

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1**

IN THE MATTER OF:	)	
	)	
Arctic Glacier USA Inc - Sanford	)	NOTICE OF VIOLATION AND ADMINISTRATIVE COMPLIANCE ORDER ON CONSENT
	)	
Respondent	)	
	)	
Proceeding under Section 113 of the Clean Air Act, 42 U.S.C. §§ 7413	)	
	)	
	)	
	)	

INTRODUCTION

1. The United States Environmental Protection Agency ("EPA") issues this Administrative Order on Consent ("Order") to Arctic Glacier USA Inc - Sanford ("Respondent"), for Respondent's failure to comply with Section 112(r) of the Clean Air Act ("CAA" or the "Act"), 42 U.S.C. § 7412(r), in the handling and storage of anhydrous ammonia in the refrigeration system at Respondent's facility located in Sanford, Maine. The Notice of Violation ("NOV") provides EPA's statutory authority for issuing this action, explains the factual background, and alleges violations of the CAA's General Duty Clause. The Order requires Respondent to correct the alleged violations.

2. The NOV and Order are issued under the authority of Section 113 of the CAA, 42 U.S.C. § 7413.

STATUTORY AND REGULATORY AUTHORITY

3. Section 112(r) of the CAA, 42 U.S.C. § 7412(r), imposes requirements and authorizes EPA to promulgate regulations to prevent, and minimize the consequences of,

accidental releases of certain regulated substances. Section 113(a)(3) of the CAA, 42 U.S.C. § 113(a)(3), provides that EPA may issue an order requiring compliance with the requirements or prohibitions of Subchapter I of the Act (which include, *inter alia*, the requirements of Section 112(r), 42 U.S.C. § 7412(r)). A copy of the order must be sent to the relevant State air pollution control agency.

4. Pursuant to Section 112(r)(1) of the CAA, 42 U.S.C. § 7413(r)(1), owners and operators of stationary sources producing, processing, handling, or storing substances listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance, have a general duty, in the same manner and to the same extent as 29 U.S.C. § 654, to: (a) *identify hazards* that may result from accidental releases of such substances using appropriate hazard assessment techniques; (b) *design and maintain a safe facility* taking such steps as are necessary to prevent releases; and (c) *minimize the consequences of releases* that do occur. This section of the CAA is referred to as the "General Duty Clause."

5. The extremely hazardous substances listed pursuant to Section 112(r)(3) include, among others, anhydrous ammonia.

6. The term "accidental release" is defined by Section 112(r)(2)(A) of the CAA, 42 U.S.C. § 7412(r)(2)(A), as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

7. The term "stationary source" is defined by Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C), in pertinent part, as any buildings, structures, equipment, installations, or substance-emitting stationary activities, located on one or more contiguous properties under the control of the same person, from which an accidental release may occur.

8. The term "have a general duty in the same manner and to the same extent as 654, title 29 of the United States code" means owners and operators must comply with the General Duty Clause in the same manner and to the same extent as employers must comply with the Occupational Safety and Health Act ("OSH Act") administered by the Occupational Safety and Health Administration ("OSHA").¹

9. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), authorizes EPA to issue compliance orders for violations of the CAA, including violations of Section 112(r), 42 U.S.C. § 7412(r). An order relating to a violation of Section 112 of the CAA can take effect immediately upon issuance.

FINDINGS AND ALLEGED VIOLATIONS

10. Respondent owns and operates a cold storage warehouse facility located at 1913 Main Street, Sanford, Maine (the "Facility"). The Facility is one building that consists of a workspace with both the ice production equipment and ammonia machine room ("AMR") area, and a separated workspace for employees.

¹ Section 654 of OSHA provides, in pertinent part, that "[e]ach employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees" and "shall comply with occupational safety and health standards promulgated under [OSHA]." 29 U.S.C. § 654. See Durion Company, Inc. v. Secretary of Labor, 750 F.2d 28 (6th Cir. 1984). According to the legislative history of the CAA General Duty Clause, Durion is cited as a guide for EPA's application of the General Duty Clause. Durion criteria are those established earlier in National Realty & Construction Co. v. OSHRC, 489 F.2d 1257 (D.C. Cir. 1973), namely, that OSHA must prove (1) the employer failed to render the workplace free of a hazard; (2) the hazard was recognized either by the cited employer or generally within the employers' industry; (3) the hazard was causing or was likely to cause death or serious physical harm; and (4) there was a feasible means by which the employer could have eliminated or materially reduced the hazard. For purposes of complying with the CAA General Duty Clause, owners and operators must maintain a facility that is free of a hazard, the hazard must be recognized by the owner/operator or recognized by the owner/operator's industry, the hazard from an accidental release must be likely to cause harm, and the owner/operator must be able to eliminate or reduce the hazard. U.S. EPA, *Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1)* (May 2000) at 11, footnote 4.

11. Respondent Arctic Glacier USA Inc - Sanford is a business that manufactures, stores, and distributes ice products to supermarkets, gas stations, and other customers across the United States and Canada. Respondent is a corporation organized under the laws of the Delaware.

12. As a corporation, Respondent is a "person" within the meaning of Section 302(e) of the CAA, 42 U.S.C. § 7602(e), against whom an administrative order may be issued under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).

13. The Facility is located in a rural, mixed residential and commercial area, adjacent to a municipal airport, on State Highway Route 109, and within 0.25 miles of the nearest businesses. 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. Within approximately one mile of the Facility are other businesses, a house of worship, and a community college.

14. The Facility is a building or structure from which an accidental release may occur and is therefore a "stationary source" as that term is defined at Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C).

15. At all times relevant to the violations alleged herein, Respondent was the "owner or operator" of the Facility, as defined at Section 112(a)(9) of the CAA, 42 U.S.C. § 7412(a)(9).

16. At the times relevant to the violations alleged herein, Respondent used approximately 8,000 lbs. of anhydrous ammonia in its refrigeration system at the Facility. Accordingly, Respondent "stored" and "handled" anhydrous ammonia, which, as indicated in paragraph 5 above, is an "extremely hazardous substance" subject to the General Duty Clause.

17. Accordingly, at the time of the violations alleged herein, Respondent operated a stationary source that handled and stored anhydrous ammonia, an extremely hazardous substance, and thus was subject to the General Duty Clause.

18. Anhydrous ammonia is a clear, colorless gas at atmospheric pressure and temperature with a strong odor. It is often stored and shipped under pressure as a liquid. Although anhydrous ammonia has many operational benefits as a refrigerant, it presents a significant health hazard because it is corrosive to the skin, eyes, and lungs. Inhalation of ammonia may cause irritation and burns of the respiratory tract, laryngitis, shortness of breath, high-pitched respirations, chest pain, pulmonary edema, and pneumonia. Ammonia vapors may be fatal if inhaled. Ingestion of ammonia may cause nausea, vomiting, and oral, esophageal, and stomach burns. If ammonia has contacted the eyes, irritation, pain, conjunctivitis, tearing, and corneal erosion may occur, and loss of vision is possible. Dermal exposure may result in severe burns and pain. Exposure to 300 parts per million of ammonia by volume is immediately dangerous to life and health.

19. Ammonia gas is generally regarded as nonflammable but burns at concentrations of approximately 15.5% to 27% by volume in air with strong ignition. It can explode if released in an enclosed space with a source of ignition present or if a vessel containing anhydrous ammonia is exposed to fire. The fire hazard increases in the presence of oil or other combustible materials.

20. Due to the dangers associated with anhydrous ammonia, the ammonia refrigeration industry has developed industry standards ("Industry Standards of Care") to control the risks associated with the use of ammonia. In collaboration with the American

National Standards Institute ("ANSI"), the International Institute of Ammonia Refrigeration ("IIAR") has issued (and updates) Standard 2: *American National Standard for Safe Design of Closed-Circuit Ammonia Mechanical Refrigeration Systems* ("ANSI/IIAR 2"); Standard 4: *Installation of Closed-Circuit Ammonia Mechanical Refrigeration Systems* ("ANSI/IIAR 4"); Standard 6: *Standard for Testing, Inspection, and Maintenance of Closed-Circuit Ammonia Refrigeration Systems* ("ANSI/IIAR 6"); and Standard 9: *American National Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems* ("ANSI/IIAR 9"), among others, along with other applicable standards and guidance. Bulletins and guidance include, without limitation, the Ammonia Refrigeration Management Guidelines (for systems that have less than 10,000 lbs. of ammonia); IIAR Bulletin No. 109, *Guidelines for IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System* (1997, and in effect until 2019 when ANSI/IIAR 6 replaced it) ("IIAR Bull. 109"); IIAR Bulletin No. 110, *Guidelines for Start-Up, Inspection, and Maintenance of Ammonia Mechanical Refrigerating Systems* (1993, most recently updated in 2007, and in effect until 2019 when ANSI/IIAR 6 replaced it) ("IIAR Bull. 110"); and IIAR Bulletin No. 114, *Guidelines for Identification of Ammonia Refrigeration Piping and Components* (1991, updated in 2018, and in effect until 2021 when the entirety of Bulletin No. 114 was incorporated as informative Appendix Q of ANSI/IIAR 2) ("IIAR Bull. 114"). These standards are consistently relied upon by refrigeration experts and some are incorporated by reference into state building and mechanical codes.

21. Respondent acquired the Facility from Getchell Bros, Inc. ("Getchell") in October 2021. The original ammonia refrigeration system was installed in 1998 with some changes

made over the years. Getchell had last made upgrades to the Facility in 2012. The Facility is subject to, among other things, ANSI/IIAR 9-2020.

22. On May 16, 2024, Respondent noted that approximately 85 lbs. of ammonia had been released into the atmosphere, from a pump seal that failed.

23. As a result of the release, Respondent completed a Mechanical Integrity ("MI") Compliance Audit and a Process Hazard Analysis ("PHA") for the Facility on June 19, 2024 and June 20, 2024, respectively. The MI Compliance Audit identified 216 deficiencies, and 56 deficiencies were identified in the PHA.

24. On November 8, 2024, EPA conducted an inspection at the Facility (the "Inspection"). The purpose of the Inspection was to determine whether Respondent was complying with Section 112(r) of the CAA and the Emergency and Community Right-to-Know Act. The EPA inspectors toured the Facility's perimeter, roof, combined ammonia machinery room ("AMR"), and ice making area.

25. The Inspection and EPA's review of information provided by Respondent revealed several potentially dangerous conditions relating to Respondent's refrigeration system (the "System"). These were explained in EPA's out-brief meeting at the conclusion of the Inspection and detailed in EPA's Inspection Report, which was provided to Respondent on January 15, 2025.

26. The potentially dangerous conditions regarding the use of anhydrous ammonia included, among others:

- a. The Facility's main access door from the outside into the AMR was not equipped with an emergency stop button to turn off compressors or emergency ventilation controls to turn on emergency ventilation;
- b. The main exit door from the AMR leading outside was not equipped with panic hardware and was not tight fitting along the entrance floor;
- c. The placement of the air intake into the AMR and interior exhaust fans at approximately the same level may "short circuit" air flow, inhibiting proper ventilation to the AMR;
- d. Ammonia detectors were not regularly calibrated in accordance with manufacturer's instructions;
- e. The Facility's ice production equipment was not isolated from the AMR;
- f. There was no emergency eyewash/shower unit located outside the AMR's primary door;
- g. Certain discharge headers for the Pressure Relieve Valves ("PRVs") located on the outside wall did not terminate at least 7.25' above surrounding working surfaces;
- h. Pipe labeling throughout the facility were missing or incomplete;
- i. Breached insulation and/or ice buildup indicative of breached insulation were observed on the high-pressure receiver, valves, and gauges, affecting readability of meters and usability of valves and gauges;
- j. High pressure ammonia piping and sight glass were not provided with adequate bump protection;

- k. Combustibles were stored in the AMR; and
- l. The workspace off the AMR did not have a separate exit, which could trap people during an ammonia release.

27. This Order addresses the deficiencies that inspectors observed, as expressly described herein. Those deficiencies are listed in the chart attached to and made a part of this AOC as Attachment 1. Attachment 1 provides examples of the industry standards of care that demonstrate that a hazard is recognized by the ammonia refrigeration industry and that the industry has identified a standard means for eliminating or reducing the hazard. Further, Attachment 1 also explains how each of the conditions could lead to a release or inhibit the Facility's ability to minimize any releases that do occur.

NOTICE OF VIOLATIONS

Count I: Failure To Design And Maintain A Safe Facility

28. The allegations in Paragraphs 1 through 27 are hereby realleged and incorporated herein by reference.

29. Pursuant to the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling, or storing extremely hazardous substances have a general duty, in the same manner and to the same extent as Section 654 of Title 29, to, among other things, design and maintain a safe facility, taking such steps as are necessary to prevent releases.

30. The recommended industry practice and standard of care for designing and maintaining a safe facility with an ammonia refrigeration system of the same size and type as Respondent's System is to base design considerations upon applicable design codes, federal

and state regulations, and industry guidelines to prevent releases or minimize their impacts as well as to develop and implement standard operating procedures, maintenance programs, personnel training programs, management of change practices, incident investigation procedures, self-audits, and preventative maintenance programs. EPA's *Guidance for Implementation of the General Duty Clause: Clean Air Act Section 112(r)(1)* (May 2000) ("EPA's GDC Guidance") explains broad categories of measures appropriate for preventing releases of extremely hazardous substances, and IIAR and others have developed more specific standards and guidelines for preventing releases of ammonia, set out in Attachment 1. These include, *inter alia*, the ANSI/IIAR Standards 2, 6 and 9; IIAR Bulletins; IIAR guidance including the Ammonia Refrigeration Management Guidelines ("ARM") for systems with less than 10,000 lbs. of ammonia; and NFPA 1: Fire Code, Section 53. The standards and guidance cited herein and in Attachment 1 are generally those that were in effect at the time of the inspection and at the time the Respondent acquired the Facility.

31. The instances in which EPA alleges that Respondent failed in its general duty to design and maintain the Facility in a safe manner, taking such steps as are necessary to prevent a release of an extremely hazardous substance, are listed under Conditions 1-7 of Attachment 1.

32. Examples of the industry standards of care for Respondent's failure to design and maintain the Facility in a safe manner, taking such steps as are necessary to prevent a release of an extremely hazardous substance, are also listed in Attachment 1.

33. Accordingly, by failing to (a) equip the Facility's main access door from the outside into AMR with an emergency stop button and emergency ventilation controls; (b) place

air intake into the AMR and interior exhaust fans at different levels to allow for proper ventilation to the AMR; (c) regularly calibrate ammonia detectors in accordance with manufacturer's instructions; (d) adequately label all ammonia and PRV piping throughout the facility; (e) ensure that ammonia piping and valves are provided with physical protection from accidental rupture due to external sources; (f) regularly inspect insulation and vapor barrier on equipment and piping, and ensure ammonia piping and equipment (including meters, valves, and gauges) are free from excessive ice buildup; and (g) ensure combustibles are stored in a separate location from the AMR, EPA alleges that Respondent failed to design and maintain a safe facility, in violation of the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

Count II: Failure to Minimize the Consequences of Accidental Releases that Might Occur

34. EPA realleges and incorporates by reference Paragraphs 1 through 33 of this document.

35. Pursuant to the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), owners and operators of stationary sources producing, processing, handling, or storing extremely hazardous substances (including anhydrous ammonia) have a general duty, in the same manner and to the same extent as Section 654 of Title 29, to, among other things, minimize the consequences of any accidental releases that do occur.

36. Industry standards and guidelines for minimizing the consequence of an accidental release from ammonia refrigeration systems are found, among other places, in the industry standards referenced in Attachment 1. They include emergency planning and

preparedness measures, as well as design and maintenance measures to minimize the severity and duration of releases that do occur.

37. The recommended industry practice and standard of care for *emergency response planning* at ammonia refrigeration systems of this size is to, inter alia, design and implement an emergency response plan that specifically addresses release scenarios developed from hazard analyses and facility-based knowledge, identifies emergency response equipment and its whereabouts, includes communication with and involvement of emergency planning and response officials, incorporates accident training for employees, and involves conducting periodic exercises to ensure that the plan is adequate to address emergency scenarios. EPA's GDC Guidance at 16-18. IIAR has developed standards and guidelines for emergency response planning, including, among other things, ANSI/IIAR 9,² the ARM,³ and IIAR's *Critical Task Guidelines for Ammonia Refrigeration System Emergency Planning*.

² For example, Chapter 7 of Standard 9: Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems ("ANSI/IIAR 9") provides that refrigeration facilities should provide directions for the emergency shutdown of the system at a location that is readily accessible to trained refrigeration system staff and trained emergency responders. Such documentation should include, among other items, instructions with details and steps for shutting down the system in an emergency, the name and telephone numbers of the refrigeration operating and maintenance staff, the names and telephone numbers of all local, state, and federal agencies to be contacted as required in the event of a reportable incident, the quantity of ammonia in the system, and emergency facility contact title and phone number to call in the event of an alarm or ammonia release. IIAR 9-2020, Chapter 7.

³ Chapter 10 of IIAR's ARM Program (Guidelines and Templates) for smaller ammonia refrigeration systems provides that refrigeration facilities should develop an up-to-date, facility specific emergency response plan that accurately describes the facility and the surrounding community. Such a plan should include, among other items, personnel involved in the emergency action plan and their roles and responsibilities, procedures for incident discovery, emergency evacuation procedures and routes, procedures for external reporting of emergencies, procedures for responding to emergencies if appropriate, incident termination and follow-up procedures, employee training, drills, and coordination with off-site responders. IIAR ARM Program Templates, Chapter 10.

38. The instances in which EPA alleges that Respondent failed in its general duty to minimize the consequences of a release should one occur are listed under Conditions 1-4 and 8-11 of Attachment 1.

39. Examples of the industry standards of care for Respondent's failure to minimize the consequences of a release should one occur are also listed in Attachment 1.

40. Accordingly, by failing to (a) equip the Facility's main access door from the outside into AMR with an emergency stop button, emergency ventilation controls; (b) place air intake into the AMR and interior exhaust fans at different levels to allow for proper ventilation to the AMR; (c) regularly calibrate ammonia detectors in accordance with manufacturer's instructions; (d) isolate the Facility's AMR from the ice production equipment; (e) ensure that the System's pressure relief vent lines and ventilation system discharge to safe locations; (f) ensure that doors to the machinery rooms are tight-fitting and equipped with panic hardware; and (g) ensure there is an emergency eyewash/shower unit located outside the AMR's primary door, EPA alleges that Respondent failed to minimize the consequences of an accidental release should one occur, in violation of the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

ADMINISTRATIVE ORDER ON CONSENT

41. Based on the foregoing findings of violation, it is hereby ordered and agreed that Respondent shall comply with the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. § 7413(r)(1). Specifically, EPA and Respondent agree that Respondent shall correct Conditions 1-4, 6, and 8-11 in Attachment 1, in accordance with the latest version of the Industry

Standards of Care, as expeditiously as practicable, but in any event no later than six (6) months after the effective date of this Order.

42. By no later than 6 months after the effective date of this Order, Respondent shall submit:

- a. A certification that the actions in Paragraph 41 above have been fully implemented pursuant to the provisions of this Order and that Respondent is in compliance with the General Duty Clause of the CAA for Conditions 1-4, 6, and 8-11;
- b. Supporting documentation showing correction of the deficiencies in Paragraph 41. Such documentation should include a narrative description of the actions taken, the dates the action was taken, and any relevant supporting information. The documentation may include, for example: copies of documents, ventilation calculations, and photographs; and
- c. A list of expenditures associated with implementing the requirements of this Order.

43. EPA and Respondent agree that Respondent shall correct Conditions 5 and 7 in Attachment 1, in accordance with the latest version of the Industry Standards of Care, as expeditiously as practicable, but in any event no later than February 28, 2026.

44. By no later than February 28, 2026, Respondent shall submit:

- a. A certification that the actions in Paragraph 43 above have been fully implemented pursuant to the provisions of this Order and that Respondent is in compliance with the General Duty Clause of the CAA;

- b. Supporting documentation showing correction of the deficiencies in Paragraph 43. Such documentation should include a narrative description of the actions taken, the dates the action was taken, and any relevant supporting information. The documentation may include, for example: copies of documents, ventilation calculations, and photographs;
- c. A list of expenditures associated with implementing the requirements of this Order; and
- d. Supporting documentation showing that: (1) Respondent evaluated compliance with ANSI/IIAR 9 at all other ammonia refrigeration systems owned or operated by Respondent. The certification required by Paragraph 43 shall also contain the following statement signed by an officer of Respondent:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. (Signature and date)

45. All submissions or correspondence shall be considered effective upon receipt and shall be emailed to:

Drew Meyer, Environmental Scientist Waste and Chemical Compliance Section
Enforcement and Compliance Assurance Division
EPA Region 1
5 Post Office Square, Suite 100 (Mail Code 5-MO)
Boston, MA 02109-3912
meyer.drew@epa.gov

46. For the purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of the actions in Paragraphs 41–45 is restitution or required to come into compliance.

47. Pursuant to 26 U.S.C. § 6050X and 26 C.F.R. § 1.6050X-1, EPA is required to send to the Internal Revenue Service ("IRS") annually, a completed IRS Form 1098-F ("Fines, Penalties, and Other Amounts") with respect to any court order or settlement agreement (including administrative settlements), that require a payor to pay an aggregate amount that EPA reasonably believes will be equal to, or in excess of, \$50,000 for the payor's violation of any law or the investigation or inquiry into the payor's potential violation of any law, including amounts paid for "restitution or remediation of property" or to come "into compliance with a law." EPA is further required to furnish a written statement, which provides the same information provided to the IRS, to each payor (i.e., a copy of IRS Form 1098-F). Failure to comply with providing IRS Form W-9 or Tax Identification Number ("TIN"), as described below, may subject Respondent to a penalty, per 26 U.S.C. § 6723, 26 U.S.C. § 6724(d)(3), and 26 C.F.R. § 301.6723-1. To provide EPA with sufficient information to enable it to fulfill these obligations, EPA herein requires, and Respondent herein agrees, that:

- a. Respondent shall complete an IRS Form W-9 ("Request for Taxpayer Identification Number and Certification"), which is available at <https://www.irs.gov/pub/irs-pdf/fw9.pdf>;
- b. Respondent shall therein certify that its completed IRS Form W-9 includes Respondent's correct TIN or that Respondent has applied and is waiting for issuance of a TIN;
- c. Respondent shall email its completed Form W-9 to EPA's Cincinnati Finance Center at chalifou.jessica@epa.gov, within 30 days after the Effective Date

of this Order per Paragraph 66, and EPA recommends encrypting IRS Form W-9 email correspondence; and

d. In the event that Respondent has certified in its completed IRS Form W-9 that it has applied for a TIN and that TIN has not been issued to Respondent within 30 days after the Effective Date, then Respondent, using the same email address identified in the preceding sub-paragraph, shall further:

i. notify EPA's Cincinnati Finance Center of this fact, via email, within 30 days after the 30 days after the Effective Date of this Order per

Paragraph 66; and

ii. provide EPA's Cincinnati Finance Center with Respondent's TIN, via email, within five (5) days of Respondent's issuance and receipt of the TIN.

STIPULATED PENALTIES

48. Respondent must pay the following stipulated penalties to the United States for violations of this Order, subject to the limitations of CAA Section 113(d)(1), 42 U.S.C. § 7413(d)(1) on EPA's administrative penalty authority.

49. For failure to perform the work and submit the documents required by Paragraphs 41 through 45 above, in a manner consistent with the terms of this Order, or within the time required by this Order: \$500 per day for the first fifteen (15) days of such violation; \$1,000 per day for the sixteenth (16th) through thirtieth (30th) days of such violation; and \$1,500 per day for each day of such violation thereafter.

50. Penalties shall begin to accrue on the day after complete performance is due or a violation occurs and shall continue to accrue through the day the violation is corrected. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Order. Penalties shall continue to accrue regardless of whether EPA has notified Respondent of a violation.

51. All penalties owed to the United States under this Section shall be due and payable within thirty (30) days of Respondent's receipt from EPA of a written demand for payment of the penalties. Such written demand will describe the violation and indicate the amount of penalties due. EPA may, in its sole discretion, decide not to seek stipulated penalties or waive any portion of the stipulated penalties that accrue.

52. All penalties shall be made payable by certified or cashier's check to the United States of America and shall be remitted to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000.

All such checks shall contain "*In the matter of Arctic Glacier USA Inc - Sanford, Clean Air Act Administrative Order on Consent, EPA Region 1*" in the reference line. Copies of all such checks and letters forwarding the checks shall be sent simultaneously to the EPA contacts in Paragraph 45 above.

53. The payment of stipulated penalties shall in no way alter Respondent's obligation to comply with the terms and conditions of this Order.

54. The stipulated penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the terms or conditions of this Order.

55. No payments of stipulated penalties shall be tax deductible for federal tax purposes.

EFFECT OF ORDER, RESERVATION OF RIGHTS, AND JUDICIAL REVIEW

56. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this Order. This Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers and/or authorities, civil or criminal, which EPA has under any other statutory, regulatory, or common law authority of the United States.

57. This Order does not resolve any civil or criminal claims of the United States for the violations alleged in this Order, nor does it limit the rights of the United States to obtain penalties or injunctive relief under the CAA or other applicable federal law or regulation. See Section 113(a)(4) of the Clean Air Act, 42 U.S.C. § 7413(a)(4). Nothing herein shall be construed to limit the power of EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.

58. This Order is not intended to be, nor shall it be, construed to be a permit. Further, the parties acknowledge and agree that EPA's approval of this Order does not constitute a warranty or representation that requirements provided hereunder will meet the

requirements of Section 112(r) of the Clean Air Act, 42 U.S.C. § 7412(r). Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with the CAA or any other applicable local, State, or federal laws and regulations. Nor shall compliance restrict EPA's authority to seek compliance with any applicable laws or regulations or be construed to be a ruling on, or determination of, any issue related to any federal, state, or local permit.

59. Respondent has entered into this Order in good faith without any trial or adjudication of any issue of fact or law. Respondent reserves all rights and defenses it may have regarding factual and legal allegations within this Order and with respect to its compliance with the Order, except that, for the purpose of this proceeding, Respondent admits the jurisdictional allegations in this Order, neither admits nor denies specific factual or legal allegations made in the Order, and consents to the compliance actions and conditions specified in the Order.

60. For the purposes of this Order and its enforcement, Respondent waives any and all remedies, claims for relief, and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1).

61. In any subsequent administrative or judicial proceeding initiated by EPA or the United States for injunctive or other appropriate relief relating to the Facility, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any

contention that the claims raised by EPA or the United States in the subsequent proceeding were or should have been raised in the present matter.

62. Neither EPA nor the United States, by issuance of this Order, assumes any liability for any acts or omissions by Respondent or its employees, agents, contractors, or consultants engaged to carry out any action or activity pursuant to this Order. Nor shall EPA or the United States be held as a party to any contract entered into by Respondent or by its employees, agents, contractors, or consultants.

63. The Parties shall bear their own costs and fees in this action, including attorneys' fees.

MODIFICATION

64. This Order may only be modified by mutual agreement of the Parties. Any agreed-upon modifications shall be in writing and signed by both Parties, shall have as their effective date the date on which they are signed by EPA, and shall be incorporated into this Order. Changes to scheduling may be approved by the EPA's Manager for the Waste and Chemical Compliance Section instead of the Director of the Enforcement and Compliance Assurance Division.

SEVERABILITY

65. If any provision or authority of this Order or the application of this Order to any Party or circumstance is held by any judicial or administrative authority to be invalid, the remainder of the Order shall remain in force and shall not be affected thereby.

EFFECTIVE DATE

66. Pursuant to Section 113(a)(4) of the CAA, an order does not take effect until the person to whom it has been issued has had an opportunity to confer with EPA concerning the alleged violations. By signing this Order, Respondent acknowledges and agrees that it has been provided an opportunity to confer with EPA prior to issuance of this Order. Accordingly, this Order shall take effect immediately upon receipt by Respondent of a fully executed copy of the Order.

67. The Order shall apply to and be binding upon Respondent, its officers, agents, trustees, servants, employees, authorized representatives, successors, and assigns, and to all persons, firms, and corporations acting under, through or for Respondent. From the Effective Date of this Order until the Termination Date as set out in Paragraph 70 below, Respondent must give written notice and a copy of this Order to any successors in interest prior to any transfer of ownership or control of any portion of or interest in the Facility. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to the EPA. In the event of any such transfer, assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this Order unless the EPA has provided written approval of the release of said obligations or liabilities.

68. This action is not subject to Office of Management and Budget review under the Paperwork Reduction Act, 44 U.S.C. Chapter 35.

69. Each undersigned representative of the Parties certifies that he or she is authorized to enter into the terms and conditions of this Order to execute and bind legally the Parties to this document.

TERMINATION

70. This Order shall terminate on the earlier of the following (the "Termination Date") at which point Respondent shall operate in compliance with the Act:

- a. One (1) year after the Effective Date of this Order;
- b. The effective date of any determination by the EPA that Respondent has achieved compliance with all terms of this Order; or
- c. Immediately upon receipt by Respondent of notice from the EPA finding that an imminent and substantial endangerment to public health, welfare, or the environment has occurred.

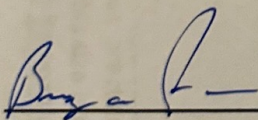
FOR U.S. ENVIRONMENTAL PROTECTION AGENCY

JAMES CHOW

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James Chow, Director
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 1

FOR RESPONDENT:



Bryan Pettis
Senior Manager
Arctic Glacier USA Inc – Sanford

Date: 4/14/2025

Attachment 1

Alleged Hazards/Dangerous Condition	GDC Violation	How Condition Could Lead to or Exacerbate the Consequences of a Release, Causing Harm	Examples of Industry Standards of Care, Showing that (1) Hazard is Recognized by Owner/Operator's Industry, and (2) There are Feasible Way(s) to Eliminate or Reduce the Hazard
<u>Condition 1</u> The Facility's main access design and door from the outside into AMR was not equipped with an emergency stop button to turn off compressors or emergency ventilation controls to turn on emergency ventilation.	Failure to maintain a safe facility taking such steps as are necessary to prevent releases.	Creates risk of harm to workers and emergency responders who cannot quickly shut down or properly ventilate machinery room without having to enter the room, which could contain dangerous levels of vapors. The delay could also contribute to a longer ammonia release time, increasing risks to workers, emergency responders, and to people off-site and the environment. Buildup of vapors could create flammable conditions that could lead to a bigger release.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to provide clearly identified emergency stop and emergency ventilation switches immediately outside the machinery room with override capability. <i>See, e.g.,</i> ANSI/IIAR 9-2020 §§ 7.3.11.1 (A clearly identified emergency shut-off switch with a tamper-resistant cover shall be located outside and adjacent to the designated principal machinery room door. The switch shall provide off-only control of refrigerant compressors, refrigerant pumps, and normally closed automatic refrigerant valves located in the machinery room. The function of the switch shall be clearly marked by signage near the controls.), 7.3.11.2 (A clearly identified control switch for emergency ventilation with a tamper-resistant cover shall be located outside the machinery room and adjacent to the designated principal machinery room door unless the continuous ventilation operates at a rate at or above that required for emergency ventilation. The switch shall provide "ON/AUTO" override capability for emergency ventilation. The function of the switch shall be clearly marked by signage near the controls.).
<u>Condition 2</u> Air intake into the AMR and interior exhaust fans	Failure to design and maintain a	Without adequate ventilation, vapors are more likely to build up	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to discharge vertically upward and for make-up air intakes to be positioned to draw uncontaminated

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placement at approximately the same level may "short circuit" air flow, inhibiting proper ventilation to the AMR.	safe facility taking such steps as are necessary to prevent releases.	to levels that are significant inhalation and dermal hazards or that risk causing fire or explosion. Also, where emergency ventilation function is hampered, the buildup of dangerous levels of toxic/flammable vapors in a machinery room can delay the entry of emergency response personnel to shut off the system, resulting in a prolonged release.	outdoor air. See, e.g., ANSI/IIAR 9-2020 § 7.3.14.3 (Make-up air shall be provided to replace air being exhausted. Make-up air supply locations in the machinery room shall prevent shortcircuiting of the make-up air directly to the exhaust. Intakes for make-up air shall draw uncontaminated outdoor air. Intakes for make-up air to the machinery room shall serve only the machinery room.).
<u>Condition 3</u> Ammonia detectors were not regularly calibrated in accordance with manufacturer's instructions.	Failure to redesign and maintain a safe facility taking such steps as are necessary to prevent releases.	Ammonia alarms provide early warning that a release is taking place, enabling quick response and protecting workers, emergency responders, and the public from a larger release. It is essential for detectors to be properly placed,	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to follow manufacturer's recommendations for testing ammonia detectors and alarms or, where not available, to test at least annually. See, e.g., ANSI/IIAR 9-2020 § 5.1 (All equipment and system components shall be inspected, tested, and maintained in accordance with ANSI/IIAR 6 (2019).); ANSI/IIAR 6-2019 § 12.1 ([Inspection, Testing, and Maintenance] tasks shall be performed on Safety Systems for Emergency Ventilation, Emergency Shutdown Switches, Ammonia Detection and Alarms, Computer Controls, and Emergency Eyewash and Safety Showers at the indicated frequencies in Tables 12.1-12.5 or per manufacturers' instructions, unless a different

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	Failure to minimize the consequences of releases which do occur.	maintained, calibrated, set at the proper set-points, and connected to alarms and other safety systems so that they can fulfill their function.	frequency is justified in accordance with Section 5.2.1., Table 12.3 (Calling for, among other things, semiannual calibration of ammonia detector sensors, annual testing of detectors to confirm exposure to ammonia gas as specified levels shuts down refrigeration equipment and activates the emergency ventilation system, and annual testing of alarms.); NFPA 1-2012 § 53.2.3.1.7 (Detection and alarm systems shall be installed and maintained in accordance with the equipment manufacturers' specifications.); 53.3.2.2 (listing refrigerant vapor detection and alarm systems as emergency devices/systems that shall be periodically tested in accordance with the manufacturers' specifications and as required by the AHJ).
Condition 4 Combustibles were stored in the AMR.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	Exacerbates risk of fire or explosion, which could cause an ammonia release or make an ammonia release more dangerous. Ammonia is flammable at certain concentrations.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to ensure that combustible materials are not stored in an ammonia machinery room unless in fire-rated storage containers. See, e.g., ANSI/IIAR 9-2020 § 7.3.4 (Combustible materials shall not be stored in machinery rooms outside of approved fire-rated storage containers.); NFPA 1-2006 § 53.10.8.2 (Flammable and combustible materials shall not be stored in refrigeration machinery rooms except for incidental materials necessary for the safe and proper operation of the system.); NFPA 1-2012 § 53.3.1.3.1 (same).
	Failure to minimize the consequences of releases which do occur		

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<u>Condition 5</u> Pipe labeling throughout the facility were missing or incomplete, including on some of the exterior ammonia piping and PRV piping.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	The lack of proper pipe labeling makes it more difficult to properly maintain system, increases chance of accidental release of ammonia, and could frustrate efforts to respond quickly in the event of a release.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to label all piping with the identity, physical state, and relative pressure of the contents, as well as direction of flow. <i>See, e.g., ANSI/IIAR 9-2020 § 7.2.9.4</i> (Piping shall be labeled with the identity, physical state, and relative pressure of the contents, along with the pipe service and direction of flow.); IIAR Bull. 114 § 4.1 (Piping markers shall be designed to identify the refrigerant, the physical state of the refrigerant, the relative pressure level of the refrigerant, and the direction of flow.); ANSI/ASME 13.1-2007 (specifying conventions for labeling piping).
<u>Condition 6</u> Multiple valves and associated high pressure ammonia piping were not provided with adequate bump protection.	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	Lack of adequate bump protection risks ammonia release from accidental damage to system components.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to adequately safeguard ammonia system components to minimize possible accidental damage or rupture due to external sources. <i>See, e.g., ANSI/IIAR 9-2020 §§ 7.2.11.1</i> (Enclosures for ammonia equipment shall be suitable for the installation location and shall be provided with protection from physical and environmental damage as required for the installed location.), 7.2.12.1 (Where ammonia-containing equipment is installed in a location subject to physical damage, guarding or barricading shall be provided.).
<u>Condition 7</u> Breached insulation and/or ice buildup indicative of breached insulation were observed on the high-pressure receiver, valves, and gauges, effecting	Failure to design and maintain a safe facility taking such steps as are necessary to prevent releases.	Ice buildup can obscure valves and weigh down components, risking collapse and ammonia release and making it difficult to turn off components. It also exposes pipes to	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to ensure ammonia piping and equipment is free from excessive ice buildup. <i>See, e.g., ANSI/IIAR 9-2020 § 7.2.6.1</i> (Piping and equipment surfaces not intended for heat exchange shall be insulated, treated, or otherwise protected to mitigate condensation and excessive frost buildup where the surface temperature is below the dew point of the surrounding air during normal operation and in an area where condensation and frost could

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readability of meters and usability of valves and gauges.	prevent releases.	moisture, which can cause corrosion and pipe failure.	develop and become a hazard to occupants or cause damage to the structure, electrical equipment, or refrigeration system; piping and fittings constructed of corrosion-resistant materials or protected with a corrosion-resistant treatment must be routinely defrosted or otherwise managed to limit ice accumulation if not insulated; if defrost method of ice control used then must provide means to control and drain condensate.); ANSI/IIAR 6-2019, Sections 9.1 (Table 9.1 Inspection Task (g) requires verification that evaporators are free from excessive ice buildup), 11.1 (Table 11.1 Inspection Task (b) requires regular inspection of piping for frost and ice buildup), and 11.6 (Table 11.6 Inspection Task (b) requires regular inspection of valves for frost and ice buildup).
Condition 8 The Facility's ice production equipment was not isolated from the AMR.	Failure to minimize the consequences of releases which do occur.	Separating the ammonia machinery room from the remainder of the building by tight-fitting construction allows for containment of ammonia in the case of a release. Not having the ammonia equipment in a separate room with tight-fitting doors exacerbates exposure and harm to workers.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to separate the machinery room from the remainder of the building by tight-fitting construction. See, e.g., ANSI/IIAR 9 (2020) §§ 7.3.2.1 (The machinery room shall be separated from the remainder of the building by tight-fitting construction.), 7.3.1 (All machinery rooms shall comply with this chapter.).

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<u>Condition 9</u> Certain discharge headers for the Pressure Relieve Valves ("PRVs") located on the outside wall did not terminate at least 7.25' above surrounding working surfaces.	Failure to minimize the consequences of releases which do occur.	Improperly placed discharge reliefs and exhaust fans can result in ammonia being sprayed on people during a release, further exacerbating the consequences of a release.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to direct discharge from pressure relief devices and ventilation systems upward, to avoid spraying people with ammonia, and at least 7.25 feet above the roof. <i>See, e.g., ANSI/IIAR 9-2020 § 7.4.2.2</i> (The discharge termination from pressure relief devices relieving to atmosphere shall not be less than 7.25 feet above a roof that is solely occupied during service and inspection.).
<u>Condition 10</u> The main exit door from the AMR leading outside was not equipped with panic hardware and was not tight fitting along the entrance floor.	Failure to minimize the consequences of releases which do occur.	In the event of an ammonia release inside the machinery room or the pump room, the failure to have tight-fitting doors risk the spread of ammonia vapors outside the room. Also, it is more difficult for employees to escape when the doors do not have panic hardware.	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to ensure that all machinery room doors are self-closing, tight-fitting, equipped with panic hardware, and hinged to swing in the direction of egress. <i>See, e.g., ANSI/IIAR 9-2020 §§ 7.3.2.1</i> (The machinery room shall be separated from the remainder of the building by tight-fitting construction with a one-hour fire-resistance rating.), <i>7.3.9.2</i> (Machinery room doors shall be self-closing and tight fitting. Doors that are part of the means of egress shall be equipped with panic hardware and shall be side hinged to swing in the direction of egress for occupants leaving the machinery room . . .).
<u>Condition 11</u> There was no emergency eyewash/shower unit located outside the AMR's primary door.	Failure to minimize the consequences of releases	Makes it difficult for emergency responders and workers to wash off this corrosive, toxic	The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to provide at least one easily accessible eyewash/safety shower unit in each machinery room and one easily accessible eyewash/safety shower unit outside each machinery room. <i>See, e.g., ANSI/IIAR 9-2020 §§ 7.3.7.1</i> (Each machinery room shall

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	which do occur.	chemical in the event of exposure.	have access to a minimum of two eyewash/safety shower units, one located inside the machinery room and one located outside of the machinery room, each meeting the requirements in Section 7.3.7.3.), 7.3.7.3 (Emergency eyewash/safety shower unit installations shall comply with ANSI/ISEA Z358.1.).