

State Registration Number

B5854

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number

MI-ROP-B5854-
2020

Romeo RIM, Inc.

State Registration Number (SRN): B5854

Located at

74000 Van Dyke Avenue, Romeo, Macomb County, Michigan 48065

Permit Number: MI-ROP-B5854-2020

Staff Report Date: June 15, 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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JUNE 15, 2020 - STAFF REPORT

MI-ROP-
B5854-2020

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; 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:	Romeo RIM, Inc. 74000 Van Dyke Avenue Romeo, Michigan 48065
Source Registration Number (SRN):	B5854
North American Industry Classification System (NAICS) Code:	326199
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900115
Responsible Official:	Tim Howell, President 586-336-5816
AQD Contact:	Shamim Ahammod, Environmental Engineer 586-212-0508
Date Application Received:	July 2, 2019
Date Application Was Administratively Complete:	July 2, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 15, 2020
Deadline for Public Comment:	July 15, 2020

Source Description

Romeo RIM, Inc. is located at 74000 Van Dyke Avenue, Romeo, Michigan 48065. The facility has two separate buildings identified as Plant 1 and Plant 2. Romeo Rim manufactures plastic components such as bumpers, fascias (dashboards), fenders, hoods, engine covers for trucks, recreational vehicles, and farm and lawn tractors, as well as side panels and corners for spas. Plastic parts are formed using either polyurethane or dicyclopentadiene (DCPD) materials. In both plants plastic parts are formed using reaction injection molding (RIM) equipment.

RIM is performed with an open or closed mold. The processes covered under this ROP are all closed-mold process where a resin and a catalyst are injected into the mold and react to form a solid plastic component. An individual RIM press is often referred to as a “clamp”. The majority of the molding processes utilize both mold release chemicals and “in-mold” coatings. The company refers to the coating process as “in-mold painting” (IMP). The coatings are spray-applied to the interior of the mold prior to the RIM operation. The coating is transferred to the surface of the part to get the desired color.

RIM processes with the ability to apply IMP in Plant 1 are:

- FG-PLT1-RIM-IMP – a Flexible Group made up of seven (7) clamps: EU-PLT1-IMP2 (Cinci 1), EU-PLT1-IMP50 (Cinci2), EU-PLT1-IMP26 (LFI-1), EU-PLT1-IMP28 (LFI-2), EU-PLT1-IMP12 (LFI-3), EU-PLT1-IMP29 (LFI-4), EU-PLT1-IMP24 (LFI-5).
- FG-SHUTTLECLAMP – a Flexible Group made up of two (2) clamps; EU-CLAMPBOOTH1 (Shuttle North Booth) and EU-CLAMPBOOTH2 (Shuttle South Booth).
- FG-ROTARY – a Flexible Group made up of one (1) to seven (7) clamps that rotate through paint booth EU-ROTARYPAINT, barrier coat booth EU-ROTARYBC, and one of two resin fiber addition booths, EU-ROTARYLFI1 or EU-ROTARYLFI2.

EU-PLT1-IMP5, previously included in FG-PLT1-RIM-IMP, was removed from service on December 1, 2018.

On December 6, 2019, EGLE-AQD received a PTI application from Romeo RIM requesting to add two new IMP (EU-PLT1-IMP51 and EU-PLT1-IMP52) to FG-PLT1-RIM-IMP. PTI No. 196-19 was approved on January 3, 2020. EU-PLT1-IMP51 and EU-PLT1-IMP52 are not installed as of the date of this Staff Report. The AQD received an application for a Minor Modification to MI-ROP-B5854-2015a from Romeo RIM on February 28, 2020. The Minor Modification application was submitted to incorporate PTI No. 196-19 into the ROP. This Minor Modification is being processed concurrently during ROP Renewal under Application No. 201900115.

RIM processes with the ability to apply IMP in Plant 2 are:

- EU-PLT2-RIM42
- EU-PLT2-RIM43
- EU-PLT2-RIM44
- EU-PLT2-RIM45

Clamps 42, 43, and 44 are combined into FG-RIMPROCESSES, the exhausts from which are controlled by two Carbon Adsorption units when DCPD materials are used: one unit for RIM 42 and RIM 43 combined and the other unit for RIM 44. Exhaust from RIM 45 is not controlled.

Romeo RIM operates two (2) post-mold coating lines in Plant 1: EU-PLT1-LINE1 and EU-PLT1-LINE2. Each line consists of a manual spray paint booth, a flash off area and a natural gas-fired curing oven. The company also operates one (1) post-mold coating line in Plant 2: EU-PLT2-LINE1. The line consists of a spray booth, a flash off area and a natural gas-fired curing oven. In addition, there are post mold paint storage and mixing rooms associated with the Paint Lines.

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

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Volatile Organic Compounds (VOCs)	41.13

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2019 by Romeo RIM:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Total Hazardous Air Pollutants (HAPs)	0.69

**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.

Macomb County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the eight-hour ozone standard.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of volatile organic compounds exceeds 100 tons per year and 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 volatile organic compounds was less than 250 tons per year.

EU-PLT2-LINE1, EU-PLT2-RIM45, EU-PLT1-IMP2, EU-PLT1-IMP12, EU-PLT1-IMP24, EU-PLT1-IMP26, EU-PLT1-IMP28, EU-PLT1-IMP29, EU-PLT1-IMP50, EU-PLT1-IMP51, EU-PLT1-IMP52, EU-PLT1-LINE1, EU-PLT1-LINE2, EU-PLT2-RIM42, EU-PLT2-RIM43, EU-PLT2-RIM44, EU-CLEANUP, EU-MOLDRELEASE, EU-CLAMPBOOTH1, EU-CLAMPBOOTH2, EU-PAINTKITCHEN, EU-FINISHING, EU-PARTSWIPE, EU-LINECLEANING, EU-ROTPAINTKITCHEN, EU-ROTFINISHING, EU-ROTPARTSWIPE, EU-ROTLINECLEANING, EU-ROTARYPAINT, EU-ROTARYBC and EU-SPACOATING at the stationary source are subject to the Maximum Achievable Control Technology Standards for National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Plastic Parts and Products promulgated in Title 40 of the Code of Federal Regulations (CFR) Part 63, Subparts A and PPPP.

The plastic parts painting lines and the RIM with IMP processes are subject to Administrative Rule 632(3)(a)). For lines installed or modified after 1993, the lines are subject to Rule 702(d), which at a minimum requires the processes limit the VOC maximum allowable emission rate as specified in Part 6 of the Act 451. To comply with Rule 632(3)(a), the Company will maintain the pounds of VOC per gallon of coating (minus water) as applied within the limits as required per Rule 632(20), Table 66. At this time, the processes fall under category (2) Air-dried coating--exterior parts.

Pursuant to Administrative Rule 632(8), for each coating line, Romeo RIM maintains a volume weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period. Pursuant to Rule 632(9)(a), the emission limits specified in Table 66 are determined using the method described in Rule 1040(12)(a). Romeo Rim uses high volume low-pressure (HVLP) paint spray guns, and electrostatic paint spray guns (in some RIMs) and particulate exhaust filters in accordance with Rule 632(3)(b).

On April 26, 1999, AQD issued Consent Order (CO) No. 7-1999 to address Rule 901 odor concerns. The CO required the installation of Carbon Adsorption systems as air pollution control equipment on spray coating lines (SCLs) 3 and 4 in FG-PLT1-SCL1256 & SCL34 and the RIM processes in FG-RIMPROCESS. Romeo RIM installed and began operating a Carbon Adsorption System (CA No. 1) on SCL 3 and SCL 4, a Carbon Adsorption System (CA No. 2) to control the exhaust from both EU-PLT2-RIM42 and EU-PLT2-RIM43, and another Carbon Adsorption System (CA No. 3) to control the exhaust from EU-PLT2-RIM44.

AQD terminated CO No. 7-1999 on November 7, 2003. Romeo RIM dismantled and removed EU-PLT1-LINE3 through EU-PLT1-LINE6, including SCLs 3 and 4, prior to June 16, 2016. A minor modification to remove conditions pertaining to EU-PLT1-LINE3 through EU-PLT1-LINE6 from MI-ROP-B5854-2015 was approved on March 9, 2017. The ROP requires monitoring, recordkeeping, and the continued proper operation and maintenance of the Carbon Adsorption systems for EU-PLT2-RIM42, EU-PLT2-RIM43, and EU-PLT2-RIM44 in FG-RIMPROCESS.

The AQD's Rules 287 and 290 were revised on December 20, 2016. FG-RULE287(2)(c) and FG-RULE290 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."

No 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 subject to an emission limitation or standard for an applicable regulated air pollutant at the stationary source do not use a control device to achieve compliance with the applicable emission limitations or standards for the regulated air 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-B5854-2015 are identified in Appendix 6 of the ROP.

PTI Number			
144-10	365-08B	365-08A	2-06
360-05	321-01	407-97	583-94
49-88B			

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.

Exempt Emission Unit ID	Description of Exempt Emission Unit	Rule 212(4) Exemption	Rule 201 Exemption
EU-SPACEHEATERS	Nineteen (19) Natural Gas fired space heaters. Max. rated capacity 5,124,999 BTU/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-BUNKLATCH	Adhesive line with application rate <2 gallons per day. Emissions released into the general plant environment. Installed 06/01/2001.	R 336.1212(4)(f)	R 336.1287(2)(a)
EU-VOLVOPREP	Adhesive line with application rate <2 gallons per day. Emissions released into the general plant environment. Installed 08/01/1999.	R 336.1212(4)(f)	R 336.1287(2)(a)
EU-FURNACE	Plant 1: One (1) natural gas-fired furnace. Provides space heating. Not externally vented. Rated capacity 30,000 BTU/hr. Installed 01/10/1996.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-REZTORHEATER	Plant 1: Seven (7) externally vented, natural gas-fired Reznor radiant heaters. Max. rated capacity 130,000 BTU/hr. Installed 01/01/1999.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EU-RADIANTHEAT	Plant 1: Nine (9) natural gas-fired radiant heaters, max. capacity 90,000 BTU/hr. Not externally vented. Installed in 1996.	R 336.1212(4)(c)	R336.1282(2)(b)(i)
EU-PLANT2ROOFUNIT	Plant 2: One (1) natural gas-fired rooftop unit, provides space heating. Installed 01/01/1998.	R 336.1212(4)(c)	R 336.1282(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 Joyce Zhu, Warren 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

B5854

RENEWABLE OPERATING PERMIT

AUGUST 4, 2020 - STAFF REPORT ADDENDUM

ROP Number

MI-ROP-B5854-
2020

Purpose

A Staff Report dated June 15, 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:	Tim Howell, President 586-336-5816
AQD Contact:	Shamim Ahammod, Environmental Engineer 586-212-0508

Summary of Pertinent Comments

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

Changes to the June 15, 2020 Draft ROP

No changes were made to the draft ROP.