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MAWILA

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

M47442635

FACILITY: DETROIT AUTOMATIC TOOLING		SRN / ID: M4744
LOCATION: 12275 HURON RIVER DR, ROMULUS		DISTRICT: Detroit
CITY: ROMULUS		COUNTY: WAYNE
CONTACT: Rich Reitz , VP-Operations		ACTIVITY DATE: 11/07/2017
STAFF: Terseer Hemben	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Machine Parts Repair Shop		
RESOLVED COMPLAINTS:		

INSPECTED BY : Terseer Hemben, MDEQ  
 PERSONNEL PRESENT : Rich Reitz (VP-operations)  
 FACILITY PHONE NUMBER : 800-328-6424  
 FACILITY FAX : 888-942-2740  
 DATES OF INSPECTION : 11/7/2017  
 Detroit Automatic Tooling, Inc.  
 12275 Huron River Drive, Romulus, MI 48174  
 SRN: M4744

**FACILITY BACKGROUND:**

The Detroit Automatic Tooling, Inc. (DAT) is a machine parts service shop. The service includes automatic screw machine parts replacement that are new as well as those that are used. The facility also refurbishes tools and machine parts for industrial companies. DAT re-threads worn out screws and maintains machine brokerage for machining shops. DAT has been in operation since 1987. The facility has not been a problem source. The source operates 1 Portable Media Blaster (PMB), and 2 Cold Cleaner machines (2CCM). The PMB and 2CCM met exemptions from Rule 201(1).

The CCM #1 was installed in 1992. The equipment is a 4.67 sq. ft. unit that uses mineral spirits to clean metal parts. The unit top is kept closed when not in use. The unit is identified as new equipment and subject to operational restrictions in Rule 707. However, according to its size, the cleaner met exemption under Rule 281(2)(h).

CCM #2 was installed in 1992. The equipment is a 5.41 sq. ft unit that uses mineral spirits to clean metal parts. The unit top is kept closed when not in use. The unit is identified as new equipment and subject to operational restrictions in Rule 707. In accordance with its size, the cleaner met exemption under Rule 281(2)(h).

PMB was installed in 2016. The equipment polishes surfaces of metal parts blasting using Glass and Aluminum Beads mix (GABM). The process emits particulate materials only into the plant environment. Additionally, the PMB uses fabric filter for PM control. The equipment met exemption under Rule 285(2)(I)(vi)(B).

The potential to emit calculations for the equipment is attached as spreadsheet (Attachment B). Further discussions are presented under the regulatory requirements heading.

**INSPECTION NARRATIVE**

I arrived at the premises of the DAT on November 7, 2017 at 1400 hours. The purpose of visit was to conduct a scheduled regulatory inspection of the metal parts servicing facility. Temperature at the hour was 48 F. Wind speed was 7 mph coming from the North, and humidity was 46%. I was admitted onto the facility by Mr. Rich Reitz, the Vice President-operations. Mr. Reitz and I went through the pre-inspection conference. The VP informed the facility performs automatic machine parts repairs for industries. The emission generating processes were the grinding and polishing. The two processes were conducted in tight enclosures. Contractors remove machines with enclosed spent materials from the property and service during scheduled maintenance. The equipment servicing is performed regularly. Records of maintenance of the services are attached. We walked the floor of the entire building and inspected the rows and columns of shelves stocked with new and used machine parts. Machining equipment were installed in rows in between the shelves. There were no emissions, open liquids or spills of particulate dust in the building. I left the facility at 1440 hours.

**COMPLAINT/COMPLIANCE HISTORY:**

DAT has not been a source of citizen air quality complaints.

**OUTSTANDING CONSENT ORDERS:**

None

**OUTSTANDING LOV'S:**

None

**OPERATING SCHEDULE/PRODUCTION RATE:**

The facility operates 8 hours per day, and 5 days per week.

**PROCESS DESCRIPTION PROCESS EQUIPMENT:**

The company receives worn out parts from tooling industries for repairs or re-calibration. The parts are sandblasted, if necessary, and cleaned out using mineral spirits. Sandblast mix and mineral spirits (solvent) are serviced and removed from the site for recovery by the contractor. Solvent and blast material recovery processes are undertaken away from the site.

**EQUIPMENT AND PROCESS CONTROLS:**

Equipment installed in this facility included, screw threads, sanding machines, sandblasting box, and mineral spirits machine for cleaning blasted parts. All process equipment was totally enclosed in secluded workspace to reduce organic and particulate emissions from the metal finishing processes. Process controls were built in the equipment and processes. Generated metal particulates were either discharged in the in-plant area or contained in the enclosed sandblasting box or mineral spirits cleaning machine, as applied. There was no heating involved in any of the metal part repairs.

**APPLICABLE RULES AND CONDITIONS:**

The applicable rules consist of requirements of the exempt rule: Rule 285(2)(l)(vi)(B) and Rule 281((2)(h) or assumptions that support the facility's statutory compliance or determination of compliance. All contaminants generated at the shop were timely removed by the contractor according to schedule [Attachment A]

**REGULATORY DISCUSSION**

Compliance with regulatory rules was evaluated as follows:

**Rule 201 (1):** DAT satisfied the rule through exempt status. The facility installed PMB with the PTE 1-ton PM per year. The PMB discharges inside the plant area. The equipment corroboratively met the exempt status under Rule 285(2)(l)(vi)(B) and Rule 281(2)(h). Equipment installed and operated at the facility include Cold Cleaners #1, #2 and PMB. The calculated PTE for the cleaners is 0.585 tons VOC, each, per year.

**MACT, 40 CFR 63:** The facility operates a cold cleaner that has less than 10 sq. ft area with closed top when not in use. The composition of mineral spirits used in the cold cleaning is not listed under MACT.

**Rule 901:** There was no issue with nuisance attributed to the facility's operation during the time of inspection.

**Rule 910:** The filters and spent GABM used in blast cleaning are timely removed from the facility during scheduled service and replacement. The PTE calculations for the blast is listed at 1-ton PM per year (Attachment B).

**Rule 278**

Rule 278a(1) requires, for an operator to utilize eligibility for specific exemptions listed in Rule 280 through Rule 291, the operator must be able to provide information demonstrating the applicability of the exemption. The demonstration must include (a) a description of the exempt process or process equipment including the date of installation, (b) the specific exemption being used by the process or process equipment, (c) an analysis demonstrating that Rule 278 does not apply to the process or process equipment. DAT submitted the potential to emit calculation sheet highlighting particulate generating emissions of each equipment with respective applicable exempt rules claimed [Attachment B]. The company provided adequate information supporting the exemption claims.

**VOC:** The PTE for VOCs from the mineral spirits associated with the 2CCM operating process was determined to be 10 gallons per 3 weeks (3.33 gallons of cleaning liquid per week) and amounts to 0.585 tons per year. The VOCs are generated in the cleaning box during the cleaning process. The box is removed from plant and taken off-site for service, and maintenance. The 2CCM top is always closed when not in use. Captured metal debris from the cleaners are disposed by the Heritage-Crystal Clean, LLC on regular basis. The Heritage-Clean, LLC also provides and services the blast box regularly. The entire blast operation is supported by the exempt Rule 285(2)(I)(vi)(B).

**APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:**

This facility does not have nor needs a fugitive dust plan.

**FINAL COMPLIANCE DETERMINATION:**

The DAT facility was inspected. The facility was maintained dust-free. The inspection determined the facility operated in compliance with air pollution regulatory requirements. The process operations identified exempt conditions associated with services performed at the site.

NAME    jlr   

DATE    6/14/2018    SUPERVISOR    JK