



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: NOV 09 2018

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Nexteer Automotive Corporation, Saginaw, Michigan

FROM: Jason Schenandoah, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Chief
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Nexteer Automotive Corporation

Facility Location: 3900 Holland Road, Saginaw, Michigan

Date of Inspection: August 29, 2018

EPA Inspectors:

1. Jason Schenandoah, Environmental Engineer
2. Sarah Clark, Environmental Engineer

Other Attendees

1. Andrew Walker, Senior Environmental Engineer, Nexteer Automotive Corporation
2. Nikita Patterson, Environmental Engineer, Nexteer Automotive Corporation
3. Alexander Juhasz, Environmental Engineer, Nexteer Automotive Corporation
4. Ademir Butzke, Global Facility Manager, Nexteer Automotive Corporation
5. Dominick DeCarlo, Plant Engineer, Nexteer Automotive Corporation
6. John Gardner, Plant Engineer, Nexteer Automotive Corporation
7. Robert Reh, Plant Engineer, Nexteer Automotive Corporation
8. Jeff Shaw, Site Utilities Manager, Nexteer Automotive Corporation
9. Jamie Doty, Environmental Lab Technician, Nexteer Automotive Corporation
10. Ivo Fill, Facility Engineer, Nexteer Automotive Corporation
11. Rick Delisle, Maintenance Manager, Nexteer Automotive Corporation

Contact Email Address: alex.juhasz@nexteer.com

Purpose of Inspection: To determine compliance with the Clean Air Act.

Facility Type: Automotive parts manufacturer

Arrival Time: 8:55 AM

Departure Time: 5:12 PM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from Nexteer Automotive Corporation (Nexteer) personnel unless otherwise noted.

Process Description:

Nexteer currently has 6 production plants, a power house, and a water treatment plant on its campus. The production plants are named Plants 1-7. Plant 2 is no longer on campus. Each plant is dedicated to certain areas of production and parts. Nexteer produces automotive steering components and assemblies.

Plant 1 makes motors for electric power steering. Parts come from offsite and are assembled. There are two ovens in Plant 1 used to heat the parts to approximately 200 °C.

Operations in Plant 3 mostly consist of assembly of parts to finished electronic power unit products. Some grinding and machining occurs in Plant 3; the associated particulate matter (PM) is controlled by scrubbers and dust collectors. There are two grey rooms in Plant 3 that have adhesive lines in them. The adhesive is used to seal electronic parts.

Plant 4 produces components for and assembles half shafts. Plant 4 is broken up into three buildings. Building A focuses on machining, heat treatment, and assembly. Building B focuses on machining, heat treatment, and grinding. Building C focuses on stamping, heat treatment, and coating; Building C includes a Karst coater and a Fitch coater (also known as "phos coaters") used for applying phosphate coatings that aid in the forming/pressing process of parts. Emissions from grinding, stamping and coating are controlled by scrubbers.

Plant 5 produces half shafts and C-V joint units. There are press, grinding, and machining operations throughout Plant 5. Induction hardening also occurs in Plant 5; #3 and #4 SAET induction hardeners vent to a wet scrubber. Emissions associated with grinding operations are controlled by scrubbers.

Plant 6 operations are mostly assembly. There is another phosphorous or "phos" coating process in Plant 6 described as an "open-tank, push-pull system" that involves approximately nine tanks. Phosphoric acid from the phos coating process is controlled by an acid fume scrubber. Injection molding also occurs in Plant 6; PM from injection molding is controlled by a dust collector. Some machining occurs in Plant 6 and is vented internally. Plant 6 also does leak-testing of certain units; emissions are sent to a scrubber.

Plant 7 produces pump parts for hydraulic units, torsional bars (T-bars), and yokes for steering shafts. Plant 7 also services older cars that still use hydraulic power steering. Machining, heat treatment, grinding, and assembly processes occur in Plant 7. A dust collector controls the tumble blast wheelabrator, and grinding units are controlled by mist collectors.

Nexteer's power house uses natural gas boilers to produce process heat for the entire campus. Large air compressors (1250 HP) are operated in the power house and feed compressed air throughout the campus. Nexteer also operates a wastewater treatment plant to treat plant process water only.

Staff Interview: Turnings from machining processes are collected and shipped via truck to be recycled. In Plant 1, Nexteer personnel was not able to inform EPA about why the parts needed to be heated. All material that is used in heat treatment processes is assumed to be released to atmosphere. Monthly visible emissions testing is conducted while on the roof on each stack on every plant. When Nexteer personnel records differential pressure (dP) at scrubbers, a handheld pressure gauge is used and not the gauge that is on the unit. A Nexteer internal monthly report on air emissions is assessed each month.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

In Plant 7, a barrel containing product NC 1305 with an open cap; NC 1305 has 10% volatile organic compound (VOC) content. Nexteer personnel stated that they believe NC 1305 is used as a washer cleaner. In Plant 6, a washer had emissions coming out of it; Nexteer personnel stated that it was likely a process steam leak. Plant 5 had smoke emitting from a motor on an IMF washer unit. Plant 5 had two SAET induction hardeners (#3 and #4) that had smoke rising out of them; the doors on the units were open and there was likely not proper capture. Plant 4, annealer #4 had smoke rising out of the collection bin at end feed; Nexteer personnel stated that they believe it was likely from lubricant left over after the press. Plant 4 Nova grinding (venturi) scrubber in department 61 (Dept 61 Nova grinders) had a reading of 7 inches of water when the label under the gauge stated that the range is 8-12 inches of water. When we asked Nexteer personnel to use the hand-held pressure gauge on this unit to compare pressure readings, we were told that first shift collected the last reading and that the pressure gauge was currently locked up. A sign on the ovens in Plant 1 stated that solvent entering the oven is limited to 0.15 gallons/hour; Nexteer personnel was not sure which solvents are associated with those ovens.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

1. Plant layout obtained.

CLOSING CONFERENCE

Requested documents:

- 2016 and 2017 MAERS reports
- Second half 2016, both half 2017, and first half 2018 semi-annual compliance reports
- 12 months internal monthly check reports
- Last month of dP readings at the Dept 61 Nova grinders in Plant 4
- Statement or picture describing any bias between the unit pressure gauge and handheld pressure gauge
- SDS for NC1305
- Follow up on motor on IMF washer in Plant 5
- Follow up on emissions from SAET induction hardeners #3 and #4 in Plant 5
- Information on oven solvents in Plant 1
- Inventory of refrigeration units that contain more than 50 pounds of refrigerant
- Repair records on refrigeration units that contain more than 50 pounds of refrigerant in the past 2 years

SIGNATURES

Report Author: _____

Date: _____

Section Chief: _____

Date: _____

Facility Name: Nexteer Automotive Corporation
Facility Location: 3900 Holland Road, Saginaw, Michigan
Date of Inspection: August 29, 2018

APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log

Facility Name: Nexteer Automotive Corporation
Facility Location: 3900 Holland Road, Saginaw, Michigan
Date of Inspection: August 29, 2018

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Sarah Clark	2. Dates of Inspection: August 29, 2018
3. Company/Facility Name: Nexteer Automotive Corporation	4. Street Address, City, State: 3900 Holland Road, Saginaw, Michigan
5. Number of Images: 18	6. Archival Record Location: CD-R labeled as "Nexteer Automotive"

Image Number	File Name	Date and Time (EDT)	Latitude and Longitude	Description of Image
1	P8290041.JPG	8/29/2018 10:26	43.413333, -83.879722	Barrel of NC1305 at Plant 7
2	P8290042.JPG	8/29/2018 10:26	43.413333, -83.879722	Label for NC1305 at Plant 7
3	P8290043.JPG	8/29/2018 10:37	43.413333, -83.879722	Wheelabrator dP gauge Plant 7
4	P8290044.JPG	8/29/2018 10:55	43.413333, -83.879722	Mist collector dP gauges Plant 7
5	P8290045.JPG	8/29/2018 11:21	Not recorded	Acid Scrubber Plant 6
6	P8290046.JPG	8/29/2018 13:54	Not recorded	Emissions from Motor for IMF washer Plant 5
7	P8290047.JPG	8/29/2018 13:55	Not recorded	Motor IMF washer Plant 5
8	P8290048.JPG	8/29/2018 14:08	Not recorded	Label for grinder scrubber Plant 5
9	P8290049.JPG	8/29/2018 14:08	Not recorded	dP gauge for grinder scrubber Plant 5
10	P8290050.JPG	8/29/2018 14:08	Not recorded	Flow rate meter for grinder scrubber Plant 5
11	P8290051.JPG	8/29/2018 14:53	Not recorded	dP for scrubber A for Karst phos coater Plant 4
12	P8290052.JPG	8/29/2018 14:54	Not recorded	Water flow rate for scrubber A for Karst phos coater Plant 4
13	P8290053.JPG	8/29/2018 14:55	Not recorded	dP for scrubber B for Karst phos coater Plant 4
14	P8290054.JPG	8/29/2018 14:57	Not recorded	Flow rate for scrubber B for Karst phos coater Plant 4
15	P8290055.JPG	8/29/2018 15:07	Not recorded	Haze of emissions from parts bin Holcroft Annealer #4 Plant 4
16	P8290056.JPG	8/29/2018 15:07	Not recorded	Haze of emissions from parts bin Holcroft Annealer #4 Plant 4
17	P8290057.JPG	8/29/2018 15:26	Not recorded	Flow rate for Dept 61 NOVA grinders wet (venturi) scrubber Plant 4
18	P8290058.JPG	8/29/2018 15:26	Not recorded	dP for Dept 61 NOVA grinders wet (venturi) scrubber Plant 4