REGION 1
BOSTON, MA 02109

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
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BOSTON, MASSACHUSETTS 02109-3912

CAA 112 (r), Risk Management Plan (RMP), CAA § 112(r)(1) General Duty Clause (GDC), CERCLA § 103, and EPCRA §§ 302-313 Compliance Evaluation Inspection of:

Artic Glacier USA Inc.
1913 Main Street
Sanford, ME 04073

11/8/2024

Date of Inspection

Waste and Chemical Compliance Section

1/14/2025

Date Inspection Report Approved

O'Donnell, Mary Jane
Digitally signed by O'Donnell, Mary Jane
Date: 2025.01.14 16:47:29 -05'00'

Mary Jane O'Donnell, Manager

Waste and Chemical Compliance Section

1/14/2025

Date Inspection Report Finalized

1/15/2025

Date Inspection Report Transmitted to Facility

Disclaimer: Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make initial determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 1

EPCRA and CAA 112(r) Inspection Report

Date: January 14, 2025

From: Andrew Meyer, U.S. EPA Enforcement Officers

Through: Mary Jane O'Donnell, Chief

Waste and Chemical Compliance Section

To: File

Subject: Chemical Accident Investigation and Inspection, Clean Air Act (CAA) Risk Management Plan (RMP) Section 112(r) and Emergency Planning and Community Right-To-Know Act (EPCRA) Sections 302-312, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 103 of Arctic Glacier USA Inc. in Sanford, Maine.

I. GENERAL INFORMATION

Facility Name:	Arctic Glacier USA Inc. - Sanford .
Dun and Bradstreet Number:	11-877-9428
RMP Number:	N/A
Address:	1913 Main Street, Sanford, ME 04073
Inspector Names:	Andrew Meyer, U.S. Environmental Protection Agency (U.S. EPA) Region 1 Aaron Gilbert, U.S. EPA Region 1 Parker Hendrick, Eastern Research Group, Inc. (ERG) Brendan Scher, ERG
Inspection Date:	November 8, 2024
Type of Inspection:	CAA § 112(r)(1) General Duty Clause (GDC), CERCLA § 103, and EPCRA §§ 302-313 Compliance Evaluation Inspection
Purpose of Inspection:	This inspection was conducted as a routine EPA CAA § 112(r)(1) General Duty Clause (GDC), § 112(r)(7) Risk Management Plan (RMP) Program, CERCLA § 103, and EPCRA §§ 302-312 compliance evaluation inspection. The Arctic Glacier Facility in Sanford, Maine (ME) was selected for inspection because it stores anhydrous ammonia onsite as a heat exchange media for the Facility's anhydrous ammonia refrigeration system.
Current Owner:	Arctic Glacier USA Inc.
Current Operator:	Arctic Glacier USA Inc.

Primary NAICS codes: 312113 (Ice Manufacturing)

Number of full-time employees (FTEs): 12 total

Estimated Annual Sales: $253.92M in sales for the parent company

Parent Corporation: Arctic Glacier USA Inc.

II. GENERAL FACILITY DESCRIPTION

The Arctic Glacier USA Inc. in Sanford, ME (Arctic Glacier, or the Facility) produces ice for consumers. The Facility has 12 full-time employees and operates 7 days a week in the summer and 5 days a week the rest of the year working from 7:00AM through 3:30PM each day. The facility operates three ice makers and a bin and freezer for ice-storage. The original ammonia refrigeration system was installed in 1998 with some changes made over the years, including new ice-makers in 2012. The Facility was purchased by Arctic Glacier USA Inc. in 2022 from the previous owner, Getchel Brothers. Employees at the Facility are not members of a labor union. According to Brian Pettis, Arctic Glacier Senior Manager, Arctic Glacier conducted a full mechanical integrity inspection and Process Hazard Analysis (PHA) in 2024. The completed MI identified 216 findings in need of follow-up and the PHA identified 56 findings that needed following up.

The ice production area and the ammonia machinery room (AMR) are located in a single inside work space. The facility's AMR is equipped with compressors, pumps, an auto-purger, and associated ammonia piping. Outside and behind the AMR, the facility is equipped with two evaporator condensers mounted on an elevated platform, and a high pressure receiver (HPR), along with associated piping.

Inside in the AMR, the inspection team observed one mounted ammonia alarm. According to Bryan Pettis, the facility has no records for this alarm being calibrated and routinely maintained and tested. Mr. Pettis explained that the detector is supposed to alarm at 25 parts per million (ppm) and is set up to notify an off-site, third-party security company, identified as Seacoast Security. Mr. Pettis explained that Seacoast Security would be responsible for notifying local authorities. Furthermore, Brian Butler, Arctic Ice Plant Manager stated that the company uses AAA Energy Service out of Scarborough, Maine to help maintain their ammonia refrigeration system.

The Facility is located in a mixed residential and commercial area in Sanford, ME. There is a residential neighborhood less than 0.5 miles east of the facility with commercial development located less than 0.5 miles to the north. Southwest of the Facility there is a small airport runway used for medical emergency flights. Attachment 1 includes a GoogleEarth® aerial photograph of the Arctic Glacier facility located in Sanford, ME. On the day of the inspection no ice production was occurring.

III. IN-BRIEF/OPENING CONFERENCE

The U.S. EPA inspection team including Andrew Meyer, Aaron Gilbert, Brendan Scher (U.S. EPA contractor inspector), and Parker Hendrick (U.S. EPA contractor inspector), entered the Facility at approximately 9:00 AM EST. The U.S. EPA inspection team was supported by the

individuals listed in Table 1 from Maine Emergency Management Agency (MEMA) and the York County Emergency Management Agency (YCEMA):

Table 1. Inspection Participants, Government Agencies:

Name	Title/Company	Phone Number	E-mail
Faith Staples	MEMA	207-557-3675	Faith.e.staples@maine.gov
Darron Curtis	MEMA	207-707-2962	Darron.j.curtis@maine.gov
David Fran	YCEMA	207-324-1078	David.fran@yorkcountyme.gov

The U.S. EPA inspection team presented identification to Mr. Bryan Pettis, senior manager at Arctic Glacier. Inspector Meyer presented his credentials and subsequently conducted the In-Brief/Opening Conference, explaining the reason and scope of the inspection. Inspector Meyer presented the EPCRA Notice of Inspection form to Mr. Pettis, who signed as the Recipient of the Notice. Mr. Pettis did not attempt to deny entry to the Facility to the U.S. EPA inspection team and did not invoke any claims of Confidential Business Information (CBI) for the purposes of the inspection. Mr. Pettis and Mr. Mark Butler, each listed in Table 2, participated in the onsite portion of the inspection:

Table 2. Facility Representatives:

Name	Title/Company	Phone Number	E-mail
Bryan Pettis	Arctic Glacier Senior Manger	816-689-8459	bpettis@arcticglacier.com
Mark Butler	Plant Manger	207-608-1825	mbutler@arcticglacier.com

Inspector Meyer shared the following guidance documents with Facility representatives during the In-Brief/Opening Conference:

1. Guide to the Emergency Planning and Community Right-to-Know Act (Fall 2020)
2. EPCRA Quick Reference Fact Sheet (Fall 2020)
3. List of Lists (EPA 550-B-20-001, August 2020)
4. Small Business Resource Information Sheet (February 2020, EPA-300-F-20-002)
5. National Response Center Oil and Chemical Spill Reporting flyer
6. Chemicals in Your Community brochure (EPA 550-K-99-001, December 1999)

Inspector Meyer stated that after the opening meeting, the inspectors would do a walk-through inspection of all areas of the Facility where anhydrous ammonia and any other chemicals were currently present. Inspector Meyer stated the inspection team would be taking photographs of items and areas of interest and a copy of all photographs taken would be made available to the Facility representatives after the inspection.

IV. PHYSICAL INSPECTION

The U.S. EPA inspection team conducted a walk-through of the following areas at the Facility:

1. Building Exterior
2. Outdoor Ammonia Evaporators
3. Ammonia Machinery Room/Production Area

Inspector Gilbert took a total of 35 digital photographs during the inspection to provide reference to documentation of conditions observed. The photographs are referenced throughout the document.

The following include areas of concern (AOCs) identified in each of the areas during the physical inspection.

Building Exterior

The Arctic Glacier manufacturing facility includes a metal frame building with parking areas and loading docks located in front of the building.

The U.S. EPA inspection team identified the following areas of concern based on observations made on the building exterior.

- Additional windsocks are needed to ensure adequate visibility for emergency responders approaching the Arctic Glacier facility, as well as for facility personnel needing to leave the facility during a chemical release or other incident (see Photographs 0241108_145127560_iOS, and 20241108_145304048_iOS).
- Inspectors observed a red beacon, possibly a fire alarm, on the front wall of the building lacking posted signage to indicate what the alarm indicated (see Photograph 20241108_144853481_iOS).
- The Facility's electrical transformer was not marked with its polychlorinated biphenyls (PCB) status and natural gas pipes servicing the building were not labeled.
- Ground-level vent pipes located along the base of the building exterior are not labeled (see Photograph 20241108_151410965_iOS).

Outdoor Ammonia Evaporators

Located outside of the north corner of the building, the Facility has two evaporators installed on metal platforms. This area also contained ammonia piping and pressure relief valves connecting to the AMR.

The U.S. EPA inspection team identified the following areas of concern based on observations made around the evaporators.

- Pressure relief valves (PRVs) are not headed together, and each PRV discharge exhausts downward directly into areas where employees may be regularly working (see Photographs 20241108_145748474_iOS, and 20241108_150429738_iOS).

- PRV exhaust points are not located at least 7.25 feet above the surrounding working surfaces (see Photographs 20241108_145748474_iOS, and 20241108_150429738_iOS).
- Exterior ammonia piping, including PRV exhaust piping, is not adequately labeled with contents, direction of flow, and/or pressure and temperature (see Photographs 20241108_145748474_iOS, 20241108_150429738_iOS, 20241108_145403688_iOS, 20241108_150055832_iOS, 20241108_150925121_iOS, and 20241108_151410965_iOS).
- Ammonia piping insulation is damaged in multiple locations (see Photographs 20241108_150247854_iOS, and 20241108_150925121_iOS).
- Ammonia piping is not maintained with protective painting or coating at points of interface with associated support brackets (see Photograph 20241108_145420138_iOS).
- The ladder to access the two elevated evaporator/condensers does not reach ground-level and requires a portable ladder for access (see Photograph 20241108_150651673_iOS).
- Exterior ammonia equipment is not protected to prevent access from unauthorized personnel (see Photographs 20241108_145403688_iOS, and 20241108_150055832_iOS).

Ammonia Machinery Room/Production Area

The AMR at the Facility is accessed through the main entrance door at the northeastern side of the building. The AMR contains ammonia refrigeration equipment and piping and is also the location of the ice production operation.

The U.S. EPA inspection team identified the following areas of concern based on observations made within and outside of the AMR.

- The Facility's main access door from the outside into the ammonia machinery room (AMR) is not equipped with emergency stop (E-stop) actuation controls, emergency ventilation controls, or an audible ammonia alarm (see Photograph 20241108_145304048_iOS).
- The main exit door from the AMR leading outside is not equipped with panic hardware and the door itself is not of tight-fitting construction (see Photograph 20241108_151850222_iOS).
- Piping and instrumentation diagrams (P&IDs) denoting locations of critical safety valves is not posted at the main AMR entry door.
- There is no emergency safety shower/eyewash station located outside the main AMR door (see Photograph 20241108_145748474_iOS).
- The Facility's ice production equipment is not isolated from the AMR (see Photograph 20241108_153419593_iOS).
- Facility personnel identified that the visible alarm beacons located inside the AMR are ammonia alarm beacons; however, these alarm beacons are not posted with signage to indicate their function.
- Multiple valves and associated high pressure ammonia piping is not provided with adequate bump protection (see Photograph 20241108_153555077_iOS).

- Ice buildup on ammonia piping and meters inside the AMR is inhibiting the function of valves and the ability for operators to read operating meters (see Photographs 20241108_154224065_iOS, and 20241108_154326638_iOS).
- "Armorflex" insulation is used on ammonia piping inside the AMR (see Photograph 20241108_154504111_iOS). Facility personnel stated that outside insulation on ammonia piping had independently identified by the Facility as the "wrong type" of insulation.
- Inspectors observed only one permanent ammonia detector inside AMR. Facility personnel stated that this detector is not regularly calibrated. The Facility has set up handheld ammonia detectors inside the room and set up cameras to visually monitor these hand-held, temporarily arranged detectors (see Photographs 20241108_152718349_iOS, 20241108_152809909_iOS, and 20241108_154005535_iOS).

V. OUT-BRIEF/CLOSING CONFERENCE

EPA conducted an in-person inspection closeout meeting with Bryan Pettis and Mark Butler on site at 11:00 AM EST on November 8, 2024, to discuss the observations from the inspection. Inspector Meyer discussed sharing of photographs and documentation as well as the procedure for Arctic Glacier to upload documents requested by EPA during and after the physical inspection. Additionally, Inspector Meyer went through the previously provided Notice of Inspection letter's requested documents and summarized the informal and formal enforcement options available to EPA. Inspector Meyer requested Arctic Glacier provide specific operating procedures, records of inspection and testing of piping and pressure vessels, the most recently completed PHA, and additional documents.

Specific AOCs identified during the inspection and noted during closeout meeting included the following:

1. Additional windsocks are needed to ensure adequate visibility for emergency responders approaching the Arctic Glacier facility, as well as for facility personnel needing to leave the facility during a chemical release or other incident (see Photographs 20241108_145127560_iOS, and 20241108_145304048_iOS).
2. Inspectors observed a red beacon, possibly a fire alarm, on the front wall of the building lacking posted signage to indicate what the alarm indicated (see Photograph 20241108_144853481_iOS).
3. The Facility's electrical transformer was not marked with its polychlorinated biphenyls (PCB) status.
4. Outside natural gas piping was not adequately labeled.
5. The Facility's main access door from the outside into the ammonia machinery room (AMR) was not equipped with emergency stop (E-stop) actuation controls, emergency ventilation controls, or an audible ammonia alarm (see Photograph 20241108_145304048_iOS).
6. Recommend locating the sign for the visual ammonia alarm immediately above the visual alarm beacon rather than below (see Photograph 20241108_145304048_iOS).
7. Air intake into the AMR was located approximately twelve feet above ground-level along the exterior building wall which may cause short-circuiting inside of the AMR as the

interior exhaust is located at approximately the same level (see Photographs 20241108_145748474_iOS, 20241108_150651673_iOS, 20241108_152718349_iOS, and 20241108_153724339_iOS).

8. Pressure relief valves (PRVs) exhausted downward directly into areas that are unprotected from employees that may be in the area (see Photographs 20241108_145748474_iOS, and 20241108_150429738_iOS).

9. PRV piping was not labeled (see Photographs 20241108_145748474_iOS, and 20241108_150429738_iOS).

10. PRV piping was not 7.25' above the surrounding working surfaces (see Photographs 20241108_145748474_iOS, and 20241108_150429738_iOS).

11. Floor vent pipes were not labeled (see Photograph 20241108_151410965_iOS).

12. Ammonia piping insulation was observed to be damaged in multiple locations (see Photographs 20241108_150247854_iOS, and 20241108_150925121_iOS).

13. Ammonia piping was not affixed with protection painting or coating at points of interface with associated support brackets (see Photograph 20241108_145420138_iOS).

14. Exterior ammonia piping was not adequately labeled (see Photographs 20241108_145403688_iOS, 20241108_150055832_iOS, 20241108_150925121_iOS, and 20241108_151410965_iOS).

15. The ladder to access large evaporator/condenser did reach ground-level and required a portable ladder for access (see Photograph 20241108_150651673_iOS).

16. Exterior ammonia equipment was not protected to prevent access from unauthorized personnel (see Photographs 20241108_145403688_iOS, and 20241108_150055832_iOS).

17. The main exit door from the AMR leading outside was not equipped with panic hardware and was not tight fitting along the entrance floor (see Photograph 20241108_151850222_iOS).

18. Piping and instrumentation diagrams (P&IDs) denoting locations of critical safety valves were not posted at the main AMR entry door.

19. There was no emergency safety shower/eyewash station located outside the main AMR door (see Photograph 20241108_145748474_iOS).

20. The Facility's ice production equipment was not isolated from the AMR (see Photograph 20241108_153419593_iOS).

21. Facility personnel identified that the visible alarm beacons located inside the AMR were ammonia alarm beacons; however, these alarm beacons were not posted with signage to indicate their meaning when activated.

22. Multiple valves and associated high pressure ammonia piping was not provided with adequate bump protection (see Photograph 20241108_153555077_iOS).

23. Ice buildup was observed on ammonia piping inside AMR inhibiting the function of valves and the ability for operators to read operating meters (see Photographs 20241108_154224065_iOS, and 20241108_154326638_iOS).

24. "Armorflex" insulation was observed on ammonia piping inside the AMR (see Photograph 20241108_154504111_iOS). Facility personnel stated that outside insulation on ammonia piping had independently identified by the Facility as the "wrong type" of insulation.

25. Inspectors observed only one permanent ammonia detector inside AMR. Facility personnel stated that this detector is not regularly calibrated.

26. The Facility had set up handheld ammonia detectors inside the room and set up cameras to visually monitor the detectors (see Photographs 20241108_152718349_iOS, 20241108_152809909_iOS, and 20241108_154005535_iOS).

VI. FACILITY COMPLIANCE STATUS AND ELEMENTS OF PROOF - EPCRA

EPCRA Section 302

(1**)** Does Facility have on-site, at any one time, extremely hazardous substances (EHS) at or above the TPQ? **YES**

(2) List or obtain documentation:
Inspectors' observations; information provided by Facility personnel.

(3) How was maximum quantity on-site determined or calculated? Unknown

EPCRA Section 303

(1) Facility Coordinator identified per Sec. 303 and date LEPC was notified? Unknown

EPCRA Section 311

(1) Is Facility required to maintain MSDSs under the OSHA Hazard Communication Standard 29 CFR 1910.1200 (no specific chemical list)? **YES**

(2) Has the Facility conducted a comprehensive audit to identify SDS chemicals on-site and to determine if 500 lb./10,000 lb./TPQ thresholds were exceeded?
Yes, the Facility reported 8,000-pounds of anhydrous ammonia onsite in the 2023 Tier II report.

(3) List of OSHA chemicals manufactured, processed, used/stored, and obtained? **No**

(4) How were the maximum amounts determined? Unknown

(5) Section 311 info supplied to the:

SERC (Y/N): **Unknown**
LEPC (Y/N): **Unknown**
Local Fire Department(Y/N): **Unknown**
Date: **Unknown**
Chemical List: **Unknown**
SDSs: **Unknown**

(6) Have any new hazardous chemicals, mixtures, or substances been introduced into the Facility in the last 5 years? **Unknown**

(7) If yes, has the Facility submitted updated lists or SDSs? **Unknown**

EPCRA Section 312 (due March 1 of year following reporting calendar year)

(1) Was Tier II form submitted for all required chemicals? **Yes**

(2) What procedures are used to update Section 312 information for annual submittal and to ensure additional or new chemical data is submitted within 90 days? **Unknown**

(3) Was Facility aware of annual reporting requirements under Section 312? **Yes**

(4) Had the Facility completed and signed a list of all reportable chemicals on site on date of the inspection? **No**

(5) Table of EPCRA 312 Reportable Substances:

CAS #	Chemical	Approx. Max. Wt. on Site (Lbs.)	TPQ (Lbs.)	Approx. Ratio (Actual/TPQ)
7440-37-1	Anhydrous Ammonia	8,000	500	16
7664-93-9	Sulfuric Acid in Lead Acid Batteries	1,500	500	3

VII. ENFORCEMENT HISTORY

Review of EPA's ECHO database indicates the facility has not had any violation over the past five (5) years.

VIII. ENVIRONMENTAL JUSTICE

According to EPA's Environmental Justice Screening and Mapping Tool (EJ Screen), Arctic Glacier is located in an area of potential Environmental Justice interest. At least one disadvantaged socioeconomic indictor is greater than 90% the U.S. average.

Attachment 1

Google Earth Image of the
Arctic Glacier USA Facility in Sanford, ME