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

B360756290

FACILITY: Thomas Aerospace & Defense		**SRN / ID:** B3607
LOCATION: 628 N HAMILTON, SAGINAW		**DISTRICT:** Bay City
CITY: SAGINAW		**COUNTY:** SAGINAW
CONTACT: Ryan Rayburn , Temporary Contact		**ACTIVITY DATE:** 11/09/2020
STAFF: Gina McCann	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Records review.		
RESOLVED COMPLAINTS:		

Mid-March 2020 State of Michigan residents have since been required to adhere to social distancing guidelines in response to the Covid-19 pandemic crisis. This inspection was to be conducted in two parts, an electronic records review with facility staff in teleconference and an onsite portion to review operation of control devices and process equipment. On November 15th, 2020 MDHHS issued the Three-Week Epidemic Order to slow the spread of COVID-19. The on-site portion of this inspection was delayed due to this order.

On October 27th, 2020, EGLE-AQD staff emailed Thomas Aerospace & Defense. Upon no response from the facility contact, a phone call was made. The contact had left the facility. On November 9, 2020 a records request to Mr. Randy Zimmerman and Mr. Ryan Rayburn. Attached is the request sent on November 9th. The facility's consultant called a few times to review the records request. It appears the records were not being maintained after the environmental staff left. The facility sent records requested on November 12th, 2020. On November 24th and December 7th follow up emails were sent asking for the missing records from the November 9th records request.

I (glm) performed an off-site inspection Thomson Aerospace and Defense. I had a meeting to review records with Mr. Ryan Rayburn, EHS for a Washington state facility and temporarily assisting the Saginaw plant and Mr. Randy Zimmerman, Plant Manager for Thomson Aerospace and Defense. The purpose of the inspection was to determine compliance with PTIs # 383-08. At the time of the inspection the facility was not in compliance with active permit.

The facility is located on Hamilton Street in Old Town Saginaw. Through the years the facility had various owners ranging from General Motors Delphi in the late 1970's to General Motors Saginaw Steering Gear Division/Thompson Saginaw Ball Screw in the mid 1980's and most recently called Linear Motion, LLC as recent as 2008. The company is currently owned by the parent, European company Meggitt and operates under the name Thomson Aerospace and Defense. They manufacture ball screws for civilian and military aerospace as well as munitions for defense. Due to the nature of equipment they manufacture the facility is an ITAR, International Traffic in Arms Regulations, regulated plant. ITAR regulates the export and import of defense related articles and services.

One active PTI is listed in permit cards for this facility, #383-08. The permit has HAP opt-out limits, though it is unclear that this is a true HAPs opt-out permit.

EUPGBBLASTER

The Pangborn Rotoblast system is used to remove scale from heat treated metal parts. A 1,095 scfm Wheelabrator dust collector is the associated control device. EUPGBBLASTER was taken offline 18-20 months ago and remove in the fourth quarter of 2019.

EUWHLBLASTER

The Wheelabrator Tumblast system is used to remove scale from heat treated parts. The part tumbles through this equipment to "de-bur" the part. A 4,250 scfm Pulsair dust collector is the associated control device. EUWHLBLASTER is restricted from operating unless the associated dust collector is installed, maintained, and operated in a satisfactory manner. The records request asked for records of maintenance performed on the dust collector associated with EUWHLBLASTER for the last two years. Maintenance data was not available. Mr. Rayburn commented the facility did not have a PM program in place. In November 2019, a PM program was put in place to track schedules and activities for all machines and equipment. A malfunction abatement plan (MAP) will be requested for this equipment.

EUPLATING

EUPLATING consists of two copper plating lines with phosphating or pickling tanks for surface treatment of metal parts. Each plating line is controlled by a cross-flow scrubber and mist eliminator system.

Special condition (SC) III.1. restricts the facility from operating the plating lines unless a malfunction abatement plan (MAP) is submitted for the packed bed wet scrubber system with mist eliminator. The records request asked for a copy of the malfunction abatement plan. Mr. Rayburn's commented the facility does not have a MAP. An abatement plan will be generated and forwarded. A violation notice will be sent citing this condition.

SC VI. 2 requires the facility to keep in a satisfactory manner, daily records of a once per day reading of both the pump discharge pressure and visual verification of return water flow to the holding tanks for the packed bed wet scrubber system with mist eliminator. The required MAP should specify appropriate operating parameters for the scrubber and mist eliminator. Records for January 2019 through October 2020 were requested and reviewed. The operating logs require each scrubber to operate at a minimum flow of 42 gallons per minute (gpm) and the pump discharge pressure to be a minimum of 10 psig per minute for all four pumps. Each scrubber seems to operate the pump discharge, consistently above the minimum required 10 psig. There are periods of time when the pressure and flow data were not recorded due to the operator being on vacation. Additionally, there are multiple periods throughout 2019 and 2020 when the scrubbers operated below 42 gpm. The facility does not appear to be operating the scrubber system with mist eliminator in a satisfactory manner. Future compliance will be checked once a MAP is received.

FGHEATTREAT

This facility group consists of two (2) emission units, EUSCANNER14 and EUHEATTREAT. EUSCANNER14 is a 14-foot vertical scanner with oil quench. The process is equipped with an electric induction ring and quenches for heat treating. EUHEATTREAT is a heat treat process equipped with three gas-fired furnaces with integral quench tanks; two gas-fired endothermic gas

generators; two draw furnaces (one electric and one gas-fired); and one parts washer. These units do not have associated controls.

Special condition II.1 limits material usage for quench oil to 3,470 gallons during a 12-month rolling time period. SC VI.2. is the associated monitoring recordkeeping condition that requires the facility to record and calculate the quench oil usage. According to the records, the material usage for 12-month rolling time period ending November 2020 was 250 gallons.

Special condition I.1. limits particulate emissions to 16.0 tpy based on a 12-month rolling time period. According to the records, emissions ranged from 0.54 tons in January 2020 and 0.91 tons in October 2020.

At the time of the inspection this flexible group appeared to be in compliance.

FGFACILITY

Emission limits appear to be opt-out limits for HAPs. The potential to emit (PTE) calculations could not be found therefore it is unknown what they were at the time of permitting and further if this is truly an opt-out permit. However, based on the HAP emission limits of 9 tpy for each individual HAP and 22.5 tpy for aggregate HAPs I am considering this an opt-out facility.

Based on previous inspections it appears that the hydrochloric acid in the muratic acid used on the plating line was the was the only HAP associated with the facility, therefore the individual emissions are the same as the aggregate. Emissions for the 12-month rolling time period ending October 202 were 0.15 tpy. At the time of the inspection the facility was in compliance with thte requirements of this flexible group.

NAME _____ DATE 12/9/2020 SUPERVISOR _____