

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

P129468748

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| FACILITY: PRECISION LASER & MFG LLC | | SRN / ID: P1294 |
| LOCATION: 31330 STEPHENSON HWY, MADISON HTS | | DISTRICT: Warren |
| CITY: MADISON HTS | | COUNTY: OAKLAND |
| CONTACT: Jesse Schmidt , Vice President of Engineering | | ACTIVITY DATE: 03/20/2023 |
| STAFF: Noshin Khan | COMPLIANCE STATUS: Compliance | SOURCE CLASS: |
| SUBJECT: scheduled, on-site inspection | | |
| RESOLVED COMPLAINTS: | | |

On Monday, March 20, 2023, I, Noshin Khan, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, performed a scheduled, on-site inspection of Precision Laser & Manufacturing, LLC located at 31330 Stephenson Highway, Madison Heights, Michigan 48071 (SRN: P1294). The purpose of the inspection was to determine the facility's compliance status with the requirements of the federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended (Act 451); the AQD administrative rules, and the conditions of Permit to Install (PTI) Number 86-22. This permit was issued in July 2022, and is a General PTI for coating lines emitting up to 10 tons per year (tpy) of volatile organic compounds (VOCs).

I arrived at the facility at about 2PM and met with Jesse Schmidt, VP of Engineering, and Delmar Luna, Plant Manager, and discussed the facility's operations before they led me on a walkthrough of their processes.

The facility designs and paints racks used in automotive manufacturing plants for storing various automotive parts. Racks arrive at the facility mostly assembled from an associate facility in Canada. According to Jesse, the facility began operations in 2021, but coating operations began in February 2023. At the time of my inspection he told me that the facility was using two water-based paints—blue and gray—for the job that was being completed. The facility has one coating booth and does not perform any baking. Besides coating operations, the facility does some metal welding, grinding, and sanding for finishing of the racks. These metal processing activities are performed in the general in-plant environment and are exempt from permit requirements per Rule 285(2)(l)(vi)(B). According to Precision Laser staff, there is no thermal oxidizer or catalytic oxidizer for emissions control, and I did not observe one on site during the walkthrough. The facility operates one shift from 6AM-2:30PM from Monday through Friday and has about 10 employees. Besides the site in Canada, Precision Laser has locations in Tennessee and Mexico.

Jesse and Delmar led me on a facility walkthrough. I observed the coating booth, which was not being used during my inspection. The booth is equipped with fabric filters and a fan to direct emissions out of the stack, and Delmar turned the fan on to demonstrate its operation. I asked how often the filters are replaced and staff informed me that the filters had not required replacement yet since coating operations began recently. The filters appeared to be in good operating condition with no gaps or tears. Jesse showed me the high volume-low pressure (HVLP) coating applicators used in the booth and explained that they will not operate unless the fan is on. He also showed me the pressure test caps available for testing the pressure in the applicator.

Next to the booth was a coating storage area, and I observed that all coating lids were closed tightly.

Jesse showed me the parts the facility was working on for the current job. Besides coating the racks, the job required sanding of small parts on each rack. No welding was being performed for this job.

In another part of the facility I observed a fully enclosed 3D printer. Jesse informed me that this was used to make dunnage and smaller parts that are used to hold/store parts. He informed me that the material used in the printer is a thermoplastic polyester called polylactic acid (PLA).

I also observed machining equipment including a drill press and a saw. In one corner of the shop is a prototyping area.

I did not observe any emergency generators, boilers, or parts washers during my inspection.

Permit Compliance

FG-COATING

Emission Limits

Per Special Condition (S.C.) I.1, the facility has a VOC limit of 2000 lb/month. Per S.C. I.2, the facility is subject to a VOC emission limit of 10 tpy based on a 12-month rolling time period as determined at the end of each month. Delmar provided paper and electronic copies of the spreadsheet used to track coating usage and emission calculations. The calculations show that 17.7 lbs of VOCs were emitted in February 2023. The facility is calculating 12-month rolling VOC emissions, but enough data is not available yet to determine compliance with this emission limit.

Process/Operational Restrictions

Per S.C. III.1, the permittee shall capture all pure/clean-up solvents and waste coatings from all coating applicators, store these materials in closed containers, and dispose of them in an acceptable manner. During the walkthrough, I observed all waste coatings stored in closed containers.

Design/Equipment Parameters

Per S.C. IV.1, the permittee shall equip and maintain FG-COATING with high volume-low pressure (HVLP) spray applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. As discussed, the facility's coating booth is equipped with HVLP applicators and pressure test caps.

Per S.C. IV.2, the facility shall not operate any spray application unless particulate control is installed, maintained, and operated in a satisfactory manner. As discussed, the coating booth is equipped with dry fabric filters that were in good operating condition.

S.C. IV.3-IV.5: As discussed, the facility does not have or operate a thermal oxidizer or catalytic oxidizer. These conditions pertain to the operation of these controls.

Testing/Sampling

Based on AQD records, the Department has not requested verification of VOC emissions and VOC content of coatings using Test Method 25A, Method 24, or another EPA-approved reference method, as specified in S.C. V.1.

Monitoring/Recordkeeping

S.C. VI.1-VI.2 pertain to monitoring requirements for a thermal oxidizer or catalytic oxidizer, neither of which are operated at the facility.

Per S.C. VI.3, the facility provided VOC content records, coating usage records, monthly VOC emission calculations, and 12-month rolling VOC emission calculations. I did not request records for purchase orders.

Per S.C. VI.4, the facility shall maintain a current listing from the manufacturer of the chemical composition of each coating. Delmar provided paper copies of the SDS's for the two coatings used, which contain chemical composition information.

S.C. VI.5-VI.7 specify recordkeeping requirements for coating lines using a thermal or catalytic oxidizer and do not currently apply.

Stack/Vent Restrictions

Per S.C. VIII.1, the exhaust gases from FG-COATING shall be discharged unobstructed vertically upwards to the ambient air at exit points not less than one and one half times the building height (from ground level to point of discharge). I did not measure the stack height during my visit, but I observed that the stack was constructed vertically upward at roughly one and one half times the building height.

FG-SOURCE

Emission Limits

Per S.C. I.1, the facility is subject to a VOC emission limit of 30 tpy based on a 12-month rolling time period as determined at the end of each month. As discussed under FG-COATING, not enough data is available yet to determine compliance with a 12-month rolling VOC emission limit.

Monitoring/Recordkeeping

Per S.C. VI.1, the permittee shall keep monthly VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period, for all coating lines and associated purge and clean-up operations at the source. The facility maintains 12-month rolling VOC emission calculations for the coating booth.

Based on my observations during my inspection and the records provided, the facility is in compliance with applicable rules and regulations.

NAME Noshin KhanDATE 9/12/23SUPERVISOR K. Kelly