State Registration Number

A6175

Air Quality Division RENEWABLE OPERATING PERMIT STAFF REPORT

Michigan Department of Environment, Great Lakes, and Energy

ROP Number MI-ROP-A6175-2022

Nexteer Automotive Corporation

State Registration Number (SRN): A6175

Located at

3900 East Holland Road, Saginaw, Saginaw County, Michigan 48601

Permit Number: MI-ROP-A6175-2022

Staff Report Date: May 2, 2022

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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State Registration Number

RENEWABLE OPERATING PERMIT

ROP Number

A6175

MAY 2, 2022 - STAFF REPORT

MI-ROP-A6175-2022

<u>Purpose</u>

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan's Administrative Rules for Air Pollution Control promulgated under Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

| Stationary Source Mailing Address: | Nexteer Automotive Corporation |
|---|---|
| | 3900 East Holland Road |
| | Saginaw, Michigan 48601 |
| Source Registration Number (SRN): | A6175 |
| North American Industry Classification System | 336330 |
| (NAICS) Code: | |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 201900024 |
| Responsible Official: | Jill Dralle, Vice President and Chief Operating |
| | Officer, US Operations |
| | 989-757-6191 |
| AQD Contact: | Ben Witkopp, Environmental Engineer |
| | 989-295-1612 |
| Date Application Received: | February 14, 2019 |
| Date Application Was Administratively Complete: | February 14, 2019 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | May 2, 2022 |
| Deadline for Public Comment: | June 1, 2022 |

Source Description

Nexteer Automotive Corporation (hereinafter "Nexteer") is located at 3900 Holland Road in Saginaw, Michigan. The property is bordered to the west by Interstate 75, north and across the street is the now closed Buena Vista High School. East of the facility there is farmland while directly south of the facility and across Hess Road are residential properties.

Nexteer consists of six plants designated as Plants 1, 3, 4, 5, 6, and 7, and a Powerhouse. The facility encompasses approximately 400 acres. This facility is principally engaged in the design and manufacture of steering columns, electronic power steering (EPS), half shafts, integral steering gears, rack and pinion steering gears, power steering pumps, advanced steering systems and complete steering modules with anti-theft features for various vehicle manufacturers.

The plants engage in typical manufacturing operations such as assembling, machining, and grinding. Remaining operations at Nexteer involves material handling, product packaging, maintenance activities, and other miscellaneous support operations.

Additionally, a Powerhouse produces heat and steam to heat the various manufacturing processes, manufacturing plants, and office complex. A few changes have occurred since the previous renewable operating permit was issued. Boilers 4 is no longer in use. Boilers 5 and 6, both 180 MMBTU/hr were the last remaining coal fired units. They were both converted to burn natural gas and are equipped with low Nitrogen Oxides (NOx) burners.

Add-on control equipment used at the facility includes primarily wet scrubbers, a mist collector, and some baghouses to control particulate from various finishing operations.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2020**.

| Pollutant | Tons per Year |
|------------------------------------|---------------|
| Carbon Monoxide (CO) | 4 |
| Lead (Pb) | 0.29 pounds |
| Nitrogen Oxides (NO _x) | 53.8 |
| PM10 [*] | 30.8 |
| Sulfur Dioxide (SO ₂) | 0.3 |
| Volatile Organic Compounds (VOCs) | 44 |

TOTAL STATIONARY SOURCE EMISSIONS

* Particulate matter (PM) that has an aerodynamic diameter less than or equal to a nominal 10 micrometers.

This source is a true minor source of HAPs, thus no HAP emissions data is listed

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory nonapplicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is in Saginaw County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter 10 microns in aerodynamic size (PM10), and volatile organic compounds (VOC) exceeds 100 tons per year.

The stationary source is a minor source of HAP emissions because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year.

EUBR03, 5, and 6 at the stationary source are not currently subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR Part 52.21. The boilers were originally coal fired and the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations. The boilers have been converted to burn natural gas. The fuel conversion action did not result in reconstruction or modification per PSD regulations during new source review permitting. Similarly, the fuel conversion did not trigger regulation under federal New Source Performance Standards (NSPS).

EUEMGRICE04, 07, 08, 09, 10, and 12 were installed prior to August 15, 1967. As a result, this equipment is considered "grandfathered" and is not subject to New Source Review (NSR) permitting requirements. However, future modifications of this equipment may be subject to NSR.

EUEMGRICE03, 04, 06, 07, 08, 09, 10, 12, 13, 16, 17, 18, 19, 20, and 21 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

EUEMGRICE22 and 23 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. These engines are Spark Ignition (SI), Emergency Reciprocating Internal Combustion Engine (RICE) located at an area source of HAPs and installed after June 12, 2006. These engines are required under 40 CFR 63.6590(c)(1) to show compliance with the RICE MACT by meeting applicable requirements under 40 CFR Part 60, Subpart JJJJ New Source Performance Standards for Spark Ignition RICE

EUGASTANK1, EUGASTANK2, EUGASTANK3, EUGASTANK4, and EUGASTANK5 at the stationary source are subject to the National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subparts A and CCCCCC (Area Source MACT). The ROP contains special conditions provided by Nexteer in their application for applicable requirements from 40 CFR Part 63, Subparts A and CCCCCC. The AQD is not delegated the regulatory authority for this area source MACT.

The AQD's Rules 287 and 290 were revised on December 20, 2016. FGRULE287 (c) and FGRULE290 are flexible group tables created for emission units subject to these rules. Emission units installed before December 20, 2016, can comply with the requirements of Rule 287 and Rule 290 in effect at the time of installation or modification as identified in the tables. However, emission units installed or modified on or after December 20, 2016, must comply with the requirements of the current rules as outlined in the tables.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

The following Emission Units/Flexible Groups are subject to CAM:

| Emission Unit/Flexible group ID | Pollutant/ Emission Limit | UAR(s) | Control Equipment | Monitoring (Include Monitoring Range) | Emission Unit/Flexible Group for CAM | PAM? * |
|---------------------------------------|---|---------------------|---------------------------|--|---|--------|
| EUCG02 | 0.09 # PM/ 1000# exhaust gases, calculated on a dry gas basis 6.1 #/hr 26.7 TPY | R 336.1331(1)(c) | Scrubber | Pressure Drop 8-12 " water column; Scrubber liquid flow rate 300 gpm flow | EUCG02 | No |
| EUCG03 | 0.01 # PM/ 1000# exhaust gases, calculated on a dry gas basis | R 336.1331(1)(c) | Scrubber | Pressure drop 8-12 " water column; Scrubber liquid flow rate 700 gpm flow | EUCG03 | No |
| EUCG07 | 0.01 # PM/ 1000# exhaust gases, calculated on a dry gas basis 1.6 #/hr 6.9 TPY | R 336.1331(1)(c) | Scrubber | Pressure drop 8-12 " water column; Scrubber liquid flow rate 320 gpm flow | EUCG07 | No |
| EUBL11 | 0.10 # PM/ 1000# exhaust gases, calculated on a dry gas basis | R 336.1331(1)(c) | Baghouse | Pressure drop 1-3 " water column | EUBL11 | No |
| EUBL12 | 0.10 # PM/ 1000# exhaust gases, calculated on a dry gas basis | R 336.1331(1)(c) | Fabric Filter Baghouse | Pressure drop 1-3" water column | EUBL12 | No |

*Presumptively Acceptable Monitoring (PAM)

Pressure drop and liquid flow were selected as indicators of proper particulate matter capture occurring in the scrubbers. Pressure drop can indicate clogging or potential leak, as well as change in operations. Liquid flow is critical so the particulate matter being generated by process equipment encounters enough water to ensure its removal prior to external exhaust. The operating ranges were based on the scrubber

manufacturer's recommendations and facility operating experience. Stack testing is being required to confirm / support the ranges cited in the special conditions of the ROP.

Pressure drop is selected as indicator of proper particulate matter capture occurring in the fabric filter baghouses. In general, baghouses are designed to operate at a relatively constant pressure drop. Monitoring pressure drop provides a means of detecting a change in operations that could lead to an increase in emissions. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device. Baghouse pressure drop was selected as an indicator range based on facility experience. The indicator ranges were based on the specification of the filter media. Stack testing is being required to confirm / support the ranges cited in the special conditions of the ROP.

Please refer to Parts B, C, and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-Wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-A6175-2014 are identified in Appendix 6 of the ROP.

| PTI Number | | | |
|------------|---------|---------|--------|
| 236-07 | 83-79A | 633-81 | 661-78 |
| 143-02 | 629-94 | 341-81 | 618-78 |
| 367-01 | 469-89B | 1044-80 | 321-77 |
| 366-01 | 522-79 | 625-79 | 82-75 |
| 281-98 | 503-91 | 624-79 | 203-72 |
| 484-91A | 186-89 | 607-79 | 53-69 |
| 176-98 | 657-88 | 587-79 | 99-13A |
| 175-98 | 498-86 | 575-79 | 175-14 |
| 174-98 | 332-86 | 545-79 | |
| 166-98 | 44-86 | 31-79 | |
| 96-98 | 634-81 | 663-78 | |

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

| PTI Exempt Emission Unit ID | Description of PTI Exempt Emission Unit | Rule 212(4) Citation | PTI Exemption Rule Citation |
|--------------------------------|---|-------------------------|--------------------------------|
| EUNATGASFNS | 16 Natural gas fired furnaces | Re 212(4)(c) | Rule 282(2)(a)(i) |
| EUADHLINES | 19 Adhesive coating lines | Rule 212(4)(f) | Rule 287(2)(a) |
| EUNATGASOVS | 8 Natural gas fired ovens | Rule 212(4)(c) | Rule 282(2)(a)(i) |
| EUNATGASSHS | 34 Natural gas fired space heaters | Rule 212(4)(c) | Rule 282(2)(b)(i) |
| EUNATGASIDFNS | 6 Natural gas indirect fired furnaces | Rule 212(4)(c) | Rule 282(2)(b)(i) |
| EUTANKFARM | 29 Tanks in tank farms of VOC or Non-carcinogenic liquid <40000 gal and <1.5psi | Rule 212(4)(d) | Rule 284(2)(i) |
| EUDV420da | 1 Production blaster vents thru Fabric Filter outside | Rule 212(4)(e) | Rule 285(2)(I)(vi)(C) |

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by EGLE, AQD

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Chris Hare, Bay City District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

State Registration Number

A6175

RENEWABLE OPERATING PERMIT

ROP Number MI-ROP-A6175-2022

JUNE 14, 2022 - STAFF REPORT ADDENDUM

<u>Purpose</u>

A Staff Report dated May 2, 2022, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

| Responsible Official: | Jill Dralle, Vice President and Chief Operating Officer, US Operations 989-757-6191 |
|-----------------------|---|
| AQD Contact: | Ben Witkopp, Environmental Engineer 989-295-1612 |

Summary of Pertinent Comments

The following comments were received from Nexteer Automotive Corporation. No other comments were received during the comment period.

Nexteer Automotive Corporation Comment 1:

After further review of the draft ROP, we would like to update Section VI.(2) of EUPC08. System A was separated out of this section because it is a mist eliminator. Section VI.(1) was added to address requirements for the mist eliminator so that VI.(2) would be specific to the wet scrubbers (Systems B, C, D, and E). There were no other comments or concerns brought up by the public or Nexteer.

AQD Response:

The AQD agrees with this comment. EUPC08, Section VI.2 has been corrected to remove System A.