

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N131645417

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: 07/26/2018
STAFF: Rem Pinga	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Unannounced Level 2 Target Inspection		
RESOLVED COMPLAINTS:		

On July 26, 2018, I conducted an unannounced level 2 target 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. 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. Per Mr. Cook, NJT bought the equipment from the former occupant at this site, Mayco Plastics, and installed additional equipment the company obtained from Collins & Aikman. For business and familiarity reasons in dealing with the facility's major customer, FCA US LLC, this manufacturing plant was named Mayco International LLC.

NJT Enterprises LLC (NJT) manufactures and coats various interior and exterior automotive plastic parts. At the Sterling Heights facility, the company conducts injection molding, thermoforming of plastic parts, reaction injection molding, assembly of components in instrument panels (Jeep Grand Cherokee and Durango), and coating of automotive plastic parts. Currently, 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 facility's consent order, CO AQD No. 3-2010, was terminated last April 14, 2017.

I conducted walk-through inspection and records review process to determine compliance with applicable requirements of the facility's ROP. 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. Includes 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 and oven-dried before going to the coating process. Water in the water curtains is treated and reused. Suspended paint solids captured in the water curtain are removed by adding chemicals to make the solids float. The solids are skimmed off. 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, condition (C)EUPLASTICS (I.1), the monthly 12-month rolling total VOC and Acetone emission rate at the end of June 2018 was 12.83 tons per year and less than the 137.2 tpy permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS(I.2), the monthly 12-month rolling total VOC and Acetone emission rate for purge and clean-up in EUPLASTICS were 3.42 tons per year at the end of June 2018, and less than the 5.00 tpy permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS (I.3), the monthly 12-month rolling total VOC emission rates at the end of June 2018 and for each spraybooth were as follows: Booth 1 – 1.25 tpy, Booth 2 – 2.07 tpy, Booth 3 – 3.18 tpy, and booth 4 – 3.28 tpy, and less than the 72.8 tpy permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS(I.4), the highest daily VOC emission rate was noted on March 31, 2018 at 255.84 lb. and less than the 5,222.0 lb./day permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C) EUPLASTICS(II.1), the highest adhesion promoter VOC content was 4.58 lb./gal minus water as applied, P1C21A, and less than the 7.0 lb./gal permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS(II.2), the highest topcoat VOC content was 4.65 lb./gal minus water as applied, Cocoa, and less than the 5.0 lb./gal permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS(III.2), I observed the curing oven temperature during walk-through inspection at 118°F and less than the 194°F permit limit. Per ROP No. MI-ROP-N1316-2015, condition (C) EUPLASTICS(III.1), I observed no open paint and waste paint containers during inspection. Per ROP No. MI-ROP-N1316-2015, condition (C)EUPLASTICS(III.2), I observed the curing oven temperature during walk-through inspection at 118°F and less than the 194°F permit limit. Per ROP No. MI-ROP-N1316-2015, 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 at least 2015. I verified it was cold and dusty and appeared to not have been used in a while.

EUDIESELGEN3 – pertains to 125 KW diesel fuel-fired emergency electric generator installed in 2014. This table contains requirements of the New Source Performance Standards for Stationary Compression Ignition - Internal Combustion Engines, 40 CFR Part 60, Subpart IIII that applies only to this diesel fuel-fired emergency generator. This emergency diesel generator is less than 10 MM BTU/hr and exempt under Rule 285(g). Per ROP No. MI-ROP-N1316-2015, condition (C)

EUDIESELGEN3(I.1), I obtained 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 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 2018 and until June 2018, the engine operated for 14 hours and less than the 50 non-emergency hours limit. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(IV.1), I observed the non-resettable hour meter reading at 58.5 hours. Per ROP No. MI-ROP-N1316-2015, condition (C)EUDIESELGEN3(VI.1-8), facility purchased a certified engine, keeps records of certified engine, fuel supplier and usage records, engine name plate capacity and date of installation/manufacture, and hours of operation.

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 0.01 lb./lb. of coating solids and less than the 0.16 lb./lb. coating solids permit limit. The facility is choosing 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 non-HAP thermoplastic olefin coating thus meeting the 0.26 lb./lb. coating solids permit limit. Per ROP No. MI-ROP-N1316-2015, condition (D)FGMACT(II), facility meets this applicable requirement since the plastic material usage does not contain organic HAP. During walk-through inspection, Mr. Cook showed me 3 thermoformers, 59 injection molding equipment, and 5 carriers for thermoforming foams.

FGRULE287(C) – pertains to any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c). During inspection, I observed 2 spraybooths (EUSPRAYBOOTH1 & EUSPRAYBOOTH2). Mr. Cook showed me that the sample booth (EUSAMPLEBOOTH71) has been removed. I observed filters in place but the booths are unused. MAERS also showed no reported coating usage for both booths.

FGEMGENS – pertains to reciprocating internal combustion engines (RICE) utilized as emergency generators that are less than 10 MM BTU/hr, exempt under Rule 285 (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

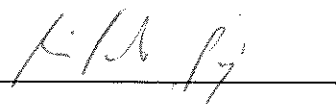
and October 19, 2013 for existing emergency spark ignition (SI) engines \leq 500 HP. EUDIESELGEN1, EUDIESELGEN2, and EUNATGASGEN are the emission units installed at the facility covered by this flexible group. Per ROP No. MI-ROP-N1316-2015, condition (D)FGEMGENS(III.1-7), facility submitted records showing total operating hours for each generator as of June 2018 for FY 2018 as follows: EUDIESELGEN1 – 14 hours, EUDIESELGEN2 – 12 hours, and EUNATGASGEN – 14 hours. These 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. 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 is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. EUFLEXFOAM is the emission unit subject to Rule 290. It is for 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 called 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 is reporting 0.32 lb. of emissions from this process per the submitted records.

FGCOLDCLEANERS – pertains to any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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. The lid was closed and safety instructions were in place.

NAME



DATE

7/28/2018

SUPERVISOR

