

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

P030168282

FACILITY: STATE FABRICATORS, INC.		SRN / ID: P0301
LOCATION: 30550 W 8 MILE, FARMINGTN HLS		DISTRICT: Warren
CITY: FARMINGTN HLS		COUNTY: OAKLAND
CONTACT: Roy Rodriguez , Facilities Manager		ACTIVITY DATE: 06/14/2023
STAFF: Noshin Khan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: scheduled on-site inspection		
RESOLVED COMPLAINTS:		

On Wednesday, June 14, 2023, I, Noshin Khan, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, performed a scheduled, on-site inspection of State Fabricators, Inc. located at 30550 West Eight Mile Road, Farmington Hills, Michigan 48336 (SRN: P0301). The purpose of the inspection was to determine the facility's compliance status with the requirements of the federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended (Act 451); the AQD administrative rules, and the conditions of Permit to Install (PTI) Number 1416-91A.

I arrived at State Fabricators, Inc. at 1PM and met with Roy Rodriguez, Facility Manager, to discuss the facility's operations. The facility produces automotive assembly components including metal carriers, platforms, skillets, and skids. Welding and painting of metal parts are the main processes that occur at the site. Roy said that the facility typically operates from 7:00AM-3:30PM from Monday through Friday, or 5:00AM-7:30PM Monday through Saturday as needed depending on the jobs received. The facility has 38 employees. Roy informed me that no equipment or processes had been added to the facility's operations since my last inspection in July 2022. The records review process after the 2022 inspection revealed that the facility had not been calculating or maintaining 12-month rolling VOC and HAPs calculations as required by their permit, and a violation was issued. Roy shared that the facility now has Jacob Abair, Environmental Consultant at Fishbeck, maintain emissions calculations to comply with requirements.

After discussing operations, Roy led me on a walkthrough of the facility. We began in the production area in the same building as the office area—this is considered Plant 1. Roy said that parts staging, metal cutting and welding, and some research and development activities are performed here. I observed welding and cutting processes, and a CNC machine that Roy said is not used often. These processes are exempt from permit requirements per Michigan Air Pollution Control Rule 285(2)(i) and 285(2)(l)(vi)(B).

Behind Plant 1, Roy pointed out stacks of parts that are de-rusted before going into the paint shop. I followed up with Roy after the inspection to clarify how these parts are de-rusted, and he said that a wire wheel is used to mechanically remove rust. Roy confirmed that this process is performed outside, and I explained that this would mean that particles are being emitted to the outside air. I advised that a process for grinding or sanding metal that is performed inside the general in-plant environment could be exempt from permit requirements per Rule 285(2)(l)(vi)(B). Roy said the facility can adjust their processes to perform de-rusting inside. The de-rusting process as it is performed currently is a violation of Rule 201 since air contaminants are emitted in a non-permitted process.

The paint shop building includes the booth and the paint and thinner storage/mixing room. In the storage room, I observed that paint containers not in use were kept closed. Roy showed me a usage log that is now kept in the storage room to track how much of each paint is used during each job. This usage is added into an excel sheet managed by Larry Boose, Plant Engineer, who sends the updated sheet to Jacob Abair. Previously, usage was tracked assuming an entire container of paint is used once opened. Roy explained that a significant portion of the paint usually goes to waste since the paint will start to dry up as soon as it is opened and exposed to air. About two days after opening, the paint remaining in a container will be left to dry into a solid disk and sent to a landfill. According to Roy, the containers holding paint that is left to dry are kept in the paint storage room with the lids closed. My observations were consistent with this as I did not observe any open containers of paint that were not in use inside the storage room or outside. Along the side of the room, I observed 3, 55-gallon drums used to store xylene waste from cleaning paint applicators. All waste drums were closed. Roy said that U.S. Ecology collects these waste drums in addition to machine oil waste that is also stored in 55-gallon drums.

In the paint booth, I observed filters in place that appear to be functioning properly. Paint guns are kept submerged in a closed container of xylene. Roy pointed out a manometer that is used to confirm air flow out of the exhaust. He said that the filters in the booth are replaced about every two days when the manometer reading starts to indicate less positive flow. Additional filters are in place in the exhausts on the roof—Roy said that these are changed once or twice a month, as needed. Based on my observations, the facility operates exhaust filters properly as required by EUSPRAYBOOTH Special Condition (S.C.) IV.1 in PTI 1416-91A. I did not observe any visible emissions from the spray booth, in compliance with S.C. I.3.

Prior to the walkthrough, I had asked Roy if there were any boilers on site and he said there was a small, natural gas-fired one used to heat the paint booth, located in a small room behind the paint mixing room. The boiler nameplate read a capacity of 233,000 Btu/hr. This boiler is exempt from permit requirements per Rule 282(2)(b)(i) for fuel-burning equipment used for space heating with rated heat input capacities below 50 MMBtu/hr.

Next, we walked through Plant 3. I observed more assembly and welding activities here. Roy showed me a robot that performs welding and plasma cutting of mild steel sheets. I did not observe this robot equipped with a fabric filter. In my post-inspection follow-up with Roy, he confirmed that the robot is not equipped with a fabric filter designed for plasma cutting. He said that the plasma cutting function is not used often and estimated that it is used for a total of 24 to 48 hours in the year. The use of the plasma cutter without an appropriately designed filter and no permit is a violation of Rule 201.

Behind Plant 3 is an outside storage area. I observed parts storage and an adjacent area where full waste drums are stored and marked according to the material each one holds. All waste drums were closed with tight fitting lids.

We then walked through Plant 2, where painted products undergo final detailing and assembly.

Lastly, Roy led me to the maintenance shop primarily used for repairing welding machines. Roy showed me a parts washer that was recently purchased but has not been used yet. I provided Roy with an AQD sticker that lists instructions for operation of a cold cleaner (which is required to be posted on a cold cleaner per Rule 707) in case the facility decides to use a solvent-based cleaner,

and I asked Roy to inform me when they decide what cleaner they will use in the washer. The parts washer is equipped with a lid and has an air-vapor interface of less than 10 square feet, so it is exempt from permit requirements per Rule 281(2)(h) or 287(2)(k) depending on the type of cleaner that will be used.

Per EUSPRAYBOOTH S.C. I.2, the facility has a VOC emission limit of 15 tpy based on a 12-month rolling time period as calculated each month. In accordance with recordkeeping requirement S.C. VI.1, the facility keeps records for VOC content and usage of coatings and reducers. According to the calculations provided by Jacob, the highest VOC emissions from December 2022 through June 2023 were 6.69 tons based on the 12-month rolling total calculated in June 2023. The highest monthly emissions from January 2022 through June 2023 were 1.47 tons in January 2022. The facility is in compliance with this emission limit.

The AQD has not requested testing to confirm the emission limit of 15 lb/hr specified in S.C. I.1.

Per FGFACILITY S.C. I.1, the facility has an emission limit of less than 9.0 tpy (based on a 12-month rolling time period as calculated each month) for each individual HAP. Per S.C. I.2, the facility has an aggregate HAPs emission limit of less than 22.5 tpy (based on a 12-month rolling time period as calculated each month). In accordance with recordkeeping requirements in S.C. VI.2, the facility provided monthly and 12-month rolling records for usage, content, and emissions of HAP-containing materials. Based on calculations provided by Jacob, the highest aggregate HAP emissions from December 2022 through June 2023 were 2.94 tons based on the 12-month rolling total calculated in June 2023. This is below the individual HAP and aggregate HAP limits.

Based on my observations during the inspection and review of recordkeeping, the facility is currently in violation of Michigan Air Pollution Control Rule 201 for the following unpermitted processes: mechanical de-rusting that is performed outside and for operation of a plasma cutter without an appropriately designed filter.

NAME *Noah Khan*

DATE 10/02/2023

SUPERVISOR *K. Kelly*