

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

B360740539

FACILITY: THOMSON SAGINAW BALL SCREW		SRN / ID: B3607
LOCATION: 628 N HAMILTON, SAGINAW		DISTRICT: Saginaw Bay
CITY: SAGINAW		COUNTY: SAGINAW
CONTACT: Edwin VanHorn , EHS/Maintenance & Facilities Manager		ACTIVITY DATE: 06/22/2017
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of PTI 383-08, 473-88 and 349-84B.		
RESOLVED COMPLAINTS:		

I (glm) performed a scheduled unannounced inspection of Meggitt / Thomson Aerospace and Defense. I was accompanied by Mr. Ed VanHorn, EHS-Facilities Manager and Mr. Dan McIntyre, UAW Representative. The purpose of the inspection was to determine compliance with PTIs # 383-08, 473-88 and 349-84B. At the time of the inspection the facility was in compliance with the active permits and applicable state and federal air quality regulations.

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/Thomson Saginaw Ball Screw in the mid 1980's and most recently called Linear Motion, LLC as recent as 2008. They employ 185 employees and of that 118 are hourly and the remaining are salary. 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. During the inspection FAA (Federal Aviation Administration) was performing an inspection with staff from the quality division.

The inspection started with a review of active permits and a brief discussion of the overall expectations of the inspection followed by a tour of the facility and finished with records review.

PTI #383-08

The permit application requested voiding PTI 473-88 for (2) two Homocard induction furnaces equipped with an oil quench tank, because the equipment was no longer installed. Additionally, the application requested to void PTI # 349-84B for the paint booth operations and operate under permit exemption R287c. Permit cards database still had these PTIs listed as active. A void request was sent to Lansing on July 7, 2017.

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. Johnson Controls performs preventative maintenance (PM) for all equipment at the facility. The dust collector had bags replaced in April 2017 and additional PM as recent as May 2017. Attached are job detail reports. Employees check for proper operation on an ampres output meter. The proper operating range is in between 15 and 20 ampres. The equipment was not in operation at the time of inspection; however plant staff started it to show how it works. At the time of the inspection this emission unit appeared to be in compliance.

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. At the time of the inspection this equipment was down for maintenance. Staff was changing a belt on the unit. Job detail reports from Johnson Controls show the dust collector had bags replaced in April 2017. See attached logs.

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. The plating lines operate one shift per day.

Special condition 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. AKT Peerless submitted a MAP on behalf of the facility on June 2, 2009. The MAP covers items listed in special conditions III.1.a., b. and c.

Flow for scrubber #1 was 45 gallons per minute (gpm) at 30 pounds per square inch (psi), scrubber #2 was 51.49 gpm at 27 psi, plating line #3 was not in operation nor was the associated scrubber and scrubber #4 had a flow of 43 gpm at 24 psi. According to the MAP the viewed monitoring parameters were within normal operating ranges at the time of the inspection.

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.

Mr. VanHorn provided material usage records for recording years 2012 through current. Special condition II.1 limits material usage for quench oil to 3,470 gallons during a 12-month rolling time period. According to the records, March 2015 was the highest recorded usage of quench oil at 1,754.5 gallons and September 2014 was the lowest at 745 gallons.

Special condition I.1. limits particulate emissions to 16.0 tpy based on a 12-month rolling time period. Mr. VanHorn provided emission records for 2012 through current. According to the records, emissions ranged from 6.4 tons in March 2015 and 2.7 tons in September 2014.

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.

Mr. VanHorn and I reviewed SDS for the facility and determined that hydrochloric acid (HCl) was the only HAP associated with the facility and was found in the muriatic acid used on the plating line. Mr. VanHorn provided material usage records for 2012 through July 2016. Based upon usage and the associated density of HCl from the SDS, emissions were 0.143 tpy for 2016. At the time of the inspection the facility was in compliance with the requirements of this flexible group.

NAME *Shia L. Mc* DATE 7/17/17 SUPERVISOR *C. [Signature]*