

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1 - NEW ENGLAND

IN THE MATTER OF )  
)  
)

Cold Storage Solutions I, Inc. )  
310 Kenneth Welch Drive )  
Lakeville, MA 02347 )

Respondent )  
)  
)

Proceeding under Section 113(d) of the )  
Clean Air Act, 42 U.S.C. § 7413(d) )  
)

Docket Nos. CAA-01-2013-0063

COMPLAINT AND  
NOTICE OF OPPORTUNITY  
FOR HEARING

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**I. STATEMENT OF AUTHORITY**

1. The United States Environmental Protection Agency ("EPA") issues this administrative Complaint and Notice of Opportunity for Hearing ("Complaint") pursuant to Section 113(d) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(d). This action is subject to the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation/Termination or Suspension of Permits, 40 C.F.R. Part 22 ("Consolidated Rules of Practice"). The authority to issue this Complaint has been delegated to the Director of the Office of Environmental Stewardship, EPA Region 1.

2. The Complaint notifies Respondent Cold Storage Solutions I, Inc. ("CSSI" or "Respondent"), that EPA intends to assess penalties for Respondent's failure to comply with Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1) in its handling of ammonia at the company's Lakeville, Massachusetts cold storage warehouse.

3. The Notice of Opportunity for Hearing describes Respondent's option to file an Answer to the Complaint and to request a formal hearing.

## **II. STATUTORY AND REGULATORY AUTHORITY**

4. Pursuant to 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 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 to: (a) identify hazards which 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 accidental 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), 42 U.S.C. § 7412(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. Sections 113(a) and (d) of the CAA, 42 U.S.C. §§ 7413(a) and (d), provide for the assessment of civil penalties for violations of Section 112(r) of the CAA, 42 U.S.C. § 7412(r).

### **III. FACTUAL ALLEGATIONS**

9. CSSI is a domestic corporation organized under the laws of Massachusetts, with its principal office located in Lakeville, Massachusetts. As a corporation, Respondent is a "person" within the meaning of Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

10. CSSI operates a cold food storage warehouse at 310 Kenneth Welch Drive in Lakeville, Massachusetts (the "Facility").

11. The Facility abuts a railway line, is located within a third of a mile of Interstate Route 495, and is located within 1.5 miles of the downtown of neighboring Middleborough, two elementary schools, and a supermarket.

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

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

14. At the times relevant to the violations alleged herein, the Facility's ammonia refrigeration system ("System") used approximately 9,000 pounds of anhydrous ammonia. 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.

15. Ammonia presents a significant health hazard because it is corrosive to the skin, eyes, and lungs. Exposure to 300 parts per million is immediately dangerous to life and health. Ammonia is also flammable at concentrations of approximately 15% to 28% by volume in air. 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. In light of the potential hazards posed by the mishandling of anhydrous ammonia, industry trade associations have issued standards outlining the Recognized and Generally Accepted Good Engineering Practices in the ammonia refrigeration industry. In collaboration with the American National Standards Institute, the International Institute of Ammonia Refrigeration has issued (and updates) "Standard 2: Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems," along with other applicable standards and guidance. Also in collaboration with the American National Standards Institute, the American Society of Heating, Refrigerating and Air-Conditioning Engineers has issued (and updates) "Standard 15: Safety Standard for Refrigeration Systems." These standards are consistently relied upon by refrigeration experts and are sometimes incorporated into state building and mechanical codes.

16. The System was installed in 2011, using reused components. At all times relevant to the violations alleged herein, the System was a "closed-loop" refrigeration system with components and piping in three connected areas of the Facility: the Machinery Room, where most of the System equipment is located (including the receiver, three compressors, and the recirculator) and which has four Access Doors, an area exterior to the building where the condenser and piping are located, and the freezer warehouse spaces, where the evaporator(s) and associated piping are located.

17. On February 13, 2012, EPA inspectors visited the Facility ("Inspection") to assess Respondent's compliance with Section 112(r) of the CAA and with Sections 302-312 of the Emergency Planning and Community Right-to-Know Act ("EPCRA").

18. During the Inspection of the Facility and three related facilities, EPA requested and received certain documentation pertaining to the System, including the Facility's emergency response plan. Respondent provided EPA with a document titled, "Anhydrous Ammonia Emergency Response Plan for Cold Storage Solutions," dated June 19, 2009 ("Plan").

19. EPA later received copies of EPCRA "Tier II" Inventory Forms, which CSSI submitted to the relevant emergency response organizations for the first time in February 2012, covering the year 2011.

20. The Inspection and EPA's review of subsequently submitted information revealed that Respondent:

- a. Had not conducted an adequate hazard analysis of the System, using appropriate hazard assessment techniques;
- b. Did not have, or have available for EPA review, critical documents and information about the System that would allow Respondent to adequately identify hazards posed by the System and to maintain and safely operate it. For example, Respondent did not have a complete Piping and Instrumentation Diagram (the diagram it had lacked identification of the System's valves) or information, diagrams, and calculations concerning the ventilation capacity of the Machinery Room;

- c. Had not designed, installed, and operated an adequate ventilation system, ensuring that the Machinery Room had sufficient air sweep to clear it of ammonia fumes in case of emergency. The sole fresh inlet air vent openings were extremely remote (estimated by EPA to be at least 250 feet away), were located in an adjacent warehouse room with a closed door between it and the Machinery Room, and were completely blocked with heavy wood covers that were fastened in place;
- d. Had not designed and operated an air-tight, isolated Machinery Room, in that the northern Access Door was a sliding door rather than a tight-fitting and outward-opening door;
- e. Had not posted ammonia warning signs at each entrance to the Machinery Room or signs displaying a diagram and other information about the System's capacity, operation, alarms, and emergency shutdown process, near the compressor or outside any of the four Machinery Room doors;
- f. Had not labeled the components, pipes (except a single pipe on the ammonia recirculator), or valve systems (except a temporary sign hung on the King Valve);
- g. Had not kept the Machinery Room free of flammable material, in that it contained two drums of new and/or waste oil;
- h. Had not ensured that all components and piping, including the glycol poly-tank, were protected from forklift traffic or other potential impact;

- i. Did not have an eyewash and shower station just outside of the Machinery Room and did not have the necessary personal protective equipment to help protect employees in case of ammonia exposure or other emergency;
- j. Had not positioned the condenser relief valve discharge above the condenser or maintained paint on the condenser piping to prevent corrosion;
- k. Had not installed the main pressure-relief vent pipe in a safe manner. The vent pipe opening was on the side of the building, rather than above roof level. Further, not only was it aimed downwards instead of upwards, it was situated to vent in the general vicinity of both an employee break patio and where critical emergency hookups and connections (fire hose connections, main sprinkler valves, and natural gas shutoff valves) are located;
- l. Had not provided adequate ammonia detectors with associated alarms. There was a single ammonia detector in the Machinery Room, which was not near the receiver or overpressure vent piping. The Facility's detectors did not actuate visual alarms at each Machinery Room entrance.
- m. Had not provided emergency shutdown or ventilation switches for the System outside the principal Machinery Room door. The only emergency shutdown and ventilation switches for the System were located outside the northern Access Door, which cannot be considered the Machinery Room's principal door, given that it is approximately 250 feet away from where the equipment is located, does not afford any nearby egress to the outside, and is out of normal walking routes;

- n. Did not have handles on the King and other isolation valves, and these valves were not always accessible from permanent work surfaces. The handle for the King Valve was hanging nearby and would need to be retrieved to be used in an emergency. Additionally, the King Valve was only accessible by a ladder over the receiver;
- o. Had not developed an adequate emergency response program, including an up-to-date and accurate emergency action plan that addressed release scenarios based on hazards associated with the design, location, and operation of the Facility. For example, the emergency plan provided to EPA was drafted for another company's operations and only partially updated to reflect the specific conditions at the Facility. The Plan was dated over two years before the Facility opened, and it did not appear to include the Facility in its list of building-specific emergency contacts (only listing primary and alternate contacts for Buildings #1, #2, and #3, which are presumably the three related facilities operated by Respondent's sister companies prior to the opening of the Facility). The Plan erroneously included several references to itself as being the emergency plan for the company "American Refrigeration." The Plan also severely undercounted the size of the surrounding population (estimating the population within three miles to be 2,500 while EPA estimates indicate it is over 16,000) and neglected to include contact information for officials from the neighboring town of Middleborough even though the Facility is located near its populous downtown. The Plan also referenced an evacuation route plan that was not attached, and it inaccurately describes



aspects of the Facility, including the relative location of the Machinery Room within the Facility, and the existence of a detector in the main relief vent. Additionally, Respondent's failure to promptly notify the local fire departments of the presence of ammonia deprived emergency responders of information about the Facility, which would compromise their ability to safely respond to an emergency at the Facility.

21. EPA issued a Notice of Violation, Administrative Order and Reporting Requirement ("NOV/AO/RR") to Respondent pursuant to CAA Sections 113 and 114, 42 U.S.C. §§ 7413 and 7414, which became effective on April 24, 2013. Among other things, the NOV/AO/RR required Respondent to comply with the General Duty Clause at the Facility. Respondent had begun to address its compliance deficiencies after the Inspection and was likewise cooperative after receiving the NOV/AO/RR.

22. After receiving information from Respondent that it had complied with all of the NOV/AO/RR requirements, EPA re-inspected the Facility on August 5, 2013 ("Re-Inspection").

23. The Re-Inspection revealed that many of the deficiencies identified in Paragraph 20, above, had been corrected and that others were not fully and adequately resolved.

24. Additionally, information subsequently submitted by Respondent in response to the NOV/AO/RR revealed that Respondent:

- a. Had not developed and implemented an adequate training program, in that it had no records indicating that it had developed a training agenda nor provided and documented training to the necessary employees; and

- b. Had not developed and implemented an adequate maintenance program, in that it had no procedures and schedules for the inspection, testing, and preventative maintenance of the System and only sporadic inspection records.

#### IV. VIOLATIONS

##### **Count 1: Failure to Identify Hazards in Violation of the CAA's General Duty Clause**

25. The allegations in Paragraphs 1 through 24 are hereby realleged and incorporated herein by reference.

26. 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 to identify hazards that may result from accidental releases of such substances, using appropriate hazard assessment techniques.

27. The recommended industry practice and standard of care for identifying, analyzing, and evaluating potential hazards associated with ammonia refrigeration systems of this size is to use standard, industry-developed checklists, a "What If" analysis, or a Hazard and Operability study. See, e.g., U.S. Env'tl. Prot. Agency, Guidance for Implementation of the General Duty Clause Clean Air Act Section 112(r)(1) § 2.3.1 (2000) [hereinafter "EPA GDC Guidance"], available at <http://www.epa.gov/oem/docs/chem/gdcregionalguidance.pdf> (last checked Feb. 6, 2013).

28. At the time of the Inspection, Respondent had not conducted a hazard analysis of the System, using industry-recognized hazard assessment techniques.

29. Also, as described in Paragraph 20 above, inspectors observed potentially dangerous conditions and management practices at the Facility, including Respondent's failure to possess certain documentation and information about the System, its unsafe Facility design (including the location of the emergency ventilation and shutdown switches, the poor accessibility of isolation valves, and the dangerous positioning of the pressure-relief discharge), its failure to post critical information on and about the System to facilitate a quick response to releases, and its failure to develop an adequate emergency response plan that accurately reflected conditions at, and potential hazards posed by, the Facility. These deficiencies indicate a failure to adequately identify hazards associated with the release of ammonia at the Facility.

30. By failing to conduct an adequate hazard analysis of the System using appropriate hazard assessment techniques, Respondent failed to identify hazards that may result from accidental releases, in violation of the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

**Count 2: Failure to Design and Maintain a Safe Facility in Violation of the CAA's General Duty Clause**

31. The allegations in Paragraphs 1 through 30 are hereby realleged and incorporated herein by reference.

32. 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 also have a general duty to design and maintain a safe facility, taking such steps as are necessary to prevent releases.

Lack of Refrigeration System Documentation

33. As described in Paragraph 20(b), above, Respondent did not have, or have available for EPA review, critical information about the System and its operation that would allow Respondent to ensure safe operation of the System.

34. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to maintain this, and more, refrigeration system documentation, to help personnel identify hazards posed by the system and to safely maintain and operate the system. See, e.g., Int'l Inst. of Ammonia Refrigeration, Bulletin No. 110: Start-up, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems § 4 (1993) [hereinafter "IIAR Bull. 110"] (recommending retention of "[a]ll essential records relevant to the system..." including piping and instrumentation diagrams, other types of engineering diagrams, and refrigeration circuit and ventilation flow diagrams). See also Int'l Inst. of Ammonia Refrigeration, Ammonia Refrigeration Management Program §§ 3.4, 3.10 (2005) [hereinafter, "IIAR ARM"].

Inadequate Ventilation System Design and Operation

35. As described in Paragraph 20(c), above, Respondent had not designed, installed, and operated an adequate ventilation system, including by failing to have sufficient air sweep in the Machinery Room to clear it of ammonia fumes in case of emergency.

36. The recommended industry practice and standard of care for ammonia refrigeration systems of this size includes designing and installing a ventilation system based on calculations and other analysis of the ammonia system and Machinery Room to determine the air sweep necessary for safe operation in normal conditions and to clear ammonia fumes in case of emergency. See, e.g., Am. Nat'l Standards Inst./Int'l Inst. of

Ammonia Refrigeration, Standard 2-2008: Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems §§ 13.3.8 & .9 (2010 ed.) [hereinafter "IIAR 2-2008 (2010 ed.)"] (normal and emergency ventilation capacities); Am. Nat'l Standards Inst./Am. Soc'y of Heating, Refrigerating and Air-Conditioning Eng'rs, Standard 15-2010: Safety Standard for Refrigeration Systems § 8.11.5 (2010) [hereinafter "ASHRAE 15-2010"]. The openings for inlet air should be near the machinery, and they should be sufficient to allow the inlet air to replace that exhausted. See, e.g., IIAR 2-2008 (2010 ed.), *supra*, § 13.3.3; ASHRAE 15-2010, *supra*, § 8.11.4.

37. Also, as described in Paragraph 20(d), above, Respondent failed to ensure that the Machinery Room was designed to be air-tight, in that the northern Access Door was a sliding door rather than a tight-fitting and outward-opening door.

38. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to ensure that no air can flow from the Machinery Room to other parts of the building, to minimize the spreading of ammonia during any leak. Each Machinery Room door should have tight-fitting doors that open outward and that self-close if they open into building space. See, e.g., IIAR 2-2008 (2010 ed.), *supra*, §§ 13.1.1.6, 13.1.10.1; ASHRAE 15-2010, *supra*, §§ 8.11.2, 8.11.7.

#### Inadequate Signs and Labels

39. As described above in Paragraph 20(e), at the time of the Inspection, Respondent did not have sufficient signs to adequately identify many aspects of the Facility. None of the four Access Doors to the Machinery Room had, nor did the interior of the Machinery Room itself have, any signs notifying of the presence of ammonia

inside, restricting entry to authorized personnel, or containing information about the System's operation, alarms, or emergency shutdown process.

40. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to post signs warning of the presence of ammonia and restricting entry to authorized personnel at each entrance to the Machinery Room, see, e.g., IAR 2-2008 (2010 ed.), supra, § 13.1.2.4; ASHRAE 15-2010, supra, §§ 8.11.8, 11.2.4, and to post other signs with information about the operation of the System, including signs explaining the alarms and the emergency shutdown process, outside the principal Machinery Room door. See, e.g., IAR 2-2008 (2010 ed.), supra, §§ 13.1.10.4 (systems need "informative signs, emergency signs, charts and labels in accordance with [National Fire Protection Association] 704"), 13.2.4.1 (alarms), App. L (summarizing signage and providing examples); ASHRAE 15-2010, supra, §§ 8.11.2.1 (meaning of alarms at each entrance), 11.2.1 (installer name and address, amount and kind of refrigerant, amount and kind of lubricant, and field test pressure applied), 11.7 (emergency shutdown procedures and precautions in case of a breakdown or leak); Int'l Inst. of Ammonia Refrigeration, Bulletin No. 109: IAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System §§ 4.10.4 (1997) [hereinafter "IAR Bull. 109"] (general system information), 4.10.6 (evacuation plan with activation responsibility clearly indicated).

41. Also, as described above in Paragraph 20(f), at the time of the Inspection, the System components, pipes, and valve systems were unlabeled, with the exception of one pipe on the ammonia recirculator and a temporary sign on the King Valve.

42. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to label all system components, pipes, and valve systems. See, e.g., IIAR 2-2008 (2010 ed.), supra, § 10.5 (pipes need to be marked with physical state of refrigerant, relative pressure level, and direction of flow); ASHRAE 15-2010, supra, §§ 9.3 (pressure vessels), 9.12.6 (stop valves), 11.2.2 (piping, valves, and switches for refrigerant flow, ventilation, and compressor); IIAR ARM, supra, § 4.2 (listing the labeling of lines, emergency isolation valves, and safety systems as a part of writing operating procedures); IIAR Bull. 109, supra, §§ 4.1.1 (compressor nameplate information), 4.3.1 (heat exchanger and pressure vessel nameplates), 4.3.7 (same), 4.7.6 (all piping needs attached markers indicating the use of the pipe and direction of flow). See generally, Int'l Inst. of Ammonia Refrigeration, Bulletin No. 114: Guidelines for Identification of Ammonia Refrigeration Piping and System Components (1991) [hereinafter "IIAR Bull. 114"] (all piping should be identified with physical state of the refrigerant, the relative pressure level, and the direction of flow; all components of the system should be uniformly identified as to the name of the equipment and a pressure level designation). See also IIAR Bull. 109, supra, § 4.1.2 (warning against operating a compressor without a nameplate unless its limitations have been verified).

*Inadequate Basic Safety Practices*

43. As described above in Paragraph 20(g), at the time of the Inspection, Respondent had not maintained the Machinery Room to be clear and free of flammable storage.

44. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to store no flammable material in machine rooms.

See, e.g., IIAR 2-2008 (2010 ed.), supra, § 13.1.3.1.

45. Also, as described above in Paragraph 20(h), at the time of the Inspection, Respondent had not ensured that all components and piping were protected from forklift traffic or other impact.

46. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to safeguard piping, controls, and other refrigeration equipment to minimize the chance of accidental damage by external sources such as forklifts. See, e.g., ASHRAE 15-2010, supra, § 11.1; IIAR Bull. 109, supra, §§ 4.4.2, 4.7.3.

47. Also, as described above in Paragraph 20(i), at the time of the Inspection, Respondent had failed to provide the necessary eyewash and shower stations and personal protective equipment to protect employees in case of ammonia exposure or other emergency.

48. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to have eyewash and shower stations just outside the exit to the Machinery Room. See, e.g., IIAR 2-2008 (2010 ed.), supra, § 13.1.6; IIAR Bull. 109, supra, § 4.10.10. It is also to have a self-contained breathing apparatus outside but nearby the Machinery Room, with a second apparatus also available. See, e.g., IIAR Bull. 109, supra, § 4.10.11.



49. Additionally, as described above in Paragraph 20(j), at the time of the Inspection, Respondent had failed to maintain paint on the piping associated with the condenser to prevent corrosion.

50. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to keep uninsulated piping painted with a rust preventive paint. See, e.g., IIAR Bull. 109, supra, § 4.7.4.

*Inadequate Emergency Design and Mechanisms*

51. As also described above in Paragraph 20(j), at the time of the Inspection, Respondent had not ensured that the condenser relief valve discharge was raised above the condenser.

52. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to ensure that the discharge of a condenser relief valve is positioned above the level of any liquid refrigerant and away from the location of any personnel servicing the equipment. See, e.g., IIAR 2-2008 (2010 ed.), supra, § 11.3.6.4; ASHRAE 15-2010, supra, §§ 9.4.8, 9.7.8; IIAR Bull. 109, supra, § 4.9.6.

53. Also, as described above in Paragraph 20(k), at the time of the Inspection, the main relief header piping was at roof level and was aimed downwards in the general vicinity of an employee break patio and the location of critical emergency mechanisms.

54. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to raise the relief header pipe at least fifteen feet above the adjoining surface level and orient it to point up and away from where any people, including emergency responders, may be nearby. See, e.g., IIAR 2-2008 (2010 ed.), supra, §§ 11.3.6.3 & .4; ASHRAE 15-2010, supra, § 9.7.8.

55. As described above in Paragraph 20(l), at the time of the Inspection, Respondent had not provided adequate ammonia detectors with associated alarms.

56. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to install at least two ammonia detectors in the Machinery Room. See, e.g., IIAR 2-2008 (2010 ed.), supra, § 13.2. The detectors should be placed where leaked ammonia is likely to concentrate. See, e.g., id.; ASHRAE 15-2010, supra, § 8.11.2.1. The detectors should also actuate visual alarms inside the Machinery Room and at each of its entrances. See, e.g., IIAR 2-2008 (2010 ed.), supra, § 13.2.1.2; ASHRAE 15-2010, supra, § 8.11.2.1.

57. Also, as described above in Paragraph 20(m), at the time of the Inspection, Respondent had not provided emergency shutdown or ventilation switches for the System outside the principal Machinery Room door.

58. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to provide clearly marked emergency shutdown and ventilation switches at the principal Machinery Room door (and, preferably, all access doors). See, e.g., IIAR 2-2008 (2010 ed.), supra, §§ 13.1.13.2 (shutdown), 13.3.11 (ventilation).

59. Additionally, as described above in Paragraph 20(n), at the time of the Inspection, Respondent had not installed handles on the King and other isolation valves, and these valves were not always accessible from permanent work surfaces. Both of these situations would impede quick access and operation of these valves, which can be used to shut off the flow of ammonia throughout the System, in an emergency.

60. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to have isolation valves, including the King Valve, readily operable, either directly or via a chain, from a permanent work surface. See, e.g., id. § 13.1.2.3; IIAR Bull. 109, supra, § 4.10.3.

*Inadequate Training Program*

61. As described above in Paragraph 24(a), Respondent had not developed and implemented an adequate training program.

62. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to train employees on the hazards of the work area, including those posed by ammonia, on procedures applicable to the employees' tasks that pertain to operating or maintaining the integrity of the System, including safe work practices, and on the emergency response plan, verify that the employee understood the training, and maintain records of the training given. See, e.g., Bull. No. 110, supra, § 5.2.3; IIAR ARM, supra, § 9.

*Inadequate Mechanical Integrity Program*

63. As described above in Paragraph 24(b), Respondent had not developed and implemented an adequate mechanical integrity program.

64. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to establish a schedule for testing equipment and systems according to the manufacturer's recommendations, perform the necessary inspections (some of which should occur daily, weekly, monthly, quarterly, semi-annual, yearly, and every five years), and maintain logs and other inspection records. See, e.g.,

Bull. No. 110, supra, § 6; IIAR ARM, supra, § 5 & App. 5.1. See also IIAR 2-2008 (2010 ed.), supra, § 13.3.12; ASHRAE 15-2010, supra, § 11.6.3; IIAR ARM, supra, § 4.3.

65. Accordingly, by failing to have (a) appropriate refrigeration system documentation; (b) adequate ventilation system design and operation; (c) adequate signs and labels; (d) adequate basic safety practices; (e) adequate emergency design and mechanisms; (f) an adequate training program; and (g) an adequate mechanical integrity program, 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 3: Failure to Minimize the Consequences of Accidental Releases That Do Occur in Violation of the CAA's General Duty Clause**

66. The allegations in Paragraphs 1 through 65 are hereby realleged and incorporated herein by reference.

67. 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 to minimize the consequences of any accidental releases of anhydrous ammonia that do occur.

68. As described above in Paragraph 20(o), at the time of the Inspection, Respondent did not have an adequate emergency response program, including an up-to-date emergency action plan that addressed release scenarios based on hazards associated with the design, location, and operation of the Facility. The emergency plan provided to EPA was not fully tailored to reflect the specific conditions at the Facility and so could not adequately address the likely consequences of an accidental release.

69. The recommended industry practice and standard of care for ammonia refrigeration systems of this size is to develop an up-to-date, facility-specific emergency action plan that accurately describes the facility and the potentially affected population. Such a plan should include, among other items: types of evacuation, evacuation procedures and routes, procedures for employees who remain to maintain critical operations, procedures for accounting for evacuated employees, any employee rescue and medical duties, and means for reporting emergencies. See, e.g., IIAR ARM, § 7. An adequate emergency response program should also identify procedures for responding to an ammonia release, including shutting the system down, starting emergency ventilation, and coordinating with all relevant off-site emergency responders. See, e.g., id.

70. In addition, the allegations in paragraphs 35 through 43, 47, and 51 through 59 describe deficiencies that not only constitute a failure to design and maintain a safe facility, but also reflect a failure to minimize the consequences of any accidental release of ammonia. Each of these shortcomings could exacerbate the negative effects of any release of ammonia that does occur at the Facility.

71. Accordingly, by failing to develop and implement an adequate emergency response plan based on the specific design and operation of the Facility, failing to have adequate ventilation system design and operation, failing to have adequate signs and labels posted throughout the Facility, failing to have certain basic safety practices in place, and failing to provide adequate emergency design and mechanisms for the Facility, Respondent violated the requirement to minimize the consequences of any accidental release of anhydrous ammonia that does occur, in violation of the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

## V. PROPOSED CIVIL PENALTY

72. Sections 113(a) and (d) of the CAA, 42 U.S.C. §§ 7413(a) and 7413(d), as amended, authorize EPA to assess a civil penalty of up to \$25,000 per day of violation for violations of Section 112(r) of the CAA, 42 U.S.C. § 7412(r). Pursuant to the Debt Collection Improvement Act of 1996 ("DCIA"), 31 U.S.C. § 3701, and 40 C.F.R. Part 19, violations that occurred after January 12, 2009 are subject to up to \$37,500 per day of violation.

73. Section 113(d) of the CAA, 42 U.S.C. § 7413(d), as adjusted for inflation by the DCIA and 40 C.F.R. Part 19, prescribes a \$295,000 penalty limit and a twelve-month duration limitation on EPA's authority to initiate an Administrative Penalty Order. However, these limitations may be waived where the Administrator and the Attorney General jointly determine that a matter involving a larger penalty or a longer period of violation is appropriate for an administrative penalty action. EPA and the Department of Justice jointly have determined that an administrative penalty action is appropriate in this case.

74. In light of the above-referenced findings, EPA seeks to assess civil penalties of up to \$37,500 for violations occurring after January 12, 2009, as follows:

- (a) Up to one year and nine months (approximately 639 days) of violation for Respondent's failure to comply with the General Duty Clause's requirement to **identify hazards**. For penalty purposes, the duration of the violation is from at least September 1, 2011, when the Facility commenced operation, to June 1, 2013, approximately when Respondent completed a hazard identification checklist. This violation is substantial because a hazard analysis helps facility

personnel assess and manage the hazards that are posed by chemicals at a facility so that threats of releases are minimized.

- (b) Up to one year and ten months (approximately 669 days) of violation for Respondent's failure to comply with the General Duty Clause's requirement to **design and maintain a safe facility**. For penalty purposes, the duration of the violation is from at least September 1, 2011, when the Facility commenced operation, to July 1, 2013, when Respondent reported that most of the necessary modifications had been completed. This violation is substantial because the failure to compile critical information about the System inhibits understanding of the functioning, capacity, and maintenance needs of the System, as well as the risks posed by it. The failure to have adequate signs and labels throughout the System can increase the chances for inadvertent releases and injuries and can hamper the ability of emergency responders to address a release. The failure to have adequate ventilation increases the likelihood that vapors will build up to levels that are hazardous to human health or that risk causing fire or explosion, and failing to have sufficient emergency controls may prolong a release. Similarly, inadequate employee training, mechanical integrity program, and basic safety practices increase the likelihood that a release will occur and make it difficult to respond quickly. Inadequate emergency design and mechanisms increase the likelihood that any release will be prolonged and pose a greater threat to human health than would otherwise occur.
- (c) Up to one year and nine months (approximately 639 days) of violation for Respondent's failure to comply with the General Duty Clause's requirement to

**minimize the consequences of any accidental releases of anhydrous ammonia that do occur.** For penalty purposes, the duration of the violation is from at least September 1, 2011, when the Facility commenced operation, to June 1, 2013, approximately when Respondent updated its Emergency Action Plan and reported to EPA that it had been submitted to the appropriate emergency responders. This violation is substantial because the failure to develop an adequate emergency response plan can impede a swift, safe emergency response, and thus increase risks to workers, emergency responders, and people off-site.

75. Prior to any hearing on this case, EPA will file a document specifying a proposed penalty and explaining how the proposed penalty was calculated, as required by the Consolidated Rules of Practice, 40 C.F.R. Part 22, a copy of which is enclosed with this Complaint.

76. In determining the amount of the penalty to be assessed, EPA will take into account the statutory factors listed in Section 113(e) of the CAA, 42 U.S.C. § 7413(e). These factors include the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, the seriousness of the violation, and such other factors as justice may require.

77. An appropriate penalty will be derived pursuant to the penalty policy entitled, "Combined Enforcement Policy for Clean Air Act Sections 112(r)(1), 112(r)(7), and 40 C.F.R. Part 68" (Jun. 2012). A copy of the penalty policy is enclosed with this



Complaint. This policy provides a rational, consistent, and equitable calculation methodology for applying the statutory penalty factors identified above to a particular case.

#### **VI. NOTICE OF OPPORTUNITY TO REQUEST A HEARING**

78. Respondent has the right to request a hearing to contest the issues raised in this Complaint. Any such hearing would be conducted in accordance with the Consolidated Rules of Practice, 40 C.F.R. Part 22. Any request for a hearing must be included in Respondent's written Answer(s) to this Complaint and filed with the Regional Hearing Clerk at the address listed below within 30 days of receipt of this Complaint.

79. In its Answer, a Respondent may also: (1) dispute any material fact in the Complaint; (2) contend that the proposed penalty is inappropriate; or (3) contend that it is entitled to judgment as a matter of law. The Answer must clearly and directly admit, deny, or explain each of the factual allegations contained in this Complaint of which a Respondent has any knowledge. If a Respondent has no knowledge of a particular factual allegation and so states, the allegation is considered denied. The failure to deny an allegation constitutes an admission of that allegation. The Answer must also include the grounds for any defense and the facts a Respondent intends to place at issue.

80. The original and one copy of any motions or other pleadings filed or made before an Answer to the Complaint is filed, the Answer to the Complaint, and any Consent Agreement and Final Order to settle the case filed in this action must be sent to:

Wanda I. Santiago, Regional Hearing Clerk  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Mail Code ORA18-1  
Boston, MA 02109-3912

81. After an Answer has been filed, except for a Consent Agreement and Final Order settling the case, a copy of all other documents that Respondent files in this action must be sent to the Headquarters Hearing Clerk, in the following manner:

For U.S. Postal Service mailings –  
Headquarters Hearing Clerk  
U.S. Environmental Protection Agency  
Office of Administrative Law Judges  
Mail Code 1900R  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

For UPS, FedEx, DHL, or other courier, or personal delivery –  
Headquarters Hearing Clerk  
U.S. Environmental Protection Agency  
Office of Administrative Law Judges  
Ronald Reagan Building, Rm. M1200  
1300 Pennsylvania Ave., NW  
Washington, DC 20460

82. Respondent should also send a copy of the Answer, as well as a copy of all other documents that Respondent files in this action to Christine M. Foot, the attorney assigned to represent EPA and designated to receive service on behalf of Complainant in this matter at:

Christine M. Foot, Enforcement Counsel  
Office of Environmental Stewardship  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912

83. If a Respondent fails to file a timely Answer to this Complaint, it may be found to be in default, which constitutes an admission of all the facts alleged in the Complaint and a waiver of the right to a hearing.

## VII. INFORMAL SETTLEMENT CONFERENCE

84. Whether or not a hearing is requested upon the filing of an Answer, Respondent may confer informally with EPA concerning the alleged violations, the amount of any penalty, and/or the possibility of settlement. Such a conference provides Respondent with an opportunity to respond informally to the charges, and to provide any additional information that may be relevant to this matter or the penalty. EPA has the authority to adjust the penalty, where appropriate, to reflect any settlement reached in an informal conference. The terms of such an agreement would be embodied in a binding Consent Agreement and Final Order.

85. Please note that a request for an informal settlement conference does not extend the thirty (30) day period within which a written Answer must be submitted in order to avoid a default. To request an informal settlement conference, Respondent or its representative(s) should contact Christine M. Foot, Enforcement Counsel, at (617) 918-1333.

## VIII. CONTINUED COMPLIANCE OBLIGATION

86. Neither assessment nor payment of an administrative penalty shall affect Respondent's continuing obligation to comply with environmental laws and regulations.

Susan Studien  
Susan Studien, Director  
Office of Environmental Stewardship  
U.S. Environmental Protection Agency  
Region 1 – New England

09/27/13  
Date

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1 – NEW ENGLAND

\_\_\_\_\_  
IN THE MATTER OF )  
)  
)

Cold Storage Solutions I, Inc. )  
310 Kenneth Welch Drive )  
Lakeville, MA 02347 )

Respondent )  
\_\_\_\_\_

Docket No. CAA-01-2013-0063

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing Complaint and Notice of Opportunity for Hearing has been sent to the following persons on the date noted below:

Original and one copy,  
hand-delivered:

Ms. Wanda I. Santiago  
Regional Hearing Clerk  
U.S. EPA, Region I  
5 Post Office Square, Suite 100  
Mail Code ORA18-1  
Boston, MA 02109-3912

Copy of Complaint (with the  
Consolidated Rules of Practice  
and Penalty Policies), certified mail,  
return receipt requested:

Thomas J. Parenteau, President  
Cold Storage Solutions, Inc.  
310 Kenneth Welch Drive  
Lakeville, MA 02347

Roger Zehntner  
Partridge Snow & Hahn LLP  
128 Union Street, Suite 500  
New Bedford, MA 02740

Dated: 9/30/13

Christine M. Foot  
Christine Foot, Enforcement Counsel  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912