

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

B2757

FY 2016 Insp

B275732739

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: 12/28/2015
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY 2016 level-2 scheduled inspection of FCA US, LLC ("Chrysler")		
RESOLVED COMPLAINTS:		

B2757_SAR_2015_12_28

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 December 28, 2015, I conducted a level-2 **scheduled** inspection of FCA US, LLC ("Chrysler") located at 22800 Mound Road, Warren, Michigan 48091-3596. The inspections were 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.

During the inspection, Mr. Greg Karageozian (Phone: 586-497-1454; Fax: 586-497-1750; Cell: 313-618-8112; E-mail: Gregory.Karageozian@FCAGroup.com), Environmental Specialist, Facilities Engineering, assisted me. Mr. Kevin Sugar (Phone: 586-497-5458; Fax: NA; Cell: NA; E-mail: Kevin.Sugar@FCAGroup.com), Environmental Health and Safety Manager, Warren Stamping Plant, was also present.

Ms. Sarah Olson (Phone: 586-427-5458; Fax: NA; Cell: 248-219-1107; E-mail: 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.

FCA US (Chrysler) Warren Stamping Plant is engaged in the production of automotive parts such as door panels, hoods, etc. for automotive assembly plants. As such, most of its parts are shipped to Warren Truck, Jefferson North, Belvidere (IL), SHAP, Saltillo (Mexico) 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. During the FY 2016 inspection, the plant was shut down for maintenance.

The following emission units / groups present:

1. EU-CARP-SHOP: Carpenter shop with one common dust collector. About 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).
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. 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); 715 gallons of highlighter fluid per year was used (CY2015). 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. $(6.7 \text{ lbs. VOC / gal}) * (715 \text{ gallons / year}) = 4,790 \text{ pounds of VOC per year} = 2.4 \text{ tons of VOC emissions per year}$ (EU-HIGHLIGHT, I.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 40 (Rule 287(c) limit: 200 gallons per month; highest usage: 37 gallons in Sep 2015) gallons of coatings per month are used.
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.
5. EU-COLD-CLEANERS: All cold-cleaners are water based.

Conclusion

Chrysler stamping is a small source VOC and particulate matter. However, the stamping plant is subject to ROP Program because it is adjacent to Chrysler's Warren Truck Assembly Plant.

NAME J. Sheenahall DATE 12/29/2015 SUPERVISOR CJE