

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

N717457843

<b>FACILITY:</b> American Autocoat Inc		<b>SRN / ID:</b> N7174
<b>LOCATION:</b> 3565 Highland Drive, HUDSONVILLE		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> HUDSONVILLE		<b>COUNTY:</b> OTTAWA
<b>CONTACT:</b> Phil Frisbie , Director, Paint & Maintenance		<b>ACTIVITY DATE:</b> 03/15/2021
<b>STAFF:</b> Chris Robinson	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> FY'21 inspection to determine the facility's compliance status with respect to PTI no. 195-02A and any other applicable air quality rules and regulations.		
<b>RESOLVED COMPLAINTS:</b>		

The purpose of this report is to document the findings of an inspection of American Autocoat Inc. (SRN N7174) located at 3565 Highland Drive in Hudsonville, Michigan. The inspection was conducted to determine the facility's compliance status with the requirements of the federal Clean Air Act; Part 55 (Michigan's Air Pollution Control Rules) of Act 451 (Natural Resources and Environmental Protection Act (NREPA)); and the requirements established in Permit to Install (PTI) No. 195-02A.

The inspection was conducted by AQD staff Chris Robinson (CR) and was initially going to consist of an offsite records review and an onsite visit. However, due to covid19 concerns the onsite visit was conducted via phone and emailed photos. On March 15, 2021 CR contacted Phil Frisbie, Paint and Maintenance Director, and requested records, which were received on March 18, 2021. Additional records requested on April 26, 2021 were received that day. The remaining portion of the inspection took place over the phone on April 27, 2021 and CR drove past the facility on April 29, 2021 for odor and visible emission observations. None were observed.

The Weather conditions on April 29, 2021 were approximately 66°F, cloudy with southwest winds at approximately 12 mph ([www.weatherunderground.com](http://www.weatherunderground.com)).

### **A) Facility Description**

American Autocoat is a plastic automotive parts manufacturer. The manufacturing process includes plastic injection molding, and a coating line. American Autocoat typically operates 1-2 shifts per day, five (5) days per week.

### **Compliance Evaluation**

#### **1) PTI No. 195-02A**

American Autocoat operates under Title V Opt-out Permit No. 195-02A which includes the Automotive plastic parts coating line (EU-AUTOLINE) and facility-wide requirements (FG-FACILITY) to restrict the emissions of Hazardous Air Pollutants (HAPs) to below title V thresholds of 10 tons per year (TPY) individual and 25 tpy aggregate.

#### **EU-AUTOLINE**

Emission unit EU-AUTOLINE consists of an automotive plastic parts coating line with a five-stage power washer, a natural-gas fired dry-off oven, a tack-off booth, adhesion promoter spray booth, flash-off tunnel, basecoat spray booth with ambient flash zone, clearcoat spray booth with heated flash zone, natural-gas fired bake oven, and a process/repair inspection booth, all connected by a chain-on-edge system. The tack-off booth, adhesion promoter booth, flash-off tunnel, basecoat

spray booth with ambient flash zone, clearcoat spray booth with heated flash zone, and natural-gas fired bake oven are all controlled by a single regenerative thermal oxidizer. Clean-up and purge solvents used on the line are included in the emission unit and emission limits.

All applicators on this line are either HVLP or electrostatic bell applicators as required by SC 1.6, all booths are equipped with downdrafts to help increase reclaim. Per discussions Mr. Frisbie reconfirmed that American Autocoat reclaims, or at least tries, to reclaim 100% of materials used. Dry filters consist of three layers and are replaced as needed based on magnehelic gauge readings. In general, the top layer is replaced daily, the middle layer is replaced weekly, and the bottom layer is replaced monthly. Based on a photo of the bell applicator and discussions with Mr. Frisbie filters appear to be in good shape as required by SC 1.5. Mr. Frisbie also indicated that the spent filters are disposed of in the dumpster in a manner that minimizes the introduction of the collected air contaminants to the outer air as required by SC 1.4.

Combined VOC and acetone emissions (coatings, reducers, and clean-up and purge solvents) are restricted to 35.4 tpy per a 12 month rolling time period (SC 1.1a) and/or 235.7 pounds per day (SC 1.1b). Special Conditions 1.11 through 1.13 require monitoring and record keeping necessary to properly calculate VOC emissions. This consists of material usage and VOC contents. Based on the records provided, which are attached, the facility appears to be properly monitoring and recording necessary data. This data indicates that the total VOC emissions for EU-AUTOLINE from March 2020 through February 2021 were 18,033.34 lbs. (9.01) tons with the highest monthly emissions being 2,208.86 lbs. (1.10 tons) in August. To demonstrate compliance with the daily limit of 235.7 pounds Mr. Frisbie provided records representing days that would have had the highest emissions which were June 8, 2020 and June 16, 2021. On June 8, 2020 total VOC/Acetone emissions were 152.62 pounds which is approximately 65% of the limit and 83.16 pounds on June 16, 2021 which is approximately 35% of the limit. Based on discussions these two days represent a worse case situation, both are below the permitted daily limit. Special Condition 1.8 requires Method 24 testing for VOC's. In 2002 the facility requested to us Manufacturer's formulation data, which was approved by the AQD and is being used.

SC 1.9 requires the facility to verify VOC capture and destruction efficiency of the Thermal oxidizer. Testing was conducted in October 2003 verifying compliance with the 96% CE, 95% DE and 0.5 second retention time (SC 1.7 & 1.9). Per Mr. Frisbie EU-AUTOLINE is never operated unless the RTO is operating as required by SC 1.7. In fact, the RTO operates continuously except during 2 scheduled shutdowns for maintenance. RTO temperature is being continuously monitored and is recorded on circle charts (SC 1.10 & 1.14), which were reviewed onsite. Based on the circle charts the RTO is being operated above the required minimum operating temperature of 1,400°F specified in SC 1.7 of the PTI. Per discussions the RTO is set to operate at 1,450°F. Example circle charts were provided and are attached. Based on these the RTO appears to be operating at the required temperature.

### **FG-FACILITY**

FG-FACILITY restricts facility-wide emissions of Hazardous Air Pollutants (HAPs) to below title V thresholds to 9 tpy for any individual HAP and 22.5 tpy for total HAPs emitted (SC 2.1a & 2.1b). Special Conditions 2.3 requires the facility to maintain a listing of any material used. The facility maintains Safety Data Sheets (SDS's) as allowed. Special Condition 2.4 requires material use records

and emission calculations. Based on what was provided, which is attached, the facility appears to be maintaining the appropriate records which indicate that the facility-wide maximum 12-month rolling total for aggregate HAPs was 0.80 tons from March 1, 2020 through February 28, 2021. Aggregate HAP emissions appear to be well under the limits for both aggregate and individual HAPs.

## 2) Permit Exemptions

American Autocoat has six (6) plastic injection molding stations, which appear exempt from Rule 201 permitting under Rule 286(2)(b). There are also some buffing and sanding stations located in the facility which are controlled by a common baghouse. These processes appear exempt from Rule 201 permitting under Rule 285(2)(l)(vi)(C).

## 3) MAERS

The facility's 2020 emissions data submitted to MAERS in 2021 was reviewed by the AQD on April 7, 2021. The facility is using all MAERS emission factors. No issues were identified, and the database was accepted as is. Source-wide information provided is summarized in the table below.

Pollutant	Amount (tons)
Ammonia	0.004
CO	0.11
NOx	0.13
PM10	0.06
PM2.5	0.01
SO2	0.01
VOC	10.16

## B) Compliance Determination

Based on a review of this facility's records and observations and discussions made during the onsite portion of this inspection, American Autocoat, Inc. appears to be in compliance with applicable air quality rules and regulations including the requirements established in PTI 195-02A.

NAME 

DATE 5/20/2021

SUPERVISOR 