

N1362 - SAR - 2017 0425

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

N136239565

FACILITY: ISP Coatings		SRN / ID: N1362
LOCATION: 130 E Pond Dr, ROMEO		DISTRICT: Southeast Michigan
CITY: ROMEO		COUNTY: MACOMB
CONTACT: Cindy Surline , General Manager		ACTIVITY DATE: 04/25/2017
STAFF: Francis Lim	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Inspection		
RESOLVED COMPLAINTS:		

On April 25, 2017 I conducted an inspection at ISP Coatings Corp., located at 130 E. Pond Drive, Romeo. The purpose of the Air Quality Division's inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; and Permit-to-Install (PTI) Nos. 114-04, 368-86, 369-86, and 371-86.

Cindy Surline, General Manager represented the facility during the inspection. Donna Hill also assisted during the inspection.

ISP Coatings is a higher-tier automotive small metallic parts supplier. It indirectly supplies to several automotive manufacturers like GM, Ford, Chrysler, Honda, and Toyota. ISP Coatings has less than 20 employees operating one shift.

Main process involves protective coating of small metallic parts with either plastisol or nylon. Plastisol is a suspension of PVC particles in a liquid plasticizer. Plasticizers are additives that increase the viscosity of a material. Plastisol will not dry but must be cured in an oven. The nylon application process is simpler. However, nylon coatings cannot be applied to metal parts where the metal part will be flexed or bended, otherwise, the nylon will break.

Metal parts are heated to about 450 to 475 °F before going to the dip tank which contains either plastisol or fluidized nylon powder. For plastisol application, metal parts are dipped in a primer tank, go to a pre-heat oven, dipped in plastisol, go to a curing oven and finally cooled in a water cooling tank. For nylon application, metal parts are preheated in an oven or burner, dipped in nylon powder, and cooled in a water cooling tank.

Permit # 114-04

This permit covers Machine # 12, 13, 16, 17, and 18. This permit also includes facility-wide opt-out limits.

Machine #13, 14 and 15 are nylon, plastisol, and epoxy coating machines. Machine #17 and 18 are plastisol coating machines. For plastisol coating, metal parts are dipped in a primer tank, goes to an oven before going to the plastisol dip tank, cured in another oven. After curing, the parts are cooled/quenched in a water tank. To adjust plastisol viscosity, a small amount of Varsal (a reducer) is added. Film thickness of the coating is achieved by adjusting the conveyor line speed.

For nylon application, a simpler process called melt mix is utilized. The metal parts are preheated in an oven or burner, dipped in nylon powder, and cooled in a water cooling tank. Film thickness is adjusted by introducing a very low pressure air to the nylon tank to fluidize the nylon powder.

When the tanks are not in use, the dip tanks are covered with cardboard.

All paints, solvents, as well as waste solvents are stored in closed containers at the back of the plant in a separate room. I did not see any spills in the storage area. Since the facility is using the same plastisol,

a method 24 VOC analyses has not been done. The facility keeps a record of the coating usage, the VOC content of each coating, and emission calculations of VOC, mineral spirits, single HAP as well as aggregate HAPs. The company also calculates the VOC content in terms of lbs of VOC per gallon minus water on a daily basis.

Facility keeps good records. I reviewed 12-month rolling time period records from April 2015 until March 2017. VOC limit is 34 tons for Machine # 12, 13, 16, 17, and 18. Facility reports less than two tons of VOC emissions, excluding TCE emissions. Most of the VOC emissions come from Varsal, a plastisol reducer. Mineral spirits emissions are less than 100 pounds per 12-month period.

Facility-wide HAPs limit is less than 9 tons each individual HAP and less than 22.5 tons aggregate HAPs. Majority of the HAPs emissions are from TCE, which is used in the TCE cold solvent cleaner. Facility no longer uses primer and reducer containing TCE. I reviewed 12-month total HAPs emissions from January 2016 until March 2017. Total 12-month rolling time period emissions ranged from 0.17 tons to 2.48 tons, mostly from TCE used in the cold cleaners. Other potential sources of HAPs are the solvent-based primer and water-based primer. But HAPs from these are negligible. For the 12-month period ending March 2017, facility reported no usage for the solvent-based primer and only 20 gallons for the water-based primer.

During the inspection, only the nylon process was in operation. I did not notice any visible emissions from the machines

Permit # 368-86

This permit covers a primer dip tank & oven. The oven has been removed and only the dip tank remains. The equipment has been idled for a long time. Facility prefers to keep the permit for now.

Permit #369-86

The permit is for a nylon and epoxy dip machines, Machine #7 and 8 respectively. These machines cannot process plastisol since the oven is a flame oven and not an electric oven. A flame oven cannot control temperature properly. Plastisol application is temperature sensitive. Facility has not been using the epoxy machine. I did not notice visible emissions from the equipment.

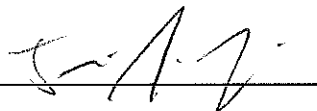
Permit #371-86

This permit is for two plastisol silk screening machines & ovens. The silk screening machines are seldom used. Machines were not operating during the inspection. Facility no longer uses any TCE containing material in the machines.

Cold Cleaners exempt under Rule 281(h)

The facility operates two portable 5-gallon TCE cold cleaners subject to NESHAP. The cold cleaners are located at the back of the building. Facility complies with the Halogenated Solvent NESHAP, 40 CFR 63 Subpart T by using control combination cover plus water layer. The cold cleaners are used for stripping the plastisol coatings. During the inspection, I verified that the cover is installed. Cindy said that a 1-inch water layer is maintained and verified daily. Each unit is equipped with a device to properly drain the material being cleaned. The TCE cold cleaners are used occasionally.

NAME



DATE

05-02-17

SUPERVISOR

