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

N080229717

FACILITY: ALBAR INDUSTRIES, INC.		**SRN / ID:** N0802
LOCATION: 780 WHITNEY DR., LAPEER		**DISTRICT:** Lansing
CITY: LAPEER		**COUNTY:** LAPEER
CONTACT: Andrew Woodruff , Human Resources Manager		**ACTIVITY DATE:** 05/26/2015
STAFF: Robert Byrnes	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled Inspection.		
RESOLVED COMPLAINTS:		

On May 26, 2015 Nathan Hude and I visited the Albar Industries facility to conduct an announced air quality inspection. I arrived at the facility at 12:20 pm and met with Andy Woodruff. We began the inspection by going over the inspection brochure informing them of our reason for inspection, what information we would be looking for, and explained we would send a copy of our report and there would be an opportunity for them to complete a survey regarding this inspection.

Albar paints plastic and metal parts for the automotive industry. The facility is a major source of VOC and is cover by ROP MI-ROP-N0802-2010. The ROP is also currently under review for renewal. The facility currently has 3 paint lines and a small booth for proto types and testing coatings. Line 1 runs mostly interior plastic auto parts with no metal parts. Line 2 had the pre-production hydro-coating tank but has since been removed and is being replaced with the production version of the hydro-coater. Line 3 is currently running mostly plastic parts (spoilers, calipers, door handles, exterior pieces, vent trim for interior) with some metal parts in between. The facility has been running 2 shifts from 6:00 am to 2:30 pm for line 1 and from 6:00 am to 11:15 pm for line 3. Line 3 does not stop while line 1 stops to assist line 3 workers for breaks and lunch.

Coating Line 1 has a 1989 natural gas fired water heater which generates hot water for the parts washer proceeding line 1 coating operations. The spray booths are side draft set ups with dry filters for particulate control. The spray booths utilize all manual spraying. The line has no bake oven so it either sprays prime first, cure the coating then re-runs the parts for base and clear. Or it just base and clears the parts. This line does all plastic and uses electrostatic sprayers. No metal parts are coated on this line due to the lbs VOC/gallon for metal parts.

Coating Line 2 is a side draft booth with dry filters for particulate control and was originally only used for priming parts as it only has 1 cure oven. We did not look into line 2 but we were shown the pre-production and initial production hydro- coating tanks which will be used under the newly obtained PTI 127-14A.

Coating Line 3 has a 1993 natural gas fired 2.5 MMBTU/hr water heater which generates hot water for the parts washer proceeding line 3 coating operations. The spray booths are side draft set ups with dry filters for particulate control. It has a primer booth with 2 robots and 1 manual spray area. A primer oven cures parts for 45 minutes at 160 to 180 degrees F. A basecoat booth follows with 3 electrostatic robots and 2 manual sprayers. Next, an 8-10 minute ambient flash area and then followed by a clear coat booth with 4 electrostatic sprayers and 2 manual sprayers followed by the bake oven. The prime oven, main bake oven are directed to the thermal oxidizer. The basecoat booth is directed to the carbon bed concentrator followed by the thermal oxidizer.

Coating Line 4 is the side booth for line 3 and is identified as SLN3 in the permit. This is just a test booth which is a 3 sided enclosure. There is also a bake oven off to the side of this booth for curing the test applications.

VOC Control (Fluidized Bed Concentrator and RTO) - The thermal oxidizer is a 3 chamber unit which controls the ovens and fluidized bed. The fluidized carbon bed concentrator uses hot air to desorb the VOC from the carbon beads. The following operational parameters were observed during the inspection:

	Actual Observation	Permit Requirement
RTO Temperature	1503 degrees Fahrenheit	1400 degrees Fahrenheit ROP, 1480 degrees Fahrenheit MACT
RTO Duct Static Pressure	2.60 to 3.25	2.66" WC (although the instantaneously value is out of range, the permit requirement is based upon a 3 hour average)

Fluidized Bed Desorb Temperature	453.5 degrees Fahrenheit	445 Degrees Fahrenheit
Fluidized Bed Pressure Drop	0.98" WC	0.9647 (although the instantaneously value is not out of range, the permit requirement is based upon a 3 hour average)

Both the fluidized bed and the RTO had the thermocouples Calibrated in July 2014, re-calibration is due July 2015. Hard copies of the fluidized bed and RTO calibrations are attached to this report as Appendix A. Copies of the latest Preventative Maintenance (PM) dated August 15, 2014, August 25, 2014 and May 22, 2015 were also obtained for the concentrator and RTO. These records demonstrate Compliance with the Operations and Maintenance (O&M) inspection requirements found in special condition VI.1. These records show the company had recently checked pressure gauges, carbon flow and height, heat exchanger medial and RTO valves, linkages and tested the valves operating alarm. There is also a work order for calibration of the pressure differential transmitter. Copies of the inspection records for the control devices are included with this report as attachment "B".

MACT PPPP and MACT MMMM Monitoring Data Review:

At the site inspection I collected MACT monitoring data for the week of April 6th, 2015. This information contained the RTO operating temperature data which is used for destruction efficiency verification. All operating periods during this week were well above the 1400 degree Fahrenheit value usually averaging around1460 degrees Fahrenheit. This complies with the EU-LN3 portion of the ROP, however this is non-compliance for FG-MMMM and FG-PPPP. This item is further explained below in items to be addressed. A copy of the RTO monitoring data is included with this report as Attachment "C".

Further, as part of the MACT MMMM and MACT PPPP RTO/concentrator review, copies of the concentrator desorb temperature (desorb verification) and the pressure drop to the RTO (capture verification) were obtained for April 6, 2015 through April 10, 2015. Review of the data shows all desorb temperature data was above the minimum 445 degree Fahrenheit requirement and all RTO pressure drop data was above the 0.9647 "wc based upon a 3 hour average. The data obtained at the facility and printed in color is not totally accurate in that it was instantaneous data and not based upon a 3 hour average. The black and white print out obtained from Andy Woodruff via e-mail has the information compiled into 3 hour averages and are based upon operating time frames only. Copies of the desorb temps and RTO inlet pressure drop is included with this report as Attachment "D". Andy was asked if the facility performed RTO bake-outs as part of the maintenance conducted on the unit. We confirmed with Randy the Maintenance Supervisor that Albar Industries Inc., has never conducted an RTO Bake-out yet to date but the unit does have the programming logic to conduct such a procedure.

Review of the MACT emission limits was conducted based upon the most recent data submitted on January 15, 2015. The following information was included with the most recent MACT Compliance Report.

Emissions for the 12 month rolling time period ending December 2014	MACT MMMM Limit	MACT PPPP Limit	Compliant?
0.0461 # HAP/# SOL (for MACT MMMM)	0.45 # HAP/# SOL	NA	Yes
0.0524 # HAP/# SOL (for MACT PPPP)	NA	0.16 # HAP/# SOL	Yes

A copy of the January 15, 2015 MACT compliance report is included with this report as Attachment "E".

VOC Calculation Discussion:

A copy of the daily paint records for the week of April 6, 2015 was obtained during the inspection. A review of this information shows the gallons of paint sprayed on EU-LN3 each day, and any catalyst and/or thinner used as well. These records show the capture efficiency, removal efficiency and destruction efficiency values used are those which are consistent with the most recently acceptable performance test. However, given that the thermal oxidizer was not at the proper operating temperature, the control credit should not have been used for compliance purposes. A copy of the daily paint records for the week of April 6, 2015 is included with this report at Attachment "F". No review of the quarterly VOC records was conducted as part of this PCE. The reason for this

is because the quarterly VOC reports are reviewed every quarter when they come in. Over the recent 2 year period all of the reports have demonstrated compliance with the applicable VOC emission limits for coating lines 1, 2, 3 & 4. Copies of the quarterly VOC reports are found in the facility file for Albar Industries Inc., in the Lansing District Office.

Maintenance Department has various machining, drilling, cutting equipment exempt under Rule 285(l)(vi)(B). The area also has welding and torching equipment exempt under rules 285(i) and 285(j).

ROP Discussion:

As discussed with Andy the ROP renewal is currently under way. Working Draft comments are due by June 15, 2015. It was also pointed out to Andy that the CAM obligations under EU-LN3 special condition VII.5 require each semi-annual and annual deviation to include a statement regarding CAM. If there are no excursions or exceedances then these reports shall include a separate statement that there were none. If excursions or exceedances occur, then most company should simply note which deviations are also considered excursions or exceedances under CAM.

Areas of Concern and items to be addressed:

The facility had white opacity coming from Line 1 basecoat booths when we drove to the facility at 11:24 am. Further review of the parts and colors sprayed revealed that white coatings were being applied during that time frame. Normally no opacity is expected from any spray booth with proper overspray filtration working properly and in place. At our time of arrival and during the inspection of the spray booths new filters had since been installed and other new ones were nearby. Because opacity is not normally seen from paint spray booths a Violation Notice (VN) will be sent for not complying with EU-LN1 special condition III.1 and Rule 910. A copy of the Method 9 readings are included with this report as Attachment "G".

Also, while observing EU-Line 1 we asked for a demonstration that the electrostatic spray equipment was on and functioning. The unit had no lights on until they turned the switch on. At that point it was not clear if it was functioning because of a yellow light and it did not show when the gun was being triggered. We temporarily left the area while we continued to discuss the permit requirements for electrostatics. We returned to the electrostatic controller and talked with the paint line manager who also tried to make the electrostatics work. As it turns out the electrostatic cable was also not plugged into the spray gun. When we left the area the electrostatic spray equipment was being operated. The spray gun pressures were running in the 25-28 psi at the gun tip well above the High Volume Low Pressure (HVLP) spray gun requirements. Because the EU-LN1 electrostatics were not turned on nor was the spray gun pressure below 10 psi a VN will be sent for not complying with special condition III.2 and Rule 702(a).

On June 9, 2015 the response to additional information confirmed that the temperature records for the RTO met the obligations for the ROP, but was below the 1480 degree Fahrenheit requirement for MACT MMMM and MACT PPPP compliance. The most recent compliance testing for MACT conducted under 40 CFR 63.3967(a) and 40 CFR 63.4567(a) established the 3 hour average temperature at 1480 F. The company will need to look back to determine how long the unit did not meet the required temperature and deduct any compliance credit for periods in which the temperature was not met. The emissions for those periods will also need to be recalculated as well. As such this will also be added to the VN letter sent on June 10, 2015.

Conclusion:

Additional Information (RTO calibration dates) was requested on June 3, 2015 via email. Andy Woodruff responded on June 4, 2014 via e-mail with the information that was requested. Additional RTO temperature data was requested on June 9, 2015 via phone message and e-mail. Andy responded later in the day on June 9, 2015 via e-mail.

The facility has three outstanding items which need to be addressed and were cited in the VN letter dated June 10, 2015. A response deadline of July 1st, 2015 has been set.

Coating samples were sent to ATOM laboratories for Method 24 and Method 311 analysis. The results of these samples will be done as a separate Partial Compliance Evaluation (PCE) after the results are received. Copies of the MSDS for each sample sent to the ATOM laboratories is included with this report as Attachment "H ".

All other records and items observed during the inspection appeared to be in compliance with the rules and regulations. At the end of the inspection we also discussed the ongoing odor concerns from recent complaints received on the facility. Andy did mention they were looking into possibly changing some coating formulations and may have had some trial runs of lower VOC coating in the works. We left the facility at approximately 3:20 pm. The copy of the field notes, facility diagram and e-mails are included as Attachment "I".

NAME John T Byrnes DATE 6/10/15 SUPERVISOR