

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

N257542015

FACILITY: MASSEE PRODUCTS LTD		SRN / ID: N2575
LOCATION: 2612 N 5TH ST, NILES		DISTRICT: Kalamazoo
CITY: NILES		COUNTY: BERRIEN
CONTACT: Jesse Townsend , President		ACTIVITY DATE: 10/05/2017
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On October 5, 2017 AQD Staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Masee Products facility located in Niles, Berrien County. The purpose of the inspection was to determine the facilities compliance with both state and federal air pollution regulations as well as the facilities air use permit No. 533-97. This permit has VOC and HAP emission limits that allowed the facility to opt-out of being a major source and the federal Title V air program. Staff departed for the facility at approximately 10:45 a.m.

Staff arrived at the facility at approximately 12:50 p.m. after travel time and lunch. Staff wasn't sure that the facility was open because no cars were visible and the front door was locked. Staff then proceeded to drive out behind the building and noticed a pick-up truck parked near a bay door that was open. Staff also noted that the door was open to the building that houses the paint dip operation. It appeared to have been in use recently since some medical devices (Head Mobilizers) were on the hooks of the conveyor and were being air dried. Staff then took a moment to see if any visible emissions or odors could be detected and neither were noted. Staff then proceeded over to the bay door of the main building where they could hear a radio on but couldn't locate anyone. Staff proceeded through the building until they reached the front office area where they were able to locate Jesse Townsend (President). Staff introduced them self to Jesse, gave him a business card, and stated the purpose of the visit. Jesse was in the process of finishing up his lunch so staff told him they would wait for him in the manufacturing area until he got done. After finishing his lunch a few minutes later, Jesse came out to meet with staff. Jesse asked what staff needed to see and Staff stated that they would like to view the company's operations and review the records required to be kept by the permit. The following is a summary of staff's conversation with Jesse and facility operations.

According to Jesse, business has been real slow and not much has changed since staff's last inspection in 2014. Staff asked how many employees currently work there and Jesse told staff that he's the only employee now. He said his daughter does come in about once per week or so to help out with books and accounting. Staff then asked if any of their products they make had changed and Jesse said it hadn't. He said that foam products are still all they manufacture. He said they are still a job shop and will do just about any foam product. He went on to state that Head Mobilizers for the medical industry are still the main stay of their business. He said that the business for those has been real slow because all of that work appears to be going to China and he just can't compete. Staff then asked if he had looked into getting back into coolers like he had mentioned previously. He said that he has experimented with them but he's not sure they will be a viable option to help pick up business. Staff then took a walk through with Jesse of the buildings at the facility just to see if anything had been added and nothing had been. Since there was no production currently going on and since their manufacturing process is still the same as it was previously, staff will use the following summary of the facilities operations from one of their previous inspection reports. Jesse also said he would e-mail staff their records because he keeps them on his home computer.

Raw Products: The company purchases foam slit roughly to the size of the products they will be making. They may then have to trim it up and do a little fabrication on the foam depending on the specs of the product. It will then go to the glue operation.

Adhesive Operation: The company uses two types of adhesive, Permagrip 599 and a new product called Silaprene which replaced a product called Vinobond. Jesse said that Silaprene was cheaper and lower in VOCs. The Permagrip adhesive is a type of contact cement that is brushed on while the Silaprene is rolled on and has to be heat activated with a hair dryer or heat gun. The Silaprene product is used the most of the two. The adhesive operation is mainly for adhering two pieces of foam together during the initial process that will ultimately be used for attaching accessory items to it at a later stage of the process. The foam then goes on to assembly.

Assembly: All that takes place here is the sewing on of accessory items such as Velcro and webbing prior to the paint dipping process. Sometimes these items will be sewn on after the paint dipping process depending on the

product.

Paint Dipping: This process is located in another building that is adjacent to the main building. In this process, powder paint and/or liquid gel paint are placed in a 55 gallon barrel. It will then have either toluene, MEK, acetone, or MIBK added to it as a solvent for mixing. This process requires heat and it is provided by a hot water heater. Copper coils that are attached to the hot water heater are placed in the barrel during the mixing process. Jesse had stated that they use toluene and MEK the most, but will use MIBK at times if they need a better shine to the product. Acetone is used more often in the winter because of its evaporation rate. If used during the summer, it dries to fast and leaves the product looking flawed. After the paint has been mixed, it is transferred to smaller plastic totes located under a conveyor system. The parts are then placed on hooks attached to the conveyor and an employee manually takes the part off, dips it in the paint, and then places it back on the hook to dry. Drying is done by a forced air system. Jesse had stated before that most products have be run through the paint dipping process 3 to 4 times to get the coating they want. During the inspection, Head Mobilizers for the military were in the process of drying. Staff also noted that all containers were covered.

Assembly: After the paint dipping process, the product may need to come back this area for sewing on any additional accessory items.

Silkscreening: The products eventually end up here where a logo or any other required information will be printed on the product. Jesse had stated before that they only use about a gallon of ink per year and the most of the emissions form this process come from the use of MEK and Toluene during clean-up.

Packaging and Shipping: The products are then packaged and shipped to the customer.

NOTE: Jesse e-mailed staff the facilities records on October 10th and the following lists the Special Conditions of PTI No. 533-97 and staff's comments regarding their compliance status.

13. The VOC emission rate from the processes (Paint Dip Operation, Glue Operation, and Silk Screen Operation and Associated Clean-Up) shall not exceed 24.9 tons per year based on a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff did not note any instances where the company exceeded this limit. Records reviewed indicate the most recent 12-month rolling total was approximately 1.5 tons.

14. The hazardous air pollutants (HAPs) as defined pursuant to section 112(b) of the Clean Air Act shall not exceed 9.5 tons per year for any individual HAP nor exceed 24.9 tons per year for any combination of HAPs at the facility. The annual limit shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff did not note any instances where the company exceeded this limit. Records reviewed by staff indicate that Toluene is the highest individual HAP emitted at 0.73 tons and aggregate HAP emissions at 1.39 tons. The aggregate total included MEK which has been delisted as a HAP.

15. The volatile organic compound (VOC) emission rate from the paint dip operation, shall not exceed 67.0 pounds per hour, nor 2.0 tons per month. These limits are based on an average solvent use of 571 gallons per month with an average VOC density of 7.0 pounds per gallon.

AQD Comment: Appears to be in COMPLIANCE. Staff did not note any instances where these limits were exceeded.

16. The acetone emission rate from the facility, shall not exceed 6.0 tons per year based on a 12-month rolling time period as determined at the end of each calendar month.

AQD Comment: Appears to be in COMPLIANCE. Staff did not note any instances where the company exceeded this limit. Records reviewed by staff indicate emissions of zero tons.

17. There shall be no visible emissions from the paint dip operation.

AQD Comment: Appears to be in COMPLIANCE. Staff did not observe any VEs during staff's inspection.

18. Stack Testing Requirements.

AQD Comment: Not applicable unless the AQD requests it which we haven't to date.

19. The exhaust gases from the paint dip operation shall be discharged unobstructed vertically upwards to the ambient air from 2 stacks each with a maximum diameter of 28 inches at an exit point not less than 16 feet above ground level.

AQD Comment: The stacks appear to meet the diameter and height requirements mentioned above.

20. For each of the processes specified in this permit, applicant shall keep a record of the following:

- A. For each material used, record the following on a monthly basis:
 - 1. The identification of each material used.
 - 2. The VOC content in pounds per gallon and/or pounds of each material as applied.
 - 3. The content, in pounds per gallon and/or pounds, of each and all HAPS for all materials used.
 - 4. The amount in gallons and/or pounds of all materials used.
- B. Monthly flush and clean-up solvent usage rate, reclaim rate, and disposal records, if applicable.
- C. Monthly record of purchase orders and invoices for materials.
- D. Hours of operation of the paint dip line.
- E. For all HAPs used at the facility, monthly calculations of the following:
 - 1. Each HAP emission rate in tons per month.
 - 2. Aggregate HAP emission rate in tons per month.
 - 3. 12-month rolling time period emission rate in tons per month.
- F. Monthly calculations of the following for VOCs:
 - 1. VOC emission rate in tons per month by process.
 - 2. 12-month rolling time period emission rate in tons per year by process.

AQD Comment: Appears to be in COMPLIANCE with all the above.

AQD Inspection Summary: The facility appears to be in COMPLIANCE with the special conditions of PTI No. 533-97 at the present time. Staff departed the facility at approximately 2:05 p.m.

NAME Matt Dahl

DATE 10-10-17

SUPERVISOR MA 10/17/2017

