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

N741153991

FACILITY: SMR Automotive Systems USA, Inc.		**SRN / ID:** N7411
LOCATION: 1875 BUSHA HIGHWAY, MARYSVILLE		**DISTRICT:** Southeast Michigan
CITY: MARYSVILLE		**COUNTY:** SAINT CLAIR
CONTACT: Deborah Hayes , Paint Quality Engineer		**ACTIVITY DATE:** 06/17/2020
STAFF: Rem Pinga	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled Level 2 Inspection		
RESOLVED COMPLAINTS:		

On June 17, 2020, I conducted a level 2 scheduled inspection at SMR Automotive Systems USA Inc. (SMR), formerly known as Samvardhana Motherson Reflectic, located at 1875 Busha Highway, Marysville, Michigan 48040. The purpose of the inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), the Administrative Rules, and the facility's Permit to Install No. 50-13A.

To comply with the COVID-19 Emergency AQD Field Inspection Guidance Update (June 2020), the inspection was announced and scheduled. Ms. Deborah Hayes, Paint Quality Engineer, accompanied me during the walk-through inspection. Per my request, she was my only inspection contact while at the facility. With Ms. Hayes' assistance, I adhered to the facility's COVID-19 safety protocols. Additional COVID-19 safety protocols were instituted at the facility such as temperature checks at main building entrances, check list/questionnaire of health/contact information, available paper face masks/gloves/face shields for customers in case they needed one, and hands free elbow/foot door openers. Following AQD guidance, all recordkeeping information were obtained through email instead of obtaining printed copies during inspection including some monitoring data except for data that needed to be verified during the walk-through inspection such as checking RTO temperatures that are required by PTI No. 50-13A. During the pre-inspection meeting, I reiterated the purpose of the inspection, including the need to follow the COVID-19 Emergency AQD Field Inspection Guidance. Ms. Hayes informed me that she has briefed her upper management on my request to limit my contact with facility staff for safety reasons and the request was approved. She mentioned that Mr. David Heise remains to be the Facilities Manager.

SMR bought this facility, formerly known as Schefenacker Vision Systems - USA Inc. This facility was originally under air use Permit to Install (PTI) No. 244-04 issued in November 2004 for one coating line. PTI No. 50-13 was issued in May 2013 to consolidate the first coating line with an additional second coating line that is almost similar to the first coating line except for the VOC emission control system. Both are controlled by regenerative thermal oxidizers (RTOs) except: RTO1 for EUPAINTPLANT-01 is rotary type RTO; and RTO2 for EUPAINTPLANT-02 is switching 2-drum type RTO. The facility also grew from 2

buildings into 3 buildings. SMR is also an international company with facilities in the United Kingdom and other countries. On June 26, 2019, a revised PTI No. 50-13A was issued to add FGBURNOFF, 2 natural gas-fired burnoff ovens with an afterburner emissions control for each unit. The ovens will be used to clean paint racks and paint booth floor grates. Per PTI No. 50-13A, special condition FGBURNOFF, I verified during the walk-through inspection that this equipment has not been installed at the facility.

PTI No. 50-13A was also issued as a synthetic minor permit to opt the facility out of the Clean Air Act of 1990, Title V, Renewable Operating Permit (ROP) requirements. This stationary source is not considered a major source of Hazardous Air Pollutant (HAP) emissions because the company has agreed to accept facility-wide single HAP and combined HAP emission restrictions, supported by monthly 12-month rolling total/s recordkeeping requirements, to demonstrate continued compliance as a HAP minor facility. Under PTI No. 50-13A, FGFACILITY, the facility is restricted to a potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112 to less than 9.0 tons per year and a potential to emit of all HAPs combined (aggregate HAPs) to less than 22.5 tons per year.

The facility manufactures the external side mirrors for various automotive customers (TESLA, GM, FCA, Ford, Nissan, Hyundai, Kia, etc.). Ms. Hayes and I conducted walk-through inspection in the 3 facility buildings. Plant 1 houses molding machines and office spaces. Plant 2 houses the assembly lines, office spaces, and testing laboratory. Plant 3 is the third and southern most building with address:1875 Busha Highway, Marysville, Michigan. It houses the 2 coating lines, EUPAINTPLANT-01 (PP1) and EUPAINTPLANT-02 (PP2). Each line include a fully enclosed and automated wash line (EU-Wash Line), primer coat (EU-Primer), base coat (EU-Basecoat), and clear coat (EU-Clearcoat). Emissions from the coating processes, except for EU-Wash Line, the flash off area, and the gas fired dry oven, are controlled by the designated regenerative thermal oxidizers (RTO No. 1 & 2) as described earlier. The building also houses a paint kitchen (EU-Paint Kitchen) and sludge room for each line. Emissions from the sludge room pits for PP1 and PP2 are ducted to the designated RTO for odor control.

Prior to entering the facility for inspection, I conducted odor observations upwind and downwind from the facility. In the past, SMR had odor issues but the facility took care of the odor issues primarily by routing paint kitchen and sludge room emissions into the RTO and improving on housekeeping to prevent leaks from the coating processes. The wind was blowing towards the south (Northerly Wind) at that time. I drove downwind along Cuttle Road from Busha Highway going east to Michigan Ave. and north on Michigan Ave. while conducting odor observations, but I did not verify any odors. I did not observe any odors upwind from the facility either.

At the facility, I met with Ms. Hayes at the lobby. After going through the COVID-19 safety measures discussed above and the pre-inspection meeting, Ms. Hayes accompanied me for a walk-through inspection first on the injection molding processes, since these processes were located in the main building. I requested for information on the injection molding machines, the mold release material, etc., while we were conducting the walk-through inspection. Per Ms. Hayes, Plant 1 has 81 functional injection molding machines but 2 are scheduled for removal. Data submitted showed 6.56 tons/year (tpy) VOC emission rate from mold release for FY 2019 and as reported in December 2019. The monthly 12-month rolling total VOC emission rate reported for end of May 2020 was 4.96 tpy. The injection molding equipment have been reported as permit to install exempt per AQD Administrative Rule R 336.1286(b). It appears that the mold release process can take AQD Rule R 336.1287(b) exemption from permit to install requirements.

Next, we walked towards RTO No 1 of EUPAINTPLANT-01. I noted an afterburner temperature of 1524°F at the display panel inside the electrical room located outside RTO No. 1. The temperature was in compliance with PTI No. 50-13A special condition EUPAINTPLANT-01 (IV.3) of 1400°F. The facility conducted stack test on March 25-26, 2015. Test results showed 98% and 97% destruction efficiency (DE) for RTO No.1 and RTO No. 2 respectively, and in compliance with the 95% DE permit limit. I verified the presence of flowing water underneath the paint booths for particulate control as a waterwash system and in compliance with PTI No. 50-13A, special condition EUPAINTPLANT-01 (IV.1). Per PTI No. 50-13A, special conditions EUPAINTPLANT-01 (III.1 & 2), all containers were closed during inspection. Per PTI No. 50-13A, special condition EUPAINTPLANT-01 (IV.2), I observed all applicators were automated bell applicators. Per PTI No. 50-13A, special condition EUPAINTPLANT-01 (V.1), SMR obtained approval from the AQD Warren District Supervisor to use formulation data instead of Method 24 testing for coatings but must test at least 10 coatings each year. The facility submitted Method 24 test results for 10 coatings on December 10, 2019 to comply with the condition for approval and the testing permit condition. Per PTI No. 50-13A, special conditions EUPAINTPLANT-01 (VI.1, 2, & 3), SMR kept records of chemical compositions of coatings used, gallons of coatings, VOC content, monthly and 12-month rolling total VOC emission rates and calculated the emission rates by the 15th of the following month. Per PTI No. 50-13A, special condition EUPAINTPLANT-01 (VI.4), SMR monitors RTO No. 1 temperatures continuously through an electronic chart recorder installed outside the electrical box panel located in a room outside RTO No. 1.

At EUPAINTPLANT-02, I noted an afterburner temperature of 1550°F at the display panel inside the electrical room located outside RTO No. 2. The temperature was in compliance with PTI No. 50-13A special condition EUPAINTPLANT-02 (IV.3) of 1450°F. I verified the presence of flowing water underneath the paint booths for particulate control as a waterwash system and in compliance with PTI No. 50-13A, special condition EUPAINTPLANT-02 (IV.1). Per PTI No. 50-13A, special

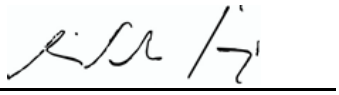
conditions EUPAINTPLANT-02 (III.1 & 2), all containers were closed during inspection. Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (IV.2), I observed all applicators were automated bell applicators. Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (V.1), SMR obtained approval from the AQD Warren District Supervisor to use formulation data instead of Method 24 testing for coatings but must test at least 10 coatings each year. The facility submitted Method 24 test results for 10 coatings on December 10, 2019 to comply with the condition for approval and the testing permit condition. Per PTI No. 50-13A, special conditions EUPAINTPLANT-02 (VI.1, 2, & 3), SMR kept records of chemical compositions of coatings used, gallons of coatings, VOC content, monthly and 12-month rolling total VOC emission rates and calculated the emission rates by the 15th of the following month. Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (VI.4), SMR monitors RTO No. 2 temperatures continuously through an electronic chart recorder installed outside the electrical box panel located in a room outside RTO No. 2. Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (V.2), SMR conducted capture and destruction efficiency (DE) testing for RTO N0. 2 on March 25-26, 2015 and verified 100% capture of the non-fugitive enclosure (NFE) and 97% DE, in compliance with the 95% DE permit limit in EUPAINTPLANT-02 (IV.3). Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (V.3), SMR verified the direction of air flow using smoke tube test method also on March 25-26, 2015. SMR also conducted the same testing requirements for RTO No. 1 during the same time period and verified 98% DE, 100% capture of the NFE.

Ms. Hayes sent all recordkeeping requirements per PTI No. 50-13A via email per COVID-19 AQD inspection guidance. Per PTI No. 50-13A, special condition EUPAINTPLANT-01 (I.1), SMR reported the monthly 12-month rolling total VOC emission rate at the end of May 2020 at 5,435.14 pounds (lb.) or 2.72 tons per year (tpy) and less than the 27.0 tpy permit limit. Per PTI No. 50-13A, special condition EUPAINTPLANT-02 (I.1), SMR reported the monthly 12-month rolling total VOC emission rate at the end of May 2020 at 8,173.71 pounds (lb.) or 4.09 tons per year (tpy) and less than the 12.3 tpy permit limit. Per PTI No. 50-13A, special condition FGFACILITY (I.1), the facility's submitted records showed the highest emitting individual HAP emission for FY 2020 was Xylene, based on monthly 12-month rolling totals. From June 2019 through May 2020, the highest monthly 12-month rolling total Xylene emission rate was reported in August 2019 at 5,219.82 pounds or 2.6 tpy and less than the permit limit of 9.0 tons tpy. Per PTI No. 50-13A, special condition FGFACILITY (I.2), the submitted records showed the highest monthly 12-month rolling total aggregate HAPs emission rate from June 2019 through May 2020 was reported for the month of August 2019 at 5.9 tpy and less than the permit limit of 22.5 tpy.

I also conducted a walk-through inspection at the facility’s natural gas fired emergency generator. The reciprocating internal combustion engine (RICE) is a spark ignition (SI) engine with manufacture date of August 09, 2013

and installation date of August 20, 2013. Submitted records showed the engine is Kohler and rated at 259 HP. The RICE is subject to the MACT standard, 40 CFR Part 63 Subpart ZZZZ (4Z) which referenced compliance to the New Source Performance Standard (NSPS), 40 CFR Part 60 Subpart JJJJ for SI ICE. I noted the non-resettable hour meter at 265.5 hours. SMR submitted recordkeeping showing full-service maintenance that included tune-up, oil, filter, spark plugs changed, inspection of hoses, battery, etc., was conducted on July 12, 2019 and the hour meter was noted at 207.9 hours. In 11 months, it appeared that the engine operated for 57.6 hours and less than 100 hours. SMR also submitted the USEPA certification for the certified engine showing compliance with the emission limits.

Overall, I did not find any noncompliance issues during the inspection.

NAME  DATE July 21, 2020 SUPERVISOR