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

N759633859

FACILITY: DEXTER FASTENER TECHNOLOGIES INC.		**SRN / ID:** N7596
LOCATION: 2110 BISHOP CIRCLE EAST, DEXTER		**DISTRICT:** Jackson
CITY: DEXTER		**COUNTY:** WASHTENAW
CONTACT: Don Semones , Environmental, Health & Safety Manager		**ACTIVITY DATE:** 03/15/2016
STAFF: Zachary Durham	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled, unannounced inspection of the minor source operating under a Rule 290 exemption. Also discussed a planned expansion project consisting of a coating line that may meet Rule 287(c) permit exemption.		
RESOLVED COMPLAINTS:		

Contacts

Don Semones, EH&S Manager
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Dan Johnston, Engineering Manager
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Purpose

This was a scheduled, unannounced inspection of the facilities and equipment at Dexter Fastener Technologies, Inc. in Dexter, MI. This is a minor source that operates using Permit to Install (PTI) exemptions for their various cold forming, heat treating, and packaging processes. Brian Carley and I arrived at the facility at about 12:40pm on 3/15/16 to determine compliance with state and federal rules and regulations. We met with Don Semones and Dan Johnston.

Background

Dexter Fastener Technologies manufactures bolts used in the automotive industry. Their process consists of straightening, cutting and forming wire of various gauges to the product specification of their customers. Large spools of wire are fed into the cold forming machines whereby it is pulled and hammered straight. Next, the wire is cut to length, depending on the bolts application. The slug of wire is then struck to form the head of the bolt. These blank bolts are finally forced through a die that forms the threads and the bolts are ejected from the machine. From there, bolts are heat treated in another machine to increase strength. The heat treating process heats the bolts in a furnace fired by Rx Gas (see attached record) and subsequently quench in oil. Vaporized quench oil is tracked for Rule 290 as particulate matter (PM). Following heat treating, some bolts are assembled with a washer; others are threaded or staged to be sent out for plating. Those bolts not receiving further processing are packaged.

This facility was last inspected by Glen Erickson in August 2014 after correspondence with Don about the possibility of the company expanding their current operation. Since the company has been located at this site, beginning around 1989 or 1990, there have been several expansions. The prospective process they are looking to add would consist of a dip-spin coating process controlled by a catalytic oxidizer that would require the company to construct a new building to house the equipment. The project, should it continue, is estimated to take about 1 year.

During the correspondence between Don and Glen, Don inquired whether or not a PTI would be required with the new process. In the report dated 8/28/2014 Glen informed Don of the Rule 287(c) exemption and associated record keeping requirements for surface coating processes that use less than 200 gallons per month, minus water. Their current estimated rate is around 150-165 gal/month, with 30% being water, thus yielding a monthly usage of about 110 gal/month. This rate would reflect compliance with Rule 287(c).

Glen also indicated in his previous report that fuel consumption was low enough that the company would not be required to report to MAERS.

Compliance Evaluation

This company currently utilizes the Rule 290 permit exemption for their Heat Treat furnace lines, of which they are labelled A through G. The records we reviewed during the closing meeting indicate that the company is maintaining proper documentation while also keeping within monthly emission rates for each chemical with a screening level (see attached record).

We also viewed an emergency backup generator rated at 153.2 HP. I was provided with the EPA Exhaust Emission Compliance Statement (see attached) required by 40 CFR Part 60 Subpart JJJJ that was developed by the manufacturer, Cummins Power Generation. It appears to be in compliance with Subpart JJJJ.

Summary

Brian and I held a pre-tour meeting with Don and Dan to discuss the purpose of our visit and I provided them with the Environmental Inspections brochure as well as the PTI Exemption handbook. We discussed the process and layout of the facility, upon which time Don provided me with a copy of the existing building drawing and area of projected expansion for the dip-spin coating line (see attached drawing). From there we headed into the facility to walk through the different process areas.

We observed the process from beginning to end; starting with the cold forming process, continuing to heat treating, and finishing with either final product or product to be sent out and further treated elsewhere. While walking past the heat treating furnaces we noticed a pilot flame, which Don indicated was burning excess Rx gas. We also went up to the roof to view a host of different stacks, each corresponding to a different furnace. Don informed us that he had a camera placed on the roof that allows him to view the stacks on a continuous basis.

Having completed the facility tour, we headed back to the conference room and discussed the record keeping requirements as well as the upcoming project. After Don provided me with a representative sample of their records for Rule 290 and the engine certification, Brian and I exited the facility.

Compliance Status and Recommendations

I have determined that this facility is in compliance with state and federal air rules and regulations during the time of this inspection.

I recommend that the company contact AQD with any questions they have before the time of installation of new equipment associated with the upcoming dip-spin coating process to ensure continued compliance.

NAME Zach Durham DATE 3/23/16 SUPERVISOR