Michigan Department of Environmental Great Lakes, and Energy Air Quality Division

State Registration Number N1966 RENEWABLE OPERATING PERMIT STAFF REPORT ROP Number MI-ROP-N1966-2020

# Michigan Automotive Compressor, Inc.

State Registration Number (SRN): N1966

Located at

2400 North Dearing Road, Parma, Jackson County, Michigan 49269

Permit Number: MI-ROP-N1966-2020

Staff Report Date: September 14, 2020

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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Michigan Department of Environment, Great Lakes, and Energy

State Registration Number

N1966

# Air Quality Division RENEWABLE OPERATING PERMIT

ROP Number

September 14, 2020 - STAFF REPORT MI-R

MI-ROP-N1966-2020

## <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:	Michigan Automotive Compressor, Inc. 2400 North Dearing Road Parma, Michigan 49269
Source Registration Number (SRN):	N1966
North American Industry Classification System (NAICS) Code:	336390
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	20200038
Responsible Official:	Bruce VerBurg, Vice President of Operations 517-622-7000
AQD Contact:	Stephanie Weems, Environmental Quality Analyst 517-416-3351
Date Application Received:	February 28, 2020
Date Application Was Administratively Complete:	February 28, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	September 14, 2020
Deadline for Public Comment:	October 14, 2020

# Source Description

Michigan Automotive Compressor, Inc. (MACI) manufactures automotive compressors with magnetic clutches for air conditioning systems. MACI is located at 2400 North Dearing Road, Parma in Jackson County, Michigan. This facility is located in a rural area next to Interstate 94, west of the City of Jackson. MACI melts clean aluminum ingots in reverberatory melt furnaces controlled by fabric filter baghouses. The aluminum is transported to high pressure die cast machines that make the housing for the compressors. The other compressor components are machined, coated, and assembled on conveyor lines. Coatings are rubber, adhesive, or paint, and they are applied by robotic applicators. Some coating lines utilize permanent total enclosures (PTE) and regenerative thermal oxidizers (RTOs) as air pollution control equipment. Other activities at this facility include natural gas fired process boilers and heaters, as well as numerous exempt parts washers.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2019**.

## TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	10.93
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	13.09
Particulate Matter (PM)	4.64
Sulfur Dioxide (SO <sub>2</sub> )	0.22
Volatile Organic Compounds (VOCs)	5.92

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2020 by the company:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	0.010
Hexane	0.23
Benzene	0.003
Total Hazardous Air Pollutants (HAPs)	0.243

\*\*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 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 Jackson 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 any single HAP regulated by Section 112 of the federal Clean Air Act, 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.

No emission 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 each criteria pollutant was less than 250 tons per year.

Although the boilers in FGBOILERMACT and the engines in FGRICEMACT were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

Since the issuance of the previous ROP, MACI has not been issued any new Permits to Install (PTI).

Since the issuance of the previous ROP, MACI has submitted an exemption demonstration for exhausting die cast machines through the roof under R 336.1285(2)(I)(ii). In August of 2019, AQD staff indicated to MACI that the information submitted appeared to show that MACI may be able to meet the demonstrated exemption.

Since the issuance of the previous ROP, MACI has removed and replaced emission units (EU) that were included in the previous ROP. As indicated in the current ROP application and confirmed during the most recent compliance inspection, MACI has removed EUHUBLINE3, EUFAC-BOILER4, EUHB3CC1, EUHB3CC2, and FGRULE287(c) (comprised of EURA0026, EURA0027, EURA0028). These units have been dismantled. Furthermore, MACI has replaced EUFAC-BOILER5 and EUFAC-BOILER6 with new, high-efficiency boilers.

EUEMERGEN4 at the stationary source is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII. It appears that previous ROP renewals did not include a table for this regulation, however, since the engine was installed on December 1, 2012 it is subject to this performance standard. A new table was added to this ROP to address this.

EUHUBLINE1, EUHUBLINE4, EUHUBLINE5, EUHUBLINE6, EUROTORLINE1, and EUSTATORLINE at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products promulgated in 40 CFR Part 61, Subparts A and MMMM. An affected source is a new affected source if construction commenced after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products coating facility existed. An affected source is reconstructed if it meets the criteria as defined in 40 CFR 63.2. An affected source exists if it is not new or reconstructed. For an existing affected source (constructed before August 13, 2002), the compliance date is January 2, 2007.

EUFAC-AHUS, EUFAC-BOILER1, EUFAC-BOILER2, EUFAC-BOILER3, EUFAC-BOILER5, EUFAC-BOILER6, and EUFAC-HEATERS at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Major Sources for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD. This standard is also referred to as a Maximum Achievable Control Technology (MACT) standard, and it has been cited as an applicable requirement in the FGBOILERMACT table of the ROP.

EUEMERGEN1, EUEMERGEN2, EUEMERGEN3, and EUEMERGEN4 at the stationary source are subject to the National Emissions Standards for Hazardous Air Pollutants for Major Sources for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. This standard is also referred to as a Maximum Achievable Control Technology (MACT) standard, and it has been cited as an applicable requirement in the FGRICEMACT table of the ROP.

On July 19, 2019 USEPA awarded EGLE the delegation for implementation and enforcement of 40 CFR Part 63, Subparts DDDDD and ZZZZ. Subsequently, EGLE, AQD has revised the related ROP templates for Subpart DDDDD, and the newly revised template was used for the FGBOILERMACT table in this ROP renewal.

There have not been any enforcement issues since the last ROP issuance. Therefore, Appendix 2 of the ROP does not include a compliance schedule.

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 limitation(s) or standard(s) for Hazardous Air Pollutants (HAPs) from EUHUBLINE1, EUHUBLINE4, EUHUBLINE5, EUHUBLINE6, EUROTORLINE1, and EUSTATORLINE at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR Part 64 because HAPs are addressed by the major source MACT standard - 40 CFR Part 63, Subpart MMMM – Surface Coating of Miscellaneous Metal Parts and Products. Therefore, EUHUBLINE1, EUHUBLINE4, EUHUBLINE5, EUHUBLINE6, EUROTORLINE1, and EUSTATORLINE are exempt from CAM requirements for HAPs.

No other emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds. (This includes the above EUs evaluated for VOCs, and FGFURNACES evaluated for criteria pollutants)

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-N1966-2015 are identified in Appendix 6 of the ROP.

PTI Number				
609-88	610-88	611-88D	612-88	
613-88A	614-88	615-88	616-88	
617-88	618-88	849-89	850-89	
151-92	152-92	153-92	894-93	
929-93	448-95A	614-95	35-96	
97-96	38-99	136-01	137-01	
138-01	163-02	200-04A	47-14	
170-11B				

#### 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
EU-StressRelief	Stress relief furnaces	Rule 212(4)(c)	Rule 282(2)(a)(i)
EU-NDOILTANKS	Two 5,600 gallon oil tanks	Rule 212(4)(d)	Rule 284(2)(i)
EU-ROTOR- TURNING	14 metal turning machines	Rule 212(4)(e)	Rule 285(2)(I)(vi)(C)
EU-DIECAST- SHOTBLAST	2 shot blast machines	Rule 212(4)(e)	Rule 285(2)(l)(vi)(C)
EU-HUB4-WASHER	Part washer water heater	Rule 212(4)(c)	Rule 282(2)(b)(i)

## 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 Scott Miller, Jackson 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 Environment, Great Lakes, and Energy

State Registration Number

# Air Quality Division RENEWABLE OPERATING PERMIT

**ROP Number** 

N1966

# October 15, 2020 - STAFF REPORT ADDENDUM

MI-ROP-N1966-2020

### <u>Purpose</u>

A Staff Report dated September 14, 2020, 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:	Bruce VerBurg, Vice President of Operations 517-622-7000
AQD Contact:	Stephanie Weems, Environmental Quality Analyst 517-416-3351

#### Summary of Pertinent Comments

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

#### Changes to the September 14, 2020 Draft ROP

No changes were made to the draft ROP.