

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

B724855476

| | | |
|--|--------------------------------------|----------------------------------|
| FACILITY: FCA US LLC Sterling Heights Assembly plant | | SRN / ID: B7248 |
| LOCATION: 38111 Van Dyke, STERLING HTS | | DISTRICT: Warren |
| CITY: STERLING HTS | | COUNTY: MACOMB |
| CONTACT: Adekunle Sanni , EH&S Environmental Specialist | | ACTIVITY DATE: 07/29/2020 |
| STAFF: Rem Pinga | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR |
| SUBJECT: Level 2 Scheduled Inspection | | |
| RESOLVED COMPLAINTS: | | |

On July 29, 2020, I conducted a level 2 inspection at FCA US LLC, Sterling Heights Assembly Plant (FCA SHAP). The facility is located at 38111 Van Dyke Ave., Sterling Heights, Michigan 48312. 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, the facility's Renewable Operating Permit (ROP) No. MI-ROP-B7248-2014a and Permit to Install (PTI) No. 27-17B.

The applicable requirements in PTI No.27-17B are incorporated in the draft renewal ROP, MI-ROP-B7248-2020, that is currently on 30-day Public Comment Period from September 7, 2020 until Oct. 7, 2020. ROP No. MI-ROP-B7248-2014a expired last November 18, 2019. However, FCA SHAP submitted an application for renewal of the ROP on April 18, 2019. The application was assigned to AQD staff Iranna Konanahalli to process. FCA SHAP obtained an application shield after the application was deemed complete and submitted timely, thus ROP No. MI-ROP-B7248-2014a remains in effect, along with PTI No. 27-17B, until the draft ROP No. MI-ROP-B7248-2020 is issued.

During the inspection, I was accompanied by FCA SHAP Mr. Adekunle Sanni, Environmental Specialist and facility contact person, and Ms. Rachel Winters, also Environmental staff primarily assigned to South Paint Shop (SPS). Ms. Winters joined the walk-through inspection around SPS only. Prior to conducting the walk-through inspection, I met with Mr. Sanni at the main building entrance for the facility's Covid-19 safety protocols of filling out health/contact tracing form, temperature check, wearing mask, and signing in. Next, Mr. Sanni took me to SPS building entrance and was provided with clean and plastic sealed coveralls to wear while inside the SPS building where I began the walk-through inspection. Prior to the July 29, 2020 inspection, Mr. Sanni, Ms. Winters, and I conducted on-line Google meetings, set up by Mr. Sanni, to discuss recordkeeping requirements and Covid-19 safety protocols for the onsite inspection. We also conducted post inspection online meeting on August 3, 2020 to discuss any additional/follow-up compliance with emission limits, monitoring, recordkeeping, and miscellaneous applicable requirements as contained in ROP No. MI-ROP-B7248-2014a and PTI No. 27-17B. This scenario was set up to minimize my time and Covid-19 risk exposure at the facility.

Fiat Chrysler Automobiles (FCA) owns and operates the Sterling Heights Assembly Plant (SHAP). FCA SHAP is a complex automotive manufacturing facility which includes a stamping plant, an automotive paint line, a body shop, an assembly plant, a bedliner facility, and warehousing. The facility currently operates under the terms of the ROP No. MI-ROP-B7248-2014a and PTI No. 27-17B. FCA SHAP assembled the various versions of the Chrysler 200 sedan vehicles until December 2016. On October 20, 2016, FCA SHAP obtained new source review (NSR) PTI No. 227-10D for an additional paint line to paint truck bed in preparation for the proposed shift of production at the facility from sedan to light duty trucks in 2017. On May 30, 2017, FCA SHAP obtained PTI No. 27-17 to replace PTI No. 227-10D for the new truck bed paint line, South Paint Shop (SPS), and the addition of a spray-on truck bedliner (SOBL) facility and storage warehouse facility outside of the assembly facility complex. PTI No. 27-17A was issued on November 2, 2017, replacing PTI No. 27-17, for equipment changes in the truck bed paint line as well as modifications to equipment associated with SOBL and the warehouse. Subsequently, PTI No. 27-17B was issued on April 6, 2018, replacing PTI No. 27-17A, to modify the 2 emergency generators, located in the truck bed paint line, from less than 500 Hp each into 770 Hp each. The paint shop under ROP No. MI-ROP-B7248-2014a is designated as North Paint Shop (NPS) and coats the cab portion of the truck.

During the 07/29/2020 walk-through inspection, I observed the Chrysler Laramie being built and other light duty trucks. The facility operates 24 hours a day and appears to be on full production now since the Covid-19 shutdown. The 2 paint lines in SPS were operating at that time as well as the paint lines in NPS.

The facility is considered a major source under the Clean Air Act of 1990, and operates under a Title V permit, ROP No. MI-ROP-B7248-2014a, initially issued in November 2014 and revised on January 15, 2015, and Permit to Install No. 27-17B. The ROP has 19 emission units and 15 flexible groups while the PTI has 6 emission units and 10 flexible groups.

ROP No. MI-ROP-B7248-2014a – includes the North Paint Shop (NPS) for painting the cab component of light duty trucks to be manufactured at this facility, a regenerative thermal oxidizer (RTO) for VOC emissions control, 2 natural gas fired emergency generators, 3 natural gas fired boilers, 3 natural gas fired hot water generators, 2 fire pumps, emergency generators, storage tanks, the body shop, and the truck assembly operations. The applicable requirements in the ROP are contained in the following emission units and flexible groups:

EU-WWASH&GASFIL – this emission unit (EU) is located in the final line of the body shop building towards the end of assembly operations. Per ROP No. MI-ROP-B7248-2014a (C) (EU-WWASH&GASFIL) (III.1), I observed the on-board vapor recovery system at the fuel fill area during the walk-through inspection. I also observed the dispensing equipment for filling of brake fluid, anti-freeze, windshield washer fluid, and fuel fill are located in the same area/line.

EU-DINACLEAN - this emission unit was shut down in 2014. I verified that the equipment was removed from the facility during the July 16, 2018 walk-through inspection. This emission unit is no longer included in the draft ROP renewal currently on public participation process.

EU-SANDING – this emission unit is for color prep and re-process spot repair operations. Color prep is for powder paint repair. Re-process spot repair is for repairs made after topcoat. Mr. Sanni mentioned that the VOC for very minimal spraying that may take place under this emission unit to repair the coating would be recorded under EU-FLASHPRIME. Very light buffing compounds are used to remove any mars or blemishes from the clear coating. During the walk-through inspection, I verified filters in place for the booths and no gaps observed per ROP No. MI-ROP-B7248-2014a (C) (EU-SANDING) (IV.1).

EU-SEALERS & ADHESIVES-FBP - this emission unit covers sealers applied in the Frame, Body and Paint (FBP) shop area of the facility. The sealers are all applied after the ecoat system and prior to the powder booths in the paint shop area. In the paint shop, sealer application system is split up into north and south manual (hand application) sealer decks followed by the respective robotic application booths before converging into another sealer booth and into a single sealer oven. Also, in the paint shop, under body seam sealer is applied with the car flipped up. Some of the sealers are applied in the body shop. In the past, all VOC emissions are released either in-plant or outdoor but uncontrolled. Due to opacity issues, emissions from the NPS sealer oven, after the sealer application, are now ducted to the incinerator. During the walk-through inspection at the Body Shop building, I requested Mr. Sanni to accompany me to the roof top of the building closest to the adjacent NPS building to conduct visible emissions (VE) observations for all visible stacks on top of the North Paint Shop building that included the 2 sealer oven stacks that had opacity issues in the past. I did not observe any VEs for all stacks that I observed. From the same roof top, I could observe the North Paint Shop RTO stack and I did not observe any visible emissions. I observed a slight e-coat odor at the roof top.

EU-ECOAT – this emission unit consists of dip tank system followed by a curing oven. Truck cab bodies are primed in the enclosed electrocoat (e-coat) dip tank system. From the e-coat line, the coated part goes to either the north or south oven then to a sealer patch deck before going to either the north or south sealer deck. VOC emissions from the dip tanks and the ovens are controlled by a regenerative thermal oxidizer (RTO). Per ROP No. MI-ROP-B7248-2014a (C) (EU-ECOAT) (IV.1), I took the RTO temperature readings as follows: Zone 1/2 = 1420°F; Zone 2/3 = 1440°F; Zone 3/4 = 1469°F; Zone 4/5 = 1482°F; Zone 5/6 = 1499°F; Zone 6/7 = 1476°F. These temperature readings were above the minimum temperature requirement of 1350°F. While outside at the RTO area, I did not observe any odors implying no leaks in the ductwork and the RTO system.

EU-FLASH PRIMER - this emission unit repairs defective e-coat coatings prior to entering the anti-chip powder coating and the topcoat system. The flash prime is controlled by dry filter particulate control. Per ROP No. MI-ROP-B7248-2014a (C) (EU-FLASH PRIMER) (IV.1), I observed the filter system in place and appeared to be operating properly.

EU-TOPCOAT 1, 2, & 3 - these emission units consist of 3 parallel lines (Topcoat Lines 1, 2, & 3). Topcoat Lines 2 & 3 are similar while line Topcoat Line 1 is a little longer line to accommodate the tri-coat coating process. Each topcoat line consists of interior basecoat, exterior basecoat, heated flash, interior clearcoat, exterior clearcoat, and color oven zones. Topcoat Line 1 has an extra color 1 zone prior to the clearcoat zones to accommodate for tri-color coating.

The topcoat spray booths have a water wash system to control particulate overspray. Per ROP No. MI-ROP-B7248-2014a (C) (EU-TOPCOAT 1, 2, & 3) (IV.1), I observed water in the water wash system at several points in the line during walk-through inspection. The wastewater from the water wash system cascades over a weir in the booth and goes to the sludge pit area where a polymer is added prior to the clarifier and filter system for solids removal. The sludge goes to a tank for outside disposal. The wastewater gets reclaimed and re-used in the water wash booth.

VOC emissions from the coating booths, the heated flash zones, and the cure ovens are ducted into the RTO. Per ROP No. MI-ROP-B7248-2014a (C) (EU-TOPCOAT 1, 2, & 3) (IV.2 & 3), I verified during the walk-through inspection that the facility kept the RTO temperature above 1350°F. I did not smell any solvent odors while at the booths and along walkways outside the booths, implying no leaks from the booths.

EU-TOUCH UP – this emission unit pertains to manual repairs and touch up painting on blemishes performed in the paint shop area (Finesse Deck) and VOC emissions are vented into the in-plant environment. During the walk-through inspection, I did not observe any visible emissions around the area.

EU-BLACKOUT – this emission unit pertains to coating of wheel well (water base coating) operations which has not been operated since the CY 2000 as per Mr. Sanni. During the walk-through inspection, I verified that this process was removed at the facility. This emission unit is no longer included in the draft ROP renewal currently on public participation process.

EU-PAINT SPOT REPAIR - consists of stalls for either re-routing damaged vehicles back to the topcoat spray booth or for repair of small paint defects or parts which may be routed to a spot repair stall. Minor paint repair does not include full application of paint coating on the vehicles, only the impacted panels. Per ROP No. MI-ROP-B7248-2014a (C) (EU-PAINT SPOT REPAIR) (IV.1), I observed the dry filters installed and appeared to be operating properly. During the walk-through inspection, I did not observe any visible emissions (VEs) while in the area.

EU-WIPE – this emission unit refers to auto bodies being manually wiped with solvents wipes during different phases of painting and assembly operations in various areas of the facility. The VOC emissions are either vented into in-plant or through a stack. During the walk-through inspection, Mr. Sanni pointed to me one area where rag wipes are being conducted on vehicles next to the sealer system. I did not notice VEs in the area.

EU-PURGE CLEAN - this emission unit refers to purge, cleanup solvents, and non-production solvents used throughout the facility. Per ROP No. MI-ROP-B7248-2014a (C) (EU-PURGE CLEAN) (I.1), records showed 34.01 tons per year (tpy) in December 2019 and 47.70 tpy in June 2020 for the monthly 12-month rolling total VOC emission rates and less than the 223.2 tpy permit limit.

EU-AST 13, EU-NPS4, EU-NPS5 – these are storage tanks. Due to Covid-19, I took discretion not to conduct an inspection at these tanks during the facility walk-through inspection.

EU-DEADNER - this emission unit refers to sound deadening and foam application processes in various locations of the vehicle. Per Mr. Sanni, this process was uninstalled in October 2017. During the facility walk-through inspection, I verified that this process is no longer conducted at the facility.

EU-BODY SHOP – this emission unit pertains to natural gas-combustion (i.e. air make-up units, heaters, etc.) for space or process heating, tooling and equipment to assemble vehicle panels including resistance spot welding, adhesive/sealer application, grinding and other related operations. Per ROP No. MI-ROP-B7248-2014a (C) (EU-BODY SHOP) (II.1), the facility reported 5.95 MMCF monthly 12-month rolling total natural gas usage rate in June 2020 and less than the 718 MMCF/year permit limit. During the walk-through inspection, I observed sealers, welding equipment, a parts washer, assembly of vehicles panels, etc. The parts washer was unused, but the cover is closed, and safety instructions are posted outside the equipment. As mentioned earlier, Mr. Sanni and I climbed the roof top from the body shop building to observe the NPS stacks that are visible including the body shop stacks. I did not observe any visible emissions while conducting VEs from the roof top.

FG-FACILITY - this flexible group covers all equipment used for automotive assembly and painting operations for the Sterling Heights Assembly Plant. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (I.1), FCA-SHAP reported 486.11 tpy for December 2019 and 360.12 tpy for June 2020 monthly 12-month rolling total VOC emission rates and less than the 673.2 tpy permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (I.2), FCA-SHAP reported 2.06 lb./job for December 2019 and 1.62 lb./job for June 2020 monthly 12-month rolling total VOC emission rate and less than the 4.5 lb./job permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY (I.3), FCA-SHAP reported 14.75 tpy for December 2019 and 11.35 tpy for June 2020 monthly 12-month rolling total PM10 emission rates and less than the 55.8 tpy permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (I.4), FCA-SHAP reported 6.96 tpy for

December 2019 and 5.61 tpy for June 2020 monthly 12-month rolling total PM2.5 emission rates and less than the 51.3 tpy permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (I.5), FCA-SHAP reported 34.13 tpy for December 2019 and 29.40 tpy for June 2020 monthly 12-month rolling total NOx emission rates and less than the 72.0 tpy emission rate limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (II.1), FCA-SHAP reported 1358.85 MMCF for December 2019 and 1154.65 MMCF for June 2020 monthly 12-month rolling total natural gas usage rates and less than the 1914.0 MMCF/12-month usage permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (IV.1), I verified the presence of water flowing in the water wash particulate control system underneath the spray coating booths. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (VI.2), FCA-SHAP conducts weekly visual inspections on the water wash and fabric filter particulate control systems. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (V.1, 2, & 6), testing was conducted on the week of July 30-31, 2019 for EU-Topcoat3 and RTO. The submitted report assumed PM10 and PM2.5 emissions are the same as the tested PM for EU-Topcoat3 and RTO. The PM results are as follows in lb./hr.: Basecoat Zone - 0.27, Clearcoat Obs. Deck - 0.25, and RTO Outlet - 1.4. The RTO Destruction Efficiency (DE) result is 95.4% and in compliance of the 95% DE permit limit. The testing was conducted at an average RTO temperature of 1450°F. I informed Mr. Sanni that the facility needs to increase the temperature set point to ensure that the RTO temperatures do not fall below 1450°F since the DE margin for error is small. As such, Mr. Sanni sent a photo confirming that the set point was raised and the monitor recorded the following temperatures: Zone 1/2 = 1478°F; Zone 2/3 = 1502°F; Zone 3/4 = 1510°F; Zone 4/5 = 1530°F; Zone 5/6 = 1480°F; Zone 6/7 = 1476°F. Per ROP No. MI-ROP-B7248-2014a (D) (FG-FACILITY) (V.3, 4, & 5), the NPS operates 3 boilers (EU-Boilers1, 2, & 3) which were tested in February 2018. The test results will be discussed under FG-Boilers.

FG-CONTROL – this flexible group refers to the regenerative thermal oxidizer (RTO) used for control of VOC emissions from the e-coat, paint spray booths, and curing ovens. Per ROP No. MI-ROP-B7248-2014a (D) (FG-CONTROL) (III.1), AQD staff obtained a copy of the MAP. As part of MAP, FCA SHAP conducts weekly, monthly, quarterly, semi-annual and annual maintenance activities for the RTO, the water wash system, and the dry filter control systems. It included the staff and managers responsible for making sure maintenance activities are conducted. The facility also instituted a malfunction abatement plan that included alarm systems, and an interlock system that shuts the process during an RTO malfunction.

FG-BOILERS – this flexible group pertains to three natural gas fired boilers (EU-Boiler 1, 2, & 3) and 3 hot water generators (EU-HWG 1, 2, & 3) used to generate hot water for in-plant use. One boiler has a heat input capacity of 85 MMBtu/hour and the other two boilers have a heat input capacity of 118 MMBtu/hour each. EU-Boilers 1, 2, and 3 are equipped with low NOx burner technology in compliance with ROP No. MI-ROP-B7248-2014a (D) (FG-BOILERS) (III.1).

These can be confirmed from the February 2018 stack test results wherein data showed 0.0898, 0.0621, and 0.0554 lb./MMBTU emission rates for NO_x. In addition, this flexible group also includes EU-HWG 1, 2 & 3, each rated at 31.5 MMBtu/hr. natural gas fired hot water generator. Per ROP No. MI-ROP-B7248-2014a (D) (FG-BOILERS) (III.2 & 3), the boilers and hot water generators only fire natural gas. Per ROP No. MI-ROP-B7248-2014a (D) (FG-BOILERS) (III.5), I saw a copy of filled Initial Notification Form to USEPA Region 5 dated May 13, 2013. The report showed: type of boiler (Cleaver Brooks), manufacture date (2012), design capacity (31.5 MMBTU/hr.), type of fuel burned (natural gas), date of construction, (March/April 3013) and date of start-up (May/June 2013). Per ROP No. MI-ROP-B7248-2014a (D) (FG-BOILERS) (III.4 & 5), the facility keeps daily natural gas usage records for EU-Boilers 1, 2, & 3 and EU-HWG 1, 2, & 3 as required by NSPS 40 CFR 60 Subparts A and Dc.

FG-CAM – refers to compliance assurance monitoring requirements for EU-ECOAT, EU-Topcoat 1, EU-Topcoat 2, EU-Topcoat 3 per 40 CFR Part 64 Federal Standard. These emission units are major for VOC emissions and are controlled by an RTO. Per ROP No. MI-ROP-B7248-2014a (D) (FG-CAM) (III.1), AQD staff verified during walk-through inspection, that the VOC emissions from the above emission units are ducted to the RTO. I took RTO temperature readings during inspection and provided the data earlier under EU-ECOAT. The temperature readings were above the temperature requirement for the North Paint Shop RTO for VOC emissions control. FCA SHAP maintains an electronic temperature data recording system that shows instantaneous temperature monitoring and recording where a 3-hour average can be calculated. Per ROP No. MI-ROP-B7248-2014a (D)(FG-CAM) (VI.1), FCA SHAP keeps records of dates and times when the damper is opened. In an emergency, an alarm system is set off for any incidental event that may occur related to the RTO. Per ROP No. MI-ROP-B7248-2014a (D) (FG-CAM) (VI.2), a continuous temperature monitoring is installed, and data recording showed at least 15 minute intervals. Per ROP No. MI-ROP-B7248-2014a (D) (FG-CAM) (IX), Mr. Sanni mentioned that the RTO has an interlock system to shutdown the coating booths if the RTO temperature falls below the set point temperature consistently.

FG-AUTO MACT – this flexible group refers to each new, reconstructed, or existing affected source as defined in 40 CFR 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts, and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c) is subject to the requirements of 40 CFR 63 Subpart IIII. This includes equipment covered by other permits, grandfathered equipment, and exempt equipment. Per ROP No. MI-ROP-B7248-2014a (D) (FG-AUTO MACT) (I.1), FCA-SHAP submitted records that showed the organic HAP emission rate for the facility, in June 2020, was 0.128 lb./GACS and less than the 0.30 lb./GACS permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-AUTO MACT) (I.3), the same FCA-SHAP records showed the organic HAP emission rate of 0.00002 lb./lb. coating for Sealers and Adhesives is lower than the 0.01

lb./lb. coating permit limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-AUTO MACT) (III.1 & 3), FCA-SHAP submitted a Work Practice Plan and I obtained a sample copy of a recordkeeping for a Work Practice Plan inspection/implementation. Per ROP No. MI-ROP-B7248-2014a (D) (FG-AUTO MACT) ((III.4, 5, 6, & 7), (V.1, 2, & 3)), FCA-SHAP does not take credit for a control device in the calculation for Organic HAP emissions, and the additional requirements do not apply to FCA-SHAP.

FG-OLD MACT – this flexible group refers to new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is located at or is part of a major source of hazardous air pollutant (HAP) emissions. The affected sources comprise of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to this subpart. Equipment that is part of an affected source under another NESHAP is excluded from the affected source per 40 CFR 63.2338(c)). These conditions specifically cover existing (construction pre-dates April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles. FCA-SHAP has an 8,000 gallon and 4,000 gallon tanks subject to this standard. Per ROP No. MI-ROP-B7248-2014a (D) (FG-OLD MACT) (VI.1), FCA-SHAP keeps records of vapor pressure for methanol and diethylene glycol monobuthyl ether.

FG-BOILER MACT – this flexible group refers to the collection of industrial, commercial and institutional boilers and process heaters within a subcategory as defined in §63.7575 that is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources, 40 CFR Part 63 Subpart DDDDD. As discussed earlier, FCA-SHAP utilizes three natural gas fired boilers to generate hot water for in-plant use. One has a heat input capacity of 85 MMBtu/hour and the other two each have a heat input capacity of 118 MMBtu/hour. Boilers 2 and 3 are equipped with low NOx burner technology. This flexible group also includes the three hot water generators, EU-HWG 1, 2 & 3. Each HWG is rated at 31.5 MMBtu/hr. and have continuous oxygen trim systems. Per ROP No. MI-ROP-B7248-2014a (D) (FG-BOILER MACT) (III.1 & 2), FCA-SHAP submitted documentation of initial tune-up and testing conducted by Grayton Control Services on December 14, 2015 which is less than 61 months from July 31, 2013 on Boilers 1, 2, & 3. Per ROP No. MI-ROP-B7248-2014a (D) (FG-BOILER MACT) (III.3), Mr. Sanni mentioned that the facility is ISO 50001 compliant and did not have to conduct this initial energy assessment requirement (facility conducts yearly energy assessment as part of ISO 50001 compliance requirement). Mr. Sanni also showed documentation of initial notification report submitted to US EPA Region 5, dated June 13, 2013, pertaining to the 3 Hot Water Generators (natural gas fired and rated at 31.5 MMBTU/hr.).

FG – MACT ZZZZ – EXISTING EMERGENCY CI < 500 HP - this flexible group refers to the North and South Fire Pumps (diesel). Per ROP No. MI-ROP-B7248-2014a (D) (FG – MACT ZZZZ – EXISTING EMERGENCY CI < 500 HP) (III.4, 5, & 6), FCA-SHAP submitted documentation showing 29.40 total operating hours for North Fire Pump and 53.50 hours for South Fire Pump in CY 2019 which are less than the allowable 100 hours. Data submitted for July 2020 showed 3.10 hours for North Fire Pump and 6.10 hours for South Fire Pump. I also obtained recordkeeping of July 2020 weekly reading on North Fire Pump non-resettable hour meter at 191.9 hours and the South Fire Pump non-resettable hour meter showed 496.0 hours.

FG – MACT ZZZZ – NEW EMERGENCY CI > 500 HP - this flexible group refers to EU-ENG-DATACTR emergency generator. Per ROP No. MI-ROP-B7248-2014a (D) (FG – MACT ZZZZ – NEW EMERGENCY CI > 500 HP) (III.1 & 2), FCA-SHAP submitted documentation showing 3.60 total operating hours for CY 2019 and 0.50 hour through June 2020 and less than the allowable 100 hours. The recordkeeping data for EU-ENG-DATACTR compression ignition (CI) emergency generator non-resettable hour meter showed 97.7 hours for July 2020.

FG – MACT ZZZZ – EXISTING EMERGENCY CI > 500 HP - this flexible group refers to EU-ENG-PAINTSHOP emergency generator. Per ROP No. MI-ROP-B7248-2014a special condition (D)(FG – MACT ZZZZ – EXISTING EMERGENCY CI > 500 HP)(III.1 & III.2), FCA-SHAP submitted documentation showing 1.0 total operating hour for CY 2019 and 0.5 hour through June 2020 and less than the allowable 100 hours. Mr. Sanni mentioned that this unit continues to be shutdown and only operates 30 minutes each twice a year for maintenance. The weekly recordkeeping for non-resettable hour meter was reported for July 2020 at 184 hours.

FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL - this flexible group refers to EU-ENG-DATACTR emergency generator. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL) (I.1), FCA-SHAP submitted documentation showing NOx emissions at 7.1 g/kW-hr and less than the permit limit of 9.2 g/kW-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL) (I.2), FCA-SHAP submitted documentation showing HC emissions at 0.71 g/kW-hr and less than the permit limit of 1.3 g/kW-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL) (I.3), FCA-SHAP submitted documentation showing CO emissions at 0.70 g/kW-hr and less than the permit limit of 11.4 g/kW-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL) (I.4), FCA-SHAP submitted documentation showing PM emissions at 0.21 g/kW-hr and less than the permit limit of 0.54 g/kW-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS IIII EMERGENCY PRE-2007<10 I/CYL) (III.2), FCA-SHAP submitted documentation showing 2.3 total operating hours for June 2020 and less than the 100 hours/CY permit limit.

FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP - this flexible group refers to EU-ENG-NEW PSHOP1 and EU-ENG-NEW BSHOP emergency generators. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (III.1), FCA-SHAP submitted documentation showing 8.9 actual operating hours for EU-PSHOP1 and 7.9 hours for EU-ENG-NEW BSHOP for June 2020 and less than the allowable 100 hours. These 2 - spark ignition (SI) engines have EPA Certificate of Conformity with approved manufacturer test emissions. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.1), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP1 NOx emissions at 2 g/Hp-hr and meets the permit limit of 2 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.2), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP1 CO emissions at 4 g/Hp-hr and meets the permit limit of 4 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.3), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP1 VOC emissions at 1 g/Hp-hr and meets the permit limit of 1 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.1), FCA-SHAP submitted documentation showing EU-ENG-NEW BSHOP NOx emissions at 2.0 g/Hp-hr and meets the permit limit of 2 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.2), FCA-SHAP submitted documentation showing EU-ENG-NEW BSHOP CO emissions at 4.0 g/Hp-hr and meets the permit limit of 4 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (I.3), FCA-SHAP submitted documentation showing EU-ENG-NEW BSHOP VOC emissions at 0.47 g/Hp-hr and meets the permit limit of 1 g/Hp-hr. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>100 BUT<500 HP) (IV.1), FCA-SHAP submitted documentation showing EU-ENG-NEW BSHOP non-resettable hour meter reading for July 2020 at 142.7 hours and EU-ENG-NEW PSHOP1 non-resettable hour meter reading for July 2020 at 228.5 hours.

FG-NSPS JJJJ EMERGENCY>500 HP - this flexible group refers to EU-ENG-NEW PSHOP2 spark ignition emergency generator. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>500 HP) (III.1), FCA-SHAP submitted documentation showing 7.4 actual operating hours for June 2020 and less than the allowable 100 hours. This SI engine has to test for emissions due to uncertified engine. The most recent data were from the tests conducted on 09/11/2019. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>500 HP) (I.1), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP2 test results of NOx emissions at 0.44 g/Hp-hr. and less than the 2 g/Hp-hr. emission limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>500 HP) (I.2), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP2 test results of CO emissions at 0.80 g/Hp-hr. and less than the 4 g/Hp-hr. emission limit. Per ROP No. MI-ROP-B7248-2014a (D) (FG-NSPS JJJJ EMERGENCY>500 HP) (I.3), FCA-SHAP submitted documentation showing EU-ENG-NEW PSHOP2 test results of VOC emissions

at 0.42 g/Hp-hr. and less than the 1 g/Hp-hr. emission limit. The non-resettable hour meter for July 2020 was 315.2 hours.

FG-RULE 290 - this flexible group refers to EU-ENG PAINTSHOP and EU-ENG-DATACTR emergency generators. FCA-SHAP submitted documentation showing 0.90 lb. total VOC emissions for June 2020 for EU-ENG-DATACTR and 0.10 lb. VOC emission for EU-ENG PAINTSHOP.

FG-RULE 287(c) – this flexible group refers to EU-FINAL REPAIR. Per ROP No. MI-ROP-B7248-2014a (D) (FG-RULE 287(c)) (II.1), FCA-SHAP submitted documentation showing 12.21 gallons total usage for June 2020 and less than the 200 gallons per month permit limit. The monthly usage for CY 2019 was less than 30 gallons a month including the January through June 2020.

Permit to Install No. 27-17B – was issued to FCA-SHAP on April 6, 2018 for emission units that includes the South Paint Shop (SPS) - for painting the box component of light duty trucks to be manufactured at this facility, 2 natural gas fired emergency generators, 3 natural gas fired hot water generators, the Spray-on Bedliner (SOBL), and an external warehouse. The SOBL and warehouse facilities are located outside but near the truck manufacturing facility complex. As discussed earlier, the applicable requirements in PTI No.27-17B are incorporated in the draft renewal ROP, MI-ROP-B7248-2020, that is currently on 30-day Public Comment Period that ends Oct. 7, 2020. ROP No. MI-ROP-B7248-2014a remains in effect, along with PTI No. 27-17B, until the draft ROP No. MI-ROP-B7248-2020 is issued.

The applicable requirements in PTI No.27-17B are contained in the following emission units and flexible groups:

EU-PHOSPHATE BOX – pertains to a series of dip tanks and rinses for the surface treatment of light duty truck boxes. Per PTI No. 27-17B special condition EU-PHOSPHATE BOX (II.1), records showed no VOC or HAP in the phosphate application process.

EU-E COAT BOX – pertains to electrodeposition coating process consisting of a series of dip tanks, rinses, followed by a curing oven and a sanding booth. Small amounts of flash (spot) prime may be used to repair e-coated defects in the sand booth. Emissions from the E-coat tanks are directed to the oven. VOC emissions from the oven are controlled by a newly built Regenerative Thermal Oxidizer (RTO) exclusively serving the South (box) Paint Shop. Per PTI No. 27-17B special condition EU-E COAT BOX (I.1), FCA-SHAP reported VOC emission rate of 0.005 lb./GACS in June 2020 and less than the permit limit of 0.04 lb./GACS. Per PTI No. 27-17B special condition EU-E COAT BOX (I.2), FCA-SHAP reported the combined VOC, Acetone, etc., monthly 12-month rolling total emission rate at 1.45 tpy in June 2020 and less than the permit limit of 2.32 tons/year (tpy). Per PTI No. 27-17B special condition EU-E COAT BOX (II.1), Mr. Sanni reported that none of the coatings used in the E-coat process contain any lead or lead compounds. Per PTI No. 27-17B special condition EU-E COAT BOX

(IV.1 & V.2), I verified that VOC emissions from this emission unit are controlled by the RTO during the walk-through inspection. I also noted the following firebox zone temperature readings: Zone 1 = 1413°F; Zone 1/2 = 1457°F; Zone 2/3 = 1459°F; Zone 3/4 = 1458°F; Zone 4/5 = 1436°F; and Zone 5 = 1450°F. These temperature readings were in compliance with the 1400°F temperature during the November 8, 2018 RTO stack test per the requirement in the permit. During the stack test, the destruction efficiency for the RTO was at 98.7% thus establishing that the RTO can operate at the tested temperature of greater than or equal to 1400°F. Per PTI No. 27-17B special condition EU-E COAT BOX (IV.2), I observed filters in the E-coat sanding booth area. Per PTI No. 27-17B special condition EU-E COAT BOX (VI), FCA SHAP monitors and records the RTO temperatures continuously, maintains a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in EU-E COAT BOX, keeps records of coatings and materials, and calculates the monthly and monthly 12-month rolling total VOC emission rates for EU-E COAT BOX.

EU-SEALER BOX – pertains to manual and robotic applicators used to apply seam sealer, deadener and underbody sealer to light duty truck boxes. A portion of the sealers will be cured during baking in the sealer oven. Per PTI No. 27-17B special condition EU-SEALER BOX (I.1), FCA-SHAP reported the highest VOC content of 0.15 lb./gallon minus water as applied for sealer coatings used and less than the 0.25 lb./gallon permit limit. Per PTI No. 27-17B special condition EU-SEALER BOX (I.2), FCA-SHAP reported the combined VOC, Acetone, etc. monthly 12-month total emission rate at 0.40 tpy as of June 2020 and less than the permit limit of 17.3 tpy. Per PTI No. 27-17B special condition EU-SEALER BOX (VI), FCA SHAP maintain a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in EU-SEALER BOX, keeps records of coatings and materials, and calculates the monthly and monthly 12-month rolling total VOC emission rates for EU-SEALER BOX.

EU-POWDERCOAT BOX – pertains to an electrostatically applied powder anti-chip coating which includes the application of a colored powder basecoat for tutone truck boxes. The powder spray application is controlled by a particulate filtration system which is vented inside the plant. Per PTI No. 27-17B special condition EU-POWDER BOX (IV.1), I observed a filter system that is closed loop system. During walk-through inspection, I observed gray powder coating application into the box line. Per PTI No. 27-17B special condition EU-POWDER BOX (V.1), FCA-SHAP contracts an outside vendor to conduct once a week visible emission (VE) reading and performs Method 9 Opacity readings by a certified reader when a VE is observed. During walk-through inspection, I did not observe any VE inside and outside the powder coat area.

EU-MISC SOLVENTS BOX – pertains to various solvent body wipes, cleaning solvents and purge solvents used in the manufacturing of light duty truck boxes. VOC emissions from the purge solvents used within topcoat booths are controlled

by the RTO except when manifested in the waste collection system. Per PTI No. 27-17B special condition EU-MISC SOLVENTS BOX (I.1), FCA-SHAP reported the combined VOC, Acetone, etc. monthly 12-month rolling total emission rate at 2.89 ton as of June 2020 and less than the permit limit of 82.6 tpy. Per PTI No. 27-17B special condition EU-MISC SOLVENTS BOX (I.2), FCA-SHAP reported the combined VOC monthly 12-month rolling total emission rate per 1000 saleable truck boxes at 0.18 ton as of June 2020 and less than the permit limit of 0.2 tons per 1000 saleable truck boxes permit limit. Per PTI No. 27-17B special condition EU-MISC SOLVENTS BOX (III.1), I observed coating and waste coating containers closed in the paint kitchen area. Per PTI No. 27-17B special condition EU-MISC SOLVENTS BOX (IV.2), I verified that VOC emissions from the topcoat purging operations are controlled by the RTO. As discussed earlier in this report and during the walk-through inspection, I noted all firebox zone temperature readings were above the 1400°F established temperature during RTO DE stack test and in compliance with the permit requirement. Also, FCA-SHAP is currently utilizing 98.7% control efficiency credit in calculating for VOC emissions per the November 8, 2018 stack test result. Per PTI No. 27-17B special condition EU-MISC SOLVENTS BOX (VI), FCA SHAP monitors and records the RTO temperatures continuously, maintains a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in EU-MISC SOLVENTS BOX, keeps records of coatings and materials, number of saleable truck boxes, and calculates the monthly and monthly 12-month rolling total VOC emission rates for EU-MISC SOLVENTS BOX.

EU-WAREHOUSE NAT GAS BOX – pertains to a natural gas-fired space heating equipment to provide comfort heating at a storage warehouse. The building is located in an industrial park north and across 17 Mile Road, approximately one-half mile north of the main assembly plant complex. The equipment has a total combined maximum heat input capacity of 6.5 MMBtu/hr and are equipped with low NOx burners. I did not conduct a walk-through inspection of the building for this inspection. This building serves as sequencing center for FCA-SHAP frames. Per PTI No. 27-17B special condition EU-WAREHOUSE NAT GAS BOX (III.2), Mr. Sanni showed me natural gas usage of 1.32 MMCF as of January 2020 which is less than the 45 MMCF permit limit.

FG-TOPCOAT BOX – pertains to a color preparation sanding booth (topcoat sand), heated flash zones, 2 parallel topcoat lines - each consisting of a water-borne basecoat application followed by a solvent borne clearcoat, and 2 topcoat cure ovens. All paint application will be performed by robotic and bell applicators (except in emergency back-up situations). A heated flash zone separates the basecoat and clearcoat sections. Once clearcoat application is complete, the light duty truck box proceeds to the main bake oven. VOC emissions from the water-borne basecoat booths, the heated flash zone, the clearcoat spray booths and the topcoat cure oven are controlled by the South Paint Shop RTO. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (I.1), FCA-SHAP reported a VOC emission rate at 0.202 lb./GACS as of June 2020 and less than the permit

limit of 2.32 lb./GACS permit limit. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (I.2), FCA-SHAP reported the combined VOC, Acetone, etc. monthly 12-month rolling total emission rate at 49.98 tpy as of June 2020 and less than the permit limit of 105.7 tpy. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (I.3-7), the PM, PM10, and PM 2.5 emission rates were determined through stack testing that was conducted November 7-9 & 13-16, 2018. The results were as follows: PM – 0.0004 and 0.0017 lb./1000 lb. exhaust gases for base coat and clear coat respectively and less than the 0.0031 permit limit; PM10 – 0.037 lb./hr. for base coat and less than the 0.11 permit limit; PM10 – 0.126 lb./hr. for clear coat and less than the 0.19 permit limit; PM2.5 – 0.017 lb./hr. for base coat and less than the 0.11 permit limit; PM2.5 – 0.066 lb./hr. and less than the 0.19 permit limit. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (III.1 & 2), I observed coating and waste coating containers closed in the paint kitchen area and the booths appeared to have positive flow. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (IV.1), I verified that VOC emissions from the topcoat operations are controlled by the RTO. As discussed earlier, I noted all firebox zone temperature readings were above the 1400°F established temperature during RTO DE stack test and in compliance with the permit requirement. FCA-SHAP is currently utilizing 98.7% control efficiency credit in calculating for VOC emissions per the results of the stack test. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (IV.2), I verified filters in the topcoat sanding booth. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (IV.3), I verified a water wash particulate control system in the topcoat booths. Per PTI No. 27-17B special condition FG-TOPCOAT BOX (V.2, 3, & 4), FCA-SHAP conducted stack testing for transfer, capture, and destruction efficiencies on November 7-9 & 13-16, 2018.

FG-REPAIR BOX – pertains to spot and final repair operations for the South Paint Shop. Per PTI No. 27-17B special condition FG-REPAIR BOX (I.1), the average VOC content reported is 3.61 lb./gallon less water and less than the 4.8 lb./gallon less water permit limit. Per PTI No. 27-17B special condition FG-REPAIR BOX (I.2), FCA-SHAP reported the combined VOC, Acetone, etc. monthly 12-month rolling total emission rate at 0.045 tpy as of June 2020 and less than the permit limit of 11.00 tpy. FCA SHAP conducted PM, PM10 and PM2.5 stack test on FG-REPAIR BOX as part of the November 2018 testing. Per PTI No. 27-17B special condition FG-REPAIR BOX (I.3), the PM emission rate was 0.0005 lb./1000 lb. exhaust gases and less than the 0.0031 permit limit.

There was a problem with the testing for PM, PM10 and PM2.5 because EU-SPOT REPAIR 1 BOX and EU-SPOT REPAIR 2 BOX have a common stack and the emission limit is for each repair booth. To address the issue, FCA SHAP has applied for a permit modification and the application is currently under evaluation by AQD Permit Section.

FG-NG BOX – pertains to 3 natural gas fired hot water generators equipped with low NOx burners with a maximum heat input of up to 18 MMBtu/hr each. This flexible group also includes natural gas fired air supply houses, space heaters, heated flash, cure ovens, emergency generators and the RTO. All air supply

houses are direct fire units. Per PTI No. 27-17B special condition FG-NG BOX (I.1), the monthly 12-month rolling total NO_x emission rate was reported at 4.66 tpy for June 2020 and less than the 27.6 tpy permit limit. During inspection, I observed the name plate at the hot water generator includes a “low NO_x burner” tag and 18 MMBTU/hr. rated heat capacity per PTI No. 27-17B special condition FG-NG BOX (IV.1 & 2). Per PTI No. 27-17B special condition FG-NG BOX (III.1 & 2), FCA-SHAP uses only pipeline quality natural gas. The total natural gas usage as of June 2020 was 39.05 MMCF and less than the 1,068 MMCF permit limit. Per PTI No. 27-17B special condition FG-NG BOX (IV.3), FCA-SHAP conducts daily meter reading and keeps recordkeeping of daily natural gas usage as required by 40 CFR Part 60 Subpart Dc.

FG-CONTROL – pertains to the Regenerative Thermal Oxidizer (RTO), the dry filter particulate control systems and the water wash particulate control system in South Paint Shop. Per PTI No. 27-17B special condition FG-CONTROL (III.1), FCA-SHAP submitted a Malfunction Abatement Plan (MAP). As part of MAP, FCA SHAP conducts weekly, monthly, quarterly, semi-annual and annual maintenance activities for the RTO, the water wash system, and the dry filter control systems. It included the staff and managers responsible for making sure maintenance activities are conducted. The facility also instituted a malfunction abatement plan that included alarm systems, and an interlock system that shuts the process during an RTO malfunction. Per PTI No. 27-17B special condition FG-CONTROL (VI.1, 2 - 6), FCA-SHAP monitors the combustion chamber temperature continuously at least once every 15-minute interval and keeps records of the temperatures, any inspection, and maintenance activities. FCA-SHAP conducts weekly VEs and keeps records of VE readings. In an emergency, an alarm system is set off for any incidental event that may occur related to the RTO.

FG-AUTO MACT – this flexible group refers to each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts for new automobiles or new light duty trucks; and/or in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment. Per PTI No. 27-17B special condition FG-AUTO MACT (I.1), FCA-SHAP submitted records that showed the organic HAP emission rate for the facility, in June 2020, was 0.031 lb./GACS and less than the 0.30 lb./GACS permit limit. Per PTI No. 27-17B special condition FG-AUTO MACT (I.3), FCA-SHAP is claiming no HAP for sealers and adhesives used in South Paint Shop. Per PTI No. 27-17B special condition FG-AUTO

MACT(III)(1 & 3), FCA-SHAP submitted a Work Practice Plan and a sample copy of a recordkeeping for a Work Practice Plan inspection/implementation as required in ROP No. MI-ROP-B7248-2014a special condition (D)(FG-AUTO MACT) (III).

FG-BOILER MACT 5D – pertains to Gas 1 fuel subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. This flexible group includes the three hot water generators, EU-HWG 4, 5 & 6. Each HWG is rated at 18 MMBTU/hr. and equipped with low NOx burner technology. Per PTI No. 27-17B special condition FG-BOILER MACT 5D (II.1), FCA-SHAP only uses natural gas. Per PTI No. 27-17B special condition FG-BOILER MACT 5D (III.1), FCA-SHAP appears to operate and maintain EU-HWG 4, 5 & 6, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Per PTI No. 27-17B special condition FG-BOILER MACT 5D (III.3, 4, & 5), Mr. Sanni mentioned that the heaters are due for tune-up in November 2023.

FG-PAINT SHOP BOX LINE – pertains to all process equipment associated with the new paint line/paint shop used for painting truck boxes (South Paint Shop). Per PTI No. 27-17B special condition FG- FG-PAINT SHOP BOX LINE (III.1), FCA-SHAP submitted records showing 290,269 truck boxes produced based on monthly 12-month rolling totals as of June 2020 and less than 407,000 permit limit. Per PTI No. 27-17B special condition FG- FG-PAINT SHOP BOX LINE (III.2), FCA-SHAP submitted records showing EU-ENG BOX GEN1 operated at 9.1 hours and EU-ENG BOX GEN2 operated at 9.6 hours as of June 2020 and less than the allowable 500 hours for each engine. The total combined hours of 18.7 hours are less than the allowable 600 hours per year.

FG-RTO and POWDER OVEN PM – pertains to the flexible group for PM, PM10 and PM2.5 emissions from the RTO and powder coat oven. Per PTI No. 27-17B special condition FG-RTO and POWDER OVEN PM (V.1), FCA SHAP conducted PM, PM10 and PM2.5 stack test on RTO and Cure Oven of EU-POWDERCOAT BOX as part of the November 2018 testing. Per PTI No. 27-17B special condition FG-RTO and POWDER OVEN PM (I.1), the PM emission rates were 0.0003 and 0.0009 lb./1000 lb. exhaust gases for RTO and Cure Oven respectively and less than the 0.0034 permit limit. Per PTI No. 27-17B special condition FG-RTO and POWDER OVEN PM (I.2), the PM10 emission rates were 1.67 and 1.62 lb./hr. for RTO and Cure Oven respectively and less than the 1.68 permit limit. Per PTI No. 27-17B special condition FG-RTO and POWDER OVEN PM (I.3), the PM2.5 emission rates were 1.67 and 1.60 lb./hr. for RTO and Cure Oven respectively and less than the 1.68 permit limit. Per PTI No. 27-17B special condition FG-RTO and POWDER OVEN PM (VI.1), the RTO is currently operating all firebox zone temperatures at or above 1400°F. This temperature was established during RTO DE stack test and wherein the DE tested at 98.7 % and greater than the 95% permit limit.

FG-NSPS JJJJ – pertains to emergency generators subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. New/Reconstructed emergency engines greater than 500 HP constructed on or after January 1, 2009. The South Paint Shop has 2 emergency generators subject to this regulation, EU-ENG BOX GEN1 and EU-ENG BOX GEN2. Per PTI No. 27-17B special condition FG-NSPS JJJJ (V), compliance with the emission limits under this flexible group were determined during emissions testing for the 2 reciprocating internal combustion engines (RICE) conducted last August 28-29, 2018, since the engines are not EPA certified engines. Per PTI No. 27-17B special condition FG-NSPS JJJJ (I.1), the NOx emission test results for EU-ENG BOX GEN1 and EU-ENG BOX GEN2 showed 38.35 ppmvd and 22.38 ppmvd respectively and less than the 160 ppmvd permit limit. The CO emission test results for EU-ENG BOX GEN1 and EU-ENG BOX GEN2 showed 100.10 ppmvd and 107.74 ppmvd respectively and less than the 540 ppmvd permit limit. The VOC emission test results for EU-ENG BOX GEN1 and EU-ENG BOX GEN2 showed 3.54 ppmvd and 6.40 ppmvd respectively and less than the 86 ppmvd permit limit. Per PTI No. 27-17B special condition FG-NSPS JJJJ (II.1), FCA-SHAP burns natural gas for EU-ENG BOX GEN1 and EU-ENG BOX GEN2. Per PTI No. 27-17B special condition FG-NSPS JJJJ (III.2, & 3), FCA-SHAP submitted records showing EU-ENG BOX GEN1 operated at 9.1 hours and EU-ENG BOX GEN2 operated at 9.6 hours as of June 2020 and less than the allowable 500 hours for each engine. The total combined hours of 18.7 hours are less than the allowable 600 hours per year.

FG-SOBL – pertains to the Spray-on Bedliner (SOBL) facility where fully assembled and painted trucks from the main assembly plant will be routed into one of several booths in which bedliner materials will be robotically sprayed onto the truck beds. Raw materials include cleaning solvents, a bonding agent, and a two (2) part polyurethane resin. Natural gas-fired equipment will be used for process and space heating. This equipment is located at 7566 Metropolitan Parkway, directly across the street from the Box Paint Shop at the main assembly plant. During the 7/29/2020 inspection, I took discretion not to conduct a walk-through inspection at this building due to Covid-19. Per PTI No. 27-17B special condition FG-SOBL (I.1), FCA-SHAP reported the monthly 12-month rolling total VOC emission rate at this facility, as of June 2020, at 4.70 tons and less than the 8.8 tpy permit limit. Per PTI No. 27-17B special condition FG-SOBL (III.5), FCA-SHAP reported the total natural gas usage at this facility as of June 2020, at 1.36 MMCF and less than the 176.00 MMCF/year permit limit.

Overall, I did not find any non-compliance issues during inspection.

NAME *RSR / 7*

DATE September 29, 2020

SUPERVISOR *Joyce H*