

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

*FY 2014 Insp*

U6314267125005

FACILITY: 3M Abrasive Systems Division	SRN / ID: U63142671
LOCATION: 30975 Century Dr	DISTRICT: Southeast Michigan
CITY: Wixom	COUNTY: OAKLAND
CONTACT: <i>JH</i>	ACTIVITY DATE: 03/14/2014
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance
SUBJECT: FY 2014 inspection of 3M Abrasive Systems Division, fka Wendt USA Diacraft Division ("3M")	
RESOLVED COMPLAINTS:	

*E-file: U63 14 2671 = SAR - 2014 03 14*

3M Abrasive Systems Division (U-63-14- 2671)  
fka Wendt USA Diacraft Division  
30975 Century Dr.  
Wixom, Michigan 48393-2064

On March 14, 2014, I conducted a level 2 self-initiated inspection of 3M Abrasive Systems Division, fka Wendt USA Diacraft Division ("3M"), located at 30975 Century Dr., Wixom, Michigan 48393-2064. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451 and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

During the inspection, Mr. James R. Peters (Phone: 248-926-2500-ext 230 Cell: NA; Fax: 248-926-2525; E-mail: jrpeters@mmm.com), Production Manager, and Mr. Roger Cassidy, Engineer, assisted me.

Founded in 1999, Wendt USA Diacraft Division, which 3M purchased about December 2012, is in the business of development, manufacturing, distributing grinding machines for hard materials, precision steel, glass, etc.

3M at Wixom facility makes super abrasive grinding wheels. In addition, 3M services and rebuilds grinding machines.

Grinding wheels of variety of sizes are made using synthetic diamonds. Diamonds of variety particle sizes are mixed with binders according to recipes in the lab. Wheels (1-20 inches diameter) are used. Diamond molds are baked at 180 °C in the presses; 14 presses in all are present.

### Kilns – commercial

Molds after baking are sintered at 1500 °F. 7 sintering ovens are present. No exhaust to outside ambient air.

The kilns are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

### Glue application

Glue application on diamond layer and aluminum and steel core. One quart spray-can glue is used per week.

### Machines

Raw material metals are cut per desired sizes. 5 CNC and few lathes are present. The metallic particulate laden exhaust from the machines ducted to either indoor dust collector or outdoor dust collector. Indoor dust collector is equipped with cartridge filters and 55-gallon hopper. Outdoor dust collector (Micro Air Dust Collector) consists of 12 cartridges and 55-gallon drums as hoppers. Pulse-jet air is used to clean the cartridges.

### **Mold release booths (2)**

Only spray cans are used in two booths (6 ft. 6 ft.). The filters are present. The exhaust gases are discharged via two stacks; one stack for each booth.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1287(b).

### **Paint spray booth**

There is a paint booth which uses only spray cans. I asked Mr. Peters to install filters such that they fit, at all times, snugly without gaps and holes.

During FY 2014 inspection, I found some holes and gaps in the back-draft filter system.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1287(b).

### **Laser etching machine**

One laser etching machine (RS-Marker, S-line) is present to etch names, etc. The machine is equipped with a fume collection system.

The machine is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

### **Parts-cleaner**

One Safety-Kleen Model 91 Aquaous Parts-cleaner VAT parts-cleaner is present.

### **Conclusion**

All process equipment are exempt from Rule 336.1201.

NAME *J. S. Kenemahall* DATE *04/25/2014* SUPERVISOR *CTE*