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

N741348131

FACILITY: VENTRA FOWLERVILLE LLC		**SRN / ID:** N7413
LOCATION: 8887 WEST GRAND RIVER AVENUE, FOWLERVILLE		**DISTRICT:** Lansing
CITY: FOWLERVILLE		**COUNTY:** LIVINGSTON
CONTACT: Kaylyn Cox , Environmental Health & Safety		**ACTIVITY DATE:** 01/09/2019
STAFF: Robert Byrnes	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: FY 2019 Scheduled Inspection. Non Compliance due to MACT PPPP recordkeeping and violation of the 0.16 Lb HAP per Lb Solids emission limit. A violation notice will be sent on March 20, 2019.		
RESOLVED COMPLAINTS:		

On January 9th, 2019 I conducted an unannounced inspection at the Ventra Fowlerville LLC facility. I arrived at the facility and asked to meet with Kaylyn Cox, the Environmental health & Safety Manager for the facility. Tim the Paint Shop Manager for Ventra also joined us during the paint shop portion of the walk through. The facility is a major source of VOC and is covered by MI-ROP-N7413-2014a. The facility produces (molds) plastic truck/automobile bumper facia's, paints the parts and then assembles the parts as necessary.

EU-PIM
EU-PIM was identified in PTI 247-04 listing 6 presses with no permit conditions for the EU. There are currently 10 (originally 6 permitted, then 8, and now currently the 10th press was installed in 2018) plastic molding machines which make front and rear bumper components for various vehicle models. The molding operations typically run 3 shifts per day, 5 days per week. The last 4 installed mold presses are likely exempt under Rule 286(2)(b). The facility has installed robots on 9 mold press lines to flame treat the parts with a natural gas fired torch. These additions are also likely exempt under Rule 282(2)(b)(i) or under the Rule 286(2)(b) exemption.

Additional plastic molding equipment was also installed under PTI 247-04, such as electrically heated dryers, 4 plastic pellet storage silo's (currently 6, last one recently installed in July 2017) and plastic recycling. Future installations of the plastic handling equipment could also be considered exempt under the following regulations if the records required in Rule 278 are maintained. Electrically heated air dryers for the plastic Resin portion of the molding process. The dryers are used to remove moisture from the molding process to eliminate quality concerns – R286(2)(a). Outdoor plastic resin storage silo's – exempt R286(2)(a). Bulk plastic resins are offloaded from semi-tankers using a vacuum system to transfer the materials. Scraped or ruined plastic bumper components are recycled through a plastic grinder to be ground up for re-pelletizing or paint stripped at a facility off-site – exempt R285(2)(l)(vi)(B).

There are also several bumper assembly lines which punch some holes and attach smaller plastic parts (lights, grills, sensors, brackets, license plate holders) which were likely installed after the main equipment from PTI 247-04- exempt R285(2)(l)(vi)(B). The assembly lines are operating 2 shifts per day, 5 days per week for various products. A future area was being prepared for a future installation of bumper assembly.

It was again mentioned to Kaylyn that any additional equipment added beyond that of a PTI needed separate documentation for each new process showing the installation date, a description of the equipment installed, the exemption rule the equipment was installed under and a Rule 278 demonstration.

EU-WASHLINE
The paint system begins with a 5 stage aqueous based washer. The final stage uses reverse osmosis water. After the washer there is a convection dry-off oven with a 16 minute drying cycle at 225 degrees Fahrenheit. Next is a cool down process which lasts approximately 5 minutes with an end temperature target of 80 degrees Fahrenheit before paint application begins. Although EU-WASHLINE is identified in the ROP, there are no permit conditions for this emission unit.

FG-COATINGLINE
The start of the paint process begins with the application of an Adhesion Promoter (AP) which is solvent borne. There are 3 conventional robotic applicators within the adhesion promoter booth. After the AP booth there is a convection heated flash which drives off the solvent from the AP coating. EU-APPROCESS is ducted to the thermal oxidizer as required in PTI 247-04B.

The basecoat booths spray a solvent borne color coating using 5 fully electrostatic robot bells and 3 dual head electrostatic robot applicators. The booth was designed for 80 ft/minute down draft and has a water wash particulate overspray control system. Following the basecoat booth is an 8-10 minute ambient flash area. Clear coat booths apply a solvent borne clear coat paint using 6 robotic applicators. All applicators are fully electrostatic bells which the original 5 had been tested by ABB when installed and provided approx. 47% TE. The clear coat booth was also designed for 80 ft/minute down draft and has a water wash particulate overspray control system. There is a 15 minute ambient flash followed by the bake oven. The bake oven has a 10 minute radiant heat section followed by a convection section. The total oven time is approximately 40 minutes with the design criteria being able to achieve a part curing temperature of 250-280 degrees Fahrenheit for 25 minutes.

Ad Pro and basecoat paints are received from DuPont or NBcoatings in 55 gallon drums filled with 45 gallons of paint, 10 gallons of room left for thinner. The clear coat comes in 150 gallons totes or larger due to the higher usages. A new contractor/vendor has been utilized for the paint sludge room. Tim mentioned they have new paint pumps coming soon which will significantly cut down on clean up emissions.

The basecoat and clear coat spray booths are controlled by an RTO. The RTO is brought up to temperature 2 hours prior to production and has a conveyor/sprayers interlock which automatically shuts down if the temperature of the RTO falls below 1400 degrees Fahrenheit. The RTO is a 2 chamber design with a cycle time of 2.5-3 minutes.

RTO temperature strip charts were obtained for the weeks of 12/10/18, 12/17/18 and 1/3/19 and are included with this report. Other than a temperature drop over the weekend, the temperature was always above 1400 degrees Fahrenheit. More commonly the RTO was operated around 1520-1540 degrees during all operating periods. The thermocouple was replaced on 3/6/17. The heat exchanger media was replaced in the winter of 2015. An RTO bake out was last conducted in June 2015. Norm said the unit has been burning cleaner since switching to solvent borne AdPro. No more white ash and no more bake outs have needed to be conducted. Ventra did add new ceramic media (1" diameter balls, 4" deep) to the top which allows for easy cleaning during maintenance.

The operating parameters for the RTO on the day of inspection were as follows:
Operating Temperature = 1642 degrees F (previous inspections were 1547, 1546, 1546)
The thermocouple was replaced on 3-16-2017
Inlet Temperature = 122 degrees F (previous inspections were 83, 99, 92)
Outlet Temperature = 314 degrees F (previous inspections were 280, 297)
Pressure Drop 6.0" (previous inspection was 18.5", 16.5") ceramics were replaced in 2018
%CV = 0% (previously 43%, not sure if this was a correct reading)
Fan Speed 100%, 2088 RPM, 112 amps, 640 Bus VDC (same as previous inspection)

The following is a list of special conditions for the FG-COATINGLINE, the requirement and how they comply with each condition:

Special Condition	Requirement	Compliance Evaluation
I.1	176.3 tpy VOC	Summary records for December 2018 showed VOC emissions of 76.1 tons, well below the permit limit. See Attachment A.
I.2	3.7 tpy dibasic ester family	December 2018 VOC records showed the actual dibasic ester family materials as used had emissions of 0.01 tpy (previously 0.031 tpy), well below the permit limit. See Attachment "A" for details.
I.3	13.1 tpy Ethylbenzene	December 2018 VOC records showed the actual emissions of Ethylbenzene to be 0.46 tpy (previously 0.54 tpy), well below the permit limit. See Attachment "A" for details.
I.4	1.4 tpy Formaldehyde	December 2018 VOC records showed the actual Formaldehyde emissions to be 0.44 tpy (previously 053

		tpy), well below the permit limit. See Attachment "A" for details.
III.1	Reclaim 70 percent by weight of all purge solvents.	No review of the purge reclaim was conducted during this inspection. Given paint line purging occurs in the spray booth with the control device on and operating, it would be easy to assume the 90% capture and 95% destruction easily achieves better than 70% disposal of purge solvents. Previously a review of the 2013 purge manifest records and the amounts purchased was conducted. The facility reclaimed approximately 52.6% of purge solvent based upon purchase/manifest records. Those purge solvents not collected would have occurred in the controlled paint booths with 90% capture and 95% destruction. Therefore the facility would be in compliance with the 70% reclaim/removal/disposal (in this case destruction) requirements.
III.3	Captured waste coatings must be in closed containers	All coating materials were closed in the paint kitchen area.
III.4	Submit a MAP	The facility submitted a Malfunction Abatement Plan (MAP) in May 2015.
III.5	Submit a plan to minimize emissions from Start up, Shutdown and malfunctions.	This plan was also included as part of the MAP submitted in May 2015.
IV.1	Install and maintain a water wash system.	Copies of CQ Service Reports for the water wash system was requested like previous inspections. Information was provided to show maintenance on the 5 stage parts washer prior to the coating line. This documentation did not demonstrate the waterwash system was installed, maintained and operated in a satisfactory manner. Due to other more important violation discoveries this item will be reassessed at a future site inspection or site visit.
IV.2	Non-electrostatic applicators or better	Booths used 3 robotic applicators. Ventra Fowlerville does not use any HVLP applicators, therefore test caps are not applicable. The facility uses spray equipment with comparable technology and transfer efficiency.
IV.3	1400 Degrees Fahrenheit temperature and monitoring requirement.	The facility uses a wheel chart recorder. Charts were obtained for the weeks of 12/10, 12/17 and 1/2/18. The 1/2/19 chart was overwritten with the previous week, but it appears this was corrected on 1/3. Weekly wheel charts showed the oxidizer to be above 1500 degree's except during the weekends or when there was no production. See Attachment "B"
V.1	Method 24	Company uses vendor formulation data and MSDS to determine VOC contents
V.2	Conduct performance testing every 5 years unless an acceptable demonstration shows the previous results are still valid.	The facility conducted stack testing to prove capture and destruction efficiency on November 6th, 2014 when the adhesion promoter line was connected to the RTO. Testing will be again be verified in the summer of 2019 as discussed in the ROP renewal meeting held on November 8, 2018.
VI.1	Complete all calculations by 15th day of the month	VOC records were up to date.
VI.2	Monitor the RTO combustion chamber temperature.	The facility uses a wheel chart recorder. Charts were obtained for the weeks of 12/10, 12/17 and 1/2/18. The 1/2/19 chart was overwritten with the previous week, but it appears this was corrected on 1/3. Charts are included as Attachment "B" of this report.
VI.3	Maintain MSDS and/or formulation data.	No review of the MSDS was conducted during this site inspection. However, the facility has always had all MSDS available for review if needed.
VI.4	Maintain VOC records.	Copies of the VOC records ending for the month of December 2018 are included as attachment "A" of this report.
VI.5	Maintain Toxic Air Contaminant (TAC) records.	Copies of the TAC records ending for the month of December 2018 are included as attachment "A" of this report.
VI.6	Monitor and record a parameter to demonstrate capture.	The facility was asked for records of the RTO fan speed which was previously recorded on a daily basis as found in the Robot Technician Start Up Checklist. Kaylyn was not aware of any record regarding the RTO fan speed and the ROP does not currently obligate Ventra Fowlerville to recording it. Operating parameters were observed during

		the day of the site inspection and it appeared the VFD was not in use and the fan was simply operating at maximum speed consistently.
VII-1 through VII.3	Standard ROP reporting	Yes, annual and semi-annual submittals with deviation reports have been received.
VIII	Stack restrictions	Stack parameters for FG-COATINGLINE were confirmed in the MAERS submittal.
IX.1	Comply with Subpart PPPP	Summary records for December 2018 showed HAP emissions of .01 lbs HAP/l b solids, well below the MACT limit of 0.16 lbs HAP/lb soilds. See Attachment A.

VOC recordkeeping
For VOC emissions from the painting line, Ventra Fowlerville uses their EMTRACK data system for recording and calculating VOC and HAP emission data. A monthly log from the paint kitchen is sent back to the office for data entry into EMTRACK. In the paint kitchen, actual usages, including solvent additions are kept by each shift each day, and then are compared to supplier (Dupont and NB Coatings) invoices to make sure the paint inventory is balanced with usage. The facility can spray over 100 different colors.
Copies of the VOC and HAP summaries for January 2017 were obtained and are included as attachment "A" with this report. The records obtained were reviewed and they are below their respective VOC emission limits as found in the ROP.

Plastic Parts MACT
Initial notification – March 31, 2009 due, received April 29, 2009.
Based upon the initial information obtained during the original site inspection it appeared that control credit was being taken for HAP emissions. This should not be allowed as the company has not conducted proper monitoring, recordkeeping, testing and proper notifications to switch compliance options under MACT Subpart PPPP. Using the basis information obtained it was apparent control credit was erroneously being taken and that if control credit was not take they would have exceeded the 0.16 LB HAP per Lb Solids emission limits in MACT PPPP. Additional follow up information was requested and provided on February 7, 2019. Review of this data still appeared to show errors and a meeting was held with Ventra on March 4, 2019 at Constitution Hall. The discrepancies were pointed out and further additional information was requested for all Ad Pro usages/MSDS for all of 2018 as well as all Basecoat/Topcoat usages and MSDS for February 2018. This information was provided on March 8, 2019 but did not provide summary information as to what the corrected increase in emissions would be. Review of this data again continued to show discrepancies in SDS information. Ad Pro information had transposed numbers in favor of Ventra's emissions. Topcoat emissions also are under reported based upon my review of the detailed data provided for February 2018 putting them well above the MACT PPPP limit for that month. Because this was the second attempt at obtaining information to show compliance and the fact that all sets of data point to an emission limit violation, a violation notice will be sent. This will include violations for FG-MACTSUBJECT:

- exceeding the emission limit of 0.16 LB HAP per Lb Solids. 40 CFR 63.4490(a)(1), Special Condition I.1 of FG-MACTSUBJECT.
- applying control credit without monitoring parameters to verify operating limits or recordkeeping for monitoring operating parameters to use the control compliance option. 40 CFR 63.4492(b) and Table 1, Special Condition III.1 of FG-MACTSUBJECT.
- The facility was using control credit in their existing records which requires a Work Practice Plan be established. 40 CFR 63.4493(b)(1), Special Condition III.2 of FG-MACTSUBJECT.
- The facility was using control credit in their existing records which requires a Start up Shut Down and Malfunction Plan (SSMP) be established. 40 CFR 63.4500(c), Special Condition III.3 of FG-MACTSUBJECT.
- The facility was using control credit in their existing records which requires a proper capture test to establish operating parameters. 40 CFR 63.4560(a)(1), 40 CFR 63.4564(a), Special Condition V.2 of FG-MACTSUBJECT.
- The facility did not provided the proper compliance option for compliance reports, the facility did not properly report deviations and the facility did not provide a notification of change for changing compliance options. 40 CFR 63.7(b), 40 CFR 63.8(f)(4), 63.9(b) through (h), 40 CFR 63.4510, Special Condition VII.7 and VII.8 of FG-MACTSUBJECT.

Boilers/Hot Water Heaters – MACT DDDDD
The facility also has 2 natural gas fired water heaters which are exempt under Rule 282(b)(i). Both units are new and are 2.0 MMBTU/hr or less. All units are used to provide process water to the washer and building heat. The units had their MACT DDDDD tune ups completed on October 1, 2015.

Diesel Generator – MACT ZZZZ
The facility has a Spectrum 300 Detroit Diesel emergency generator that was installed when the facility began operation in March 2006. The rated capacity of the generator is 300 HP. A copy of the PM work order details was obtained which showed a total of 427.6 hours and 0.1 hours for maintenance check. The previous inspections noted 427.2 and 323.5 hours total. A copy of the hours operated and the maintenance record is included as Attachment "D" to this report.

Stacks
No review of the stack heights and diameters were done at the facility during this inspection. The 2017 MAERS report confirmed the stacks are the same dimensions as in the facility's ROP.

2017 MAERS Submittal
A review of the 2017 MAERS submittal was done and no errors or discrepancies were found

Conclusion:
The facility is in compliance with all applicable rules and regulations except for the MACT PPPP violations noted above. A violation notice will be sent. Follow up the Violation Notice will be within 21 days of being sent and will likely result in being referred to enforcement unless corrected information showed no emission limit violations occurred. The site inspection was un-announced, Kaylyn was very helpful in getting the information needed in a timely fashion.

NAME Matthew Byrne DATE 4/5/19 SUPERVISOR B.M.