

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

N674054619

FACILITY: Bodycote		SRN / ID: N6740
LOCATION: 3700 Eastern Ave SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Tom Williams , General Manager		ACTIVITY DATE: 08/06/2020
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Announced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility at 9:00AM to conduct an announced, scheduled inspection and met with Tom Williams, General Manager. Mr. Williams and I proceeded to a conference room where we met virtually with Ahmad Hammoud and William Guzman to discuss the purpose of the inspection. I filled out the Department of Environment, Great Lakes and Energy health screening form prior to my arrival, as well as the Bodycote health screening form. Mr. Williams stated that there had not been any COVID-19 positive employees identified at the facility. During the inspection, proper PPE and social distancing was performed to the extent possible.

**FACILITY DESCRIPTION**

Bodycote Grand Rapids is a steel heat treating and thermal processing facility. The two main operations consist of vacuum furnace processing and atmospheric thermal processing. They specialize in a variety of manufacturing sectors, with a focus on automotive and aerospace and defense parts. There have been no changes to the existing equipment nor has any new equipment been installed since the last inspection in 2013 and the permit modification that resulted. The facility currently operates pursuant to Permit to Install No. 98-13A which covers four heat treating lines with integral oil quench, and exemptions for other operations as described below.

**COMPLIANCE EVALUATION**

Vacuum Furnace Processing

In this section of the facility there are nine vacuum furnaces and three cryogenic temper furnaces that utilize electric heat and nitrogen in the process. These furnaces are exempt from permitting pursuant to Rule 282(2)(a). I surveyed a variety of parts before being treated in the furnaces to ensure they are not oil coated, and no oil was observed.

Atmospheric Thermal Processing

This section of the facility has four heat treating lines, each consisting of a natural gas-fired furnace with integral oil quench and is controlled by a flare (flame curtain). These heat treating lines are permitted pursuant to Permit to Install No. 98-13A. Following an on-site review of the recordkeeping, I made some suggestions to the format to include 12-month rolling totals. A quick review of the data indicated compliance with the permit limits, it just wasn't displayed in the spreadsheet. Mr. Williams quickly modified the existing spreadsheet to include the data I asked for.

The permit limits volatile organic compound (VOC) emissions of FGHEATTREAT1 to 2.3 tons per year on a 12-month rolling time period as determined at the end of the month. The permit specifies that Bodycote can utilize an emission factor of 0.8 lb VOC/ton of metal quenched. The current reported emissions for the 12-month period ending July 2020 were 0.88 tons VOC.

The permit limits metal throughput for EUHEATTREATIQ13, EUHEATTREATIQ14 and EUHEATTREATIQ15 on a combined basis to 5,400 tons per year on a 12-month rolling time period as determined at the end of the month. The current reported combined metal use for these lines for the 12-month rolling period ending July 2020 is 2,015.8 tons.

The permit limits metal throughput for EUHEATTREATIQ5 to 400 tons per year on a 12-month rolling time period as determined at the end of the month. The current reported metal use for this line for the 12-month rolling period ending July 2020 is 185.1 tons.

These values indicate compliance with the permitted limits.

I observed the associated flare (flame curtains) in operation for each of the heat treating units and Mr. Williams indicated that they have not altered the stack dimensions.

In the Atmospheric Thermal Processing area, I also observed a dunk spray washer that is externally vented and requested the Safety Data Sheet (SDS). The SDS did not identify any hazardous ingredients or VOC and based on pH is alkaline. This appears exempt per Rule 285(2)(r). There was also an internally vented rust proofing tank, that not all parts go through. However, those parts that are treated go into a tempering oven. The tempering ovens are exempt per Rule 282(2)(a) and the parts are not considered oil coated at that point as they have been washed. Finally, there was an internally vented ultrasonic wash that is exempt per Rule 285(2)(r).

**CONCLUSION**

Bodycote was in compliance at the time of the inspection.

NAME April Lazzaro

DATE 08/17/20

SUPERVISOR 