

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

P122269250

<b>FACILITY:</b> H.A. Automotive Systems, Inc.		<b>SRN / ID:</b> P1222
<b>LOCATION:</b> 1300 Coolidge Highway, TROY		<b>DISTRICT:</b> Warren
<b>CITY:</b> TROY		<b>COUNTY:</b> OAKLAND
<b>CONTACT:</b> Allen Youkhana , Deputy Production Support Manager		<b>ACTIVITY DATE:</b> 07/17/2023
<b>STAFF:</b> Noshin Khan	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> Minor
<b>SUBJECT:</b> scheduled, on-site inspection		
<b>RESOLVED COMPLAINTS:</b>		

On Monday, July 17, 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 H.A. Automotive Systems, Inc. located at 1300 Coolidge Highway, Troy, Michigan 48084 (SRN: P1222). 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 103-21.

I arrived at the facility at 9AM and met with Allen Youkhana, Deputy Production Support Manager, and Bruce Connell, Consultant with Environmental Partners, Inc., who assisted the facility with the permit application. The facility assembles taillights for automotive companies. The processes include plastic injection molding, spray coating of anti-fog, and assembly of parts. According to Allen, trial operation of the anti-fog coating commenced in June 2023. The facility operates from 6AM to 2:30PM, Monday through Friday, and has 40-50 employees. According to Bruce, equipment including the facility's 2 plastic injection molding machines and a parts washer were submitted as a part of their air permit application. The injection molding machines do not have potential emissions, and the facility calculates and tracks emissions from the parts washer.

After discussing the facility's operations, Allen and Bruce led me on a walkthrough of the facility. A large part of the production floor is dedicated to stations for robotic parts assembly and service parts. Another section is a warehouse for parts storage. The anti-fog coating booth is located in this area. The booth is enclosed with its own exhaust and anti-fog application is done by a robot with an air atomizing applicator. The robot draws coating out of a container within the booth, sprays the part, and the part is then conveyed through an adjacent oven. The air atomizing applicator meets the requirement in EU-ANTI-FOG Special Condition (S.C.) IV.2 for spray application to be done with HVLP or comparable technology. I observed fabric filters in the booth that appeared to be in good operating condition, in compliance with EU-ANTI-FOG S.C. IV.1. According to Allen, the facility has not had to replace the filters yet since trial operation had recently started. He said he plans to look into proper waste management services for spent filters.

Next to the spray application section of the booth is another enclosed room. In here, the two parts of the coating are mixed by an automated system. I observed that IPA cleaning solvent was also stored in the room. All the containers for coatings and solvents were closed, in compliance with EU-ANTI-FOG S.C. III.1 and III.3. Allen walked Bruce and I to a room where all waste materials are stored in containers up to 55 gallons in capacity. I observed that all containers were closed and labeled. Allen informed me that he is looking into a disposal service for hazardous waste materials.

Outside, Allen showed us two small boilers which he said are used to provide heat to the spray booth. The boilers were identical, natural gas fired, and I observed a heat input rating of 495,000 Btu/hr. These units are exempt from permit requirements per Rule 282(2)(b)(i).

In another room adjacent to the warehouse area, we observed the parts washing machine. Bruce explained that the fixtures (masks) used to spray anti-fog are cleaned in this washer. The parts are placed on a rack inside the cleaner, and the door to the cleaner is closed before parts are sprayed. According to Bruce, steam from this cleaner is vented outside. At the time of the inspection, Bruce showed me an SDS for a Modiper L-2 cleaner that was being used in the washer. Allen later sent an

SDS for BC100 ("Barrier Coating for Solvent Based Paints"), a phosphate wash, that the facility will be using, instead.

I did not observe any emergency generators on site.

## Permit Compliance Evaluation

### EU-ANTI-FOG

#### Emission Limits

The facility is subject to a VOC limit of 28.0 tpy based on a 12-month rolling time period determined each month, per S.C. I.1. It is also subject to an alchoxy alcohol emission limit of 10.0 tpy based on a 12-month rolling time period.

The facility provided usage, composition, and emissions calculations for June 2023 in accordance with S.C. 3 and S.C. 4. The facility maintains data for VOC and alchoxy alcohol content as required. Based on the facility's calculations, 0.1004 tons of VOCs and 0.01 lbs of alchoxy alcohol were emitted in June. Not enough data is available yet to verify compliance with the emission limits.

For the calculations discussed, the facility is using manufacturer data. At the time of my inspection, the facility had not determined the VOC content of the anti-fog coating using federal Reference Test Method 24, as required by S.C. V.1 but estimated that the testing would occur within the next few weeks. Allen provided the results from the test on August 13. The test results indicate that the coating has a VOC content of about 90% by weight, whereas the spreadsheet provided after my inspection uses a value of 82%. I will be following up with the company to make sure that the Method 24 results are used in their emissions calculations moving forward.

S.C. VII.1 requires that the facility notify the AQD District Supervisor of installation of EU-ANTI-FOG within 30 days of commencement of trial operation. During my inspection I informed Bruce and Allen that we hadn't received this notification, and Allen provided this notification on July 20, 2023. In the letter, he notes an installation date of June 1, 2023. This notification was provided after the 30 day deadline, which is a violation of S.C. VII.1. However, because the facility acted quickly in response to my reminder, I am utilizing enforcement discretion and a violation will not be cited.

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The conditions of this flexible group apply to all plastic parts coating lines at the facility. The facility currently only has one.

S.C. I.1 sets a VOC emission limit of less than 30.0 tpy based on a 12-month time period determined each month. Not enough data is available to verify compliance with this limit.

S.C. V.1 states that the permittee shall determine the VOC content of any coating using federal Reference Test Method 24. As discussed, this has been performed for the anti-fog coating.

The facility maintains chemical composition information, usage, and emissions calculations as required by S.C. VI.2 and VI.3. The records provided include records for daily use of each solvent or coating in gallons, the chemical composition of each material, and the monthly emissions in tons.

### Conclusion

The facility violated EU-ANTI-FOG S.C. VII.1 by not providing notification of installation within 30 days, but will not be receiving a violation because they provided the notification soon after being reminded of the requirement. Based on my observations during the inspection and records review, the facility is in compliance with the other evaluated rules and regulations.

NAME Nashir Khan

DATE 09/28/2023

SUPERVISOR K. Kelly