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

B652855293

FACILITY: ADAC Automotive Muskegon Plants		**SRN / ID:** B6528
LOCATION: 2050 Port City Blvd and, MUSKEGON		**DISTRICT:** Grand Rapids
CITY: MUSKEGON		**COUNTY:** MUSKEGON
CONTACT: Jessica Perez , EHS Manager		**ACTIVITY DATE:** 06/24/2020
STAFF: Scott Evans	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled, announced air permit compliance inspection		
RESOLVED COMPLAINTS:		

Introduction

The ADAC Automotive facility located in Muskegon, Michigan is an auto parts manufacturing facility that focuses primarily on the painting and assembly of small vehicle components. It has two buildings, each with its own paint line and assembly line. The facility currently has one active opt-out Permit to Install: PTI No 2-12. The PTI has requirements for three emissions units (EU-FLATRACKLINE, EU-COELINE, and EU-AUTOLINE) as well as source-wide limits to opt the source from Title V permitting in FG-FACILITY.

Scott Evans conducted an unscheduled, announced compliance evaluation on June 24, 2020. This was an announced inspection to ensure necessary staff would be present and that safety measures could be met during the ongoing COVID-19 pandemic. At the time of this inspection, tighter regulations were in place regarding site visits due to the COVID-19 outbreak. Due to this, the on-site portion of the visit was kept to a minimum with a focus on visual inspection of the facility and all equipment as pertains to the aforementioned PTI. All records reviews were conducted remotely either prior to or after the visual inspection as conducted.

Visual Inspection

Approaching the Facility

Upon approach, a drive around the perimeter of the facility was conducted, stopping periodically to observe any visual or olfactory notes. During this drive, no visible emissions were noticed. At some locations around the perimeter, a faint odor of solvents could be observed. However, these odors were minor.

Upon approaching the facility, Inspector Scott Evans (SE) was greeted by the Environmental Health & Safety Manager, Jessica Perez (JP) and Roger Hill (RH) in the parking lot of the facility. A quick health screening including a temperature check and a brief questionnaire was conducted to grant SE access to the facility. Once inside, a brief conference was held to discuss the plan for the day's visit so that time in the facility could be minimized. Proper PPE and social distancing were maintained during the inspection.

EU-AUTOLINE

This unit has been removed from the facility as well as all associated control equipment. During the visual inspection it was confirmed that where the unit and control equipment once was is now warehouse space that is used for storage. No further evaluation is necessary or possible.

EU-FLATRACKLINE

This emission unit is located in the building on Keating Ave. and is an interior and exterior automotive plastic parts coating line composed of one prime-coat booth, one prime-coat oven, two base-coat booths, one MICA-coat booth, two clear-coat booths, and one topcoat cure oven. These eight pieces of equipment are contained by a Non-Fugitive Enclosure (NFE) that serves to control fugitive emissions from escaping into the facility and, therefore, the outside environment. Emissions are controlled through the use of water curtains (which catch particulate matter as the paint coatings are sprayed onto the automotive parts) and a Regenerative Thermal Oxidizer (which captures and destroys vapors before air is cycled out of the facility). The coating line and control equipment were operational during the visit.

The water curtains function by capturing excess paint particulate and flowing into a large collection pool. From this collection pool, the particulate matter, which floats atop the water, is skimmed into collection baskets. These baskets, once full, are sealed and disposed of. The water is then recycled through the system to repeat the capture process. During the inspection, a nearly full basket could be seen effectively capturing the paint residual. There were no visible emissions escaping from this system and odors of solvent were only noticeable directly next to the system.

The Regenerative Thermal Oxidizer (K-RTO) controls VOC emissions. This K-RTO is expected to operate in

accordance with the Malfunction and Abatement Plan (MAP) currently maintained at the facility. In accordance with the MAP, the K-RTO was maintaining a temperature of ~1550°F, which was above the minimum temperature requirement in the permit of 1450°F. The records reviewed reflected consistent compliance with this parameter. No visible emissions were seen coming from the stack through which the K-RTO exhaust is run.

EU-COELINE

This emission unit is located at the Port City Blvd. building and is a plastic parts coating line consisting of an uncontrolled parts loading and unloading tunnel, an uncontrolled 5-stage parts washer with dry-off oven and dry-off tunnel; and two (2) primecoating booths with flash-off, a prime cure oven, three (3) basecoat booths with flash-off, three (3) clearcoat booths with flash-off, associated tunnels, and a final cure oven all controlled by a Regenerative Thermal Oxidizer (PC-RTO). Overspray is controlled by fabric filters. During the inspection, the line and control equipment were operational.

The fabric filters function in multiple layers. The first filter layer of each booth is replaced multiple times daily. Used filters are removed, bagged, and disposed of while fresh filters are placed. Subsequent filter layers are replaced less frequently on an as-needed basis. During the inspection used filters and their containment bags could be seen being sealed and disposed of properly. Replacement filters were nearby and ready for use when needed.

The PC-RTO functions by drawing air that has already been through the fabric filters, burning off excess VOC emissions, and releasing the air as exhaust. This PC-RTO is required by the permit to operate with a minimum temperature of 1450°F. During the inspection the PC-RTO could be seen operating at ~1570°F. No visible emissions were seen coming from the exhaust stack during the inspection.

Additional Items

During the inspection, two small parts washers were observed on the premises. Both had lids closed at the time. Both parts cleaners are exempt from air permitting regulations by Rule 281(2)(h). Two boilers were observed during the inspection as well. These boilers were confirmed by the boiler plates to be the boilers installed in 2012 and 2017. These boilers will be discussed in more detail under the records review section of the report, as review of the specifications sheets was conducted off site after the visual inspection was completed.

It is worth noting as well that PTI No. 2-12 has one more emission unit listed with applicable regulations: EU-AUTOLINE. During the inspection it was confirmed that this line has been decommissioned and dismantled and is no longer at the facility. ADAC has not requested any permit modifications to reflect this.

Records Review

EU-FLATRACKLINE

PTI No. 2-12, EU-FLATRACKLINE has two established Emission Limits, each pertaining to Volatile Organic Compounds (VOCs): 29.8 tons-per-year (tpy) based on a 12-month rolling time period, and 7.5 pounds-per-hour (pph). The facility has received permission to use manufacturer formulation data for the purposes of emissions calculations. Records for this emission unit were obtained via email from the facility for the period of May 1, 2019, to June 1, 2020. In these records can be seen the following required data:

- VOC content of each compound used.
- Amount of each compound used.
- VOC daily emissions for each compound based on 95% efficiency of destruction.
- VOC monthly emissions for each compound based on 95% efficiency of destruction.

Though not explicitly recorded within the provided data, 12-month rolling VOC annual emissions can be easily calculated based on the records provided. This is acceptable for this report, but the facility will be advised that 12-month rolling records to their data tables should be added moving forward.

The records provided demonstrate the following recorded results:

- Highest monthly VOC emissions recorded were 700 lbs during the month of February, 2020.
- During this month, average hourly VOCs were 2.2 pph, which is well within the permitted allowance.
- Annual VOC emissions for the calendar year provided were ~3.1 tpy, which is well within the permitted allowance.

All records provided demonstrate that EU-FLATRACKLINE is within permitted emission limits.

It is worth noting that the provided records show a dramatic drop in emission levels beginning in April 2020. This is due to factory shutdown during the COVID-19 pandemic and does not represent any questionable factors regarding record keeping. It should also be noted that the K-RTO provides continuous readings of internal temperatures and that procedures and documentation for regular monitoring were observed during the

inspection to confirm proper historic functionality.

EU-COELINE

PTI No. 2-12, EU-COELINE has two established Emission Limits, each pertaining to VOCs: 40.1 tpy based on a 12-month rolling time period, and 400.8 lbs/day. The facility has been granted permission to use manufacturer formulation data for the purposes of emissions calculations. Records for this emission unit were obtained via email from the facility for the period of May 1, 2019, to June 1, 2020. In these records can be seen the following required data:

- VOC content of each compound used.
- Amount of each compound used.
- VOC daily emissions for each compound based on 95% efficiency of destruction.
- VOC monthly emissions for each compound based on 95% efficiency of destruction.

Though not explicitly recorded within the provided data, 12-month rolling VOC annual emissions can be easily calculated based on the records provided. This is acceptable for this report, but the facility will be advised that 12-month rolling records to their data tables should be added moving forward.

The records provided demonstrate the following recorded results:

- The highest single day VOC emission level was 34 lbs/day during May 1, 2019, which is well within the permitted allowance.
- The highest single month VOC emission level was 565 lbs during the month of May 2019.
- The annual VOC emission level during the time period of the data provided was 2.4 tpy, which is well within the permitted allowance.

It is worth noting that the provided records show a dramatic drop in emission levels beginning in April 2020. This is due to factory shutdown during the COVID-19 pandemic and does not represent any questionable factors regarding record keeping. It should also be noted that the PC-RTO provides continuous readings of internal temperatures and that procedures and documentation for regular monitoring were observed during the inspection to confirm historic functionality.

FG-FACILITY

PTI No. 2-12, FG-FACILITY has three source-wide emission limits pertaining to VOCs and Hazardous Air Pollutants (HAPs) to opt the source out of Title V permitting: 9.0 tpy per individual HAP, 22.5 tpy for aggregate HAPs, and 89.0 tpy for VOCs. Records for this emission unit were obtained via email from the facility for the period of May 1, 2019, to June 1, 2020. In these records, the following required data can be seen:

- All HAP containing materials used
- HAP content for each material used
- Amount of HAPs emitted
- Amount of HAPs reclaimed or destroyed
- VOC containing materials used
- VOC containing material reclaimed
- VOC emissions

Though not explicitly recorded within the provided data, 12-month rolling VOC annual emissions can be easily calculated based on the records provided. This is acceptable for this report, but the facility will be advised that 12-month rolling records to their data tables should be added moving forward.

The provided records demonstrate the following recorded values:

- Total HAP emissions from 5/1/2019 to 6/1/2020 were 0.27 tpy, which is well below the limit of 22.5 tpy.
- No individual HAPs exceeded 9.0 tpy, with the highest individual HAP emission being Xylene Mixed Ortho, Meta, and Para isomers at 0.06 tpy.
- VOC emissions recorded for FGFACILITY totaled 5.5 tons for the period of 5/1/2019 to 6/1/2019. This is well below the permitted limit of 89.0 tpy.

Other Noteworthy Items

During the inspection it was verified that the facility had no generators, two boilers, and two small parts cleaners on site.

As mentioned earlier in this report, both parts cleaners had lids closed at the time of the visual inspection, and both are exempt from air permitting regulations by Rule 281(2)(h).

The oldest boiler on site was installed in June of 2012. This boiler is a natural gas fired boiler that has an output of 2.64 mmBTU/hr. Since the output is below 10 mmBTU/hr, this boiler is not subject to the New Source

Performance Standards (NSPS) 40 CFR Part 60 Subpart Dc. Because this unit is natural gas fired it is not subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJJJJJ.

The second boiler on site was installed in December of 2017. This boiler is a natural gas fired boiler that has an output of ~1.9 mmBTU/hr. Since the output is below 10 mmBTU/hr, this boiler is not subject to NSPS 40 CFR Part 60 Subpart Dc. Because this unit natural gas fired it is not subject to the NESHAP under 40 CFR Part 63 Subpart JJJJJJ.

Both boilers are exempt from air permitting requirements by Rule 282(2)(b)(i).

Conclusions

At the conclusion of this inspection it appears that the facility is in compliance with applicable air regulations and PTI No. 2-12.

NAME Scott Evans DATE 9/23/2020 SUPERVISOR HH