



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Pregis LLC

FROM: Manojkumar P Patel, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Supervisor
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Pregis LLC

Facility Location: 2700 Willis Street, Marysville, Michigan 48040

Date of Inspection: July 18 and 19, 2024

EPA Inspector(s):

1. Manojkumar P. Patel

Other Attendees:

1. Colin Ferres, Plant Manager, Pregis LLC
2. Marianne Gutknecht, Tetra tech, Pregis LLC Consultant

Contact Email Address: cferres@pregis.com

Purpose of Inspection: Compliance with the Prevention of Accidental Releases found in Section 112(r) of the Clean Air Act (CAA), 42 U.S.C. § 7412(r)

Facility Type: Urethane and other foam Products manufacturing (NAICS: 32615)

Regulations Central to Inspection: The Chemical Accident Prevention Provisions at 40 C.F.R. Part 68, commonly referred to as the Risk Management Program

Facility Name: Pregis LLC
Facility Location: 2700 Willis Street, Marysville, Michigan 48040
Date of Inspection: July 18 and 19, 2024

Arrival Time: July 18, 2024 (10:55 AM EST); July 19, 2024 (8:00 AM)
Departure Time: July 18, 2024 (4:30 PM); July 19, 2024 (1:00 PM EST)

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection.
- ☒ Provided Small Business Resource Information Sheet
- ☐ Small Business Resource Information Sheet not provided. Reason:
- ☒ Provided CBI warning to facility.

The following information was obtained verbally from the facility personnel unless otherwise noted.

Company Ownership: In or around February 2018, Pregis LLC purchased Rex Performance Products' urethane manufacturing plant located in Marysville, Michigan. Pregis LLC has been operating this facility since February 2018.

Process 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. The facility has four extruders and two reclaim units for recycling the materials to be reused in the urethane manufacturing processes.

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 plastic foam exits the extruder, it is then sliced, cut, and rolled into rolls of foam sheets. 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.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

I made the following observations during the inspection:

Risk Management Program Applicability

The facility describes its operations as under the North Industrial Classification Standards (NAICS) code 32615 (Urethane and Other foam Products Manufacturing). This NAICS code is not listed under the eligible NAICS code under the RMP regulations. However, the covered process meets the Program Level 3 eligibility requirements because the covered processes are subject to the Occupational Health and Safety Agency (OSHA) Process Safety Management standards at 29 C.F.R. § 1910.119 and it satisfies the requirements at 40 C.F.R. § 68.10(i)(2).

Management System for Implementing Elements of Risk Management Program

EPA requested documentation of the management system for implementing elements of the RMP, as specified in 40 C.F.R. § 68.15(a). The facility provided records of a RMP management system at the time of inspection.

Process Safety Information

The facility provided a block flow diagram for the covered process equipment. The process chemistry and the maximum intended inventory is described in the RMP plan. EPA observed that based on the facility's document, the maximum intended inventory for the isobutane quantity is consistent. The facility will provide the safe upper and lower limits for temperatures, pressures, and flows for the covered process equipment for EPA's review. Superficially, the safe upper and lower limits for flow from the isobutane tank to the isobutane low pressure pump are missing.

The facility provided the piping and instrumentation diagrams (P&ID) to satisfy the requirements under 40 C.F.R. § 68.65(d)(1)(iii). The facility did not provide a relief system design and design basis for the covered equipment. After Ball Valves V-32, I observed a pressure indicator that was not in the P&ID.

EPA requested documents related to the safety systems on the covered equipment and the facility stated that it will provide a document that will address the safety system for the covered process equipment. The facility claimed that the ventilation system design requirement does not apply to the facility's covered processes.

EPA was unable to verify the facility's applicable design codes and standards employed. The facility said it will upload them after the inspection.

Process Hazards Analysis

The facility used the Hazards and Operability Study (HAZOP) methods for the latest PHA revalidation. EPA observed that the facility has updated or revalidated the PHA every 5 years to show it is consistent with the current covered process. The facility's latest PHA was performed in 2021 and the previous PHA was performed in 2017.

Operating Procedures

The facility will provide all operating procedures for EPA's review. The facility stated that all operating procedures are readily accessible by employees who are involved in the covered processes.

The facility operates about 12 isobutane gas monitors – (2 are located outside; 1 located in the pumphouse #4; and 9 are located inside the processing area). Enmet, an outside vendor, annually calibrates and recertifies the isobutane gas monitors. EPA requested the gas monitors manufacturer specifications, and standard operating procedures for calibration and recertification. The facility will upload the information for EPA's review.

Management of Change

The facility informed EPA that it established and implemented written procedures to manage change to process chemicals, process, technology, and equipment. The facility stated that it has not had any MOC in the last 5 years.

Compliance Audits

EPA was unable to observe if the facility promptly determined and documented an appropriate response to each of the findings in the audit and whether the documented deficiencies have been corrected. The facility stated that it will upload the July 26, 2024 compliance audit final report for EPA to review.

Contractors

EPA requested an agreement between the facility and the isobutane supplier, AMCOR. EPA requested AMCOR drivers' training certificates covering the unloading of isobutane at the facility. AMCOR needs to provide the safe operating lower limit for the isobutane storage tank and the percentage fill level.

Emergency Response Program:

The facility's Emergency Response Program (ERP) does not provide a mechanism for notifying the local fire department in case of any accidental release at the facility. The facility stated that the security alarms would monitor the "emergency event" and notify the local fire department but this is not described in its ERP.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

1. Latest Risk Management Plan Summary
2. Piping and Instrumentation Diagram
3. Simple Process flow diagram
4. Management of change Policy
5. Compliance Audits report June 2021

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility.

Requested documents:

1. Latest PHA Report with findings and recommendations
2. July 2024 Compliance Audits Reports with findings and recommendations
3. Isobutane Gas Monitors Manufacturing Specifications and Standard Operating Practice for calibration and recertification
4. Agreement between Pregis LLC and Isobutane Supplier – AMCOR
5. AMCOR drivers' training certificates
6. Pre-Startup Safety Review Policy
7. Hotwork Policy, and Hotwork Checklist
8. Manufacturer Specifications sheet for flow meter, actuator valve, and 3-stage pump
9. Isobutane Safety data Sheet

DIGITAL SIGNATURES

Report Author: **MANOJKUMAR PATEL** Digitally signed by
MANOJKUMAR PATEL
Date: 2024.09.17
13:40:20 -05'00'

Section Supervisor: **SARAH MARSHALL** Digitally signed by
SARAH MARSHALL
Date: 2024.09.17
13:45:45 -05'00'

APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Manojkumar P Patel

Archival Record Location: [CAA Inspection PCs Upload](#)

Image Number	File Name	Date and Time (incl. Time zone and DST)	Latitude and Longitude	Description of Image
1	P7190045.JPG	7/19/2024 8:20		Nitrogen powered Emergency Shut-off Valve
2	P7190046.JPG	7/19/2024 8:21		Isobutane 2' Unloading Line 9with smaller 1.5" vapor return line)
3	P7190047.JPG	7/19/2024 8:23		2nd Emergency Shut-Off Valve
4	P7190048.JPG	7/19/2024 8:24		Isobutane Storage tank
5	P7190049.JPG	7/19/2024 8:26		Hazard Marking Labels n the Isobutane Tank
6	P7190050.JPG	7/19/2024 8:26		Z Overpressure Valve PSV -G221/G22
7	P7190051.JPG	7/19/2024 8:31		Name Plate Information on Isobutane tank
8	P7190052.JPG	7/19/2024 8:32		Isobutane Tank Pressure Gauge Reading @ 22PSI; Valve V-20 and PI-21
9	P7190053.JPG	7/19/2024 8:35		Isobutane Tank Volume Gauge Reading @48% Fill Level
10	P7190054.JPG	7/19/2024 8:38		Isobutane Tank Bottom - Transfer Pump
11	P7190055.JPG	7/19/2024 8:42		By-Pass Valve (PRV-23 @ 450 PSI)
12	P7190056.JPG	7/19/2024 8:46		PI @ 5 PSI and PRV 23 (Not a Bypass Currently)
13	P7190057.JPG	7/19/2024 8:48		PRV -23
14	P7190058.JPG	7/19/2024 8:49		SDV - G23 Shutdown Valve
15	P7190059.JPG	7/19/2024 8:50		SDV-G21 Shutdown Valve
16	P7190060.JPG	7/19/2024 8:54		DV-32 and DV-34 Standard Ball Valves
17	P7190061.JPG	7/19/2024 8:56		Unknown Pressure Indicator @275-28 PSI
18	P7190062.JPG	7/19/2024 8:58		PRV -24 (After V-34 Valve for Process Inside the Building
19	P7190063.JPG	7/19/2024 9:00		Diaphragm Valve DV-3 (Return to the Atmosphere)
20	P7190064.JPG	7/19/2024 9:08		S-12 Isobutane Gas Sensor Reading @ 4%
21	P7190065.JPG	7/19/2024 9:09		S-11 Isobutane Gas Sensor
22	P7190066.JPG	7/19/2024 9:10		Isobutane Line towards the Isobutane Storage tank - Rust
23	P7190067.JPG	7/19/2024 9:14		G427-16-15 Type Fisher Internal Valve
24	P7190068.JPG	7/19/2024 9:17		Incoming Line - Rust Observed
25	P7190069.JPG	7/19/2024 9:18		Incoming Line to the Plant Processes
26	P7190070.JPG	7/19/2024 9:20		SDV-G24 (on the Left) and SDV-G26 (on the Right) N550-10Model
27	P7190071.JPG	7/19/2024 9:21		SDV-G26 Severe Corrosion on the pipe Observed
28	P7190072.JPG	7/19/2024 9:22		V-35 Low Pressure System for Line #4
29	P7190073.JPG	7/19/2024 9:23		Diversion for Low Pressure System
30	P7190074.JPG	7/19/2024 9:28		High Pressure Pump System for Line #4

Facility Name: Pregis LLC

Facility Location: 2700 Willis Street, Marysville, Michigan 48040

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31	P7190075.JPG	7/19/2024 9:30	PRV-L4-6 (Bypass Valve)
32	P7190076.JPG	7/19/2024 9:35	Actuator Valve on the High-Pressure System for Line 4