U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 1

EPCRA, CERCLA, and CAA § 112(r) Inspection Report

Date: November 9, 2021

From: Leonard B. Wallace, IV, Andrew Meyer, and Tyler Dierks, USEPA Inspectors

Through: Mary Jane O'Donnell, Chief

Waste and Chemical Compliance Section

To: File

Subject: Chemical Accident Investigation and Inspection, under Clean Air Act (CAA) Section 112(r) and Section 112 (r) (1) and Emergency Planning and Community Right-To-Know Act (EPCRA) Sections 302-312, and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 103 of Seafreeze, Limited, North Kingstown, RI

I. GENERAL INFORMATION

Facility Name: Seafreeze, Ltd.

DUNS Number: 13-100-5886

EPA Facility Identifier: FRS ID: 110043251389

Address: 100 Davisville Road Pier, North Kingstown, RI 02852

Inspector Names: Leonard B. Wallace, IV, U.S. Environmental Protection Agency (EPA) Region 1

Tyler Diercks, EPA Region 1

Andrew Loll, Eastern Research Group, Inc. (ERG)

Inspection Date: July 8, 2021

Type of Inspection: CAA § 112(r)/EPCRA/CERCLA Compliance Evaluation Inspection

Purpose of Inspection: Inspection of the Seafreeze, Ltd. facility for compliance with EPA CAA § 112(r)(1) General Duty Clause (GDC), CERCLA § 103, and EPCRA §§ 302-312.The facility was selected because it operates an ammonia refrigeration system and the facility had three prior accidents involving anhydrous ammonia since 2020.

Current Owner: IMV Holding

Current Operator: Seafreeze, Ltd.

Primary NAICS codes: 493110, General Warehousing and Storage

Number of full-time employees: 30 FTEs

Estimated Annual Sales: $9.8 million dollars

Relationship to other firms, parent corporation, subsidiaries, and location of off-site facilities: Seafreeze, Ltd. is a subsidiary Yo Plant LLC. Yo Plant LLC is a subsidiary of IMV Holding, an international company based in the Netherlands that runs fishing operations in North America, South America, Asia, Africa, and Europe. IMV Holdings operates the North Kingston, RI facility and other fishing operations in the U.S. including Stavis Seafoods which it acquired in January 2018. IMV Holdings acquired Seafreeze, Ltd. in April 2019. Seafreeze operates another fish processing and refrigerated storage facility in Narragansett, RI.

II. GENERAL FACILITY DESCRIPTION

The Seafreeze, Ltd. facility (Seafreeze or Facility) is located in North Kingstown, RI and processes and stores frozen fish. The Facility operates two fishing trawlers and performs maintenance on the vessels. The Facility was built in the early 1980s and the current ammonia refrigeration system was installed in the early 2000's. The Facility employs approximately 16 full time employees and another 16 to 18 seasonal employees and operates one shift daily seven days per week.

All production operations and administrative offices were located in a two-story 86,000 square-foot building located at 100 Davisville Road Pier. The administrative offices were located on the second floor of the building in the southeast corner. The main building included three freezer rooms, two loading dock areas with eight truck bays along the south side of the building, a maintenance shop area, a forklift maintenance and battery charging room, an auxiliary chemical storage room, the ammonia machinery room (AMR), and railcar loading docks along the north side of the building. The Facility maintained a large storage shed on the north side of the building used for storing fishing nets and equipment, compressed gas cylinders, and other parts. There were multiple intermodal shipping containers permanently positions near the maintenance shed that store miscellaneous equipment and packaging supplies. The Facility was located within a secured port area accessed through a security guard point.

The ammonia refrigeration system contained 8,763 lbs of anhydrous ammonia according to theoretical calculations performed by the system installer and maintenance contractor, Northeast Distributers. The system served all of the freezer rooms and loading dock areas. The current AMR was located on the north side of the building adjacent to the Freezer #1 and Freezer #2 rooms. The AMR contained compressors, a suction accumulator, intercooler, autopurger, and associated piping. The control pressure receiver (CPR) was located outside the east wall of the AMR. Two surge drums and associated piping servicing Freezer #2 were located outside the AMR and along the north exterior wall of Freezer #2. Two evaporative condensers and a thermosyphon/high-pressure receiver (HPR) were located on the roof of the AMR. The surge drums and penthouse evaporators for Freezer #2 and piping for the Freezer Dock Area evaporators were located on the upper roof. The original ammonia refrigeration system equipment including pressure vessels, compressors, and associated piping were located in a room accessed through the shop area. The equipment has been decommissioned.

According to the Seafreeze Reporting Year (RY) 2020 Tier II report, the Facility stored several extremely hazardous substances (EHSs) that exceed threshold planning quantities (TPQ) including 8,700 lbs of anhydrous ammonia and 3,636 lbs of sulfuric acid (based 20-wt% sulfuric acid reported for 18,181 lbs of lead-acid batteries).

Seafreeze has had three incidents since 2020 resulting in releases of anhydrous ammonia. On November 22, 2020, the facility released an estimated 16 lbs of ammonia from an oil injection line on Booster #1 compressor. On January 6, 2021, the facility released ammonia from an oil pump seal on Booster #1 compressor. The Facility estimated the release was less than one pound. On June 29, 2021, the facility released an estimated 9 lbs of ammonia from a leak on the autopurger, resulting in one injury to a Seafreeze employee responding to the release.

III. IN-BRIEF/OPENING CONFERENCE

The EPA inspection team comprising Leonard B. Wallace, IV and Tyler Diercks EPA inspectors, and Andrew Loll, Eastern Research Group, Inc. (ERG) contract inspector, entered the Facility at approximately 9:00 a.m. Charles Colley, Department of Homeland Security (DHS) inspector; John Goins and Eric Oladapo, OSHA inspectors; John Batzinga and John Linacre, North Kingstown Fire Department; Thomas Campbell and Andrew Palmer, Rhode Island Department of Emergency Management; and David DiMaio and Rich Matarese, Rhode Island State Fire Marshall's Office also participated in the inspection. The inspection team presented identification to Bradley Kernan, Seafreeze Assistant Plant Engineer, during the opening conference in the administrative office area. The Facility's EPCRA/Emergency Response Plan compliance consultant and the Facility's refrigeration contractor were also present throughout the inspection (see table below). Inspector Wallace conducted the opening meeting and explained the reason and scope of the inspection.

Inspector Wallace presented the EPCRA Notice of Inspection to Mr. Kernan, who signed as the Recipient of the Notice. Mr. Kernan did not attempt to deny facility entry to the inspectors. Mr. Kernan did not claim any information as Confidential Business Information (CBI). Facility employees are not represented by a union.

Facility Representatives:

Name	Title/Company	Phone Number	E-mail
Brad Kernan	Assistant Plant Engineer/Seafreeze	401-230-9244	brad@seafreezeltd.com
Ken Peterson	President/Northeast Distributers	781-447-0073	kenjr@nedinc.com
E. Stefan Coutoulakis	Compliance Consultant/ESC Training LLC	401-241-5600	escapetraining@yahoo.com

Inspector Wallace shared the following guidance documents with facility representatives:

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)
7. Safety Standards for Ammonia Refrigeration

Inspector Wallace stated that after the opening meeting, the inspectors would do a walk-through inspection of the Facility's covered process and all other facility areas. He stated the inspection team would be taking photographs of items and areas of interest and a copy of all photographs taken would be sent to the Facility representative after the inspection.

IV. PHYSICAL INSPECTION

The EPA inspection team conducted a walk around of the following areas at Seafreeze:

1. Building Perimeter
2. Storage Building
3. Roof
4. Ammonia Machinery Room (AMR)
5. Maintenance Shop Area
6. Freezer and Freezer Dock Area Rooms
7. Forklift Maintenance and Auxiliary Storage Rooms

Inspector Wallace took a total of 214 digital photographs and 3 videos during the one-day inspection to provide reference documentation of conditions observed. The photographs are referenced throughout the document.

<u>Building Perimeter</u>

The EPA inspection team toured the perimeter of the building. The main entrance and parking lot for the building was on the south side of the building near the southeast corner. The boat docks were located on the east side of the building The Facility stored fork truck propane cylinders, compressed gas cylinders, and empty wooden pallets along the east wall. A loading dock with a metal ramp and access to garbage dumpsters exited the building on the east side. A large maintenance/storage outbuilding was located on the north side of the building behind the shop areas and Freezer #1. Three intermodal trailers and other material storage were located around the storage building. The access drive and approach to

the current AMR was located between the north wall of the main building and the storage building. The CPR, centralized oil collection tank, Freezer #1 surge drums, and electrical transformer were located in the access drive area outside the AMR. Facility representatives stated that an ongoing project to install a working platform for the surge drums and piping was being conducted. EPA inspectors observed structural steel installed that will be used to support the platform.

The stairs accessing the AMR roof were located directly outside the designated primary entrance to the AMR on the east wall of the room. A railroad siding and access loading dock was located on the north side of the building and a train was parked on the siding at the time of the inspection. Based on a tour of the area, the inspection team identified the following areas of concern:

- The Facility did not have windsocks visible at every approach and point of egress to the facility to inform emergency responders and evacuating personnel of the prevailing wind direction. The Facility did have windsocks on the south side of the building near the loading docks and on the north side of the building attached to one of the condenser platforms.

- The ammonia alarm lights above the main entrance to the Facility were not labeled to indicate the meaning of the lights and there was no audible alarm (see Photograph 5). Facility representatives stated the green light indicated that no ammonia was detected, but the green light was not illuminated.

- There were no NFPA hazard diamonds on or near any of the entrances to the Facility except for the AMR (see Photographs 5, 10, and 52).

- There were two fork truck propane cylinder storage cages located next to the east wall of the building. The cages were not secured and were not grounded. None of the cylinders contained labels to indicate if the cylinders were full or empty. One of the cages were missing an NFPA hazard diamond. An unsecured, freestanding 20-lb liquified propane gas (LPG) cylinder was located next to the cages (see Photographs 7 through 9).

- Empty wooden pallets was stored less than 10 feet from the side of the building (see Photographs 7 and 10).

- The facility has a flammable cylinder cage located on the east side of the building that was not anchored to the ground, grounded, or secured from unauthorized entry. The cage contained 12 oxygen cylinders. Inspectors observed three R-22 Freon Chlorodifluoromethane gas cylinders, one acetylene cylinder, and one cylinder with unknown contents sitting outside the cylinder cage and none were secured from falling. The label on the cylinder with unknown contents was illegible and the cylinder was severally corroded (see Photographs 13 through 19). Oxidizing and flammable gases were incompatible and should be stored separately.

- The facility has a cylinder cage located next to an intermodal storage container on the northeast side of the building. The cage was not anchored to the ground, grounded, or secured from unauthorized entry. There were several freestanding gas cylinders located outside the cage and not secured from falling or damage. The cylinders were a combination of R-22 Freon Chlorodifluoromethane gas, flammable gases, and oxygen. Some of the cylinders were severely corroded (see Photographs 22 through 25). Oxidizing and flammable gases were incompatible and should be stored separately.

- A wooden crate was positioned on top of an intermodal storage trailer located on the north side of the maintenance building and the crate was not secured (see Photograph 46).
- A portable storage tank used for diesel fuel was located outside the storage shed. The tank did not contain an NFPA diamond or labels to indicate the contents and hazards (see Photograph 48). Facility representatives stated the tank was empty.
- The facility was using an extension ladder as access to the roof over the old ammonia machinery room. The ladder was not properly secured, did not contain adequate access and was in the path of a second-floor egress (see Photographs 52 and 53).
- The ammonia alarm on the east wall of the AMR was not labeled to indicate the meaning of the alarm (see Photograph 57).
- Significant portions of the ammonia piping associated with the Controlled Pressure Receiver (CPR) were not labeled to indicate contents, direction of flow, and physical state (see Photographs 57, 59, and 65).
- The ammonia CPR outside the AMR was damp, contained peeling paint, and algae growth on the bottom (see Photographs 59 through 61, 82 through 84, and 88 through 91). Inspectors observed missing paint and surface corrosion around the King Valve neck on the tank and spots on associated CPR piping (see Photographs 63 through 65).
- The CPR tank support was not bolt down to the cement base under the tank (see Photographs 88, 89, 90, and 91).
- The CPR isolation/king valves were not labeled and neither the manual king valve on top of the tank or the automatic valve in the overhead piping inside the AMR were not accessible from the ground or a permanent working platform (see Photograph 60).
- The CPR label was peeling, and the vessel did not contain an NFPA hazard diamond (see Photograph 60).
- The only Emergency Eye Wash and Shower Equipment outside the AMR and near the outdoors ammonia-containing equipment was located on the north loading area and the stairs to the Emergency Eye Wash and Shower Equipment was blocked by barricade tape. In addition, materials were being stored in front of the shower (see Photographs 68 and 69). There was no Emergency Eye Wash and Shower Equipment outside the designated primary entrance to the AMR or near the CPR.
- Insulation on the surge drums and associated piping outside the AMR was damaged and contained algae growth in several places (see Photographs 70, 92, and 97 through 99).
- The emergency remote controls (E-Stop, king valve shutoff, and ventilation override) were located on the side of an unlabeled control box outside the designated primary entrance to the AMR. The signs for each control were small and not legible when approaching the area (see Photographs 71 and 101).

- The facility had a key-locked and bolted emergency pressure control box located outside the AMR that was not labeled and the local fire department was unaware that the box and controls existed (see Photograph 72).
- The pressure relief valves (PRVs) for the surge drums and associated equipment outside the AMR were manifolded together and the vent discharge pipe terminated below the adjacent roof line (see Photographs 93 and 94).
- There was construction on a multi-level working platform around the ammonia piping system (see Photographs 55, 57, 92, 93, 94, 95, 99, and 100). The RI Fire Marshal told the company to stop all work until plans are submitted to the state and authorized to do the work.
- Some of the insulated ammonia piping had been breached and some had ice buildup on the insulated ammonia pipes (see Photographs 97, 98, 99, and 102).
- Entry inside and outside doors into the AMR were not furnished with emergency shutdown documentation for the ammonia system, a pipe and instrumentation diagram (P&ID) of the system with critical valves marked, name and telephone numbers for refrigeration staff and emergency responders, and the names and telephone numbers of all corporate, local, state, and federal agencies to be contacted as required in the event of a reportable incident.

Storage Building

The EPA inspection team toured the storage building located on the north side of the main building. The building contained fishing nets and equipment, eight large cylinders R-22 Freon Chlorodifluoromethane gas containers, at least one freestanding R-22 Freon Chlorodifluoromethane gas cylinder, one free-standing oxygen cylinder, other compressed gas cylinders, oil and antifreeze drums, a forktruck skid-mounted diesel fuel tank, and a forktruck. The garage door on the building was open during the inspection. Based on a tour of the areas, the EPA inspection team identified the following areas of concern:

- The maintenance building contained several unsecured R-22 Freon Chlorodifluoromethane gas and oxygen cylinders. Several cylinders were missing guard caps over the valves (see Photographs 26, 27, and 30).
- The maintenance building contained two egress doors, but both doors were obstructed by materials stored in the building. Additionally, there was no clearance to walk through the building between materials stored on the floor (see Photographs 26, 32, 33, and 38).
- The maintenance building contained several oil and antifreeze drums that were not stored within secondary containment (see Photographs 32, 33, 34, 39, 40, and 41).
- A portable storage tank containing diesel fuel was being stored in the maintenance shed. The tank did not contain an NFPA diamond or labels to indicate the contents and hazards (see Photograph 42).

Roof

The EPA inspection team toured the roof areas with ammonia-containing equipment and piping with the exception of the roof over the maintenance shop and C Box room because there was no secure method of access to that roof (see observation under Building Perimeter related to extension ladder). The AMR roof contained two evaporative condensers, a HPR, and the AMR ventilation air discharge fans. This roof was accessed by stairs directly outside the designated primary entrance to the AMR. The upper roof above Freezer #1 was accessed by a permanent ladder. The upper roof contained two evaporator penthouses and associated surge drums and piping. Based on a tour of the areas, the EPA inspection team identified the following areas of concern:

- Inspectors observed significant corrosion on the HPR, associated piping, and structural steel on the roof between the two condensers (see Photographs 106 through 108, 112, 113, and 116).
- Inspectors observed damaged insulation and corroded piping on the upper roof of the building (see Photographs 120 through 124). Additionally, EPA inspectors observed several instances of the insulation jacketing being cut to accommodate perpendicular support steel and the cut insulation was not sealed to prevent water intrusion under the insulation (see Photographs 127 through 131).
- A PRV vent header on the AMR roof terminated horizontally below the adjacent roof line (see Photograph 133).
- Neither the AMR roof nor the Freezer #1 roof had more than one point of egress.
- None of the roofs contained any barriers or method of fall protection.

Ammonia Machinery Room

The EPA inspection team toured the AMR which includeed four screw compressors, an intercooler, a suction accumulator, an autopurger, and associated piping and equipment. The designated primary entrance was in the southeast corner of the east wall. A second entrance and garage door were located along the north wall of the room. An electrical switch room was located in the northeast corner and separated by double doors. Based on a tour of the areas, the EPA inspection team identified the following areas of concern:

- The safety shower inside the AMR was blocked by insulation materials being stored under the shower head (see Photograph 143).
- The solenoid-operated King valve in the AMR was approximately 10ft to 15ft above the ground with no permanent access and the valve was not labeled (see Photographs 149 and 151).
- The garage door in the AMR was open approximately 2 inches to 4 inches during the inspection (See Photograph 156). Therefore, the AMR was not sealed tightly.
- The portable fire extinguisher in the AMR near the garage door was not secured, there was no location sign, and the hose was partially obstructing the door (See Photograph 156).

- The AMR ventilation air intake louvers were mechanically operated and, according to facility representatives, do not fail open upon loss of power (see Photograph 157).
- Inspectors observed missing paint, moisture, and surface on an overhead valve and piping in the AMR (see Photographs 158 and 159).
- Inspectors observed cloth rigging straps hanging from roof steel (see Photograph 171).
- A drum of used oil was being stored in the AMR without secondary containment (see Photograph 173).
- The double doors from the electrical room open into the AMR rather than into the electrical room (see Photograph 174).
- Did not observe in the machinery a legible, permanent sign securely attached and easily accessible in any location on the ammonia refrigeration system displaying the following information:

  Name and address of the installer

  The refrigerant number and the amount of refrigerant in the system

  The field test pressure(s) applied

Maintenance Shop Area

The EPA inspection team toured the maintenance shop and surrounding areas located at the east end of the main building. The east end of the building was used to store empty pallets and other materials. In addition to the loading dock on the east wall, the area could be accessed by a garage door and ramp on the north side of the building. The maintenance shop contained workbenches, power tools, and parts storage on a second-floor mezzanine. The old ammonia refrigeration room was accessed through the maintenance shop and contains compressors, pressure vessels, piping, and associated equipment. The insulation jacketing on two of the vessels and some piping had been removed and inspectors observed a couple of locations where piping was disconnected (see Photographs 179 through 181). Another refrigerated room was located next to the maintenance shop identified as the C Box. An access hallway separates the shop area and C Box from Freezer #2 and leads to an exit door on the north side of the building. A door from the administrative area opened into the hallway outside the C Box room. Based on a tour of the areas, the EPA inspection team identified the following areas of concern:

- Mr. Kernan was unable at the time of the inspection to explain when the old ammonia was decommissioned and if all the ammonia and oil had been removed from all the equipment and piping.
- Miscellaneous parts and equipment were being stored under the metal open-air stairway in the maintenance shop leading to the spare parts area (see Photograph 176).
- The approach to the egress door in the hallway separating the Shop Area and Freezer #2 is blocked by a heavy wooden crate (see Photographs 182).

Freezer and Freezer Dock Area Rooms

The EPA inspection team toured the Freezer Rooms and Freezer Dock Areas. Freezer #2 was located in the middle of the building and Freezer #1 was adjacent to and west of Freezer #2. The Freezer Dock Areas were located outside each room. Freezer #2 Dock Area contained storage of empty pallets and had ceiling mounted evaporators. Freezer #1 Dock Area contained six active truck bays and ceiling mounted evaporators. Freezer #2 contained floor mounted blast evaporators and Freezer #1 contained penthouse evaporators. Based on a tour of the area, the EPA inspection team identified the following areas of concern:

- Several rows of empty wooden pallets stacked 6 to 8 feet high were being stored in the Freezer #2 Dock Area (see Photograph 184).
- The ammonia detectors in Freezer #2 were located near the ceiling at the front of the room and the blast evaporators were located at the back of the room. There were no detectors in proximity to the ammonia-containing equipment (see Photographs 187 and 193).
- The evaporators in Freezer #2 Dock Area were protected at the perimeter by floor mounted structural steel, but there were no physical barriers between the rectangular steel frame to protect the inner sections of the evaporators and associated piping (see Photograph 185). Facility representatives stated they had a project planned to install cross members between the protective steel frame.
- The ceiling-mounted evaporators in the Freezer #1 Dock Area did not contain physical protection from forklift or pallet damage (see Photographs 185 and 186). Facility representatives stated they have initiated a project to install physical barriers.

Forklift Maintenance and Auxiliary Storage Rooms

The EPA inspection team toured the forklift maintenance room and auxiliary storage room. The forklift maintenance room was used to perform work on the forklifts and other powered equipment at the Facility and to charge the lead-acid batteries. The room contained eight charging stations. The room was in the southwest corner of the building and accessed through a garage door or person door from Freezer #1 Dock Area. The auxiliary storage room was accessed through the forklift maintenance room. It was used to store used oil, paints, solvents, and other chemicals. The room also contained a burner used to provide building heat during the winter by burning the used motor oil. The used oil was stored in chemical totes in pallet racks around the perimeter of the room. Multiple flammable cabinets stored the paints, solvents, and other chemicals. The Facility also stored some small gasoline-powered handheld equipment such as weed wackers. Based on a tour of the area, the EPA inspection team identified the following areas of concern:

- The facility stored several cans of gasoline and gasoline-powered equipment inside the auxiliary storage room (see Photograph 207).
- None of the flammable storage cabinets in the auxiliary storage room were grounded or secured (see Photographs 207 through 211).
- The eyewash in the battery charging room was disconnected from the water supply and obstructed by equipment. There was no safety shower in the room (see Photograph 215).

- The battery charging room does not appear to contain a ventilation system to remove hydrogen gasses that may evolve from the lead-acid battery charging operations.

V. OUT-BRIEF/CLOSING CONFERENCE

Inspector Wallace scheduled and concluded the inspection with a virtual out-brief Microsoft Teams meeting on July 29, 2021 with facility representatives, discussing the preliminary areas of concern identified during the inspection.

The following areas of concern were identified during the out-brief and sent to the Facility via e-mail on July 28, 2021 and July 29, 2021:

1. Based on calibration labels on the ammonia detector control panels, the ammonia detection system has not been calibrated per manufacturer's recommendations and industry standards.
2. The three-color ammonia alarm light was not working properly, the green light was not illuminating over the enter door that leads to the office.
3. Ammonia system and other alarm lights were not labeled to indicate the meaning of the lights. Additionally, many locations did not have audible alarms. Note in the Ammonia Machinery Room (AMR) Ammonia Alarm Light were only red in color and not three colors of lights.
4. Doors entering facility and rooms containing hazardous materials did not have NFPA hazard diamonds.
5. Emergency Numbers and Emergency Response documentation were not posted outside the ammonia machinery room.
6. Facility was lacking windsocks at all approaches to the building to inform emergency responders and evacuating personnel of the prevailing wind direction.
7. Wooden pallets were stacked too close to the building on the east side of the building.
8. The facility has multiple fork truck propane cylinder storage racks on the east side of the building that were not anchored and grounded. One of the cages was missing an NFPA diamond. The cages were not secured. The cylinders were not labeled to indicate if they are empty or full. One gas grill cylinder was sitting outside the cages and is not secured.
9. The facility had a flammable cylinder cage located on the east side of the building that was not anchored to the ground, grounded, or secured from unauthorized entry. The cage contained 12 oxygen cylinders. Inspectors observed three Freon cylinders, one acetylene cylinder, and one cylinder with unknown contents sitting outside the cylinder cage and non were secured from falling. The label on the cylinder with unknown contents was illegible and the cylinder was severally corroded. Oxidizing and flammable gases were incompatible and should be stored separately.
10. The facility had a cylinder cage located next to an intermodal storage container on the northeast side of the building. The cage was not anchored to the ground, grounded, or secured from unauthorized entry. There were several freestanding gas cylinders located outside the cage and

not secured from falling or damage. The cylinders were a combination of freon, flammable gases, and oxygen. Oxidizing and flammable gases were incompatible and should be stored separately. Some of the cylinders were severely corroded.

11. The maintenance building on the north side of the main building contained several unsecured freon and oxygen cylinders. Several cylinders were missing guard caps over the valves.
12. The maintenance building contained two egress doors, but both doors were obstructed by materials stored in the building. Additionally, there were no clearance to walk through the building between materials stored on the floor.
13. The maintenance building contained several oil and antifreeze drums that were not stored within secondary containment.
14. A portable storage tank containing diesel fuel were being stored in the maintenance shed. The tank did not contain an NFPA diamond or labels to indicate the contents and hazards.
15. A wooden crate was positioned on top of an intermodal storage trailer located on the north side of the maintenance building and the crate was not secured.
16. The facility used an extension ladder as access to the roof over the old ammonia machinery room. The ladder was not properly secured, did not contain adequate access and was in the path of a second-floor egress.
17. The ammonia control pressure receiver (CPR) outside the ammonia machinery room (AMR) was damp, contained peeling paint, and algae growth on the bottom.
18. The CPR isolation/king valves were not labeled and neither the manual king valve on top of the tank or the automatic valve in the overhead piping inside the AMR were not accessible from the ground or a permanent working platform.
19. Significant portions of the ammonia piping were not labeled.
20. The CPR did not contain an NFPA diamond.
21. The only safety shower outside the AMR and near the outdoors ammonia-containing equipment was located on the north loading area and the stairs to the shower and eyewash was blocked by barricade tape. In addition, materials were being stored in front of the shower.
22. The emergency remote controls (E-Stop, king valve shutoff, and ventilation override) were located on the side of an unlabeled control box outside the designated primary entrance to the AMR. The signs for each control were small and not legible when approaching the area.
23. The facility had a key-locked emergency pressure control box located outside the AMR that was not labeled and the local fire department was unaware that the box and controls existed.
24. Insulation on the surge drums and associated piping outside the AMR was damaged in multiple locations and contained algae growth in several places.

25. The pressure relief valves (PRVs) for the surge drums and associated equipment outside the AMR were manifolded together and the vent discharge pipe terminated below the adjacent roof line.

26. EPA inspectors observed several instances of the insulation jacketing being cut to accommodate perpendicular support steel and the cut insulation was not sealed to prevent water intrusion under the insulation.

27. The high-pressure receiver and associated piping on the roof between the two condensers showed significant corrosion.

28. None of the roofs accessed had more than one point of egress.

29. Inspectors observed damaged insulation and corroded piping on the upper roof of the building.

30. The AMR ventilation air intake louvers were mechanically operated and did not fail open upon loss of power.

31. A drum of used oil was being stored in the AMR without secondary containment.

32. Miscellaneous equipment and materials was being stored under the open-air stairs to the mezzanine floor in the maintenance shop.

33. Multiple pressure vessels and associated piping for the old ammonia refrigeration system were located in a room behind the maintenance shop. Facility representatives did not know if the ammonia had been completely evacuated from the equipment.

34. An egress door adjacent to the old ammonia machinery room was obstructed by a wooden crate and other materials.

35. Several rows of empty wooden pallets were being stored in the Freezer 2 Dock Area.

36. The ammonia detectors in the Freezer rooms were located near the ceiling at the front of each room and the blast evaporators were located at the back of the rooms. There were no detectors in proximity to the ammonia-containing equipment.

37. The ceiling-mounted evaporators in the Freezer 1 Dock Area did not contain physical protection from forklift or pallet damage. Facility representatives stated they have initiated a project to install physical barriers.

38. The battery charging room did not appear to contain a ventilation system to remove hydrogen gasses that may evolve from the lead-acid battery charging operations.

39. None of the flammable storage cabinets in the auxiliary storage room were grounded or secured.

40. The facility was storing several cans of gasoline and gasoline-powered equipment inside the auxiliary storage room.

41. The eyewash in the battery charging room was disconnected from the water supply and obstructed by equipment. There was no safety shower in the room.

42. There was no roof fall protection system such as railings at the roof edges.

43. A permanent working platform was being built around and under the ammonia piping outside near the area of the emergency pressure control box and ammonia control pressure receiver (CPR) and the Facility had not received a hot work permit.

VII. 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, sulfuric acid in lead/acid batteries and ammonia were reported in RY2020 above TPQs.

(2) List or obtain documentation: Inspectors' observations; 2019 - 2020 Tier II reports

(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? Facility coordinators identified in RY 2020 Tier II are Brad Kernan and Patrick Masson.

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 MSDS chemicals on-site and to determine if 500 lb./10,000 lb./TPQ thresholds were exceeded? Unknown. Inspectors observed 8 large R-22 containers (estimated to contain either 1,000lbs) and several smaller cylinders.

(3) List of OSHA chemicals manufactured, processed, used/stored, and obtained? Unknown

(4) How were the maximum amounts determined? Unknown

(5) Section 311 info supplied to the:

SERC (Y/N): Unknown. Did not evaluate

LEPC (Y/N): Unknown. Did not evaluate

Local Fire Department(Y/N): Unknown. Did not evaluate

Date Unknown. Did not evaluate

Chemical List Unknown. Did not evaluate

MSDSs Unknown. Did not evaluate

(6) Have any new hazardous chemicals, mixtures, or substances been introduced into the facility in the last 5 years? Yes. Facility is contract manufacturer and hazardous chemicals/mixtures/substances change depending on manufacturing needs.

(7) If yes, has the facility submitted updated lists or MSDSs? Unknown. Did not evaluate

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

(1) Was Tier II form submitted for all required chemicals? TBD. Ammonia and sulfuric acid (in batteries) submitted for RYs 2019 and 2020. Facility may have over 10,000-lbs of R-22 stored at the facility.

(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? Facility has previously submitted Tier II reports to LEPC annually via electronic submission.

(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? Unknown.

(5) Table of EPCRA 312 Reportable Substances - RY 2020:

CAS #	Chemical	Approx. Max. Wt. on Site (Lbs.)	TPQ (Lbs.)	Approx. Ratio (Actual/TPQ)
7664-41-7	Ammonia, anhydrous	8,700	500	17.4
7664-93-9	Sulfuric Acid	2,690	1,000/500	2.7/5.4
Not Reported	Used Oil	36,500	10,000	3.7

VIII. ENFORCEMENT HISTORY

There has been no enforcement history at the Seafreeze, Ltd facility in North Kingston, RI in the past five years according to EPA's Enforcement and Compliance History Online (ECHO) System.

IX. ENVIRONMENTAL JUSTICE

EPA's ECHO indicates that the Facility is located in area of Environmental Justice interest for NPL Site proximity, RMP site proximity, hazardous waste proximity, and wastewater discharge proximity.

ATTACHMENT A

Google Earth Image of the Seafreeze, Ltd. Facility