

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

N131653108

FACILITY: NJT Enterprises, LLC (Formally Mayco Plastics)		SRN / ID: N1316
LOCATION: 42400 Merrill, STERLING HTS		DISTRICT: Southeast Michigan
CITY: STERLING HTS		COUNTY: MACOMB
CONTACT: Al Cook , Facility Manager		ACTIVITY DATE: 11/15/2019
STAFF: Rem Pinga	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Level 2 Scheduled Inspection		
RESOLVED COMPLAINTS:		

On November 15, 2019, I conducted a level 2 scheduled inspection at NJT Enterprises, LLC. The facility is located at 42400 Merrill Road, Sterling Heights, Michigan 48083. The purpose of the inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; 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 facility's Renewable Operating Permit (ROP) No. MI-ROP-N1316-2015. During the inspection, I was accompanied by Mr. Al Cook, Facility Manager/Environmental and contact person, and Ms. Stephanie Jarrett, facility consultant. Ms. Jarrett handles the recordkeeping requirements of the facility. Prior to conducting the walk-through inspection, I initially showed my I.D. and stated the purpose of the inspection.

NJT's facility at this site is called Mayco International LLC. Mr. Cook mentioned that NJT Enterprises, LLC (NJT) bought the equipment at this site from Mayco Plastics and installed additional equipment the company obtained from Collins & Aikman. For business and familiarity reasons, this manufacturing plant was named Mayco International LLC.

NJT manufactures and coats various interior and exterior automotive plastic parts. In this facility, the company conducts injection molding, thermoforming of plastic parts, reaction injection molding, assembly of components in instrument panels, and coating of automotive plastic parts primarily for FCA facilities. During inspection, the facility operates 3 shifts, 24 hours/day, and 7 days a week. The facility operates under a Clean Air Act of 1990, Title V, Renewable Operating Permit (ROP), MI-ROP-N1316-2015, that was issued on December 8, 2015.

The applicable requirements (AR) in the facility's ROP, MI-ROP-N1316-2015, are organized in 3 emission units: EUPLASTICS, EUBURNOFF, EUDIESELGEN3; and 5 flexible groups: FGMACT, FGRULE287(c), FGEMGENS, FGRULE290, and FGCOLDCLEANERS.

EUPLASTICS – pertains to air-dried interior plastic automotive parts spray coating line, consisting of four enclosed robotic spray booths: Booth No. 1 - adhesion promoter, Booth No. 2 - topcoat, Booth No. 3 - topcoat, and Booth No. 4 - topcoat. The emission unit includes a five-stage aqueous power washer with natural-gas fired dry-off oven, flash-off tunnel, IR tunnel, and paint curing oven. The booths are

controlled by water curtains and dry filters for particulate matter. The plastic parts are washed with alkali solution and hot water. Next, the parts are oven-dried before going to the coating process. The suspended paint solids, captured in the water curtain, are removed by adding chemicals to make the solids float, skimmed off, and sent out for proper disposal. Spent water from the water curtains is treated and reused. The water from the water curtain is dumped every six months and replaced. Coated plastic parts are cured in a natural gas-fired oven operating at 190°F. The coating process is considered air dried because the temperature (T) of the oven is less than 194°F. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(I.1), the highest monthly 12-month rolling total VOC and Acetone emission rate through the end of September 2019 was 14.74 tons per year (tpy), recorded for January 2019 and less than the 137.2 tpy permit limit and . Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(I.2), the highest monthly 12-month rolling total VOC and Acetone emission rate for purge and clean-up in EUPLASTICS were 4.25 tons per year, recorded for November 2018, and less than the 5.00 tpy permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(I.3), the monthly 12-month rolling total VOC emission rates at the end of September 2019 and for each spraybooth were as follows: Booth 1 – 1.32 tpy, Booth 2 – 2.23 tpy, Booth 3 – 3.43 tpy, and booth 4 – 3.53 tpy, and less than the 72.8 tpy permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(I.4), the highest daily VOC emission rate was noted on July 3, 2019 at 220.63 lb. and less than the 5,222.0 lb./day permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(II.1), the highest adhesion promoter VOC content, P1C21A (recorded in August 2019), was 4.58 lb./gal minus water as applied and less than the 7.0 lb./gal permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(II.2), the highest topcoat VOC content was recorded for Indigo at 3.11 lb./gal minus water as applied and less than the 5.0 lb./gal permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(III.1), I observed no open paint and waste paint containers during inspection. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(III.2), I observed the curing oven temperature during walk-through inspection at 122°F and less than the 194°F permit limit. Per ROP No. MI-ROP-N1316-2015, special condition (C)EUPLASTICS(VI.1), I observed the continuous temperature monitoring/recording device operating in a satisfactory manner.

EUBURNOFF – pertains to a batch type natural gas-fired burn off oven with a secondary chamber or afterburner; used for removing cured paints, oil or grease from metal parts by thermal decomposition in a primary chamber. Per Mr. Cook, this equipment has not been used since 2015. During inspection, I verified it that the facility has not used this equipment. Racks are sent out for cleaning.

EUDIESELGEN3 – pertains to 125 KW diesel fuel-fired emergency electric generator installed in 2014. This emission unit is subject to the applicable requirements of the New Source Performance Standards (NSPS) for Stationary

Compression Ignition, Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 60, Subpart IIII that applies to this diesel fuel-fired emergency generator. This emergency diesel generator is rated at less than 10 MM BTU/hr and exempt from permit to install requirements under AQD Administrative Rule R 336.1285(2)(g). Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(I.1), the facility submitted an EPA Emissions Compliance Certification issued 4/29/2013 with emissions as follows: PM – 0.11 g/kw-hr., NMHC+NOx – 4.0 g/kw-hr., CO – 1.0 g/kw-hr. These emissions comply with the following limits: PM – 0.2 g/kw-hr., NMHC+NOx – 4.0 g/kw-hr., CO – 3.5 g/kw-hr. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(II.1), I obtained the attached supplier diesel fuel product sheet which shows the sulfur content of the fuel at 15 ppm/gal. and Centane Index of 40 min. and meets the same permit limit requirements. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(III.5), submitted records showed that in FY 2019 and until November 2019, the engine operated for 23 hours and less than the 50 non-emergency hours limit minus one month of data. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(IV.1), the engine is equipt with the non-resettable hour meter as shown by the submitted photo. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(VI.1-8), facility purchased a certified engine, keeps records of the certified engine, fuel supplier and usage records, engine name plate capacity, date of installation/manufacture, and hours of operation. Engine maintenance such as hoses/spark plugs inspections/replacements, oil changes, and tune-ups are conducted at least once a year.

FGMACT – pertains to each existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR Part 63, Subpart PPPP, 63.4481(a)(2) to (5). Per ROP No. MI-ROP-N1316-2015, condition (D)FGMACT(I.1), submitted records showed that the monthly 12-month rolling total Volatile Organic HAP emission rate, for general use coating, as of June 2018 was 0.02 lb./lb. of coating solids and less than the 0.16 lb./lb. coating solids permit limit. The facility chose to use the “emission rate without add-on controls option” to comply with 40 CFR 63.4490 in determining organic HAP emission rate. Per ROP No. MI-ROP-N1316-2015, condition (D)FGMACT(I.2), the facility reported using thermoplastic olefin coating that does not have HAP. Per ROP No. MI-ROP-N1316-2015, condition (D)FGMACT(II), the facility uses plastic material that does not contain any organic HAP materials.

FGRULE287(C) – pertains to any emission unit that emits air contaminants and is exempt from permit to install requirements of AQD Administrative Rule R 336. 1201 pursuant to Administrative Rules R 336.1278 and R 336.1287(2)(c). During inspection, I observed 2 manual spraybooths (EUSPRAYBOOTH1 & EUSPRAYBOOTH2) that appeared to be unused. The sample booth, EUSAMPLEBOOTH71, has been removed. I observed filters in place.

FGEMGENS – pertains to reciprocating internal combustion engines (RICE) utilized as emergency generators that are less than 10 MM BTU/hr, exempt from AQD Administrative Rule R 336.1201 permit to install requirements per AQD Administrative Rule R 336.1285(g) and subject to 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The existing emergency engines are ≤ 500 HP and constructed before June 12, 2006. The compliance date – May 3, 2013, for existing emergency compression ignition (CI) engines ≤ 500 HP, and October 19, 2013, for existing emergency spark ignition (SI) engines ≤ 500 HP. EUDIESELGEN1, EUDIESELGEN2, and EUNATGASGEN are the emission units installed at the facility covered by this flexible group. Per ROP No. MI-ROP-N1316-2015, condition (D)FGEMGENS(III.1-7), facility submitted records showing total operating hours for each generator from January 2019 through November 2019. The 11 months of operating hours are as follows: EUDIESELGEN1 – 23 hours, EUDIESELGEN2 – 23 hours, and EUNATGASGEN – 23 hours. These total hours, if prorated to 12 months, would be less than the 50 hours limit for non-emergency use. Engine maintenance such as hoses/spark plugs inspections/replacements, oil changes and tune-ups are conducted at least once a year. NJT submitted recordkeeping on the most recent engine maintenance conducted per engine. Per ROP No. MI-ROP-N1316-2015, condition (D) FGEMGENS(IV.1), the engines are equipped with non-resettable hour meter as shown by submitted photos.

FGRULE290 – pertains to any emission unit that emits air contaminants and exempt from permit to install requirements of AQD Administrative Rule R 336. 1201 pursuant to Administrative Rules R 336.1278 and R 336.1290. EUFLEXFOAM is the emission unit covered by FGRULE290. The emission unit refers to a reaction injection molding process that manufactures flexible polyurethane foam for the Jeep Grand Cherokee and Durango soft-touch instrument panel. This emission unit has 5 production stations that termed as carriers. The foam production line use MDI and polyol. Although MDI is a carcinogen, MDI emissions are negligible since MDI is expected to completely react with polyol. Methylene chloride is not used for this process. A small amount of water-based mold release paste is used. In the flexible polyurethane foam production, the MDI and polyol is metered at a specified stoichiometric ratio, mixed together until a homogeneous blend is obtained, and the reacting liquid is dispensed into the closed mold until the product cures. The foam is formed between a plastic substrate and “skin” of the instrument panel. The substrate is manufactured in the injection molding machine and the “skin” is manufactured in the thermoforming machine. The facility submitted recordkeeping that showed the highest MDI emission of 0.32 lb. for the month of October 2019 and less than the 20 lb./month exemption limit per R 336.12990.

FGCOLDCLEANERS – pertains to any cold cleaner that is grandfathered or exempt from permit to install requirements of AQD Administrative Rule R 336. 1201 pursuant to Administrative Rules R 336.1278 and R 336.1281(h) or R 336.1285(r)

(iv). Existing cold cleaners were placed into operation prior to July 1, 1979 and new cold cleaners were placed into operation on or after July 1, 1979. During inspection, I observed one Safety Kleen parts washer that utilizes mineral spirits as cleaning solvent. The cover was closed and safety instructions were posted.

NAME *R M / 7*

DATE May 27, 2020

SUPERVISOR *Joyce*

