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

U6312041659017

FACILITY: Richard Tool and Die Corp.		SRN / ID: U63120416
LOCATION: 29700 W. K. Smith Drive, New Hudson		DISTRICT: Warren
CITY: New Hudson		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 07/09/2021
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: FY 2021 inspection of Richard Tool and Die Corporation ("Richard"), a tool and die manufacturing company, located at 29700		
W. K. Smith Drive, New Hudson, Michigan 48165-8551.		
RESOLVED COMPLAINTS:		

Richard Tool and Die Corp. (U-63-12-0416) 29700 W. K. Smith Drive New Hudson, Michigan 48165-8551

Permit-to-Install: All process equipment are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rules 285, 287, etc.

On July 09, 2021, , I conducted a level-2 self-initiated FY 2021 inspection of Richard Tool and Die Corporation ("Richard"), a tool and die manufacturing company, located at 29700 W. K. Smith Drive, New Hudson, Michigan 48165-8551. 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 Environment Great Lakes and Energy, Air Quality Division (EGLE-AQD) administrative rules.

Mr. Pat Garl (Phone: 248-486-0900-ext. 216, Fax: 248-486-4660, Cell: 248-496-5172, E-mail: pGarl@rtdCorp.com), Plant Manager, assisted me.

About July 2020, Mr. Dan A. Bacci (Phone: 248-486-0900-ext. 308, Fax: 248-486-4660, Cell: 248-499-0931, E-mail: dBacci@rtdCorp.com), Operations Manager, retired. Ms. Valerie Chandler (Phone: 248-486-0900-ext. 209, Fax: 248-486-4660, E-mail: vChandler@rtdCorp.com), Human Resources Coordinator, was not present.

Founded in 1966, Richard Tool and Die Corporation ("Richard") is in the business of making tool and die (progressive dies and transfer dies) for auto manufactures, and their suppliers and stamping industry. Richard is at this location in New Hudson for 20 years (relocated to the site about CY2000) and is in business since 1966.

#### Sandblasting machine

One sandblasting machine with a cartridge filter system to control particulate emissions is present. The filters are replaced on as needed basis. The machine is a small, enclosed box (4 ft. W. \* 4 ft. D \* 3 ft H, with gloves). Sandblasting machine is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I) as all particulate emissions are discharged to in-plant environment after control.

## **Grinding machines**

There are four (4) dry surface grinders and one (1) wet surface grinder; in all, five grinders.

Four dry grinders are equipped with particulate emission capture devices (one for each grinder) and the emissions are ducted via a common manifold to one air pollution control system consisting of a cyclone and a cartridge filter system (16 filters). Cyclone acts as a pre-filter arranged in series with and prior to the cartridge system. The cyclone protects the filters knocking out large particles of higher momentum. The filters are cleaned using a pulse-jet air and the particulate is collected in 55-gallon drum that acts as a hopper, which is emptied once per month.

In addition, there is one wet grinder with a separate cartridge filter system.

Both dry (4) and wet (1) grinding machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I) as all particulate emissions are discharged to inplant environment after filtration.

#### **EDM Wire machines**

Four EDM (Electrical Discharge Machines) Wire machines to cut steel are present. Electricity is passed through wires (brass) so that steel is cut. Water is flooded at cutting area to cool wires and to control particulate matter emissions. The metal being cut is immersed in water. Water is recycled / reused. Each water tank (4) is equipped with a liquid phase (water) filtration system (cartridge) to remove particulate from water.

EDM Wire machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I) as all particulate emissions are discharged to in-plant environment after water-wash control.

## Miscellaneous equipment

Miscellaneous process equipment such as cutting saws, hole punching machine (1), drill presses (5), lathe (1), mills (3), boring mill (1), CNC milling machines (4), tool assemble areas, stamping machines (8), CNC machines (6), etc. are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I) as all particulate emissions are discharged to in-plant environment without control.

## Rule 287(2)(b) Paint Spray

Some painting is done in the plant area (no booth) using rollers and spray cans. Painting activities are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1287(2) (b).

#### **RAPID** air cleaner

Outside the building is present one RAPID air filter system consisting of pleated filters. The RAPID filtration system maintains in-plant clean air for worker comfort and safety. RAPID filter system is used only during heating season (winter).

No painting. A solvent-based parts cleaner was removed about 2007.

#### Conclusion

All metal cutting, grinding, welding, polishing, painting, etc. processes are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I) and 336.1287(2)(b) as all particulate emissions are discharged to in-plant environment after filtration when necessary. Richard is in compliance with the conditions of the exemptions.

NAME Illuranahall. DATE July 23, 2021 SUPERVISOR Joyce I