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|  | Michigan Department of Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N1316 | **STAFF REPORT** | MI-ROP-N1316-2021 |

**Mayco International, LLC**

State Registration Number (SRN): N1316

Located at

42400 Merrill Road, Sterling Heights, Macomb County, Michigan 48314

Permit Number: MI-ROP-N1316-2021

Staff Report Date: July 26, 2021

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  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N1316 | JULY 26, 2021 - STAFF REPORT | MI-ROP-N1316-2021 |

**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: | Mayco International, LLC  42400 Merrill Road  Sterling Heights, Michigan 48314 |
| Source Registration Number (SRN): | N1316 |
| 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: | 202000088 |
| Responsible Official: | Nick Demiro, President  586-803-6021 |
| AQD Contact: | Remilando Pinga, Senior Environmental Engineer  586-854-4697 |
| Date Application Received: | May 11, 2020 |
| Date Application Was Administratively Complete: | May 26, 2020 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | July 26, 2021 |
| Deadline for Public Comment: | August 25, 2021 |

**Source Description**

Mayco International, LLC, a Tier I supplier and manufacturer of interior and exterior automotive and non-automotive plastic parts, is located in Macomb County in an industrial/commercial site at 42400 Merrill Road, Sterling Heights, Michigan. Operations at the facility consist mainly of injection molding and thermoforming of plastic components, interior automotive components assembly, and plastic parts surface coating. The plastic parts surface coating is primarily conducted in four automated paint spray booths. Some of spray coating activities occur in two manual paint spray booths while a sample booth was removed in 2017. Both water-based and solvent-based coatings are used. As an economical and safer environmental solution to painting, some plastic parts use colored resins in the injection molding to produce a mold-in-color plastic part. An adhesive spray line was recently added at the facility. The emissions from these processes consist mainly of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

The facility is permitted to operate a burn off oven with afterburner control. In addition, the facility operates the following equipment: flexible polyurethane foam production, cold solvent cleaners, emergency electric generators, and natural gas-fired space and water heaters.

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

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 0.29 |
| Lead (Pb) | 0.00 |
| Nitrogen Oxides (NOx) | 1.36 |
| Particulate Matter (PM) | 0.69 |
| Sulfur Dioxide (SO2) | 0.09 |
| Volatile Organic Compounds (VOCs) | 2.39 |

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2020 by Mayco International, LLC:

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\*** | **Tons per Year** |
| Hexane | **.25** |
| Glycol Ethers | **.00013** |
| MDI | **.0012** |
| **Total Hazardous Air Pollutants (HAPs)** | **0.3** |

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

In addition to the pollutants listed above, the facility submitted potential to emit calculations of Greenhouse Gases (GHG) emissions in tons per year (tpy) of CO2e (carbon dioxide equivalents) at slightly over 34,000 tpy, which is less than 100,000 tpy. CO2e is a calculation of the combined global warming potentials of six GHG (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

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 (VOC) 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 than10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

The stationary source is considered a “synthetic minor” source in regard to the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of VOCs to less than 250 tons per year.

The cold solvent cleaners, manual paint spray booths, emergency generators, glue application, and flexible polyurethane foam production are exempt from Permit to Install requirements. The cold solvent cleaners are exempt under Rule 281(2)(h); the manual paint spray booths under Rule 287(2)(c); emergency generators under Rule 285(2)(g); the glue application and flexible polyurethane foam production under Rule 290. The AQD’s Rules 287 and 290 were revised on December 20, 2016. FGRULE287(2)(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.

EUDIESELGEN3 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.

EUDIESELGEN1, EUDIESELGEN2, EUDIESELGEN3, and EUNATGASGEN at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. The three diesel and one natural gas fired emergency generators are rated less than 10 MM BTU/hr. and exempt from permit to install requirements under Rule 285(2)(g). For EUDIESELGEN3 and to comply with 40 CFR 63.6590(c), the engine must comply with 40 CFR 60 Subpart IIII. EUDIESELGEN1 and EUDIESELGEN2 are emission units under FGCIEMGENS. EUNATGASGEN is a separate emission unit in this ROP that is only subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ.

EUPLASTICS, EUSPRAYBOOTH1, and EUSPRAYBOOTH2, at the stationary source are subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products promulgated in 40 CFR Part 63, Subparts A and PPPP. The coating lines, including associated activities such as surface preparation, cleaning, mixing, and storage, if they are directly related to the application of the coating, are subject to this standard. EUSPRAYBOOTH1 and EUSPRAYBOOTH2 are emission units under FGRULE287(2)(c). EUFLEXFORM and EUGLUEROBOT, emission units under FGRULE290, appeared to be exempt from the applicable requirements of 40 CFR Part 63, Subparts A and PPPP per 40 CFR 63.4481(a). Any future emission units in FGRULE290 will be subject to the emission standards if engaged in surface coating of plastic parts.

Consent Order, CO AQD No. 3-2010, dated February 3, 2010, was entered into between NJT Enterprises, LLC and the AQD to resolve violations of 40 CFR Part 63, Subpart PPPP. The consent order was terminated on April 14, 2017. As part of the ROP renewal process, all references to this consent order, as contained in the previous ROP No. MI-ROP-N1316-2010, were removed in ROP No. MI-ROP-N1316-2021.

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 are subject to the federal Compliance Assurance Monitoring rule under 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.

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. ROP No. MI-ROP-N1316-2021 are identified in Appendix 6 of the ROP.

| **PTI Number** | | | |
| --- | --- | --- | --- |
| 830-87C | 830-87D | 105-03A | 108-04 |

**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** |
| --- | --- | --- | --- |
| EUMISCNGEQ | Natural gas-fired units for space and water heating, ranging from 60,000 BTU/hr. up to 350,000 BTU/hr. | 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 Joyce Zhu, Southeast Michigan 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.

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**Purpose**

A Staff Report dated July 26, 2021, 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**

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| --- | --- |
| Responsible Official: | Nick Demiro, President  586-803-6021 |
| AQD Contact: | Remilando Pinga, Senior Environmental Engineer  586-854-4697 |

**Summary of Pertinent Comments**

The company’s consultant, Stephanie Jarrett of Fishbeck, provided comments during the 30-day comment period. The comments were attached to an email dated August 24, 2021. Below are the summary of company comments:

1. Request to remove “monthly 12-month rolling time period” recordkeeping requirement for EUDIESELGEN3 (VI.4).
2. In EUDIESELGEN3 (VI.6), request to remove the reference to “certification records”.
3. In EUDIESELGEN3 (VI.7), request to delete the entire condition: “The permittee shall monitor and record, in a satisfactory manner, the diesel fuel usage rate for EUDIESELGEN3 on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1202, R 336.1213(3))”.**
4. In EUNATGASGEN (VI.4), request to remove “monthly” recordkeeping requirement.
5. In FGMACT (I.3), request to remove the entire row of organic HAP 0.22 lb./lb. of coating solids applicable requirement for reconstructed Thermoplastic Olefin (TPO) Coating.
6. In FGMACT (V.2), request to remove the entire condition: “The HAP content of any coating, catalyst, solvent, etc., as applied and as received shall be determined using manufacturer’s formulation data. Upon request of the AQD District Supervisor, the manufacturer’s HAP formulation data shall be verified using EPA Test Method 311.2 **(****R 336.1213(3), 40 CFR Part 63, Subpart PPPP, 40 CFR 63.4530(b))”**
7. In FGMACT (VI.3), request to remove: “The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e., coating, catalyst, solvent, etc.), including the weight percent of each component”.
8. In FGCIEMGENS (VI.4), request to remove “monthly” recordkeeping requirement.
9. In FGCIEMGENS (VI.5), request to remove the entire condition: “The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGCIEMGENS, demonstrating that the fuel meets the requirement of SC ll.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 1090.305)”**

**Changes to the July 26, 2021 Draft ROP**

After a review process of the above comments, AQD staff provided the responses below to the above comments:

1. No change. The monthly recordkeeping requirement is part of the template internally approved for use by AQD staff and necessary requirement. It helps ensure compliance with the yearly limit at any given month.
2. No change. The “certification records” is also part of the template and necessary or permittee shall provide fuel sample test data as alternative.
3. No change. The diesel fuel usage rate recordkeeping is necessary as an alternative method to calculate, and cross-check reported hours of operation for the engine. As a major source, it also ensures data is available to determine compliance with MAERS reporting requirements.
4. No change. The monthly recordkeeping requirement is part of the template internally approved for use by AQD staff and necessary requirement. It helps ensure compliance with the yearly limit at any given month.
5. No change. This applicable requirement was added pursuant to 40 CFR Part 63 Subpart PPPP requirement, to ensure compliance with the lower 0.22 lb./lb. of coating solids emission rate limit if a reconstruction occurs at the facility for any existing Thermoplastic Olefin (TPO) Coating. The permittee may unknowingly conduct reconstruction without first obtaining a State Permit to Install or inform the Administrator, thus be subject to the lower emission rate limit.
6. No change. This condition originally came from an NSR permit and necessary to establish method of determining and/or when verifying actual HAP content of coatings.
7. No change. This condition also came from the same NSR permit and necessary to reinforce the 40 CFR 63.4530(b) recordkeeping requirement.
8. No change. The monthly recordkeeping requirement is part of the template internally approved for use by AQD staff and necessary requirement. It helps ensure compliance with the yearly limit at any given month.
9. No change. This applicable requirement is necessary to show compliance with FGCIEMGENS (II.1).