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## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

3160425658			
FACILITY: GM LLC Customer Care & Aftersales - Swartz Creek		SRN / ID: B1604	
LOCATION: 6060 W. BRISTOL RD., FLINT		DISTRICT: Lansing	
CITY: FLINT		COUNTY: GENESEE	
CONTACT: Marvin Asbury , Environmental Operations Supervisor		ACTIVITY DATE: 06/25/2014	
STAFF: Brad Myott	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: Perform schedu	ed inspection to determine compliance with PTI 95-09.		
RESOLVED COMPLAINTS			

Contact: Marvin Asbury; marvin.k.asbury@gm.com

GM LLC Customer Care & Aftersales formerly GM Service Parts Operation (GMSPO) in Swartz Creek warehouses automotive parts. A powerhouse containing three active boilers supplies heat to the 3.2 million sq. ft. facility. Some of the auto parts, mostly doors, side panels, hoods, hatches and fenders are coated with a black prime coat in an ELPO bath at the facility. I met with Mr. Marvin Asbury and I provided him with a copy of the DEQ Inspections brochure. Marvin and I discussed their permit, operations and recordkeeping. Marvin then showed me around the facility, in particular we went the boiler room and the paint line.

## **Regulatory Discussion**

GMSPO was issued an ROP in 1999 because coal fired boilers had SO2 emissions greater than 100 tons. In 2000, three coal fired boilers were converted to natural gas and a fourth decommissioned. The changes significantly reduced the facilities Potential to Emit (PTE) for several pollutants. In 2005 the ROP was re-issued as MI-ROP-B1604-2005. In the staff report, PTEs for VOC and HAP were the pollutants identified as being greater than 100 tons and 25 tons respectively. A Flow Coater prime coat process was removed later that year. Recently, a reformulation of the prime coating for the electrophoretic deposition dip process (ELPO) was made to remove all HAPs. These last process changes have significantly reduced VOC and HAP emissions. Because the facility was less than major source threshold for all criteria pollutants and HAP they applied for and were issued an opt-out permit in 2009 identified as PTI 95-09 that restricted VOC emissions to 30 TPY. They are a minor source of HAPs and thus considered an Area source for HAPs.

The coating used on the electrophoretic deposition dip line has been reformulated and meets the definition of Non-HAP coating. The ELPO process is no longer subject to 40 CFR 63 subpart MMMM as the facility is not a major source.

The three natural gas boilers are subject to 40CFR 60, NSPS subpart Dc.

Because GM LLC Swartz Creek is an "Area Source" of HAP they are subject to 40 CFR 63 Subpart JJJJJJ, the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boiler Area Sources. This subpart may require subject facilities to mail an initial notification to the EPA, conduct an energy assessment and perform boiler tune-ups. I followed the Boiler MACT flowchart on the DEQ website and it appeared that the three natural gas boilers are not subject to any of the 6J requirements. Michigan DEQ presently does not have administrative authority to enforce this subpart.

This facility is not currently subject to the Organic Liquid Distribution (OLD) MACT, 40CFR 60 subpart EEEE.

The MAERS report including emission calculations was reviewed on 03/27/2014. In the report, the pollutants reported to be emitted in the greatest quantity were NOx at approx. 4.8 TPY, CO at 7.1 TPY, and VOC at 8.3 TPY. These emissions are consistent with past MAERS reports.

The following emission units are covered by PTI 95-09:

Emission Unit	Description	compliance status
EU1-ELPO	Electro-coating - Pre-treatment operation (ELPO) consisting of a pre- treatment operation, prime-coating (dipping) operation, and a cure oven.	compliance

EU2- BLR001	48 MMBtu/hr natural gas fired boiler with low NOx burners	compliance
EU2- BLR002	48 MMBtu/hr natural gas fired boiler with low NOx burners	compliance
EU2- BLR003	48 MMBtu/hr natural gas fired boiler with low NOx burners	Compliance

## 1. FG2-BLRGRP Three Natural Gas Fired Boilers

A document indicating specifications of the pipeline quality gas is on file. Daily records of natural gas use are being kept and a summary was submitted to me by M. Asbury, see attached. Through May of 2014, 171.8 MM cubic feet of natural gas was combusted for the 12-month rolling time period. Pipeline quality gas and recordkeeping are the only NSPS requirements. The NSPS does not contain usage restrictions for these boilers. Marvin, Gary Loder (Boiler Room Supervisor) and myself stepped outside the boiler room to witness any visible emissions from the boiler stacks. Units 3 and 4 are combined in a single stack and unit 2 has it's own stack. Only Unit 2 was operating today at a low load of about 7,000 lbs steam/hr to support the ELPO. The boilers are used much less in the summer as the heat demand for the building is much less. I did not witness any visible emissions from the stacks. The stacks appeared to be of the appropriate dimensions, greater than 75' tall and less than 30" in diameter.

2. EU1-ELPO Electrophoretic Prime Coating Line (ELPO)

The prime paint system is an electrophoretic deposition dip application (ELPO). Resin and paste are mixed in water to create the coating. The line was operational and Marvin and I witnessed the several parts entering the ELPO bath A zinc phosphate and sealer bath is used to pretreat the parts and prepare them for coating. The pretreatment line is exempt per Rule 285(r). Marvin stated that no changes have been made recently and there aren't any plans for any new processes or equipment at the facility in the near future. They currently run 1 shift per day but are designed to operate 2 shifts. Business is fairly steady but still not at levels that would warrant running 2 shifts.

I asked to see the coating records for the ELPO system and Marvin provided me with a spreadsheet containing the coating records, see attached. Coating related VOC limits from the OPT-OUT were clearly identified on the spreadsheet. The facility is allowed a total of 30 tons per year of VOC.

I reviewed the records for 2012, 2013 and 2014. VOC emissions for the rolling 12-month period ending in May, 2014 were at 6.9 Tons, well below the allowable limit of 30 tpy. The VOC content for both coatings was less than the allowable limit of 1.2 lb/gal. The ELPO coating is a two part coating consisting of 6 parts resin and 1 part paste, therefore the overall VOC content of the actual coating is far below the limit.

On 12/20/2004 an initial notification was received indicating processes subject to 40 CFR 63 subpart MMMM. Since that time the coating used on the ELPO prime line has been reformulated and meets the definition of Non-HAP coating. A letter was received on 12/20/2006 indicating the reformulation. There currently is no existing MMMM subject processes at the facility.

3. EU1-MAINTPNT Maintenance paint booth

This booth was installed in 1957 and is exempt per Rule 287(c). This booth is used very sparingly. Records are being maintained and coating usage is well below the 200 gallons/month exemption limit. A particulate control system is in place.

NAME DATE 7/8/14 SUPERVISOR Millar MCD	ell-