

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
**ACTIVITY REPORT: On-site Inspection**

B276769300

<b>FACILITY:</b> FCA US LLC WARREN TRUCK ASSEMBLY PLANT		<b>SRN / ID:</b> B2767
<b>LOCATION:</b> 21500 Mound Road, WARREN		<b>DISTRICT:</b> Warren
<b>CITY:</b> WARREN		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Laura Hall , Environmental Lead		<b>ACTIVITY DATE:</b> 09/01/2023
<b>STAFF:</b> Iranna Konanahalli	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MAJOR
<b>SUBJECT:</b> FY 2023 scheduled ROP CMS inspection of FCA US Chrysler's Warren Truck Assembly Plant, located at 21500 Mound Road, Warren, Michigan 48091-4840.		
<b>RESOLVED COMPLAINTS:</b>		

**Warren Truck Assembly Plant (B2767)**  
a.k.a. Warren Dodge Truck Plant  
FCA US, LLC  
21500 Mound Road  
Warren, Michigan 48091-4840

**Contacts:**

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**North American Industry Classification System (NAICS) Code: 336112**

**CAA Sec. 114(a):** FCA received CAA Sec. 114(a) letter dated May 15, 2018. FCA (Mathew Read, Office of General Counsel) responded to this request on July 10, 2018, with an electronic document copies package (first installment) to Jillian Rountree, Esq. Regional Counsel, US EPA 5. Subsequently, FCA amended MAERS and benefited from revised MAERS in offsets.

**RO Permit Number: MI-ROP-B2767-2016**, Effective December 6, 2016, Expired December 6, 2021. As the application was submitted in a timely manner, an application shield has been obtained. Timely ROP renewal application provided FCA with an application shield via May 17, 2021, letter to Andrew Ragalyi. In addition, FCA WTA-submitted a B2767 ROP Renewal Amendment Application 01-2022.

**Permit-to-Install:** AQD issued a series of permits PTI Nos. 13-19, 13-19A & 13-19B. PTI No. 13-19B is yet to be revised to resolve non-compliance issues with it. PTI No. 13-19B is the latest valid permit and its special conditions (except utility plant) practically replaced the special conditions of MI-ROP-B2767-2016.

**PTI No. 13-19:** The function of this permit was to reduce allowed VOC emissions from MI-ROP-B2767-2016 for a predominant purpose of generating VOC offsets (at 110% rate) especially for EU-SOLVENT-WIPE (1502.58 – 555 = 134.8 tpy offsets), EU-COLOR-1 (582.11 - 430.0 = 135.9 tpy offsets) EU-COLOR-2 (582.11 - 430.0 = 135.9 tpy offsets), EU-REPROCESS (93.74 - 40.0 = 10.45 tpy offsets) and EU-TUTONE (821.0 - 20.0 = 4.7 tpy offsets). Total offsets generated as a result of reduced VOC limits is 421.75. The offsets generated were used to build brand new assembly plant in Detroit (PTI No. 14-19) known as FCA Mack Avenue (FCA) or Detroit Assembly Complex-Mack. The offsets are surplus (not used for another purpose), permanent, quantifiable, and federally enforceable via MI-ROP-B2767-2016. Offsets must also be generated (made permanent and federally enforceable) after the baseline date for Wayne County (82) (January 1, 2017).

**PTI No. 13-19A:** FCA US, LLC submitted a Permit to Install (PTI) application for a new automotive paint shop and modifications to the existing automotive assembly line at the Warren Truck Assembly Plant. The application was to modify ROP # MI-ROP-B2767-2016. As the area was under non-attainment for ozone, the application was evaluated as a major offset source and not PSD. The application was for installation of West Paint Shop (WPS) for premier Jeep Wagoneer also make modifications to the existing automotive assembly line known as East Paint Shop (EPS) for trucks.

An automotive assembly line consists of the following operations:

- The body shop, in which the basic uncoated vehicle body is assembled,
- The paint shop, in which the vehicle body is surface prepped and various coatings are applied to the uncoated vehicle body, and
- The general assembly area, in which the coated vehicle body undergoes the final steps before coming off the line as a saleable vehicle. These final steps include glass installation, filling the vehicle with the proper fluids, and any final repairs that may be necessary.
- In addition, there will be natural gas-fired hot water generators, air supply housing units, air handling units, and natural gas-fired emergency engines installed to support the project.

The existing body shop will feed into both the new (WPS) and existing (EPS) paint shop, after which the automobiles from both paint shops will go into the existing general assembly area.

The paint shops have the following process flow:

1. Pretreatment
2. E-Coat
3. Sealer Application
4. Primer

## 5. Topcoat

With the existing assembly line (EPS) being modified, both the existing equipment associated with the assembly line is subject to NNSR for VOCs. After the NNSR review, including the LAER analysis the following changes were required for the existing assembly line (EPS) for 110% VOC offset purposes:

- Control equipment and updated VOC limits are required to meet LAER emission limits for the existing cleaning operations (updated tpy limit); E-Coat tank and oven (updated lb/gallon of applies coating solids, lb/GACS and tpy limits); and topcoat operations (updated lb/GACS and tpy limits). The applicant has elected to use a new concentrator and a regenerative thermal oxidizer (RTO) for the control equipment. The existing thermal oxidizers in the east paint shop will continue to control the oven portions of the coating processes. In lieu of installing control equipment on one of the topcoat processes (EU-COLOR-TWO), the applicant has opted to accept enforceable conditions to permanently shutdown that process.
- VOC content and updated tpy limits were established for the existing powder primer, repair (final repair and spot repair), and sealer operations throughout the existing assembly line to meet the respective LAER limits. The VOC tpy limits were also updated for fluid fill operations as a result of the review.

When all is said and done, the project (installation of WPS and mandatory modification EPS to provide 110% VOC offsets) does not change the status of the facility. FCA WTAP remains an existing major source for PSD, Nonattainment, and **Title V / ROP**.

Concerning paint shops, the VOC control equipment are:

1. Two rotary carbon concentrators and one Regenerative Thermal Oxidizers (RTO three ceramic packing columns) at WPS (Jeep)
2. Two rotary carbon concentrators and one Regenerative Thermal Oxidizers (RTO three ceramic packing columns) and two existing thermal oxidizers (2 TOs for ovens) at EPS (Truck)

The short-term emissions from the coating operations in the project were based on the maximum production rate of 25 jobs per hour (JPH) from the new west paint shop, 36 jobs per hour (JPH) from the existing east paint shop, and the maximum material usage rate for the vehicles.

FCA has agreed to meet the emission limit of **2.92** lbs VOC/GACS established by Kia Motors Georgia.

**PTI No. 13-19B:** FCA US, LLC submitted a Permit to Install (PTI) application for modifications to a new paint shop (WPS) and existing EPS at the Warren Truck Assembly Plant (Warren Truck or WTAP). FCA WTAP continues to operate under ROP No. MI-ROP-B2767-2016 although almost all of its conditions are obsolete. Actually WTAP operates currently under PTI No. **13-19B**.

**New West Paint Shop** has the following process flow:

1. Pretreatment
2. E-Coat
3. Sealer Application
4. Primer
5. Topcoat

In PTI Nos. **13-19** and **13-19A**, requirements were established at the Warren Truck facility that created 658.75 tons of VOC offsets by reducing the allowed VOC emissions. FCA is using those reductions to offset the emissions increases associated with both the **Mack Plant** project and increases resulting from this project at the **Warren Truck** Assembly Plant. In other words, Warren Truck East Paint Shop gave away the required (110% offsets) for the emissions increases associated with both the Mack Plant project and increases resulting from this project at the Warren Truck Assembly Plant

The VOC reductions that will be achieved through the modernization project will provide enough offsets to accommodate both the Mack Plant and Warren Truck projects. Even though the proposed physical changes will be implemented in phases, at all times the appropriate amount of reductions/offsets must be realized in time to allow for any incremental phased increases. FCA must track emissions sources and maintain the appropriate records, on a monthly and 12-month rolling time period basis, to document the timing of reductions achieved as production is decreased and sources are removed/abated, in addition to the timing of the increases as new sources are brought online and production is increased.

The proposed new paint shop and modifications to the existing paint shop were subject to a LAER analysis for VOCs.

**Auto Protocol: “Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations”, EPA-450/3-88-018 or as amended.** FCA US (Chrysler) follows the protocol procedures for both NSPS MM (2M: prime coat, guide coat [aka primer surfacer] and topcoat operations installed / modified after October 5, 1979; the LAER permits were issued in 1984) and RACT Rule 336.1610. While NSPS MM calculations may use NSPS Table values for Transfer Efficiency (Table TE: substantially higher (90s) than those TE values achieved in practice anywhere(60s)), Rule 610 and LAER calculations must use tested TE values according to the Protocol. TE values have impact on LAER & NSPS emissions rates because the emissions rates are expressed in pounds (kilograms) per gallon (liter) of coatings solids applied or deposited; in other words, solids overspray is accounted for in this type of emissions rate unit.

**Subject to (opt-out of control device requirements via use of HAP compliant coatings): Auto MACT, NESHAP / MACT 4I, 40 CFR, Part 63, Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks (Federal Register / Vol. 69, No. 80 / Monday, April 26, 2004 / Rules and Regulations/ Final Rule).** Because FCA US (Chrysler) opted out of the post–

11/15/90 NSPS (Auto NSPS MM was promulgated before 1990) or NESHAP / MACT federal regulations for control devices (e.g., RTO, TO, Concentrator) via compliance with Auto MACT by coatings formulations, the control devices are subject to CAM regulations (VOC). This includes two (2) concentrators (Conc.) & one RTO at West Paint Shop (WPS) and two (2) concentrators & one RTO at East Paint Shop (EPS) and two Thermal Oxidizers (TO) at EPS; 4 Conc., 2 RTOs, 2 TOs in all.

**Subject to: Compliance Assurance Monitoring (CAM) (40 CFR Part 64) for VOC control devices (e.g., RTO, TO). Page 54900 Federal Register / Vol. 62, No. 204 / Wednesday, October 22, 1997 / Rules and Regulations / Final rule; Final rule revisions / Compliance Assurance Monitoring (CAM).** CAM is a part of enhanced monitoring and compliance certification for ROP / Title V sources under the Clean Air Act. Obviously, if the control devices (e.g., Conc., RTO, TO) were subject the auto MACT monitoring, the devices would not be subject to CAM monitoring and the MACT's monitoring would be presumptive CAM. FCA US (Chrysler), like other Auto-manufacturers, chose to comply with the Auto MACT via coatings formulations without use of thermal oxidizers.

**Subject to Major Source Boiler MACT 5D (reconsidered [2011] MACT 5D: Annual Tune-up or Pentennial / Quinquennial (1/5Yr) Tune-up if boiler is equipped with oxygen trim system, one time Energy Assessment (EA) or ISO 50001): Major Source Boiler NESHAP / MACT 5D, 40 CFR Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, Page 7138, Federal Register / Vol. 78, No. 21 / Thursday, January 31, 2013 / Rules and Regulations / Final rule; notice of final action on reconsideration.** All FCA Warren Truck's natural gas boilers, (Temp Boilers (2 portable) have been removed), are equipped with Oxygen Trim Systems. An Oxygen Trim System is a system of monitors that is used to maintain excess air (EA) at the desired level in a combustion device. A typical system consists of a flue gas analyzer for oxygen (O<sub>2</sub>) and / or carbon monoxide (CO) and a feedback signal to the combustion controller. In other words, an Oxygen Trim System is designed to continuously measure and maintain optimum air-to-fuel ratio in the combustion zone. If such system exists, annual tune-up is not required; however, pentennial / quinquennial (1/5Yr) tune-up is required. FCA does follow ISO 50001, Energy Management System for continuous improvement of energy performance, energy efficiency, energy consumption and for reduction of energy use, energy costs, greenhouse gas emissions (GHG), etc. If ISO 50001 is followed properly, one-time energy assessment (EA) is not required. Mr. Dan Omahen, Plant Manager, on March 30, 2016, submitted MACT 5D Notification of Compliance Status.

**Subject to: NSPS Dc, New Source Performance Standards (NSPS) for Small Industrial -Commercial-Institutional Steam Generating Units (40 CFR, Part 60, Subpart Dc). Fuel oil is never used in the boilers.** Only boilers installed after June 9, 1989, are subject to NSPS Dc.

### **NSPS Dc Revisions:**

The NSPS Dc revisions simplified the natural gas usage recordkeeping. ROP and MAERS natural gas recordkeeping satisfies NSPS Dc.

**Subject to: OLD NESHAP / MACT EEEE/ MACT 4E, 40 CFR Part 63, Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (OLD)(Non-Gasoline); Page 5038 Federal Register / Vol. 69, No. 22 / Tuesday, February 3, 2004 / Rules and Regulations/ Final Rule; Page 42898 Federal Register / Vol. 71, No. 145 / Friday, July 28, 2006 / Rules and Regulations/ Final Rule - Amendments; notice of final action on reconsideration. 7,500 gallons / month > 5,000 gallons / month of purge solvent usage makes this facility subject to this NESHAP.**

**Subject to: Prevention of Significant Deterioration (PSD) (40 CFR 52.21) or Rule 336.1220 (during LAER review) / Rule 336.2902 (now) Major Offset Source depending upon attainment status.**

**Subject to: 40 CFR, Part 60, Subpart MM (NSPS MM or 2M)—Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations (NSPS MM) (45 FR 85415, December 24, 1980). NSPS MM applies to an automobile/ light duty truck assembly plant constructed or modified after October 05,1979. The permits were issued in 1984.**

**Subject to: Rule 336.1610.** The Rule 610 compliance calculations must be done pursuant to “**Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations**”, **EPA-450/3-88-018 or as amended**. FCA US does not perform NSPS MM calculations separately. Instead, the Auto Protocol calculations are used to satisfy NSPS MM emission limits.

**Not Subject to (cold-cleaners): NESHAP/ MACT T, area source National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T; NESHAP/ MACT T); Correction; 29484 Federal Register / Vol. 60, No. 107 / Monday, June 5, 1995 / Rules and Regulations; amended National Air Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T); Final Rule; Page 25138 Federal Register / Vol. 72, No. 85 / Thursday, May 3, 2007 / Rules and Regulations.** FCA does NOT use the MACT T listed halogenated HAP solvents (>5%w: methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5), and chloroform (CAS No. 67-66-3)) in the cold-cleaners.

**VNs:** AQD issued Violation Notices (dated November 1, 2021, May 13, 2022, September 20, 2022, and October 21, 2022) for failure to comply with Permit to Install (PTI) No. 13-19B (which is under revision as part of compliance plan) as follows:

1. FCA WTAP operated the painting process while emissions from the EUPRIMERWEST ambient flash zones were not ducted to the concentrator and Regenerative Thermal Oxidizer (RTO) in violation of EUPRIMERWEST, Condition IV.1, of PTI No. 13-19B.
2. FCA WTAP exceeded the permitted emission limit for particulate matter equal to or less than 2.5 microns (PM<sub>2.5</sub>) from the concentrator portion of FGRTOWEST.

3. FCA WTAP exceeded the permitted emission limit for particulate matter equal to or less than 10 microns (PM10) and PM2.5 from EUSPOTREPAIREAST.
4. FCA WTAP exceeded the permitted emission limit for PM10 and PM2.5 from the RTO portion of FGRTOEAST.

**ACO AQD No. 2023-11:** AQD resolved the above violations via AQD No. 2023-11.

settlement amount of **\$371,454.00**. AQD is reviewing the permit application (APP-2022-0312) as a part of compliance plan. EGLE-AQD agreed to an **extension** of the processing period for the permit revision until **March 31, 2024**, via letter dated July 19, 2023, to Chuck Padden, Plant Manager. FCA WTAP is still under schedule of compliance that includes obtaining a permit revision, conducting necessary / required stack tests, etc. Hence, FCA WTAP continues to be in non-compliance.

On **September 01, 2023**, I conducted level-2 **FY 2023 scheduled ROP CMS inspection** of FCA US Chrysler's Warren Truck Assembly Plant, located at 21500 Mound Road, Warren, Michigan 48091-4840. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules and the RO Permit Number MI-ROP-B2767-2016 / PTI No. 13-19B. PTI No. will be modified as required by Administrative Consent Order (ACO) AQD No. 2023-11

During the inspection, Laura Hall and Brad Wargnier assisted me.

FCA US LLC Warren Truck Assembly Plant (FCA WTAP) is located at the northeast corner of 8 Mile Road and Mound Road in the city of Warren, Macomb County, Michigan. The plant is located in an industrial area close to FCA Stamping and GM powertrain plants (towards north on Mound Road between 8 Mile and 10 Mile Roads). The plant receives stamped parts from FCA Stamping via tunnel at 9 Mile Road. The plant manufactures or assembles light-duty trucks. Prior to coating, the truck bodies are cleaned and pretreated to prepare vehicle bodies for painting: body cleaning and phosphate treatment. The principal emissions are volatile organic compounds (VOC), including hazardous air pollutants (HAP), from coating operations.

The assembly process begins with the framing of body by welding together various vehicle parts, such as doors, hoods, etc. After the body is framed, it then proceeds through a body cleaning and phosphate treatment step. An Electro Deposition Coating (E-Coat) a dip painting process coats and primes the body surface in preparation for final paint finish. Powder coating is applied as primer surfacer and anti-chip at East Paint Shop (EPS for truck). The powder coating anti-chip and powder coating primer surfacer are not a part of

the RO permit. West Paint Shop (WPS for Jeep) uses solvent-based primer surfacer as it is considered a premium vehicle (Jeep Wargnier).

**PSD / LAER:** WTAP is subject to Prevention of Significant Deterioration (PSD) (40 CFR 52.21) regulations because the stationary source has the potential to emit volatile organic compounds greater than 250 tons per year.

### PTI No. 13-19B, Emission Units (EUs)

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUPRETREATWEST	A series of dip tanks and rinses for the surface treatment of automobiles.	TBD	FGAUTOMACT, FGNGWEST, FGPSWEST/NEWEAST
EUECOATWEST	An electrodeposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, a cooling tunnel, followed by a primer prep booth (light sanding) for repairs of surface blemishes. Emissions from the E-coat tanks are directed to the curing oven and then to the new west RTO for control.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST
EUPRIMERWEST	A prep tunnel, two (2) automatic primer booths, one for solvent borne main primer and one for solvent borne tutone coloring primer, a primer observation zone, an ambient flash-off area, a natural gas-fired primer curing oven, and a cooling tunnel, followed by two booths (color prep booth and heavy reprocess sand) for repair of surface blemishes.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST
EUTOPCOATWEST	An automatic topcoat spray application process consisting of a water borne basecoat coating booth, a basecoat observation zone, a basecoat ambient flash-off area, a basecoat heated flash-off area, a solvent borne clearcoat coating booth, a clearcoat observation zone, a clearcoat ambient flash-off area, and a natural gas-fired curing oven.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST



Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUPURGECLEANWEST	<p>Approximately 85% of the air from the spray zones is recirculated back into the process and 15% is exhausted to the concentrator and RTO.</p> <p>Various cleaning solvents and purge solvents used in the west paint shop. VOC emissions from the solvent-based purge materials used within EUPRIMERWEST and the clearcoat booth portion of EUTOPCOATWEST are controlled by the west concentrator and west RTO except when collected in the purge collection system.</p>	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGPSWEST/NEWEAST
EUBODYWIPEWEST	Body wipes used throughout the west paint shop.	TBD	FGAUTOMACT, FGPSWEST/NEWEAST
EUSPOTREPAIRWEST	Rapid reprocess repair booth after the west paint shop topcoat process.	TBD	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUECOATEAST	Formerly EU-UNIPRIME. An electro-deposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, and a cooling tunnel. The curing oven is currently controlled by an existing RTO, which will be replaced by the new east RTO, which will control both the tank and curing oven portions of EUECOATEAST.	7/31/1984, Date of PTI	FGCONTROLS, FGAUTOMACT, FGRTOEAST, FGNEWNGEAST, FGPSWEST/NEWEAST
EUPWDRPRMEAST	A powder anti-chip coating application process in the east paint shop which is electrostatically applied. The spray booth also includes the application of a colored powder basecoat for tutone applications. The powder spray application is controlled by a particulate filtration system which is vented inside the plant.	01/01/1996, Date of PTI	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUPURGECLEANEAST	Formerly EU-SOLVENT-WIPE. Emissions from	7/31/1984 / Date of PTI	

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUSPOTREPAIREAST	purge solvent, solvent wipes, and body wipe cleaners throughout the body shop, east paint shop, and final assembly portion of the plant. After installation of the east concentrator and east RTO, VOC emissions from the solvent-based purge materials used within the basecoat and clearcoat booths are controlled except when collected in the purge collection system.	TBD	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUSEALERS	Formerly EU-SEALERS&ADHESIVES. Various manual and robotic sealer and adhesive application stations/booths. Sealers and adhesives are applied at various decks in both west and east paint shops (some of which are cured in the sealer oven), the body shop, and the final assembly areas of the facility.	7/31/1984, Date of PTI	FGAUTOMACT, FGCONTROLS, FGPSWEST/NEWEAST FGAUTOMACT, FGPSWEST/NEWEAST
EUFINALREPAIR	Formerly EU-FINAL-REPAIR: Final repair operations including a coating area. Prep booths or sanding booths are equipped with side-draft dry filter particulate control systems. Spray booths are equipped with downdraft dry filter particulate control system.	7/22/1996, Date of PTI	FGCONTROLS, FGPSWEST/NEWEAST, FGAUTOMACT
EUFLUIDFILL	Formerly EU-FLUID-FILL: Each vehicle will be filled with various fluids such as gasoline, antifreeze, transmission fluid, power steering fluid, and windshield washer fluid.	7/31/1984, Date of PTI	FGPSWEST/NEWEAST
EU-COLOR-ONE	Color1 line (one of two identical topcoat lines) consists of spray booths for applying topcoat to	07/31/1984, Date of PTI	FGAUTOMACT, FGTOPCOATEAST, FGCONTROLS, FGRTOEAST,

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-COLOR-TWO	<p>vehicle bodies and oven for curing. Downdraft Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control on the bake oven. After installation of the control equipment, the spray booth portions will be controlled by the east concentrator and east RTO.</p> <p>Color2 line (one of two identical topcoat lines) consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Downdraft Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control of the bake oven.</p>	07/31/1984	<p>FGNEWNGEAST, FGPSWEST/NEWEAST</p> <p>FGAUTOMACT, FGTOPCOATEAST</p>
EU-REPROCESS (High-bake)	<p>Reprocess is high bake repair operation that consists of spray booths for topcoat application to repair vehicle bodies and oven for curing. Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control of the bake oven.</p>	07/31/1984	<p>FGAUTOMACT, FGCONTROLS, FGTOPCOATEAST</p>
EU-BOILER3	<p>152 million BTU heat input per hour (Babcox &amp; Wilcox Boiler3, installed 7/11/98) natural gas only boiler equipped with low NOx burners.</p>	07/11/1998	<p>FG-BOILERS, FG-BOILER-MACT5D</p>
EU-BOILER4	<p>106 million BTU heat input per hour (Babcox &amp; Wilcox Boiler4, installed 7/11/98) natural gas only boiler equipped with low NOx burners.</p>	07/11/1998	<p>FG-BOILERS, FG-BOILER-MACT5D</p>
EU-BOILER5	<p>152 million BTU heat input per hour (Wickes Boiler5, installed 9/1/96) natural gas only boiler equipped with low NOx burners.</p>	09/01/1996	<p>FG-BOILERS, FG-BOILER-MACT5D</p>
EU-BOILER6	<p>192 million BTU heat input per hour (Riley Stoker Boiler6, installed 10/29/84)</p>	10/29/1984	<p>FG-BOILERS, FG-BOILER-MACT5D</p>

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-TRIMBOILER	natural gas only boiler equipped with oxygen trim system but not low NOx burners. A 37 million BTU heat input per hour (Clever Brooks) natural gas only boiler, equipped with low NOx burners.	TBD	FGBOILERMACTHWG, FGPSWEST/NEWEAST
EUHWG1	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG2	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG3	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG4	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG5	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG6	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG7	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG8	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUDSBCHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUDSSBHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUDSCCHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EU-UNLEADEDGAS1	TK1 25,000-gallon gasoline storage tank – above-ground storage tank with spill containment.	03/19/2013	FGTANKS
EUMETANK	8,000-gallon bulk storage tank for the storage of windshield washer fluid.	01/01/2014	FGTANKS
EUNEWNGASSEMBLY	Natural gas-fired air supply housing and space heating (51.0 MMBtu/hr capacity) in the assembly portion of the facility added as part of the west paint shop project.	TBD	FGNGWEST, FGCONTROLS, FGPSWEST/NEWEAST
EUNEWNGPSEAST	Natural gas-fired air supply housing (8.3 MMBtu/hr capacity) installed in the east paint shop as part of the west paint shop project.	TBD	FGNEWNGEAST, FGCONTROLS, FGPSWEST/NEWEAST
EUDIESELTANK1	8,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS
EUANTIFREEZETANK	10,000-gallon storage tank for the storage of antifreeze.	01/01/2014	FGTANKS
EUBRAKEFLUIDTANK	8,000-gallon storage tank for the storage of brake fluid.	01/01/2014	FGTANKS
EUAUTOTRANS	8,000-gallon storage tank for the storage of automatic transmission fluid.	01/01/2014	FGTANKS
EUDIESELEXTANK	5,000-gallon storage tank for the storage of diesel exhaust fluid.	01/01/2014	FGTANKS
EUGASTANK2	1,000-gallon storage tank for the storage of gasoline.	01/01/2014	FGTANKS
EUDIESELTANK2	1,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS
EUPURSOLVTANK	8,000-gallon storage tank for the storage of purge solvent.	01/01/2014	FGTANKS

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUDIESELTANK3	1,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS
EUNGEMENG1	An 850-HP natural gas-fired emergency engine.	TBD	FGNGEMENG, FGPSWEST/NEWEAST
EUSPOTPRIMEWEST1	A spot prime repair process in the west paint shop. This process is after the E-coat process and prior to primer application.	TBD	FGAUTOMACT, FGCONTROLS, FGSPOTPRIMEWEST, FGPSWEST/NEWEAST
EUSPOTPRIMEWEST2	A spot prime repair process in the west paint shop. This process is after primer application and prior to topcoat application.	TBD	FGAUTOMACT, FGCONTROLS, FGSPOTPRIMEWEST, FGPSWEST/NEWEAST

**PTI No. 13-19B, Flexible Groups (FGs)**

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FGTOPCOATEAST	Formerly FG-TOPCOAT: Two topcoat lines (EU-COLOR-ONE & EU-COLOR-TWO) and one high bake-repair operation (EU-REPROCESS), which is a part of the topcoat system. Each topcoat line consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Reprocess is high bake-repair operation that consists of spray booths for topcoat application to repair vehicle bodies and oven for curing. While Color1 (36 JPH) and Color2 (36 JPH) lines are identical topcoat lines (72 JPH), reprocess line is shorter and slower.	EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS
FGCONTROLS	Concentrators and RTOs used for control of VOC emissions as applicable from the paint spray booths, flash-off areas, and curing ovens. Waterwash or dry filter particulate control on paint spray booths and sanding/repair booths and as pre-filtration to VOC control devices.	EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EU-COLOR-ONE, EU-REPROCESS, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUFINALREPAIR,

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
		EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2
FGSPOTPRIMEWEST	Two spot prime processes in the west paint shop. One that is placed after the E-coat process and prior to the primer application process, and one that is located after the primer process and prior to topcoat application.	EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2
FGRTOWEST	This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the west paint shop concentrator and west RTO.	EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST
FGRTOEAST	This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the east paint shop concentrator and RTO associated with EUECOATEAST, EUPURGECLEANEAST, and the refurbished spray booth portion of EU-COLOR-ONE	EUECOATEAST, EU-COLOR-ONE, EUPURGECLEANEAST
FGBOILERS	Four (4) natural gas fired boilers to produce steam and heat located in the powerhouse. Boiler Nos. 3, 4 and 5 are equipped with low NOx burners, Boiler No. 6 (with oxygen trim system) is a high efficiency boiler but not low NOx.	EUBOILER3, EUBOILER4, EUBOILER5, EUBOILER6
FGAUTOMACT	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	EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUSEALERS, EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
	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.	
FGBOILERMACTHWG	This FG is for the eleven hot water generators and the Trim Boiler associated with the installation of the west paint shop and modernization of the east paint shop. Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply the applicable provisions of this subpart upon startup.	EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG, EU-TRIMBOILER
FGNGWEST	All natural gas-fired equipment associated with the installation of west paint shop portion of the Warren Truck Assembly Plant, except the emergency generator, including ten hot water generators, air supply houses, space heaters, heated flash, cure ovens, the carbon concentrator, and the RTO. In addition, this FG includes new air supply houses and space heating in the assembly area.	EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUNEWNGASSEMBLY, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8
FGNEWNGEAST	All natural new gas-fired equipment associated with the refurbishment of east paint shop portion of the Warren Truck Assembly Plant, including hot water generators, air supply houses, space heaters, cure ovens, the carbon concentrator, and the RTO.	EUECOATEAST, EU-COLOR-ONE, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG, EUNEWNGPSEAST
FGTANKS	Any existing (placed into operation before 7/1/79), new (placed into operation on or after 7/1/79) or modified storage tank, including those that are exempt from the requirements of R 336.1201 pursuant to R 336.1284.	EU-UNLEADEDGAS1, EUMETANK, EUDIESELTANK1, EUANTIFREEZETANK, EUBRAKEFLUIDTANK, EUAUTOTRANS, EUDIESELEXTANK, EUGASTANK2, EUDIESELTANK2, EUPURSOLVTANK, EUDIESELTANK3
FG-OLDMACT		EUMETANK



Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
	<p>FG-OLDMACT: The affected source is each 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 source is comprised 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. <b>(40 CFR 63.2338(c))</b></p> <p>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.</p>	
FGNGEMENG	<p>Emergency engines 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.</p>	EUNGGEN1
FGPSWEST/NEWEAST	<p>All process equipment associated with the installation of the west paint shop and modernization of the east paint shop, body shop, and final assembly.</p>	<p>EUPRETREATWEST,                      EUECOATWEST,                      EUPRIMERWEST,                      EUTOPCOATWEST,                      EUPURGECLEANWEST,                      EUBODYWIPEWEST,                      EUSPOTREPAIRWEST,                      EUECOATEAST,                      EUPWDRPRMEAST,                      EUPURGECLEANEAST,                      EUSEALERS,                      EUSPOTREPAIREAST,                      EUFINALREPAIR,                      EUFLUIDFILL, EU-</p>

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
		COLOR-ONE, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSSCHWG, EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUNGEN1, EU-TRIMBOILER

FCA WTAP is under continuous monitoring for compliance with the PTI No. 13-19B (to be modified) and ACO AQD No. 2023-11. The permit limits are changing as it is being modified and further compliance evaluation will be done during the next inspection.

The following must be noted (September 2023):

- Color2: Shutdown and removed.
- TuTone: Shutdown and removed.
- Blackout: Removed. The space is used for inspection of painted trucks.
- Reprocess: The paint line is still present but does not run.
- BC + CC: wet on wet application (both solvent-based).

Air Recirculation Unit (ARC): VOC laden air from the booths keeps recirculating with primary and secondary filter systems. Intake fresh air is filtered as well to remove contaminants in ambient air. Intake air makes up for pure air which is controlled using four concentrators (2 WPS + 2 EPS). The stripped VOC emissions from rotary concentrators are fed two RTOs (1 WPS + 1 EPS). Hot air is used for regenerating or stripping concentrators. About 15-20% recirculating air is purged and delivered to concentrators.

**CONCLUSION**

FCA (Chrysler) is in non-compliance and is under a schedule of compliance per ACO AQD No. 2023-11 (settlement amount of \$371,454.00). PTI No. 13-19B to be revised per ACO. ROP renewal is on hold until the permit is revised.

NAME



DATE October 1, 2023 SUPERVISOR

