

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

U50200402156247

<b>FACILITY:</b> Applied Tech Industries		<b>SRN / ID:</b> U502004021
<b>LOCATION:</b> 50271 E. Russell Schmidt Blvd., New Baltimore		<b>DISTRICT:</b> Warren
<b>CITY:</b> New Baltimore		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Scott Chick , Project/Quality Manager		<b>ACTIVITY DATE:</b> 11/17/2020
<b>STAFF:</b> Sebastian Kallumkal	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b>
<b>SUBJECT:</b> Self-initiated inspection		
<b>RESOLVED COMPLAINTS:</b>		

On Tuesday, November 17, 2020, I, Michigan Department of Environment, Great Lakes & Energy-Air Quality Division Staff Sebastian Kallumkal, conducted a self-initiated, announced (due to CoVid 19 pandemic) inspection at Applied Tech Industries located at 50271 E. Russell Schmidt Blvd., Chesterfield, Michigan. The purpose of the inspection was to determine facility's compliance with the Federal Clean Air Act; and Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451.

I arrived at the facility about 12:00 Noon. At the facility, I met Mr. Scott Chick, Project/Quality Manager (schick@appliedtechind.com; O: 586 949 2735; C: 989 620 2735). I introduced myself, provided credentials and stated the purpose of the visit. I followed facility's CoVid 19 pandemic protocols and wore face mask at all time while at the facility. Mr. Mike Holloway, Plant Manager, (mholloway@appliedtechind.com; C: 586-634-6929) whom I had contacted previously to schedule the inspection was not available at that time.

Applied Tech Industries (ATI) uses auto deposition process to coat metal automotive parts. It is a dip-coating process. ATI's website states they are a leading provider of Aquence™/Autophoretic® coating services. The Aquence™/Autophoretic® process is a unique, water based, environmentally friendly process that is patented by Henkel Corporation.

During previous discussions, Mike provided me SDSs for BONDERITE M-PP-866 IX R, and BONDERITE M-PP 930 R, Aquence866 Brochure and Aquence 930 Brochure. The SDSs did not have any information on VOC content of the coatings; the brochures stated that the Aquence 866 has no VOC and Aquence 930 has very little VOC (less than 0.1 lb/gal minus water). Therefore, I contacted Mr. John Redegeld, Inside Sales Partner Surface Treatment, Henkel Corporation (john.redegeld@henkel.com; 905 817 8960). He informed me that Aquence 866 and Aquence 930 are old products names and are replaced by Bonderite 866 and Bonderite 930, respectively. He provided me the technical data sheets for both products.

The TDSs also do not have the VOC content information; however, they state that the BONDERITE M-PP-866-R contains 83.7 gallons DI water out of 100 gal coating and BONERITE-M-PP-930 contains 86.5 gallons DI water per 100 gallons of coating.

The facility has an 800 Series monorail conveyor line and a large 900 Series Hoist line that is capable of running large parts such as Trailer Hitches, Engine Cradles, and Axle Assemblies.

Aquence 866 (BONDERITE M-PP-866-R) is a Medium Gloss Black water-based coating with no heavy metals or VOC's. It is cured at a low temperature (220-240F).

Aquence 930 (BONDERITE M-PP-930-R) is a Gloss Black, water based, Epoxy Enamel that is also very environmentally friendly, with no heavy metals and very low VOC's. It is cured at a higher temperature (365F).

Mike informed me previously that the facility's coating usage for 2019 and 2020 were as follows:

2019-866=12,067 gallons.

2019-930=5,650 gallons

2020-866=7,379 gallons (Jan-Sept)

2020-930=2,897 gallons (Jan-Sept)

Based on these usages, facility's volatile organic compounds (VOC) emissions (VOC content = 0.1 lb/gallon coating) could be less than 1000 pounds per month. Therefore, the coating lines appear to be exempt from permit to install requirements (required per Michigan Administrative Rule R336.1201) pursuant to Rule 290 (Michigan Administrative Rule R 336.1290 Permit to install exemptions; emission units with limited emissions.)

**Rule 290. (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.**

**(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the emission units listed in subdivision (a) of this subrule, if the conditions listed in subdivisions (b), (c), (d), and (e) of this subrule are met. Notwithstanding the definition in R 336.1121(a), for the purpose of this rule, uncontrolled emissions are the emissions from an emission unit based on actual operation, not taking into account any emission control equipment. Controlled emissions are the emissions from an emission unit based on actual operation, taking into account the control equipment.**

**(a) An emission unit which meets any of the following criteria:**

**(i) Any emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively.**

**(b)....**

**(c) A description of the emission unit is maintained throughout the life of the unit.**

**(d) Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the emissions meet the emission limits outlined in this rule. Volatile organic compound emissions shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the department.**

**(e) The records are maintained on file for the most recent 2-year period and are made available to the department upon request.**

The coating processes include alkaline clean; water rinse; coating; rinse and curing in the oven. The clean tanks and the cure ovens are exhausted to the atmosphere. Everyday, coating tanks are replenished based on the titration for coating content.

The facility started operations at this location in 2006. It has about 35 employees and operates one 12-hr shift.

The facility has no emergency generators or solvent based parts washers. It has two natural gas fired boilers, installed in 2006, 4.2 MMBtu/hr each for heating the process tanks. The facility also has two natural gas fired cure ovens to cure the parts after coating. The cure oven for the 800 series tank has two burners (0.5 MMBtu/hr & 1.1 MMBtu/hr) and the cure oven for the 900 series coating line has three burners (2 MMBtu/hr; 3 MMBtu/hr & 4 MMBtu/hr). These boilers and cure ovens appear to be exempt from Rule 201 pursuant to Rule 282(2)(b)(i) [Michigan Administrative Rule R336.1282]

**R 336.1282 Permit to install exemptions; furnaces, ovens, and heaters.**

**Rule 282.**

**(1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.**

**(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:**

**(a)...**

**(b) Fuel-burning equipment which is used for space heating, service water heating, electric power generation, oil and gas production or processing, or indirect heating and which burns only the following fuels: (i) Sweet natural gas, synthetic natural gas,**

liquefied petroleum gas, or a combination thereof and the equipment has a rated heat input capacity of not more than 50,000,000 Btu per hour.

After the pre-inspection meeting, Scott accompanied me for an inspection of the facility. I observed the two coating lines and cure ovens. I did not visit the boilers. I did not see any other process which may be subject to air quality regulations. During the post-inspection meeting, we discussed how the process ventilations

**Conclusion:** Based on the onsite inspections, and information provided, Applied Tech Industries appears to be in compliance all applicable air quality rules.

NAME Sebastianykallemkal DATE 12-07-2020 SUPERVISOR Joyce