

FY 2015 Insp.

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Self Initiated Inspection

U63150191228969

FACILITY: Toyoda		SRN / ID: U631501912
LOCATION: 51300 W. Pontiac Trail		DISTRICT: Southeast Michigan
CITY: Wixom		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 03/25/2015
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: FY 2015 initiated inspection of Toyoda ("Toyoda" or "the company" or "JTEKT"), a machine overhauling (remanufacturing), rebuilding, retooling & retrofitting, etc. company.		
RESOLVED COMPLAINTS:		

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Toyoda (U-63-15-01912)
aka JTEKT upon merger of Toyoda and Koyo (about 2006)
51300 W. Pontiac Trail
Wixom, Michigan 48393-2045

Phone: 847-253-0304

Permit-to-Install: Rules 281, 285, 287, etc. exempt process equipment.

Not Subject to: NESHAP/ MACT T, area source National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T; NESHAP/ MACT T); Correction; 29484 Federal Register / Vol. 60, No. 107 / Monday, June 5, 1995 / Rules and Regulations; amended National Air Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T); Final Rule; Page 25138 Federal Register / Vol. 72, No. 85 / Thursday, May 3, 2007 / Rules and Regulations. Toyoda does not use Halogenated (Cl, Br, I, etc.) solvents.

On March 25, 2015, I conducted a level 2 self-initiated inspection of Toyoda ("Toyoda" or "the company" or "JTEKT"), a machine overhauling (remanufacturing), rebuilding, retooling & retrofitting, etc. company, located at 51300 W. Pontiac Trail, Wixom, Michigan 48393. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

During the inspection, Mr. Gary VonGerichten (Phone: 847-253-0304 or 847-506-2409-Direct; Fax: 847-253-0540; Cell: NA; E-mail: GVonGerichten@toyoda.com), Operations Manager, and Mr. Ben Clerk (Cell: 224-456-5587), Machine Builder, assisted me.

About 2006, Toyoda and Koyo merged to form JTEKT, which is owned by Toyota Motor. Toyoda is in the business of machine overhauling (remanufacturing), rebuilding and retooling & retrofitting. The company is in business since 1970s (about 1973). Remanufacturing is accomplished in 75,000-sq.ft. facility in Wixom. Customers interested in less expensive solution to machine performance problems rebuild, overhaul, retool, retrofit, etc. their machines. Occasionally, Toyoda buys machines for scrap value, rebuilds and sells them as rebuilt machines.

Machines

Grinding, milling, CNC machines are present. No particulate laden exhaust to outside ambient air. The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

Paint spray booth (287(c))

One solvent-based paint spray booth (15 ft. W x 20 ft. D * 15 ft. H) with a back-draft dry filter system (40 filter panels) is present. Two layers of filters are present. All paints are solvent-based according to the painter. Paint usage records are not kept; the painter, stated that about 10-20 gallons of paint (solvent-based) per month was used; diluent / thinning solvents may be used to adjust viscosity.

During FY 2015 inspection, I found numerous gaps and holes in the backdraft filter system (40 filter panels). I asked Mr. Ben Clerk to install and inspect the filters such that they fit, at all times, snugly without gaps and holes. Tapes (duct, painters, etc., tapes) may be used to cover gaps and holes. I also asked him to keep records of paint and solvent usage according to Rule 336.287(c).

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.287(c).

Upon keeping usage records, the coating booth meets all of the Rule 336.1287(c) conditions:

1. The coating use rate is not more than 200 gallons, as applied, minus water, per month.
2. Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
3. Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.

Cold-cleaners

There are five identical solvent Crystal-Clean 3'x4' parts cold-cleaners (Zep machines serviced by Crystal-Clean) with spray a brush and a solvent tank. The solvent is stored in 30-gallon drum, a reservoir. The cold-cleaners are subject rule 336.611 or 336.1707 depending on if it is new or existing. A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281 (h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

The units may be described as a "sink on a drum". The solvent is stored in the drum (enclosure reservoir) of about 30 gallons capacity. Parts are placed in the sink area and solvent is pumped over the part. A brush may be used. The solvent then drains back into the drum. Mineral spirits, a low vapor pressure organic solvent, is used as a cleaner.

In addition to five solvent parts cleaners (Zep), there are two water based hot water cleaners with detergent: Crystal-Clean Model #2740 (large) and Model #2725 (small). MiraChem 500 (Mirachem Corp. of Phoenix) is used as detergent. Hot water (about 180 °F) with MiraChem 500 detergent aids degreasing.

Crystal-Clean (Heritage Crystal-Clean, Inc., Elgin, IL 60123-7873; Phone: 877-938-7948) supplies the solvents and services the cold-cleaners (Zep machines). Mineral spirits containing no halogenated solvents is used. Once in few months, dirty solvent is picked up for disposal or recovery (RCRA).

The Cold-cleaners are NOT Subject to: 40 CFR, Part 63, Subpart T, NESHAP/ MACT T, since solvents containing halogenated compounds are not used.

During FY2015 inspection, I gave DEQ's decals for "cold-cleaner operating procedures" for posting and complying with work-practice rules. I asked the company to follow the common sense work practice in the procedures. During FY2015 inspection, all mechanically assisted lids were kept open at all times as matter of practice and the work-practice procedures were not posted.

Crystal-Clean 106 Mineral Spirits (95% Petroleum naphtha and 5% 1,2,4 Trimethylbenzene).

100% VOC solvent. Flash Point (FP) = 106 °F TCC. Auto Ignition = 440-540 °F. Boiling Point (BP) = 300-419 °F @ 760 mm Hg. Vapor Pressure (VP) = 1 mm Hg at 68 °F. Reid Vapor Pressure (Reid VP) = 0.1 psi at 100 °F. Specific Gravity (SG, Water = 1.0) = 0.79. Density (ρ) @ 68 °F = 6.59 lbs. / gallon (0.790 kg /L). Flammability range = 0.5 %v (LEL) – 6%v (UEL).

Machines

Several machines with mist-hog particulate control systems are also rebuilt. These hogs control cooling oil mist at customer sites.

Conclusion

Spray booth, parts cleaners, metal cutting, grinding, milling, CNC machines are exempt from Rule 336.1201 per Rules 281, 287, 285.

NAME Stefenauhall DATE 03/30/2015 SUPERVISOR CTE