

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

N717438759

FACILITY: American Autocoat Inc		SRN / ID: N7174
LOCATION: 3565 Highland Drive, HUDSONVILLE		DISTRICT: Grand Rapids
CITY: HUDSONVILLE		COUNTY: OTTAWA
CONTACT: Phil Frisbie , Director, Paint & Maintenance		ACTIVITY DATE: 02/16/2017
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with Permit to Install (PTI) No. 195-02A and all other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On Thursday February 16, 2017 AQD Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of American Autocoat, Inc., located at 2454 Highland Drive, Hudsonville, Michigan. The purpose of this inspection was to determine compliance with Permit to Install (PTI) No. 195-02A and all other applicable air quality rules and regulations.

AQD Staff surveyed the perimeter of the facility, prior to entry, for excess opacity and odors. KD noted steam coming from the building, but no excess emissions. Additionally, no odors were noted off-site. KD met with Mr. Phil Frisbie, Director, Paint and Maintenance who accompanied KD on a tour of the facility.

### Facility Description

American Autocoat, Inc. (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.

### Regulatory Analysis

American Autocoat is a Synthetic Minor Opt-out source for Volatile Organic Compounds (VOC's) and Hazardous Air Pollutants (HAP's) and maintains one (1) permit, PTI No. 195-02A.

### Compliance Evaluation

#### *EU-AUTOLINE*

This emission unit includes an automotive plastic parts coating line consisting of a five (5) stage power washer, a natural gas fired dry-off oven, a tack-off booth, adhesion promoter spray booth, flash-off tunnels, basecoat spray booth with ambient flash zone, clear coat spray booth with heated flash zone, natural gas fired bake oven, and a process/repair inspection booth, all connected by a chain-one-edge system. The tack-off booth, adhesion promoter booth, flash-off tunnel, basecoat spray booth with ambient flash zone, clear coat spray booth with heated flash zone, and natural gas fired bake oven are all controlled by a single regenerative thermal oxidizer (RTO). Clean-up and purge solvents used on the line are also included in this emission unit.

Mr. Frisbie showed KD the coating line from start to finish beginning with the five (5) stage wash line. All of the spray booths associated with the line are robotic, and per Mr. Frisbie, American Autocoat doesn't have any manual spray application. The applicators are either HVLP or electrostatic bells applicators. All of the booths are down draft booths in order to increase the reclaim. According to Mr. Frisbie, American Autocoat reclaims, or tries to reclaim 100% of materials used, and has recently made some improvements to the internal recycling operations. All filters in the various booths throughout the facility appeared to be properly installed and operational, and are changed on an as needed basis. Additionally, all containers were closed and waste disposed of properly.

Emissions from this line are captured and sent to the RTO. The most recent capture efficiency (CE) and destruction efficiency (DE) testing was conducted in October 2003, and test results indicated compliance with the 96% CE, 95% DE, and 0.5 second minimum retention time. American Autocoat utilizes a circular disc chart to continuously monitor the temperature. The RTO runs continuously, except for the two (2) scheduled shutdown times for routine maintenance, and are noted in the attached temperature records. At the time of the inspection, the RTO was operating at 1561°F, which is above the required minimum 1400°F. Mr. Frisbie explained that the RTO is equipped with an interlock system that will automatically shut the coating line down if

the temperature drops below 1400°F. Temperature records indicate the temperature of the RTO typically operates between 1450°F and 1500 °F.

American Autocoat is properly tracking the daily usage of each material used, including the VOC and acetone content of each material. In 2002, American Autocoat requested, and AQD approved, the use of manufacturer's formulation data in lieu of method 24 for determining VOC content of the coatings. Per the attached records indicate the VOC content of the coatings are 4.77 pounds per gallon (lbs/gal) or less for the various coatings. VOC and acetone emissions are limited to 235.7 pounds per day, and 35.4 tons per year (tpy), 12-month rolling. Per the attached records, the highest daily VOC and acetone emissions was 91.71 pounds, over the past year. As of January 2017, the 12-month rolling VOC emissions were 8.03 tons (purge and clean up included). Additionally, all clean-up solvents emissions have been properly tracked, as required. The reported emissions are slightly lower than what was reported in the 2015 MAERS. At the time of this report, the 2016 MAERS had not yet been received and reviewed.

While the stack parameters were not explicitly measured, the dimensions appeared correct and there was no evidence of any changes to the stacks.

#### *FG-FACILITY*

This emission unit consists of all equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment.

American Autocoat is properly tracking the HAP content and usage of each material. HAP's are individually limited to 9.0 tpy, 12-month rolling. Toluene had the highest emissions at a 12-month rolling emission rate of 0.41 tpy, as of January 2017. Aggregate HAP emissions are limited to 22.5 tpy, 12-month rolling. As of January 2017, aggregate HAP emissions were 0.91 tpy. American Autocoat is adequately tracking the monthly and 12-month rolling emissions of HAP's, and utilizing manufacturer's formulation data to determine the HAP content of the coatings. Per the attached records, the highest HAP content is 0.42 lbs./gal.

#### *Exempt Emission Units*

American Autocoat has six (6) plastic injection molding stations, which are 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 are exempt from Rule 201 permitting under Rule 285(2)(l)(vi)(C).

Finally, American Autocoat does not have any boilers, emergency generators, or cold cleaners.

#### **Compliance Determination**

Based on the observations made during the inspection and a subsequent review of the records it appears that American Autocoat, Inc. is in compliance with PTI No 195-02A and all applicable air quality rules and regulations

NAME Kathryn Davis DATE 2/28/2017 SUPERVISOR [Signature]