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

N136261937

FACILITY: ISP Coatings		**SRN / ID:** N1362
LOCATION: 130 E Pond Dr, ROMEO		**DISTRICT:** Warren
CITY: ROMEO		**COUNTY:** MACOMB
CONTACT: Ron Gamble , General Manager		**ACTIVITY DATE:** 12/09/2021
STAFF: Kaitlyn Leffert	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: FY2022 Scheduled Inspection		
RESOLVED COMPLAINTS:		

On December 9th, 2021, Michigan Department of Environment, Great Lakes, and Energy Staff, Kaitlyn Leffert, conducted an inspection of ISP Coatings, located at 130 East Pond Drive, Romeo, MI. The purpose of the inspection was to determine the facility's compliance 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 PA 451, as amended (Act 451); the administrative rules; and the conditions of Permit to Install (PTI) Number 114-04.

I arrived at the facility around 11:00 am on December 9th. I introduced myself and explained the purpose of my visit. I met Ron Gamble, General Manager, and Donna Weakley, Office Manager, HR. First, we had a brief meeting to go over the permit and discuss the required records. ISP Coatings coats various metal parts with plastisol and nylon coatings. The parts are supplied directly to automotive manufacturers. The facility operates one shift, from approximately 6 am to 2:30 pm. The facility changed management in 2019 and since has made some changes to operations and procedures at the facility.

ISP Coatings has an opt-out permit for hazardous air pollutants (HAPs). The facility previously had a Renewable Operating Permit (ROP), but reduced emissions to obtain a HAP opt-out permit in 2004.

Facility Walk Through

ISP Coatings operates nylon and plastisol coating lines. For the nylon coatings, parts are pre-heated, dipped in nylon powder, and then cooled in a water-cooling tank. For the plastisol coating lines, parts are dipped in primer, the primer is then cured in an oven, then the parts are dipped in the plastisol coating, cured again in a curing oven, and then finally dipped in a water cooling tank.

ISP Coatings is permitted to operate five dip coating lines, identified as machines 12, 13, 16, 17, and 18. In addition, during previous inspections, it was noted that there are several exempt coating lines at the facility, identified by machines 7, 8, 9, 10, and 11. Lines 7, 8, 10, and 11 are all nylon coating machines that use powder nylon coating and are considered exempt according to Rule 287 (2)(d). Machine 9 is a water-based primer tank that is considered exempt according to Rule 287(2) (c). All of these permitted and exempt coating lines remain and continue to operate at the facility.

The facility consists of a front office area, the main production area where the dip-coating machines are located, and then a back room where coatings, primers, and other materials used at the facility are stored. In the back storage area, all drums containing coatings had lids on them. The facility manually tracks material usage on a clipboard adjacent to material storage. When a coating or primer is used and removed from the storage area, the type, amount, and machine in which it is being used are noted on the tracking sheet.

Also located in the back room next to the storage area was a blast cabinet. Mr. Gamble informed me that they do not use that anymore. However, it did appear to remain operable. The blast cabinet vents to the general in-plant environment and appears to be exempt according to Rule 285 (2)(l)(vi).

There previously were two cold cleaners at the facility that used trichloroethylene (TCE). The TCE used in these cold cleaners was the primary source of hazardous air pollutants (HAPs) at the facility. I was informed that these cold cleaners had been removed. The cold cleaners were previously used to strip paint off rejected parts so that they could be recoated in the dip coating lines. Instead, the facility now sends all rejected parts to a metal recycler. The cold cleaners were removed in January 2020. I confirmed that there were not any cold cleaners or parts cleaners at the facility during my inspection.

Records Review

ISP Coatings is required to maintain monthly records of the gallons of each coating and solvent used, as well as VOC mass emissions calculations for Machines 12-1 (PTI No. 114-4, Special Condition 6.6). While I was on-site, I was provided copies of records of the material usage and VOC emissions calculations for Machines 12-18 for the years 2019, 2020, and 2021 so far. According to the emission records, the primary two materials used are plastisol and 30% water-based primer. The facility previously also used a 9% solvent primer, trichloroethylene (in the parts washers), Jeffsol, and Varsal. According to the records, none of these materials are used anymore. The only one of those materials used over the previous 3 years was Varsal, which was last used in January 2020.

The permit contains a VOC emission limit of 34 tons per year (tpy) for Machines 12-18. The provided records indicate that 12-month rolling VOC emissions as of October 2021 were 525.6 pounds or 0.26 tons. This is also the highest rolling 12-month VOC emissions over the previous few years. The provided emissions calculations indicate that ISP Coatings is operating in compliance with the permitted VOC emission limit for Machines 12 to 18.

In addition, the facility is required to maintain individual records of material usage for Machines 12, 13, 16, 17, and 18. As noted during the inspection, ISP Coatings tracks material usage by machine and notes it on a clipboard near the material storage area. These records are maintained on-site. In addition, the permit limits VOC content for the coatings used in each machine to 3.0 lb/gal (minus water) as applied (PTI No. 114-04, S.C. 1.1, 2.1, 3.1, 4.1 and 5.1). The same plastisol or nylon coatings are used in each machine. The VOC content of the plastisol is 0.01 pounds per gallon. The nylon coating is powdered and the VOC content is minimal to non-existent since the coating is not volatilized during application.

Hazardous Air Pollutants (HAPs)

ISP Coatings has opt-out emissions limits for hazardous air pollutants (HAPs). ISP Coatings was not familiar with the HAP emissions limits and did not have records of HAP emissions calculations available on the day of my inspection. I explained the requirement in the permit and that HAP emissions calculations must also be maintained along with VOC emissions calculations. Previously, TCE usage in the cold cleaners was the primary HAP at the facility. With the removal of these cold

cleaners, the facility was unsure of whether there were any HAP-containing materials remaining in use at the facility. Following my inspection, I provided the facility with additional information on how to identify HAPs and calculate HAP emissions.

On January 14th, I was provided additional information on HAP emissions calculations by Ron Gamble. ISP Coatings has eliminated the use of the majority of materials that contain any HAPs. The only remaining material that contains a HAP is the 30% water-based primer, which contains formaldehyde. For the calendar year of 2021, formaldehyde emissions were calculated to be 0.655 pounds. Based on the provided emissions calculations, ISP Coatings appears to be operating in compliance with the individual and aggregate HAP emissions limits of 9 tons per year and 22.5 tons per year, respectively.

Petroleum distillates
PTI No. 114-04 also limits emissions of two types of petroleum distillates from Machines 12-18. The facility no longer uses petroleum distillates and therefore compliance with these emissions limits and associated recordkeeping requirements was not assessed.

Rule 287(2)(c) Exempt Equipment
Machine 9 utilizes only a water-based primer and is considered exempt according to Rule 287(2)(c). ISP Coatings maintains records of all coatings and materials used in each coating line. According to the material usage records provided during the inspection, facility-wide usage of water-based primer ranged from 4 to 80 gallons per month, which is under the 200 gallons per month limit for exempt coating lines, as specified in Rule 287(2)(c).

MAERS
I reviewed the facility's past MAERS' report and confirmed that the records of emissions calculations and material usage information provided during my inspection matched with the information provided in the 2021 MAERS submittal.

Conclusion
Based on my on-site inspection and review of the required recordkeeping, ISP Coatings appears to be operating in compliance with all conditions of PTI No. 114-04 and all other applicable air quality rules and regulations.

NAME Kaitlyn Leffert DATE 03/08/2022 SUPERVISOR K. Kelly