DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection FY2016 Insp-

U63160221133704

FACILITY: Autoneum North America, Inc.	**SRN / ID:** U631602211
LOCATION: 38555 Hills Tech Drive	**DISTRICT:** Southeast Michigan
CITY: Farmington Hills	**COUNTY:** OAKLAND
CONTACT:	**ACTIVITY DATE:** 02/23/2016
STAFF: Iranna Konanahalli **COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:**
SUBJECT: FY 2016 Inspection of Autoneum North America, Inc.	
RESOLVED COMPLAINTS:	

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Autoneum North America, Inc. (U-63-16- 02211)
38555 Hills Tech Drive
Farmington Hills, Michigan 48331-5752

Name change (2014): Rieter Automotive North America, Inc. (MCDS Misc-1431), Rieter Automotive Systems ➔ Autoneum North America, Inc. (U-63-16-02211). About 2014, Rieter spun-off automotive business and Autoneum, a Swiss company, purchased it.

On February 23, 2016, I conducted a level 2 self-initiated inspection of Autoneum North America, Inc. ("Autoneum") located at 38555 Hills Tech Drive, Farmington Hills, Michigan 48331-5752. 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) rules.

During the FY2016 inspection, Mr. Brandon Wichmann (Phone: 248-324-2271; Cell: 248-766-8235; Fax: 248-848-5176; E-mail: Brandon.Wichmann@Autoneum.com), NVH Project Manager, assisted me.

During the FY2006 inspection, Mr. David Tortelli (Phone: 248-848-0100 or 248-324-2276-Direct; Fax: 248-848-5176; e-mail: Dave.Tortelli@Autoneum.com), operations manager, assisted me. Mr. Tortelli is now a Program Manager.

About 2014, Rieter spun-off automotive business and Autoneum, a Swiss company, bought this business.

Autoneum sells its acoustic (NVH = noise, vibration, harshness) services to Ford, FCA (Chrysler), GM, Hondai, etc. Both anechoic (non-reflective, non-echoing, or echo-free) and reverberant (non-anechoic) testing is done. In the dynamometer room, engine is run in neutral so as to minimize engine noise. All exhaust is discharged via stack at the roof.

At this facility acoustic products are tested and prototypes are built. Autoneum specializes in acoustics. It operates a world-wide network of state-of-the-art acoustic centers and materials (sound insulation) testing laboratories. Autoneum carries out global NVH benchmarking (noise, vibration, harshness). This is a corporate office; there are test laboratories as well. There is one sound test cell. In one part of the room sound (reverberation room) is produced and in another part of the room (Hemi-anechoic) sound is measured. The difference is sound absorption. While reverberation room has no sound absorbing materials, anechoic room is equipped with high surface area acoustic materials to absorb sound completely. Usually, fins are designed for maximum sound absorption by increasing surface area and

reflecting back to another fin for further sound absorption. There is one Dyno test cell, where a road-worthy vehicle with exhaust controls, engine is tested; but seats, mats and other contents are removed so that their sound absorption capacity is removed. Prototype parts are installed. Sound measurement instruments are installed at various locations, inside and outside the vehicle. The Dyno can simulate black-top, concrete and dirt roads (smooth and rough road surfaces).

In Hemi-anechoic room tests are done without dyno. Hemi-anechoic room serves as second room for reverberation room for sound transmission.

At this facility, especially sound insulation materials testing is done as well. Anechoic chamber is equipped with high surface area, sound-absorbing, non-reflective materials. The chamber is also insulated from outside noises.

August 16, 2010, Hyundai letter

In connection with Hyundai America Technical Center, Inc., AQD sought US EPA determination, via December 10, 2008, letter, regarding potential-to-emit (PTE) calculations and permitting of engine and chassis dynamometers. EPA communicated to AQD, via August 16, 2010, letter, its determination that chassis dynamometers were regulated as stationary sources since the vehicles were not put into commerce. AQD Chief Hellwig wrote a letter dated September 1, 2010, to each known affected source with a copy of US EPA's determination (August 16, 2010, letter to Mr. Hellwig from Ms. Cheryl L. Newton, Division Director, Air and Radiation Division of US EPA Region V).

June 12, 2013, AQD Chief Hellwig e-mail: At this time, AQD will not enforce Rule 336.1201 for chassis dynos. However, AQD will review and issue a construction permit if requested. Autoneum can benefit from a NESHAP / MACT 5P opt-out permit.

Solvents

Small quantity of miscellaneous solvents such as acetone, mineral spirits may be used (about one gallon per year). There is no production at this facility. There is no solvent degreaser.

Small boiler

The facility has one 1.5 million BTU per hour natural gas fired space heating boiler. This boiler is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1282(b).

Conclusion

Autoneum is acoustic (NVH) products prototype testing facility with no production.

MCDS Misc-1431

NAME [signature] DATE 03/14/2016 SUPERVISOR CTE