

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

N359262683

<b>FACILITY:</b> Plastic Trim International, Inc.		<b>SRN / ID:</b> N3592
<b>LOCATION:</b> 935 AULERICH ROAD, EAST TAWAS		<b>DISTRICT:</b> Bay City
<b>CITY:</b> EAST TAWAS		<b>COUNTY:</b> IOSCO
<b>CONTACT:</b> Jerry Fitch ,		<b>ACTIVITY DATE:</b> 04/21/2022
<b>STAFF:</b> Nathanael Gentle	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Scheduled On-site Inspection		
<b>RESOLVED COMPLAINTS:</b>		

On April 21, 2022, AQD staff conducted a scheduled onsite inspection at Minth Plastic Trim International, SRN N3592. AQD staff included Mr. Nathanael Gentle, accompanied by Mr. Ben Witkopp. Staff arrived onsite at 10:20 AM and departed at 1:30 PM. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) Administrative Rules; and to evaluate compliance with the facilities Permit to Install, PTI No. 119-20. EGLE staff were assisted onsite by Mr. Jerry Fitch and Ms. Dawn Bessey. At the time of inspection, the facility was found to be in non-compliance.

### Facility Background and History

Minth Plastic Trim International is a minor source of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) located at 935 Aulerich Rd East Tawas, MI 48730. The facility primarily manufactures plastic automotive trim parts for a variety of automobile manufacturers. Parts are produced onsite using plastic injection molding. The plastic parts are coated onsite using an automated paint line. In addition, the facility operates co-extrusion (co-ex) lines to produce thin metal strips adhered with PVC. The strips produced are utilized as car window sealing strips.

One active Permit to Install is associated with the facility. PTI No. 119-20 was issued on 4/30/2021. The PTI was acquired to resolve Violation Notices (VNs) issued to the facility in September 2020 following onsite complaint investigations conducted by AQD staff. A total of three complaint investigations were completed by AQD staff from the period of 7/22/2020 to 9/9/2022. The investigations were conducted in response to complaints received by the AQD regarding paint odors detected near the facility. At the time of the odor investigations, one active PTI was associated with the facility, PTI No. 305-02. PTI No. 305-02 was a General PTI for Coating Lines. Two VNs were issued to the facility for violations of PTI No. 305-02. The first VN was issued due to the stacks from the incinerator and co-ex lines not being 1.5 times the building height. The first VN was issued on 9/3/2020. The second VN was issued due to the stack for the passive ventilation oven / cool down area not being 1.5 times the building height. The second VN was issued on 9/10/2020. Facility staff reported the shorter stack heights were the result of the facilities proximity to a nearby airport. In order to resolve the VNs, the facility applied for and obtained PTI No. 119-20. The PTI encompasses the plastic parts coating line operated at the facility. The plastic mold injection processes and co-ex lines operate as exempt from needing a PTI.

## Compliance Evaluation

### EUCOATING

**EUCAOTING** encompasses the plastic parts coating line. The process is fully automated aside from workers loading parts onto racks at the beginning of the process and offloading once the parts are coated. The process begins with the cleaning and pretreatment of parts by sending parts through an acid wash followed by spraying and rinsing. Parts are then conveyed up to the second floor of the system where they enter an electric drying oven. Once parts are dry, they enter the coating portion of the system. The system consists of three coating booths. Coatings are applied within the booths by robotic electrostatic applicators. Following the coating booths, parts pass through a natural gas fired curing oven. Once dried, the parts are conveyed back down to the 1<sup>st</sup> floor where facility staff unload the newly coated parts.

Particulate emissions from EUCOATING are controlled by an E-Cube system, Special Condition (S.C.) IV. 1. The E-Cube system contains a series of particulate filters. The system is designed to allow facility personnel to easily replace E-Cube filters as needed. Facility staff report the system is equipped with sensors to determine when filters need to be changed, and that E-Cube filters are changed at least once daily during normal operation. Spent E-Cube filters are picked up and disposed of by a third-party company, Crystal Clean, to ensure the material is properly disposed of, S.C. III. 2.

Solvents are used in EUCOATING for cleaning purposes only. Paint used in the system does not need to be thinned with solvent. The solvents are used to clean and purge paint lines. The solvents are then recaptured and stored in closed containers, S.C. III. 1. Recaptured solvents are transported to PPG, where the solvents can be reclaimed to be used once again in the process.

As described in Special Condition III. 5., the permittee shall implement and maintain a malfunction abatement plan (MAP) as described in Rule 911(2). The permittee was required to submit a copy of the MAP to the AQD within 45 days of permit issuance, S.C. III. 5. PTI No. 119-20 was issued on April 30, 2021. At the time of inspection, a copy of the MAP had still not been submitted to the AQD. AQD staff requested a copy of the MAP for EUCOATING be submitted. Facility staff were unable to provide a copy of the plan. This is a violation of S.C. III. 5.

EUCOATING is equipped with a regenerative thermal oxidizer (RTO) to control VOC emissions. A minimum temperature of 1,400°F and a retention time of 0.5 seconds is required to be maintained, S.C. IV. 3. At the time of inspection, the temperature setpoint of the RTO was observed to be 760°C, or 1400°F. Facility staff report if the temperature drops below the system set point, and alarm will sound, and the painting line will automatically shut down. The RTO is equipped with a device to monitor the temperature in the combustion chamber. However, facility staff were unsure if the device is able to record the temperature on a continuous basis, as required by S.C. IV. 4. On a continuous basis is defined as an instantaneous data point recorded at least once every 15 minutes. Special Condition VI. 2. requires the permittee to monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the thermal oxidizer, on a continuous basis, during operation of the RTO. At the time of the inspection, the facility was not monitoring and maintaining the proper records for the RTO combustion chamber temperature. This is a violation of S.C. VI. 2 and S.C. VI. 8.

Within 180 days from the issuance of the PTI, the permittee shall verify the VOC destruction efficiency of the RTO, by testing at the owner's expense, S.C. V. 3. Stack testing was completed on 12/22/2021 by Montrose Air Quality Services. AQD field staff and Technical Programs Unit (TPU) staff were onsite on 12/22/2021 to observe the stack testing activities. Following completion of the test, the facility was required to submit a complete report of the test results to both the AQD Technical Programs Unit and the District Office within 60 days following the last date of the test, S.C. V. 3. At the time of inspection on 4/21/2022, a copy of the test report had not been submitted to the AQD. This was brought to the attention of facility staff while onsite. Staff explained the reason the report was not submitted was the result of recent personnel changes within the facility. A hard copy of the report was available while onsite. AQD staff requested a digital copy of the report be provided. On 4/22/2022 a scanned copy of the report was provided via email. However, upon review it was noted the last 10 pages of the document were missing from the copy provided. The incompleteness of the document provided was brought to the attention of facility staff. The copy of the test report was provided late as well as incomplete; this is a violation of S.C. V. 3.

EU COATING is equipped with a non-fugitive enclosure to help control VOC emissions from the process. Special Condition III. 4. requires a negative pressure differential between the non-fugitive enclosure and the adjacent area through each natural draft opening (NDO). A NDO is defined as any opening that is not connected to a duct in which a fan or blower is installed. Compliance with this condition is demonstrated using a smoke test as required by S.C. V. 2. The purpose of the smoke test is to verify that the direction of air flow at each natural draft opening is into the non-fugitive enclosure. As described in S.C. V. 2., a smoke test is to be completed within 180 day from the issuance of the PTI and semi-annually thereafter. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and the District Office. The plan must be approved prior to testing. Once testing is complete, a final report must be submitted to the AQD within 60 days following the last date of the test. Smoke testing was completed on 12/22/2021 by Montrose Air Quality Services. At the time the smoke test was completed, the air flow direction was not assessed at the point of the process where parts exit the natural gas fired cure oven. At the time, facility staff said they were unable to access this point without the paint line shutting down. During the onsite inspection, AQD staff informed facility personnel that this NDO would need to be assessed in all future smoke tests completed. AQD staff also took time to explain proper smoke testing procedures. A copy of the 12/22/2021 smoke test report was never submitted to the AQD. During the inspection, AQD staff requested a copy of the report be provided. Facility staff were unable to provide a copy of the report. Without a copy of the final report, the test is considered incomplete. This is a violation of S.C. V. 2.

Special Condition V. 1. requires the facility to determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Method 24. Upon prior approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturers formulation data. Facility staff explained that the coatings used on parts are provided by the automobile companies in which the parts are produced for. They explained information on the VOC content is provided by PPG, the company that produces the coating products.

An emission limit of 9.31 tpy of VOC for EUCOATING is stipulated by S.C. I. 1. Compliance with this emission limit is to be demonstrated through proper tracking of material usage and emission calculation records. Special Condition VI. 4. requires the facility to track gallons of each coating used. Using the material compositions determined for each coating as required by S.C. V. 1., as well as material usage rates, VOC mass emissions are to be calculated, determining the monthly emissions in tons per month and 12-month rolling time period emissions. At the time of inspection, the facility had no records in place to track VOC emissions from coatings used in EUCOATING. In addition to the requirements of S.C. VI. 4., the facility is required to track solvent material usage and calculate the VOC mass emissions from solvents, S.C. VI. 5. At the time of inspection, the facility had no records in place for tracking VOC emissions from solvent usage. Because records required by S.C. VI. 4. and S.C. VI. 5. were not in place, AQD staff had no way to determine compliance with the facilities VOC emission limit of 9.31 tpy. A request for the facility to provide documentation that the VOC emission limit was not exceeded will be included as part of the violation notice sent to the facility following the inspection.

An acetone emission limit of 3.0 tpy for EUCAOTING is stipulated by S.C. I. 2. Compliance with this emission limit is to be demonstrated through proper tracking of material usage and emission calculation records. Special Condition VI. 6. requires the facility to track the gallons of each acetone-containing coating and solvent used and reclaimed (where applicable). Based on material usage, acetone mass emission calculations are to be determined monthly in tons per calendar month as well as tons per 12-month rolling time period. At the time of inspection, the facility had no records in place to track acetone emissions from EUCOATING. This is a violation of S.C. VI. 6. Because the records required by S.C. VI. 6. were not in place, AQD staff had no way to determine compliance with the facilities acetone limit of 3.0 tpy. A request for the facility to provide documentation that the acetone emission limit was not exceeded will be included as part of the violation notice sent to the facility following the inspection.

A naphthalene (CAS No. 91-20-3) emission limit of 83.44 lb/year is stipulated by S.C. I. 3. Compliance with this emission limit is to be demonstrated through proper tracking of material usage and emission calculation records. Special Condition VI. 7. requires the facility to track the gallons of each naphthalene (CAS No. 91-20-3) containing coating used. Based on material usage, naphthalene (CAS No. 91-20-3) mass emission calculations are to be determined monthly in pounds per calendar month as well as pounds per 12-month rolling time period. At the time of inspection, the facility had no records in place to track naphthalene (CAS No. 91-20-3) emissions from EUCOATING. This is a violation of S.C. VI. 7. Because the records required by S.C. VI. 7. were not in place, AQD staff had no way to determine compliance with the facilities naphthalene (CAS No. 91-20-3) emission limit of 83.44 lb/yr. A request for the facility to provide documentation that the naphthalene (CAS No. 91-20-3) emission limit was not exceeded will be included as part of the violation notice sent to the facility following the inspection.

### **Additional Processes Onsite**

In addition to the paint line permitted by PT No. 119-20, Minth Plastic Trim International operates additional processes as exempt from needing a PTI. Plastic trim parts are produced onsite using plastic injection molding. The process has no external emissions and appears to meet the exemption criteria of R. 286. The facility has a water-cooling tower used to cool molds for the

plastic injection machines onsite. The water-cooling tower appears to be exempt based on R. 280 (2)(d).

As previously mentioned, the facility operates co-extrusion (co-ex) lines to produce thin metal strips adhered with PVC. The strips produced are utilized as car window sealing strips. The lines take narrow strips of metal and form it into a rounded channel shape. From there, the strips are passed through a detergent mixture and rinsed. Then, the strips are passed through a phosphoric acid bath, to promote adhesion. At this point, an adhesive is applied, and the metal strips are adhered to rubber inserts, then cured. Emissions from the adhesive process are vented externally. Based on discussion with facility personnel, emissions from the adhesive applied likely meet the requirements of exemption R. 287(2)(c). R. 287(2)(c) exempts a surface coating line if less the coating rate is less than 200 gallons, as applied, minus water, per month. Monthly coating use records must be maintained in order to meet the exemption requirements. The facility maintains records of daily adhesive material usage. These records were reviewed while onsite. During the period of records reviewed, the facility used less than 1 gallon of adhesive per day. Based on the records reviewed, the adhesive process appears to meet the requirements of exemption R. 287(2)(c)

## Summary

Mint Plastic Trim International is a minor source of Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) located at 935 Aulerich Rd East Tawas, MI 48730. The facility primarily manufactures plastic automotive trim parts for a variety of automobile manufacturers. Parts are produced onsite using plastic injection molding. The plastic parts are coated onsite using an automated paint line. In addition, the facility operates co-extrusion (co-ex) lines to produce thin metal strips adhered with PVC. The strips produced are utilized as car window sealing strips. One active Permit to Install is associated with the facility, PTI No. 119-20. The PTI encompasses the plastic parts coating line operated at the facility. The plastic mold injection processes and co-ex lines operate as exempt from needing a PTI. At the time of inspection, the facility was found to be in non-compliance. A violation notice (VN) is being sent to the facility, citing the violations discussed within this report.

Nathanael Dentel

DATE 5/10/2022

SUPERVISOR Chris Hare

NAME