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

N003425086

FACILITY: MOLDED PLASTIC INDUSTRIES, INC.		SRN / ID: N0034
LOCATION: 2382 JARCO DR, HOLT		DISTRICT: Lansing
CITY: HOLT		COUNTY: INGHAM
CONTACT: Steve Carlson , Treasurer		ACTIVITY DATE: 05/08/2014
STAFF: Robert Byrnes	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: 2014 Scheduled Inspection.		
RESOLVED COMPLAINTS:		

On May 8, 2014 I conducted a compliance evaluation at Molded Plastics (MP) Industries Inc. facility. This inspection was to assess compliance with permit No. MI-ROP-N0034-2013. I arrived at the facility at 1:30 pm and met with Steven Carlson of (MP). I stated my intent for the site visit, provided a copy of the DEQ Environmental Inspections: Rights and Responsibilities procure and then toured both buildings within the facility.

Molded Plastics is currently operating 1 shift for 5 days per week. The facility uses both closed mold and open molding processes.

There were 7 closed mold presses only 2 of them appeared in operation at the time. A fiberglass panel was placed in one part of the mold and some black resin material was spread over the fiberglass. The fiberglass was then placed in the mold press where heat and pressure were applied for a certain amount of time. Then the part would be removed from the press and the process would start over again. There were also some cold mold resin processes, a couple closed mold operations and a mini portable press. These operations are exempt under Rule 286(b) as plastic compression and associated plastic resin handling equipment.

EU-SPRAYBOOTHGL1 and FG-COMPOSITESMACT is a spray booth for the application of gel coat on open molds. Mold release is sprayed on molds followed by an application of gel coat. Because the stationary source is major for HAP the spray booth is also subject to MACT WWWW. The following emission rates were verified as found in the March 13, 2014 Semi-annual and Annual ROP compliance certifications. The data reviewed was for the months of October, November and December of 2013. All usages and emission rates were below their respective limits as follows:

October 2013	November 2013	December 2013	Emission Limit
48.75 lbs (highest daily usage below hourly limit)	17.98 lbs (highest daily usage below hourly limit)	46.6 lbs (highest daily usage below hourly limit)	63.0 lbs/hr VOC (SC I.1)
.02 tons/mo	.01 tons/mo	.01 tons/mo	1.05 tons VOC per month (SC I.2)
0.02 tpy	0.01 tpy	0.22 tpy	12.6 tons VOC/12 month rolling time period (SC I.3)
195.04 lbs/ton	195.04 lbs/ton	195.04 lbs/ton	377 lbs HAP/ton of resin (SC I.4 and MACT WWWW)

48.75 lbs (highest day total)	17.98 lbs (highest day total)	46.6 lbs (highest day total)	300 pounds gel coat applied per hour (SC II.1)
1,201 lbs/mo	1,029 lbs/mo	1,143 lbs/mo	10,000 pounds gel coat applied per month (SC II.2)
33%	33%	33%	<=35% VOC by weight (SC II.3)

A copy of the Gel Booth particulate filter replacements were obtained for the months of Oct, Nov and Dec 2013. Based upon the records obtained it appears the filters were changed almost every week with an occasional 2 or 3 week period prior to replacement.

EU-SPRAYBOOTHRS1 and FG-COMPOSITESMACT is a spray booth for the application of resin on open molds and/or glass fibers on open molds. Because the stationary source is major for HAP the spray booth is also subject to MACT WWWW. The following emission rates were verified as found in the March 13, 2014 Semi-annual and Annual ROP compliance certifications. The data reviewed was for the months of October, November and December of 2013. All usages and emission rates were below their respective limits as follows:

October 2013	November 2013	December 2013	Emission Limit
Lbs used per month well below hourly limit	Lbs used per month well below hourly limit	Lbs used per month well below hourly limit	30.6 lbs/hr VOC (SC I.1)
35 lbs	12 lbs	19 lbs	1.28 tons VOC per month (SC I.2)
0.02 tpy	0.01 tpy	0.01 tpy	15.4 tons VOC/12 month rolling time period (SC I.3)
73.13 lbs/ton	73.13 lbs/ton	73.13 lbs/ton	88 lbs HAP/ton of resin (SC I.4 and MACT WWWW)
96 lbs (highest day total)	72 lbs (highest day total)	78 lbs (highest day total)	360 pounds resin applied per hour (SC II.1)
16,665 lbs/mo	19,666 lbs/mo	16,836 lbs/mo	

			30,000 pounds resin applied per month (SC II.2)
33%	33%	33%	<=50% VOC by weight (SC II.3)

A copy of the Gel Booth particulate filter replacements were obtained for the months of Oct, Nov and Dec 2013. Based upon the records obtained it appears the filters were changed almost every week with an occasional 2 or 3 week period prior to replacement.

FG-Rule 287(c) and FG-MACT PPPP is a plastic parts paint booth. The spray booth is operated as exempt under Rule 287(c). However, because the stationary source is major for HAP the spray booth is also subject to MACT PPPP for plastic parts painting. The facility complies with MACT PPPP using the emission rate without add-on controls option found under 40 CFR 63.4491(b). The coatings they use fall into the general use coating category. The following emission rates were verified as found in the March 13, 2014 Semi-annual and Annual ROP compliance certifications. The data reviewed was for the months of October, November and December of 2013. All usages and emission rates were below their respective limits as follows:

October 2013	November 2013	December 2013	Emission Limit
0.08 lbs HAP/lb coating solids	0.08 lbs HAP/lb coating solids	0.09 lbs HAP/lb coating solids	0.16 lbs HAP per lb of coating solids (general use coatings, 40 CFR 63.4490(b)(1))
23 gallons	26 gallons	29 gallons	200 gallons per month, Rule 287c

There was an assortment of exempt processes throughout the plant. During the site visit I observed the following processes likely being operated as exempt:

Acetone recovery unit (30 gallon) exempt under Rule 285(u).

Cutting, sanding, sand blasting, CNC mills, drill presses, plastic shredder and grinding equipment, water jet cutter, exempt under Rule 285(l)(vi)(B) with emissions vented in plant.

Welding equipment and portable cutting torches exempt under Rule 285(i) and Rule 285(j).

Across the street from the main building is another MP facility. At this facility they take sheet plastic and heat it to soften the material. The material then gets put into a mold and is vacuum formed. The processes here appear to be operated as exempt under Rule 286(d) as plastic thermoforming equipment.

I also discussed with Steve Carlson whether the facility has any emergency generators or heat sources which use natural gas. He said the facility did not have any and I clarified that the plastic vacuum

forming process used electricity to heat the plastic parts. I also explained to Steve that if the facility were ever to install a natural gas combustion source, hot water heaters over approx. 120 gallons, emergency generators, etc., that the facility would likely be subject to Boiler MACT and/or RICE MACT.

After the site tour, we concluded by viewing some of the recent VOC emission records. All the records appeared in place and I stated I would contact Bill Hilton at RCSI if I had any questions. Steve was fine with me contacting Bill for any clarifications needed on the VOC records.

On May 13th, 2014 I requested copies of the MSDS for the Gelcoat materials. This request was because the most recent records reviewed (ROP SEMI-Cert 2 and Annual Cert received in March 2014) showed a deviation which was not reported. Table 1 – Product Characteristics showed a Black Sanding Gel-coat with 36% VOC which is above the 35% VOC requirement. The attached MSDS shows the actual material content to be 31.71% VOC which is below the permit limit. Again I contacted Bill to get more information at which he responded with the attached e-mails dated May 30 and 31st which confirmed the 31.71% VOC is a percent by weight value.

Based upon the review of the latest ROP Certifications, visiting the site to conduct an inspection and after further clarification of information received in a May 20, 2014 submittal from Bill Hilton it appears the facility is in compliance with all requirements at this time based upon the information provided.

NAME  DATE 6/5/14 SUPERVISOR