop desorber 2.3; pressure drop heat exchanger 1.5. These are also within the required ranges. In the control room the RTO combustion chamber was reading 1649 degrees F. Desorb temp. #1 was 356 degrees F and desorb temp. #2 was 358 degrees F. Wheel speed for concentrator #1 was 3.91 revolutions, for concentrator #2 it was 4.25. Heat exchanger pressure drop #2 was 1.57, for #1 it was 1.66. These are within the appropriate ranges. The desorb pressure drop is also viewed here. This is the pressure drop that is recorded on the charts mentioned above. The temperature thermocouples are replaced annually. A bubble test on the RTO ductwork is performed annually.

The gelcoat that is being used is from AOC, #G247LH92372. It contains 25.8% styrene and 3% methyl methacrylate. These values are being used on the recordkeeping sheets. The resin is AOC # C909-AVA-06. It contains 48% styrene. This was switched on 7/11/18 from a resin that contained 44% styrene. They have updated the recordkeeping sheets. Liquid green and Omniwax contains VOC and they are tracking VOC. On the recordkeeping sheets they are using the correct controlled and uncontrolled emission factors including 95% control efficiency for the RTO based on the 9/22/16 stack test. They are keeping monthly records when the RTO is down, and this is reflected in the recordkeeping tables.

They are subject to 40 CFR Part 63 Subpart WWWW. In the recordkeeping the "Wael" column is the allowed weighted average emission limit based on 88 lb/ton of resin and 267 lb/ton of gelcoat. The "AWA HAP EF" is the actual weighted average organic HAP emissions factor which is calculated each month. This is based on actual styrene and methyl methacrylate calculated emissions based on facility emission factors for the month divided by gelcoat and resin usage during the month. If tons are used the number derived needs to be multiplied by 2000 to convert to pounds. The recordkeeping sheets indicate that they are in compliance each month. A start up, shut down and malfunction plan was included in their last ROP application submittal.

There are two Rule 287(c) groups. These are EUPAINT and EUPRODUCTREPAIR. The paint has not been used after 2016. Resin used for product repair is a very small amount and is included with the overall resin usage.

NAME Dewain Dunlap

DATE 9/5/18

SUPERVISOR MB 9/6/2018