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DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Self Initiated Inspection

SRN / ID: P0302	
DISTRICT: Upper Peninsula	
COUNTY: MARQUETTE	
ACTIVITY DATE: 12/23/2015	
SOURCE CLASS: MINOR	

FACILITY: Argonics Engineered Polyurethane (Argonics)

FACILITY REPRESENTATIVE: Mike Brinker, Director of Manufacturing and Engineering

<u>LOCATION</u>: Argonics is located in the community of Sawyer (former K.I. Sawyer Air Force Base), southcentral Marquette County, in a commercial/industrial district adjacent to the K.I. Sawyer International Airport terminal. There are no residences within a half mile of the facility.

<u>FACILITY DESCRIPTION</u>: Argonics Engineered Polyurethane is a manufacturer of castable polyurethane elastomers for the bulk material handling industry. The company moved its operations in 2009, from its location on Wright Street in Marquette to its current location in Sawyer. The plant operates a 10 hour shift, Monday through Friday, 6AM to 4:30PM.

<u>INSPECTION</u>: After signing in at the front desk, I met with Director of Manufacturing and Engineering Mike Brinker, Safety and Proceedure Coordinator Allen Beauchamp, and Process Engineer/Maintenance Technical Supervisor Greg Goodman to conduct the unannounced inspection. Mr. Brinker explained the main part of the business is producing flat stock and cast polyurethane products using a thermosetting casting process. After donning safety glasses and a high-visibility safety vest we proceeded into the production area.

Argonics currently does not have any air use permits as all of the equipment/processes at the facility meet Rule 201 exemptions. For the thermosetting process the resins are a solid at ambient temperature and must be heated to 150 degrees Fahrenheit to bring them to a liquid state. A small (1.6 million BTY/hr) natural gas-fired boiler is used for this purpose. In addition, three other natural gas-fired heaters (800,000 BTU/hr) are used to heat the molds for the process. These heaters and the boiler are exempt from permitting by Rule 282(b)(i). The plastic molding process is exempt by Rule 286(d and e).

The company also has a spray booth, which is used to spray an adhesive onto metal (aluminum or steel) parts that will allow a stronger bond between the cast polyurethane and metal parts. The spray booth meets the Rule 287(c) exemption from needing a permit. The booth is a downdraft type and the filters are replaced on a monthly basis. There is a manometer on each side of the spraybooth, and the operator observes these each day to help determine when the filters need to be replaced. Usage of the spray booth has decreased considerably. Due to advances in product design, the assembly process now utilizes mechanical insertion of the cast polyurethane into their metal counterparts, as opposed to using the adhesive. The company tracks their coating usage, which is below the exemption requirement:

Adhesive & Solvent Usage in

Gallons

	2014	2015	Total
Chemlok 213	390	120	510
Chemlok 248	260	90	350

Next to the spray booth is a phosphate solution spray booth and a sandblast booth. The phosphate booth cleans the steel to allow for a better bonding of the adhesive. The sandblast booth uses 70 grit aluminumoxide to also clean the metal parts to allow for better bonding. This booth has a dust collector and the emissions are released back into the plant, satisfying the Rule 285(I)(vi) conditions. The filter on

the dust collection system is changed monthly.

<u>SUMMARY</u>: At the time of inspection I did not observed any violations and the facility appeared to be in compliance with Air Pollution Control Rules.

DATE 1516 NAME SUPERVISOR