

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

B180164949

<b>FACILITY:</b> FCA US LLC, STERLING STAMPING PLANT		<b>SRN / ID:</b> B1801
<b>LOCATION:</b> 35777 VAN DYKE, STERLING HTS		<b>DISTRICT:</b> Warren
<b>CITY:</b> STERLING HTS		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Dinesh Dhamsania , Environmental Specialist		<b>ACTIVITY DATE:</b> 08/02/2022
<b>STAFF:</b> Noshin Khan	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> scheduled, announced inspection		
<b>RESOLVED COMPLAINTS:</b>		

On August 2, 2022, I (Noshin Khan, EGLE-Air Quality Division) performed a scheduled, announced inspection of Fiat-Chrysler Automotive Stamping Plant located at 35777 Van Dyke Road, Sterling Heights, MI 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 Air Quality Division (AQD) administrative rules, and the conditions of Permit to Install (PTI) Number 411-99. Iranna Konanahalli, EGLE-AQD, joined me for the inspection. Upon arrival, we met with Dinesh Dhamsania, Environmental Specialist, and Andrew Whatsitt. We showed our credentials and discussed the plant's operations.

The facility produces automotive parts for several assembly plants including Jefferson North Assembly Plant, Sterling Heights Assembly Plant, Toledo Assembly Plant, Belvidere Assembly Plant, Warren Truck Assembly Plant, Windsor Assembly Plant, and two assembly plants in Mexico. The facility receives blanks as coils and flat steel sheets that are delivered by truck. The facility currently performs stamping operations 5 days a week and 24 hours a day, with three 8-hour shifts. The facility stamps parts for 11 different vehicles.

Dinesh walked us through the facility to observe the following processes:

#### Blank Cleaning –

The facility has 3 lines, A, B, and C, where steel and aluminum blanks are cleaned with hot water and metal rolls are flattened. The water heaters have a combined heat input of 5.2 MMBTU/hr and are exempt from PTI requirements per R 282(2)(b)(i). The hot exhaust vents to ambient air. Process water for blank cleaning is transferred to a tank with a 16,000-gallon capacity in the powerhouse. From this tank, process water goes through two Koch membrane filtration system tanks that separate oil and water, and the oil is transferred to 5000 and 4000-gallon tanks to be collected for recycling. The treated water is discharged into the sewer system. The water filtration process appears to be exempt from PTI requirements per R 285(2)(m).

#### Forming and Pressing –

Lines D, E, F, and G are progressive forming and pressing lines for blanks. The lines involve spot welding operations. These processes appear to be exempt from PTI requirements per R 285(2)(l)(vi) (B) and 285(2)(i). Aluminum is separated from blank cuttings using magnets, and steel is compressed into one-ton tubes. Next to the press lines, we observed stations for highlighter application to test for quality on stamped parts.

#### Adhesive Application –

Some parts assembly processes involve adhesive application. Adhesive is stored in 55 gallon drums and transferred to an application robot. No heat is involved in this process. Dinesh provided adhesive usage records from January 2021 through July 2022, and SDS's for all adhesives used. The facility has previously claimed R 290(2)(a)(i) and R 290(2)(a)(ii) for exemption from PTI requirements for this process. The facility provided records supporting the use of this exemption—records included initial threshold screening level (ITSL) and initial risk screening level (IRSL) values for chemical components in each adhesive, monthly emissions of each chemical component, and monthly VOC emissions from each chemical component from January 2021 through July 2022. The records indicate that Teroson PV 4010.9 is the most-used adhesive. The chemical bis (2-ethylhexyl) adipate (CAS No. 103-23-1, IRSL of 3 ug/m3) is the component in this adhesive with the lowest emissions limit per R 290(2)(a)(ii)(B), with a limit of 20 lbs/month. The highest monthly emission of this chemical from January 2021 through July 2022 was 0.26 lbs in March 2022. The records indicate that emissions of other air contaminants from adhesives use are below the limits outlined in Rule 290, and the facility's adhesives application processes appear to be exempt from PTI requirements per this rule.

#### Maintenance Paint Booth –

Dinesh showed us the maintenance paint booth in the facility. The booth is used for non-production parts including part-stands and racks. The paint is applied manually using an airless applicator. The booth exhausts through mesh filters to ambient air. The filters were intact and seemed to be operating correctly. Dinesh said the filters are changed about every 3 months. The paint booth appears to be exempt from PTI requirements per R 287(2)(c). Dinesh provided paint booth usage records for January 2021 through July 2022, during which coating use did not exceed 200 gallons per month. The highest value was 30 gallons in July 2022.

During the facility walkthrough, Dinesh showed us two water-based parts cleaners and one solvent-based cleaner. All had interfaces of less than 10 square feet, had procedures posted, and the solvent-based parts cleaner had a closed lid, in compliance with Rule 707. We did not observe any visible emissions during the walkthrough, indicating compliance with General Condition 12 of PTI 411-99.

The facility has a natural gas boiler that is subject to 40 CFR Subpart Dc. The boiler keeps two, 250,000-gallon fire suppression water tanks and other storage tanks from freezing. It is shut down at the end of April and is used starting in October. The heat input of the boiler is 10.2 MMBTU. In accordance with 40 CFR Subpart Dc, the facility tracks monthly natural gas usage.

The facility has a 208 HP diesel-fired emergency engine subject to 40 CFR Part 63 Subpart ZZZZ. It is used to pump water in the case of a fire emergency. According to Dinesh, it is operated once a week for about 30 minutes to ensure functionality, maintenance is performed once a year, and it is operated less than 100 hours per year. Dinesh provided fire pump operational hours showing the meter reading for the pump. These records indicate that from January 2021 through December 2021, the pump was used for 43.5 hours for non-emergency (maintenance/testing) purposes. From January 2022 through July 2022, the pump was used a total of 17.5 hours. The AQD hasn't accepted delegation to enforce 40 CFR Part 63 Subpart ZZZZ for this area source, so compliance with this rule wasn't evaluated. Dinesh confirmed that the engine was constructed in 1995; therefore, this engine does not appear to be subject to 40 CFR Part 60 Subpart IIII since it was constructed before 2006.

Per PTI 411-99, Special Condition (S.C.) 1, the facility has a limit of 1200 MMCF for natural gas usage based on a 12-month rolling time period. According to the facility's natural gas usage records, from January 2021 to August 2022, the highest annual rate of natural gas usage was 157.951 MMCF in February 2021. This is below the permitted limit and the facility appears to be in compliance with this condition.

Per PTI 411-99, S.C. 2, the facility has a NOx emission limit of 60.0 tpy based on a 12-month rolling time period. According to emissions calculations provided by the facility, from January 2021 to August 2022, the highest annual NOx emission rate was 7.90 tpy in February 2021. This is below the permitted limit and the facility appears to be in compliance with this condition.

Per PTI 411-99, S.C. 3, the facility has a CO emission limit of 50.4 tpy based on a 12-month rolling time period. According to facility emissions calculations, from January 2021 to August 2022, the highest annual CO emission rate was 6.63 tpy in February 2021. This is below the permitted limit and the facility appears to be in compliance with this condition.

Overall, the facility appears to be in compliance with the above rules and regulations.

NAME Nashir Khan

DATE 10/09/2022

SUPERVISOR K. Kelly