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|  | Michigan Department of Environment, Great Lakes, and Energy  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| N7289 | **STAFF REPORT** | MI-ROP-N7289-2024 |

**Sonoco Protective Solutions, Inc.**

State Registration Number (SRN): N7289

Located at

123 North Chipman Street, Owosso, Shiawassee County, Michigan 48867

Permit Number: MI-ROP-N7289-2024

Staff Report Date: February 19, 2024

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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**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**

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| --- | --- |
| Stationary Source Mailing Address: | Sonoco Protective Solutions, Inc.  123 North Chipman Street  Owosso, Michigan 48867 |
| Source Registration Number (SRN): | N7289 |
| North American Industry Classification System (NAICS) Code: | 326140 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Initial Issuance |
| Application Number: | 202300073 |
| Responsible Official: | Aaron Smith, Facility Manager  517-930-3790 |
| AQD Contact: | Autumn Cole, Environmental Engineer  517-930-3790 |
| Date Application Received: | April 13, 2023 |
| Date Application Was Administratively Complete: | April 13, 2023 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | February 19, 2024 |
| Deadline for Public Comment: | March 20, 2024 |

**Source Description**

The expandable polymeric foam processes include finished goods storage and all the steps taken to create finished goods from expandable polymeric beads. Major steps include partially expanding polymeric beads with steam in the two Hirsch 6000 pre‑expanders, pre-puff storage, and molding the pre-puff into finished goods. West and South of the facility is residential lots seperated by railroad tracks. North of the facility is a landscaping company and residential lots to the East of the facility.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2022**.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 10.5168 |
| Lead (Pb) | 0.00 |
| Nitrogen Oxides (NOx) | 12.52 |
| PM10\* | 1.903 |
| Sulfur Dioxide (SO2) | 0.0751 |
| Volatile Organic Compounds (VOCs) | 38.3311 |

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

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2023 by Sonoco:

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\*** | **Tons per Year** |
| a,a-dimethyl Benzylalcohol (CAS No. 617-94-7) | 0.28 |
| Acetophenone (CAS No. 98-86-2) | 0.19 |
| Benzaldehyde (CAS No. 100-52-7) | 0.12 |
| Benzene (CAS No. 71-43-2) | 0.02 |
| Cumene (CAS No. 98-82-8) | 0.29 |
| d-Limonene (CAS No. 5989-27-5) | 4.25 |
| Ethyl benzene (CAS No. 100-41-4) | 0.10 |
| Phenol (CAS No. 108-95-2) | 0.01 |
| Styrene (CAS No. 100-42-5) | 1.20 |
| Toluene (CAS No. 108-88-3) | 0.13 |
| Xylene (CAS No. 1330-20-7) | 0.43 |
| **Total Hazardous Air Pollutants (HAPs)** | **7.02** |

\*\*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 in Shiawassee 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 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 than10 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 were subject to the Prevention of Significant Deterioration regulations of the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR 52.21 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-Boiler1, EU-Boiler2, and EU-Boiler3 at the stationary source are subject to the Standards of Performance for industrial steam generating units promulgated in 40 CFR Part 60, Subparts A and Dc.

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 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.

**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 Not in the Draft ROP**

The following table lists PTI exempt processes that were not included in the Draft ROP pursuant to Rule 212(4). These processes are not subject to any process-specific emission limits or standards.

| **Emission Unit ID** | **Description of Emission Unit** | **Rule 212(4)**  **Citation** | **PTI Exemption Rule Citation** |
| --- | --- | --- | --- |
| Space Heater 1 | 2 MMBTU/hr capacity natural gas space heater | R 336.1212(4)(b) | R 336.1282(2)(b)(i) |
| Space Heater 2 | 0.075 MMBTU/hr capacity natural gas space heater | R 336.1212(4)(b) | R 336.1282(2)(b)(i) |
| Space Heater 3 | 0.075 MMBTU/hr capacity natural gas space heater | R 336.1212(4)(b) | R 336.1282(2)(b)(i) |
| Space Heater 4 | 0.05 MMBTU/hr capacity natural gas space heater | R 336.1212(4)(b) | 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 Robert Byrnes, Lansing 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 February 19, 2024, 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  comment period as described in . In addition, this addendum describes any changes to the  ROP resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | Aaron Smith, Facility Manager  517-930-3790 |
| AQD Contact: | Autumn Cole, Environmental Engineer  517-930-3790 |

**Summary of Pertinent Comments**

No pertinent comments were received during the  comment period.

**Changes to the February 19, 2024 ROP**

No changes were made to the ROP.