

P0002

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

FY 2018 Insp

P000243530

FACILITY: Tachi-S Engineering, USA Inc		SRN / ID: P0002
LOCATION: 23227 Commerce Dr., FARMINGTN HLS		DISTRICT: Southeast Michigan
CITY: FARMINGTN HLS		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 01/25/2018
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY 2018 inspection of Tachi-S Engineering, USA, Inc. ("Tachi-S")		
RESOLVED COMPLAINTS:		

Tachi-S Engineering, USA Inc. (P0002)
23227 Commerce Dr.
Farmington Hills, MI 48335-2705

About 1998, Tachi-S moved from 23880 Industrial Park Dr., Farmington Hills, MI 48335-2871 (N2034) to 23227 Commerce Dr., Farmington Hills, MI 48335-2705 (P0002). FIAMM Technologies, Inc. (N2034), America FIAMM, occupies that former building.

PTI Nos. 5-89 (N2034; 23880 Industrial Park Dr.), for BDB-6 paint arrestor booth, voided on January 28, 2010, based upon Nov 29, 2009, inspection.

On January 25, 2018, I conducted a level-2 self-initiated **FY 2018 inspection** of Tachi-S Engineering, USA, Inc. ("Tachi-S") (former SRN: N2034, current SRN: P0002), an automotive seating systems and services company, located at, 23227 Commerce Dr., Farmington Hills, MI 48335-2705. 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. Tom Kralik (Phone: 248-888-7200; Cell: 248-417-6426; E-mail: t.kralik@tachi-s.com), Testing Manager, Tachi-S, assisted me.

Mr. Roy Thorson (248-478-5050), HR Manager, separated about 2012.

About 1998, Tachi-S moved its operations from 23880 Industrial Park Dr., Farmington Hills, MI 48335-2871 (SRN: N2034 and PTI No.: 5-89 for a booth) to 23227 Commerce Dr., Farmington Hills, MI 48335-2705 (SRN: P0002).

At this 55,000-square-foot facility, Tachi-S performs engineering, design, prototyping, testing, etc. for automotive seating systems. Approximately five seats per year are built at this location; manufacturing takes place in Ohio, Tennessee, etc. The non-production seats are made for testing, prototyping. Tailoring, cutting, gluing takes place. Patten development for automotive seating systems is performed.

The following engineering activities are conducted:

1. **Testing:** testing, validation, system certification

2. *Prototyping*: functional prototyping, skiving, shaping foam, developing patterns from trim covers or digitizing and cutting materials
3. *Engineering*: powerful CAD and CAE systems to achieve structural integrity
4. *Design*: create stylish and visible beautiful seating systems incorporating safety, comfort, production efficiencies.

All the above activities are for seat systems. Customers are Honda, Nissan, BMW, etc.

Seats:

1. Front seat backs
2. Front seat cushions
3. Rear seat backs
4. Rear seat cushions
5. Headrests
6. Armrests

Cutting systems include include fabric, vinyl, leather, plus pads, needle punch, stitch bond, mylar, pattern paper, etc.

Paint Spray Booth

One JBI Spray Booth Systems (6 ft. H * 6 ft. W * 6 ft. D; Ossewo, WI; 715-597-3168) paint spray booth with a back-draft dry filter system is present. Six (6) filter panels are present at the back of the booth. Both spray guns and spray cans are used; these days, mostly spray cans. The booth is used sparingly in any given year for non-production purpose only.

There were holes in the filter system during FY2018 inspection. I asked Mr. Kralick to install the filters such that they fit, at all times, snugly without gaps and holes. The gaps and holes may be covered using painter's or duct tape. I also asked him to keep records of paint and solvent usage according to Rule 336.1287(2)(c).

The spray gun is hardly used; not used for at least two most recent years. About two spray cans per month are used.

The booth is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1287(2)(c) [< 200 gallon per month] or 336.1287(2)(b) [aerosol spray cans].

PTI Nos. 5-89 associated with N2034 when Tachi-S was present at that previous location is voided on January 28, 20210, based upon November 12, 2009, inspection.

Misc. Equipment

Pattern making area with cutting, sewing, stitching and gluing is present. Metal cutting equip., lathes, drill presses, saws, etc. are present. None has an exhaust to outside ambient air. The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I).

GrayMills Cold-cleaner

One Gray Mills parts / cold-cleaner (4 ft. * 3 ft.) with spray a brush and a solvent tank is present. The cold-cleaners are subject rule 336.1611 or 336.1707 depending on if it is existing (611) or new (707). A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing (611) cold cleaners were placed into operation prior to July 1, 1979. New (707) cold cleaners were placed into operation on or after July 1, 1979.

One unit may be described as "soak and scrub tank" type with a brush. Mechanically assisted lid is present. The lid was closed during the inspection.

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

During the FY 2015 inspection, the operating procedures were not posted. On February 4, 2015, 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 the FY 2018 inspection, the operating procedures were posted, and the mechanically-assisted lid was closed.

The cold-cleaner is not serviced due to low usage; not used for most recent 2-3 years.

Solvent: GrayMills Corp. Super Agiene 141 (Chicago)

100% VOC solvent (97% aliphatic hydrocarbons petroleum distillates). Flash Point (FP) = 145 °F Tag CC. Auto Ignition = NA °F. Boiling Point (BP) = 360-410 °F @ 760 mm Hg. Vapor Pressure (VP) = 23 mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.8. Density (ρ) @ 68 °F = 6.65 lbs. / gallon (0.8 kg /L). Flammability range = 0.9 %v (LEL) – 7%v (UEL).

Air-bag testing

Side air-bag testing is done using sophisticated cameras. Particulate from air bag blow up are captured by a capture system and controlled by a Smog-Hog filter system. Filtered air is released to in-plant environment.

The air-bag testing is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(2)(I).

Testing chambers

Two environmental chambers (negative 100 – positive 350 °F; relative humidity 20 – 95 percent) are present. Also, one high temperature (650 °F) chamber is present.

The chambers (3) are electrically heated and do not emit any air contaminant.

Conclusion:

PTI Nos. 5-89 associated with N2034 when Tachi-S was present at that location is voided based upon November 2009 inspection. PTI (Rule 201) exempt process equipment (Rules 287, 285, 281, etc.) are operating in compliance.

NAME J. R. Menanahall . DATE 03/07/2018 SUPERVISOR Joyce Bl