

State Registration Number

N6944

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number

MI-ROP-N6944-2022

**Pregis LLC**

State Registration Number (SRN): N6944

Located at

2700 Wills Street, Marysville, St. Clair County, Michigan 48040

Permit Number: MI-ROP-N6944-2022

Staff Report Date: January 17, 2022

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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**RENEWABLE OPERATING PERMIT**  
**JANUARY 17, 2022 - STAFF REPORT**

ROP Number  
MI-ROP-N6944-2022

**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:	Pregis LLC 2700 Wills Street Marysville, Michigan 48040
Source Registration Number (SRN):	N6944
North American Industry Classification System (NAICS) Code:	326150
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202000139
Responsible Official:	Colin Ferres, Plant Manager 810-320-7343
AQD Contact:	Kaitlyn Leffert, Environmental Quality Analyst 586-249-6505
Date Application Received:	September 14, 2020
Date Application Was Administratively Complete:	September 29, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	January 17, 2022
Deadline for Public Comment:	February 16, 2022

## **Source Description**

Pregis LLC (Formerly REX Performance Products, LLC, Michigan Foam and Fabrication, LLC, and Fagerdala USA Marysville, Inc.) is a manufacturer of extruded polyethylene foam products, which are used for a variety of purposes, such as protective foam packaging and floor cushioning. The facility operates four extruders and two reclaim units.

In the extrusion process, polyethylene and polymer beads are melted and blended, and then injected with a blowing agent, isobutane. The plastic mixture is then pushed down a barrel under pressure and through a die. As the mix is pushed through the die, the change in pressure allows the blowing agent to expand and form the foam property in the plastic. As the foam exits the extruder, it is then sliced, cut, and rolled into rolls of foam sheet material. Any scrap foam material generated during the production process is taken to the reclaim units, where it is ground up, melted, extruded and finally cut into small plastic beads that are then reused as feed stock in the extrusion lines.

Emissions of isobutane are released into the manufacturing area during production, cooling, and off-gassing during storage of the foam sheet rolls. The facility's isobutane emissions are controlled with an Air Code Ionization Control System (ICS). The ICS uses ion generators to reduce the isobutane molecules to carbon dioxide and water. The ions are dispersed through the ventilation system to the production floor and reclaim room. These rooms are considered a permanent total enclosure, which is necessary to ensure that all emissions are adequately captured by the control system. Following control, air from the production area exhausts to the ambient air through two axial fans. The exhaust ducts are also equipped with a VOC sampling system where air from the two ducts is collected and directed to a common mixing area where VOC emissions are continuously monitored.

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**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	NA
Lead (Pb)	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA
Particulate Matter (PM)	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA
Volatile Organic Compounds (VOCs)	112.02

Isobutane is not a hazardous air pollutant (HAP) and therefore the source does not have any HAP emissions.

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.

St. Clair 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. A portion of St. Clair County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the SO<sub>2</sub> 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.

The stationary source is a minor source of HAP emissions because the potential to of any single HAP regulated by the federal Clean Air Act, Section 112, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year. Isobutane is not considered a HAP and therefore there are not any HAP emissions.

The stationary source is considered a "synthetic minor" source in regards to Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of VOC to less than 250 tons per year.

The facility is not subject to the New Source Performance Standards (NSPS), the Maximum Achievable Control Technology Standards (MACT), or the National Emission Standard for Hazardous Air Pollutants (NESHAP).

The source is subject to the maximum allowable emission rate based upon Best Achievable Control Technology (BACT) in Rule 702(a). Improvements made to the ICS in 2016, without installing an additional control system, was determined to satisfy the BACT requirements under Rule 702(a) during New Source Review (NSR) permitting (PTI Number 162-00F).

The facility is subject to Michigan's Air Toxics Rules 225-227. Isobutane (CAS No. 75-28-5) was determined to be the only Toxic Air Contaminant (TAC) associated with the process at Pregis during NSR permitting. A TAC limit of 476 lb VOC per eight hours is included in this permit.

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 volatile organic compounds from FG-FACILITY at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(vi), because the eight-hour and tons per year VOC emission limits meet the CAM exemption for a continuous compliance determination method.

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-N6944-2017 are identified in Appendix 6 of the ROP.

PTI Number
162-00F

**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.

<b>PTI Exempt Emission Unit ID</b>	<b>Description of PTI Exempt Emission Unit</b>	<b>Rule 212(4) Citation</b>	<b>PTI Exemption Rule Citation</b>
EU-ROOFFURN	Five 1.488 MMBTU/hr natural gas-fired, roof-mounted, furnaces to provide heat to the extrusion hall and warehouse areas.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU-OFFICEFURN	Two natural gas-fired conventional home furnaces to provide heat to the office space in the front of the building. Each unit is rated 110,000 BTU/hr.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU-OFFICEWTRHTR	One natural gas-fired water heater to provide hot running water to the office sink and employee bathrooms. 40,000 BTU/hr.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EU-PYROLYSISOVEN	Pyrolysis oven used to remove polymer residue from metal parts from the extrusion lines.	Rule 212(4)(i)	Rule 291

### **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

N6944

**RENEWABLE OPERATING PERMIT**

**FEBRUARY 25, 2022 - STAFF REPORT ADDENDUM**

ROP Number

MI-ROP-N6944-2022

**Purpose**

A Staff Report dated January 17, 2022, 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:	Colin Ferres, Plant Manager 81-320-7343
AQD Contact:	Kaitlyn Leffert, Environmental Quality Analyst 586-249-6505

**Summary of Pertinent Comments**

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

**Changes to the January 17, 2022 Draft ROP**

No changes were made to the draft ROP.