# Michigan Department of Environmental Quality Air Quality Division

State Registration Number E5094

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number
MI-ROP-E5094-2018

**Hutchinson Antivibration Systems, Inc.** 

SRN: E5094

Located at

460 Fuller Avenue NW, Grand Rapids, Kent County, Michigan 49503

Permit Number: MI-ROP-E5094-2018

Staff Report Date: July 30, 2018

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) requires that the Michigan Department of Environmental Quality (MDEQ), 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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# Michigan Department of Environmental Quality Air Quality Division

State Registration Number E5094

### RENEWABLE OPERATING PERMIT

**July 30, 2018 - STAFF REPORT** 

ROP Number
MI-ROP-E5094-2018

#### **Purpose**

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 of 1990 and Michigan's Administrative Rules for Air Pollution Control pursuant to 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**

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Stationary Source Mailing Address:	Hutchinson Antivibration Systems, Inc.
	460 Fuller Avenue NE
	Grand Rapids, Michigan 49503
Source Registration Number (SRN):	E5094
North American Industry Classification System	336399
(NAICS) Code:	
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201600143
Responsible Official:	Eric Jamet, Plant Manager
	616-234-8314
AQD Contact:	Dave Morgan, Environmental Quality Specialist
	616-356-0009
Date Application Received:	September 8, 2016
Date Application Was Administratively Complete:	September 8, 2016
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	July 30, 2018
Deadline for Public Comment:	August 29, 2018

#### **Source Description**

Hutchinson Antivibration Systems, Inc., located in Grand Rapids, Michigan manufactures a variety of antivibration parts, which consist of rubber, metal and plastic components, for the automotive and truck industry. The rubber is manufactured on site using both natural and synthetic rubber and various types of binders. Metal and plastic components are manufactured elsewhere and shipped to the facility. After primers and adhesives are applied to the metal and plastic components in one of six spray systems, the rubber and metal components are then bonded under heat and pressure in a vulcanization process. Volatile organic compound (VOC) emissions from the process are controlled by a regenerative thermal oxidizer (RTO).

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2017**.

#### TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	1.7
Lead (Pb)	1.0x10⁻⁵
Nitrogen Oxides (NOx)	2.1
Particulate Matter (PM)	2.9
Sulfur Dioxide (SO <sub>2</sub> )	1.2x10 <sup>-2</sup>
Volatile Organic Compounds (VOCs)	30.0

The following table lists estimated Hazardous Air Pollutant emissions as calculated for the year 2017 by company data:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Toluene	7.6
Methyl Isobutyl Ketone	7.1
Xylene	11.8
Ethyl Benzene	2.9
Benzene	0
1,1,2-Trichloroethane	4.5x10 <sup>-3</sup>
Total Hazardous Air Pollutants (HAPs)	29.6

<sup>\*\*</sup>As listed pursuant to Section 112(b) of the federal Clean Air Act.

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 non-applicability 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 located in Kent County, which is currently designated by the U.S. 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 any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

Emission units in FGRTO are subject to Best Available Control Technology (BACT) limits. (R 336.1702(a))

No emissions units at the stationary source are currently subject to the Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because at the time of New Source Review permitting the potential to emit of criteria pollutants was less than 250 tons per year.

FGRTO is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Miscellaneous Metal Parts Coating promulgated in 40 CFR Part 63, Subparts A and MMMM. The permittee has chosen the emission rate with add-on controls option to comply with Subpart MMMM. In addition, FGRTO is subject to the NESHAP for Plastic Parts Surface Coating in 40 CFR Part 63, Subpart PPPP. However, since the company has elected to comply with the facility-specific emission limit alternative in Subpart MMMM, then compliance with the facility-specific emission limit in Subpart MMMM constitutes compliance with Subpart MMMM and other applicable surface coating NESHAPs such as Subpart PPPP.

EUBOILER2, is a natural gas-fired boiler that was manufactured and installed in 1956 and has a heat input capacity of 25.9 MMBtu/hour. EUBOILER4 is a natural gas-fired boiler, with a heat input capacity of 12.55 MMBtu/hour, that was manufactured in 1985 and installed at the facility in January 2018. Both boilers are subject to the NESHAP for Industrial Boilers promulgated under 40 CFR Part 63, Subpart DDDDD. Although EUBOILER4 was recently installed at the facility, it is not subject to the New Source Performance Standard (NSPS) for Industrial Steam Generating Units promulgated under 40 CFR Part 60, Subpart Dc because the unit was operating prior to the 1989 applicability date in the rule; under the General Provisions of 40 CFR Part 60, Subpart A, relocation or change in ownership of an existing facility does not affect the applicability of the rule.

EUGENERATOR is subject to the NESHAP for Reciprocating Internal Combustion Engines promulgated under 40 CFR Part 63, Subparts A and ZZZZ. The generator is a 70 horsepower natural gas spark ignition (SI) reciprocating internal combustion engine (RICE) used for emergency purposes and was installed in May 2007. Due to the installation date, it is considered a new source. A new source is considered to be in compliance with the RICE NESHAP by being in compliance with the NSPS for Spark Ignition Internal Combustion Engines promulgated under 40 CFR Part 60, Subpart JJJJ. However, under the NSPS, only engines installed after June 12, 2006 and manufactured after January 1, 2009 are subject to the NSPS requirements, therefore there are no applicable requirements. Since there are no applicable requirements for the emergency engines, a RICE MACT flexible group has not been created.

The MDEQ, AQD revised R 336.1287 and R 336.1290 on December 20, 2016. The revised rules, specifically R 336.1287(2)(c) and R 336.1290, have some requirements that are more detailed compared to the earlier versions. FGRULE287(2)(c) and FGRULE290 are flexible group requirement tables created for emission units subject to R 336.1287(2)(c) and R 336.1290, respectively. 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. However, emission units installed or modified after December 20, 2016, must comply with the requirements of the current rules.

In August 2016, Consent Order AQD No. 25-2016 was entered to address numerous violations of ROP No. MI-ROP-E5094-2012b, PTI No. 54-06B and NESHAPs Subpart MMMM and Subpart PPPP. Violations included failure to conduct capture efficiency testing, failure to properly record and maintain RTO temperature records, failure to demonstrate continuous compliance with RTO operating requirements, failure to develop and implement a written startup, shutdown, malfunction plan for the capture system,

failure to install and properly operate a compliance monitoring system for the capture and control system, failure to meet HAP emission limits, and failure to comply with provisions of Subpart PPPP. Consent Order AQD No. 25-2016 has been incorporated into the ROP under FGRTO and FGMMMM.

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 emission limitations or standards for HAPS from FGMMMM at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR 64.2(b)(1)(i), because the HAP emission limits are addressed by 40 CFR Part 63, Subpart MMMM. Therefore, FGMMMM is exempt from CAM requirements for organic HAP emissions.

The emission limitation for VOCs from FGRTO at the stationary source is subject to the federal Compliance Assurance Monitoring rule under 40 CFR Part 64. Since a VOC emission limit applies to a grouping of coating lines under FGRTO, and since there are no other VOC limitations or standards on the individual coating lines, the pollutant-specific emissions unit is considered FGRTO. In addition, pre-controlled VOC emissions from FGRTO are greater than 100 tons. Monitoring included in 40 CFR Part 63, Subpart MMMM is considered to be presumptively acceptable monitoring for VOCs and is included in the ROP under FGMMMM and FGCAM.

All other controlled emission units have been evaluated for potential pre-control emissions and emissions were found to be below the major source threshold level, thus, no other emission units are subject to the federal Compliance Assurance Monitoring Rule under 40 CFR Part 64.

Emission Unit ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring	Presumptively Acceptable Monitoring?
FGRTO	VOC limit – 50.4 tons per year on a 12-month rolling time period	R 336.1205, R 336.1702(a), Paragraph 9.A.1 Consent Order AQD No. 25-2016;	Regenerative Thermal Oxidizer	Temperature of RTO in 3-hour block averages, airflow direction per Subpart MMMM	Yes
FGRTO	VOC limit – 50.4 tons per year on a 12-month rolling time period	R 336.1205, R 336.1702(a), Paragraph 9.A.1 Consent Order AQD No. 25-2016;	Regenerative Thermal Oxidizer and Permanent Enclosure capture system	The direction of the air flow by continuously monitoring the pressure of airflow to determine the direction of airflow into the enclosure; and The average facial velocity of air through all natural draft openings by monitoring the exhaust airflow (in cfm) from each booth.	Yes

Emission Unit ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring	Presumptively Acceptable Monitoring?
FGRTO	VOC limit – 50.4 tons per year on a 12-month rolling time period	R 336.1205, R 336.1702(a), Paragraph 9.A.1 Consent Order AQD No. 25-2016;	Regenerative Thermal Oxidizer and non- Permanent Enclosure capture system	The permittee shall monitor the average gas volumetric flow rate in the duct between the capture device and the add-on control device inlet in accordance with 40 CFR 63.3965(a).	Yes

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-E5094-2012c are identified in Appendix 6 of the ROP.

PTI Number			
1124-80B	709-86A	164-88	289-88
234-03	48-95A	1120-80	54-06

#### 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

There were no processes listed in the ROP Application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt	Description of	Rule 212(4)	Rule 201
Emission Unit ID	Exempt Emission Unit	Exemption	Exemption
EUGENERATOR	Natural Gas Fired Generator	Rule 212(4)(d)	Rule 285(2)(g)

#### **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 the MDEQ, 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 Heidi Hollenbach, Grand Rapids 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.

## Michigan Department of Environmental Quality Air Quality Division

State Registration Number

### RENEWABLE OPERATING PERMIT

ROP Number

E5094

MI-ROP-E5094-2018

#### September 4, 2018 - STAFF REPORT ADDENDUM

#### <u>Purpose</u>

A Staff Report dated July 30, 2018, was developed in order 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). 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:	Eric Jamet, Plant Manager 616-234-8314
AQD Contact:	Dave Morgan, Environmental Quality Specialist 616-356-0009

#### **Summary of Pertinent Comments**

No pertinent comments were received during the 30-day public comment period.

#### Changes to the July 30, 2018 Draft ROP

No changes were made to the draft ROP.