

B2757  
FY 2018 Sched. Insp  
ROP CMS  
Chrysler - Stamping

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

B275742548

FACILITY: FCA US LLC WARREN STAMPING PLANT		SRN / ID: B2757
LOCATION: 22800 MOUND RD., WARREN		DISTRICT: Southeast Michigan
CITY: WARREN		COUNTY: MACOMB
CONTACT: Greg Karageozian , Environmental Engineer		ACTIVITY DATE: 11/30/2017
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY 2018 ROP Major CMS scheduled inspection of FCA US, LLC ("FCA" or "Chrysler")		
RESOLVED COMPLAINTS:		

**FCA US, LLC (B2757)**  
**Chrysler - Warren Stamping**  
**22800 Mound Road**  
**Warren, Michigan 48091-3596**

**Name change (2015): Chrysler Group, LLC (B2757) → FCA US, LLC (B2757)**

**ROP No.: MI-ROP-B2757-2013**

On November 30, 2017, I conducted a level-2 **FY 2018 ROP Major CMS scheduled** inspection of FCA US, LLC ("FCA" or "Chrysler") located at 22800 Mound Road, Warren, Michigan 48091-3596. 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 ROP.

During the inspection, Mr. Greg Karageozian (Phone: 586-497-1454; Fax: 586-497-1750; Cell: 313-618-8112; E-mail: [Gregory.Karageozian@FCAGroup.com](mailto:Gregory.Karageozian@FCAGroup.com)), Environmental Specialist, Facilities Engineering, assisted me. Ms. Audrey Joslin (Phone: 586-214-8347; Fax: NA; Cell: NA; E-mail: [Audrey.Joslin@FCAGroup.com](mailto:Audrey.Joslin@FCAGroup.com)), Environmental Specialist, World Class Manufacturing (WCM), was also present.

Mr. Kevin Sugar (Phone: 586-497-5458; Fax: NA; Cell: NA; E-mail: [Kevin.Sugar@FCAGroup.com](mailto:Kevin.Sugar@FCAGroup.com)), Environmental Health and Safety Manager, Warren Stamping Plant, was not present.

Ms. Sarah Olson (Phone: 586-427-5458; Fax: NA; Cell: 248-219-1107; E-mail: [sarah.olson@chrysler.com](mailto:sarah.olson@chrysler.com)), Environmental Health and Safety Lead, Warren Stamping Plant, moved to Belvidere (IL) plant.

FCA US (Chrysler) Warren Stamping Plant is subject to ROP Program because it is adjacent to FCA US Warren Truck Assembly Plant and both are under common ownership and control of FCA US (Chrysler). Moreover, as an evidence of interconnected manufacturing operations, there is a tunnel to Warren Truck Assembly Plant from the stamping plant for transport of the stamped auto parts.

The definition of "major stationary source" requires a tripartite test for determining the geographic extent of a single source. Specifically, a major stationary source is defined as all of the pollutant emitting activities that are (1) located on one or more contiguous or adjacent

properties; (2) are under common control of the same person (or persons under common control); and (3) belong to a single major industrial grouping or are supporting the major industrial group (as determined by the Major Group codes in the Standard Industrial Classification Manual).

FCA US (Chrysler) Warren Stamping Plant is engaged in the production of automotive parts, using metal stamping machines, such as door panels, hoods, etc. for automotive assembly plants. As such, most of its parts are shipped to Warren Truck Assembly (Warren, MI) via tunnel, Jefferson North Assembly (Detroit, MI), Belvidere Assembly (Belvidere, IL), SHAP (Sterling Heights, MI), Saltillo (Mexico), Windsor (Canada) plants. Most stamped parts are for sports utility vehicles (vans, trucks, jeeps, etc.).

Inside the stamping plant, all materials flow from North to South. One brand new stamping press line was installed about October 2015.

The following emission units / groups are present:

1. **EU-CARP-SHOP:** Carpenter shop with one common dust collector. About six (6) carpenter stations (saw, planer, grinder, sander, etc.) are present. Saw dust emissions from each unit are captured with a dedicated capture device and are ducted to a common baghouse that uses shaker mechanism for bag cleaning. Two 55-gallon drums are present as hoppers. I asked Mr. Greg Karageozian to empty the hoppers promptly when full and inspect the bags on a quarterly basis. The quarterly baghouse inspection records are kept (EU-CARP-SHOP, VI.1: inspection records). Carpenter Shop has non-production equipment and is used infrequently on as needed basis. Most of the time, it is idle.
2. **EU-HIGHLIGHT:** Application of highlighter fluid. There are about 20-25 highlighter stations where high-light fluid is applied on some parts for quality control purposes using statistical methods; i.e. a sample of the population of stamped parts is taken for quality checks. The fluid is wiped on the parts and the quality inspectors inspect for defects. I asked Mr. Greg Karageozian to keep lids of cans (5-gallon capacity) closed at all times. Highlighter fluid usage (12-month basis) records are kept and the emissions calculations are done (EU-HIGHLIGHT, VI.1: VOC records, calculations); 330 gallons of highlighter fluid per year was used (identical usage for both CY2016 and YTD-October-2017). The fluid's density is 6.7 pounds per gallon, boiling point is 410-535 °F and vapor pressure is less than 50 mm Hg at 100 °F.  $(6.7 \text{ lbs. VOC / gal}) * (330 \text{ gallons / year}) = 2,211 \text{ pounds of VOC per year} = 1.11 \text{ tons of VOC emissions per year}$  (EU-HIGHLIGHT, 1.1 limit: 5.62 tons per year)
3. **FG-RULE287(c):** Maintenance paint spray booth (25 ft. \* 25 ft. room). The booth is equipped with backdraft filters. All paints are water-based. Paint usage records are kept. I asked Mr. Greg Karageozian to install and inspect the filters such that they fit, at all times, snugly without gaps and holes. Less than 50 gallons of coatings (including water) per month are used (Rule 336.1287(2)(c) limit: 200 gallons per month on water-free basis); highest usage: 44 and 133 gallons (including water) in June 2016 and July 2017, respectively.

4. **FG-Rule290 (EU-ADHESIVE-STATIONS, EU-BLANK-WASH):** In subassembly area, 55-gallon drums contain adhesives and the materials are pumped to applicators. Outer panels and inner panels are put together using adhesives. Both 2-part (A & B) and 1-part adhesives are used. Adhesive usage records are kept and VOC emissions calculations are done. Blank wash is mixed with water: 1 part blank wash (1.67 pounds of VOC per gallons) and 9 parts water. Blank wash is applied to a blank sheet of metal so that a metal does not slip during the stamping. All FG-Rule290 processes together emitted 1.2 and 1.25 tons of VOC per year in CY2016 and YTD-October-2017, respectively. All adhesives are water-based.
  
5. **EU-COLD-CLEANERS:** All cold-cleaners are water based.

### Conclusion

FCA (Chrysler) stamping is a small source of VOC and particulate matter. However, the stamping plant is subject to ROP Program because it is adjacent to Chrysler's Warren Truck Assembly Plant. FCA Stamping is in compliance with ROP.

NAME Jill Newhall - DATE 12/04/2017 SUPERVISOR Joyce B

