P1106 MANILA

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

P110668990		
FACILITY: Boydcote Thermal Processing, Inc.		SRN / ID: P1106
LOCATION: 8580 Haggerty Road, CANTON TWP		DISTRICT: Detroit
CITY: CANTON TWP		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 09/12/2023
STAFF: Gerald Krawiec	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY2023		
DESCLIVED COMPLAINTS.		

AQD On-site Inspection, September 12, 2023.

AQD staff conducted an On-site Inspection for FY 2023 of Bodycote Thermal Processing, Inc., located at 8580 Haggerty Road in the City of Canton. The purpose of the inspection was to determine the facility's compliance with applicable state and federal air pollution rules and regulations, and AQD's PTI 6-20A. Housain Yasin, Quality Manager accompanied AQD staff during this inspection.

FACILITY BACKGROUND

Bodycote Thermal Processing, Inc is located at 8580 Haggerty Road, Canton, MI. This company has multiple locations throughout the world. The current operating schedule Sunday 10 pm to Friday evening; 3 shifts per day. There are 27 FTE's. Facility was shut down in 2009 and restarted in 2013. Most of the equipment was installed in waves between 2013 and 2015. This facility provides steel for automotive using horizontal gas nitriding. Mr. Bryan Ames is the plant manager since 2018.

INSPECTION NARRATIVE

Housain Yasin, Quality Manager greeted me as I entered the facility. He stated that the Plant Manger was not in, but he may be able to assist. After a Zoom Opening Meeting with 4 other staff (attendees list attached), Housain was approved to give me a plant tour. I explained that my objective was to determine compliance with AQD PTI No. 6-20A, issued October 20, 2022. I was informed EU-FCE-1008 AND EU-FCE-1009 have been operating for approximately 4 months. That being the case, this maybe too soon to conduct an inspection.

During the plant tour, I observed the following:

- There are 10 furnaces ("nitriders" or "KGO's")
- · Nitriding takes 21 hours; gives a deeper diffusion of nitrogen to the part
- Each furnace has two flares: one main and one backup. Furnace pressure triggers operation of second flare
- No substantial maintenance is needed on the flares; is it either working or it's not and this is confirmed visually
- There are electrically heated pre-ox furnaces (heat to 300C)
- Furnace heated under nitrogen to 550 C; mixture of ammonia and CO is injected, furnace is back purged at the end of the cycle to cool the parts
- There is one furnace that operates on an 8-hour batch to perform ferritic nitro carbonizing, (this can be any furnace).
- Tanner services the ammonia tank; size is 1,000 gallons
- New ultrasonic washer in place (old washer is shutdown)

Housain was not able to give me any other information. I stated that after the new heat-treating furnaces have been in operation a longer time. I would return to do a more complete compliance inspection.

COMPLIANCE DETERMINATION

At this time, based on the plant tour and operations evaluated in this report, this facility appears to be in compliance.