

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Received by
EPA Region 1
Hearing Clerk

IN THE MATTER OF)
)
Barber Foods, LLC)
)
54 St. John Street)
Portland, ME 04102)
)
Respondent.)
_____)

Docket No. CAA-01-2022-0050

**CONSENT AGREEMENT
AND
FINAL ORDER**

I. PRELIMINARY STATEMENT

1. In accordance with 40 C.F.R. § 22.13(b), the issuance of this Consent Agreement (“Consent Agreement” or “Agreement”) and attached Final Order (“Final Order” or “Order”), simultaneously commences and concludes an administrative penalty assessment proceeding brought under Section 113(d) of the Clean Air Act (the “Act” or “CAA”), 42 U.S.C. § 7413(d), and Sections 22.13 and 22.18 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (“Consolidated Rules”), as codified at 40 C.F.R. Part 22.

2. Complainant is the United States Environmental Protection Agency, Region 1 (“EPA”).

3. Respondent is Barber Foods, a limited liability company doing business in the State of Maine.

4. Complainant and Respondent, having agreed that settlement of this action is in the public interest, consent to the entry of this consent agreement and the attached final order without adjudication of any issues of law or fact herein, and Respondent agrees to comply with the terms of this Consent Agreement and Final Order (“CAFO”).

II. JURISDICTION

5. This CAFO is entered into under Sections 113(a)(3)(A) and (d) of the CAA, as amended, 42 U.S.C. §§ 7413(a)(3)(A) and (d); and the Consolidated Rules, 40 C.F.R. Part 22.

6. The EPA and the United States Department of Justice jointly determined that this matter, although it involves alleged violations that occurred more than one year before the

CONSENT AGREEMENT AND FINAL ORDER
In the Matter of Barber Foods
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US EPA, REGION 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

initiation of this proceeding, is appropriate for an administrative penalty assessment in accordance with 42 U.S.C. § 7413(d) and 40 C.F.R. § 19.4.

III. GOVERNING LAW

CAA Statutory and Regulatory Authority

7. Section 112(r) of the CAA, 42 U.S.C. § 7412(r), authorizes EPA to promulgate regulations and programs in order to prevent and minimize the consequences of accidental releases of certain regulated substances. The promulgated regulations are found at 40 C.F.R. Part 68 (“Part 68”).

8. Forty C.F.R. § 68.130 lists the substances regulated under Part 68 (“RMP chemicals” or “regulated substances”). This list identifies anhydrous ammonia as an RMP chemical and identifies a threshold quantity of 10,000 pounds.

9. A “process” is defined by 40 C.F.R. § 68.3 as any activity involving a regulated substance, including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities.

10. Pursuant to 40 C.F.R. § 68.10, each process in which a regulated substance is present in more than a threshold quantity (“covered process”) is subject to one of three risk management programs. A covered process is subject to Program 3 if the process does not meet the eligibility requirements for Program 1 and is either in a specified NAICS code or subject to the Occupational Safety and Health Administration (“OSHA”) process safety management (“PSM”) standard at 29 C.F.R. § 1910.119.

11. Pursuant to 40 C.F.R. § 68.12(a) and (d), the owner or operator of a stationary source with a process subject to Program 3 requirements must, among other tasks, submit a Risk Management Plan, develop a management system to implement the risk management program, and implement the release prevention requirements of 40 C.F.R. §§ 68.65-87.

12. Anhydrous ammonia in an amount over the threshold quantity of 10,000 pounds is subject to OSHA’s PSM requirements at 29 C.F.R. § 1910.119.

13. Sections 113(a) and (d) of the CAA, 42 U.S.C. §§ 7413(a) and (d), allow EPA to assess civil penalties for violations of Part 68. Forty C.F.R. Part 19 sets out the statutory penalties as adjusted for inflation.

IV. VIOLATIONS ALLEGED BY EPA

14. The Respondent Barber Foods, LLC operates a frozen poultry storage facility located at 54 St. John Street, Portland, Maine 04102 (“the Facility”). The Facility is located adjacent to other businesses and is located within several hundred feet of residences and near a hospital.

15. Respondent is a limited liability company incorporated in the State of Delaware and thus is a “person” within the meaning of Section 302(e) of the CAA, 42 U.S.C. § 7602(e), against whom an administrative order assessing a civil penalty may be issued under Section 113(d)(1) of the CAA, 42 U.S.C. § 7413(d)(1).

16. 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), and 40 C.F.R. § 68.3.

17. At all times relevant to the violations alleged herein, Respondent was the “owner or operator” of the Facility.

18. Respondent uses anhydrous ammonia in a refrigeration “process,” as defined by 40 C.F.R. § 68.3, in a system of pipes and vessels at the Facility (the “Process”).

19. Respondent provided EPA with Process Hazard Analysis reports (“PHAs”) for the Facility conducted in 1999, 2004, 2010, 2012, 2015, and 2019.

20. Respondent filed updates of its RMP with EPA in 2014 and 2019. Respondent’s 2019 RMP categorizes the Facility as a Program Level 3 facility with an ammonia refrigeration system containing 26,905 pounds of anhydrous ammonia.

21. Respondent submitted Tier II chemical inventory reports pursuant to Sections 311 and 312 of the Emergency Planning and Community Right-to-Know Act (“EPCRA”), 42 U.S.C. §§ 11021 and 11022, reporting that the Facility used 26,905 pounds of anhydrous ammonia in 2021.

22. Accordingly, the anhydrous ammonia Process at the Facility is a “covered process” subject to the RMP provisions of Part 68.

23. The endpoint for a worst-case release of the amount of anhydrous ammonia used in the Process is greater than the distance to a public receptor.

24. Additionally, the Process is subject to OSHA’s PSM requirements at 29 C.F.R. § 1910.119 because it uses anhydrous ammonia in an amount over the threshold quantity of 10,000 pounds.

25. Therefore, in accordance with 40 C.F.R. § 68.10(a)-(d), Respondent's use, storage, and handling of anhydrous ammonia in the Process is subject to the requirements of RMP Program 3.

26. 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 ("RAGAGEP") in the ammonia refrigeration industry. The standards of care are set out in Attachment A.

27. On June 5, 2019, EPA inspectors visited the Facility ("the Inspection") to assess Respondent's compliance with Section 112(r) of the CAA, Part 68, and with Sections 302-312 of EPCRA.

28. Complainant alleges the following violations of 40 C.F.R. Part 68.

Count 1: Failure to Comply with Process Safety Information Requirements

29. Complainant realleges and incorporates by reference Paragraphs 1 through 28 of this document.

30. Pursuant to 40 C.F.R. § 68.65(a), the owner or operator of a Program 3 process is required, among other things, to compile written process safety information before completing the Process Hazard Analysis. This includes documenting information pertaining to the hazards of the RMP chemical in the process and information pertaining to the technology and equipment of the process. Pursuant to 40 C.F.R. §§ 68.65(d)(2) and (3), the owner or operator must also document that the equipment complies with recognized and generally accepted good engineering practices and document that any equipment that was designed according to codes, standards, or practices that are no longer in general use is designed, maintained, inspected, tested, and operated in a safe manner.

31. As further described in Attachment A, which is incorporated by reference into this CAFO, EPA alleges that Respondent failed to document that the Processes complied with recognized and generally accepted good engineering practices ("RAGAGEP") and that equipment designed according to outdated standards was designed, maintained, inspected, tested, and operated in a safe manner.

32. Accordingly, by failing to document that the Process complied with recognized and generally accepted good engineering practices and that any equipment that was designed according to outdated standards is designed, maintained, inspected, tested, and operated in a safe manner, Respondent violated 40 C.F.R. § 68.65 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E).

Count 2: Failure to Comply with Program 3 Mechanical Integrity Requirements

33. Complainant realleges and incorporates by reference Paragraphs 1 through 32 of this document.

34. Pursuant to 40 C.F.R. § 68.73, the owner or operator of a Program 3 process must establish and implement written procedures to maintain the ongoing integrity of certain process equipment and train employees accordingly. The owner or operator must train each employee involved in maintaining the ongoing integrity of process equipment in the procedures applicable to the employee's job task. Inspections and testing procedures shall follow RAGAGEP, and the frequency of inspections and tests shall be consistent with manufacturer's recommendations and good engineering practices, or more frequently if needed based on prior operating experience. The owner or operator must also document the inspections or tests on process equipment, correct deficiencies, assure that any new equipment is suitable for the process application, perform checks to ensure that equipment is installed properly, and assure that maintenance materials and spare parts are suitable for the process application.

35. As further described in Attachment A, Respondent had not maintained the mechanical integrity of the Process equipment by correcting deficiencies that are outside of acceptable limits (as defined by the process safety information in 40 C.F.R. § 68.65) before continuing to use the equipment, or in a safe and timely manner when necessary means are taken to ensure safe operation. For example, an ammonia sensor was not functioning adequately and some insulation on ammonia piping was not adequately maintained.

36. By failing to comply with the Program 3 mechanical integrity requirements, Respondent violated 40 C.F.R. § 68.73 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E), for the Process.

Count 3: Failure to Adequately Identify, Evaluate, and Control Hazards

37. Complainant realleges and incorporates by reference Paragraphs 1 through 36 of this document.

38. Pursuant to 40 C.F.R. § 68.67, the owner or operator of a Program 3 process is required, among other things, to perform an initial process hazard analysis ("PHA") on each covered process. The PHA must identify, evaluate, and control the hazards involved in the process. The owner or operator must update the PHA every five years and when a major change in the process occurs. Additionally, pursuant to 40 C.F.R. § 68.67(e), the owner or operator must establish a system to promptly address the recommendations identified in the PHA, including by defining a schedule for completing the action items, taking the actions as soon as possible, and documenting the resolution of the recommendations.

39. Respondent performed an updated PHA in 2015 and 2019 and identified recommended action items. However, Respondent's PHA was inadequate. Deficiencies included, but are not limited to the following: the 2015 PHA included findings that were not

addressed by the time of the Inspection; the 2019 PHA did not identify access hazards associated with eyewash stations; and the Facility's 2016 compliance audit noted that items identified the PHA had not been addressed.

40. Accordingly, Respondent violated the PHA requirements of 40 C.F.R. § 68.67 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E), for the Process.

V. TERMS OF CONSENT AGREEMENT

41. For the purposes of this proceeding, as required by 40 C.F.R. § 22.18(b)(2), Respondent:

- a. admits that EPA has jurisdiction over the subject matter alleged in this CAFO;
- b. neither admits nor denies the specific factual allegations contained in this CAFO;
- c. consents to the assessment of a civil penalty as stated below;
- d. consents to the issuance of any specified compliance or corrective action order;
- e. consents to the conditions specified in this CAFO;
- f. consents to any stated Permit Action;
- g. waives any right to contest the alleged violations of law set forth in Section IV of this Consent Agreement; and,
- h. waives its rights to appeal the Final Order accompanying this Consent Agreement.

42. For the purposes of this proceeding, Respondent:

- a. agrees that this CAFO states a claim upon which relief may be granted against Respondent;
- b. acknowledges that this CAFO constitutes an enforcement action for purposes of considering Respondent's compliance history in any subsequent enforcement actions;
- c. 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 CAFO, including any right of judicial review under Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1);

- d. consents to personal jurisdiction in any action to enforce this Consent Agreement or Final Order, or both, in the United States District Court for the District of Maine; and,
- e. waives any rights it may possess at law or in equity to challenge the authority of EPA to bring a civil action in a United States District Court to compel compliance with the Consent Agreement or Final Order, or both, and to seek an additional penalty for such noncompliance, and agrees that federal law shall govern in any such civil action.

43. Respondent certifies to the best of its knowledge based upon reasonable belief that it has corrected the violations alleged in this CAFO and is currently in compliance with 40 C.F.R. Part 68 at the Facility. Respondent further certifies that its compliance at the Facility includes compliance with all applicable safety measures listed in the International Institute of Ammonia Refrigeration (“IIAR”)’s Standard 9-2020: *Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems* (hereinafter “IIAR 9-2020”).

44. Pursuant to Sections 113(d)(2)(B) and (e) of the CAA, 42 U.S.C. § 7413(d)(2)(B) and (e), and taking into account the relevant statutory penalty criteria, the applicable penalty policy, and Respondent’s cooperation in agreeing to perform the non-penalty obligations in this CAFO, EPA has determined that it is fair and proper to assess a civil penalty of **\$151,000** for the violations alleged in this matter.

Penalty Payment

45. Respondent agrees to:

- a. pay the civil penalty of **\$151,000** (“EPA Penalty”) within 30 calendar days of the Effective Date of this CAFO.
- b. pay the EPA Penalty using any method or combination of methods, provided on the website: <http://www2.epa.gov/financial/additional-instructions-making-payments-epa>, and identifying every payment with “Docket No. CAA-01-2022-0050.”
- c. Within 24 hours of payment of the EPA Penalty, Respondent shall send proof of payment by e-mail to:

Maximilian Boal, Senior Enforcement Counsel
Office of Regional Counsel

United States Environmental Protection Agency—Region 1
boal.maximilian@epa.gov

and to:

Regional Hearing Clerk
R1_Hearing_Clerk_Filings@epa.gov

“Proof of payment” means, as applicable, a copy of the check, confirmation of credit card or debit card payment, confirmation of wire or automated clearinghouse transfer, and any other information required to demonstrate that payment has been made according to EPA requirements, in the amount due, and identified with “Docket No. CAA-01-2022-0050.”

46. Collection of Unpaid Civil Penalty: Section 113(d)(5) of the CAA, 42 U.S.C. § 7413(d)(5), specifies the consequences of failure to pay the penalty on time. There are other actions EPA may take if respondent fails to timely pay: refer the debt to a credit reporting agency or a collection agency pursuant to 42 U.S.C. § 7413(d)(5), 40 C.F.R. §§ 13.13, 13.14, and 13.33; collect the debt by administrative offset (i.e., the withholding of money payable by the United States to, or held by the United States for, a person to satisfy the debt the person owes the Government), which includes, but is not limited to, referral to the Internal Revenue Service for offset against income tax refunds, 40 C.F.R. Part 13, Subparts C and H; suspend or revoke Respondent’s licenses or other privileges; or suspend or disqualify Respondent from doing business with the EPA or engaging in programs the EPA sponsors or funds, 40 C.F.R. § 13.17.

VI. ADDITIONAL PROVISIONS

47. The terms, conditions, and compliance requirements of this CAFO may not be modified or amended except upon written agreement of both parties, and approval of the Regional Judicial Officer.

48. The provisions of this CAFO shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns.

49. By signing this CAFO, Respondent acknowledges that this CAFO will be available to the public and agrees that this CAFO does not contain any confidential business information or personally identifiable information.

50. By signing this CAFO, the undersigned representative of Complainant and the undersigned representative of Respondent each certify that he or she is fully authorized to

execute and enter into the terms and conditions of this CAFO and has legal capacity to bind the party he or she represents.

51. By signing this CAFO, Respondent certifies that the information it has supplied concerning this matter was at the time of submission true, accurate, and complete for each such submission, response, and statement. Respondent acknowledges that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing submission of such information, under 18 U.S.C. § 1001.

52. Complainant and Respondent, by entering into this CAFO, each give their respective consent to accept digital signatures hereupon. Respondent further consents to accept electronic service of the full executed CAFO, by electronic mail, to Stuart Spencer at the following address: stuart.spencer@tyson.com. Complainant has provided Respondent with a copy of the EPA Region 1 Regional Judicial Officer's Authorization of EPA Region 1 Part 22 Electronic Filing System for Electronic Filing and Service of Documents Standing Order, dated June 19, 2020. Electronic signatures shall comply with, and be maintained in accordance with, that Order.

VII. EFFECT OF CONSENT AGREEMENT AND ATTACHED FINAL ORDER

53. In accordance with 40 C.F.R. § 22.18(c), completion of the terms of this CAFO resolves only Respondent's liability for federal civil penalties for the violations and facts specifically alleged above and in Attachment A.

54. Penalties paid pursuant to this CAFO shall not be deductible for purposes of federal taxes. For 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) and 26 C.F.R. § 162-21(b)(2), performance of the work in paragraph 43 is restitution or required to come into compliance with the law.

55. This CAFO constitutes the entire agreement and understanding of the parties and supersedes any prior agreements or understandings, whether written or oral, among the parties with respect to the subject matter hereof.

56. Any violation of this CAFO may result in a civil judicial action for an injunction or civil penalties as provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), as well as criminal sanctions as provided in Section 113(c) of the Act, 42 U.S.C. § 7413(c). The EPA may use any information submitted under this CAFO in an administrative, civil judicial, or criminal action.

57. Nothing in this CAFO shall relieve Respondent of the duty to comply with all applicable provisions of the Act and other federal, state, or local laws or statutes. Nor shall it restrict EPA's authority to seek compliance with any applicable laws or regulations, or be

construed to be a ruling on, or a determination of, any issue related to any federal, state, or local permit.

58. 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.

59. The EPA reserves the right to revoke this CAFO and settlement penalty if and to the extent that the EPA finds, after signing this CAFO, that any information provided by Respondent was materially false or inaccurate at the time such information was provided to the EPA, and in the event of such specific finding, the EPA reserves the right to assess and collect any and all civil penalties for any violation described herein. The EPA shall give Respondent notice of its intent to revoke, which shall not be effective until received by Respondent in writing.

60. This CAFO in no way relieves Respondent or its employees of any criminal liability, and EPA reserves all its other criminal and civil enforcement authorities, including the authority to seek injunctive relief and the authority to undertake any action against Respondent in response to conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

61. Except as qualified by Paragraph 46 (overdue penalty collection), each party shall bear its own costs and fees in this proceeding including attorney's fees. Respondent specifically waives any right to recover such costs from EPA pursuant to the Equal Access to Justice Act, 5 U.S.C. § 504, or other applicable laws.

VIII. EFFECTIVE DATE

62. Respondent and Complainant agree to issuance of the attached Final Order. Upon filing, EPA will transmit a copy of the filed CAFO to Respondent. This CAFO shall become effective after execution of the Final Order by the Regional Judicial Officer on the date of filing with the Regional Hearing Clerk.

The foregoing Consent Agreement in the Matter of Barber Foods, Docket No. CAA-01-2022-0050, is Hereby Stipulated, Agreed, and Approved for Entry.

FOR RESPONDENT:



Signature

Sept. 22, 2022
Date

CONSENT AGREEMENT AND FINAL ORDER
In the Matter of Barber Foods
Docket No. CAA-01-2022-0050

US EPA, REGION 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Printed Name: Jane W. Duke, VP & Assoc. General Counsel, Barber Foods, LLC
Title: Chief Compliance Officer, Tyson Foods, Inc.
Address: 2200 West Don Tyson Parkway, Springdale, AR 72762
Respondent's Federal Tax Identification Number: 01-0235540

FOR COMPLAINANT:

Karen McGuire, Director
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency
Region 1—New England

Date

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1**

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| IN THE MATTER OF) Barber Foods, LLC) 54 St. John Street) Portland, ME 04130) Respondent.) | Docket No. CAA-01-2022-0050 |
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FINAL ORDER

Pursuant to 40 C.F.R. § 22.18(b) and (c) of EPA’s Consolidated Rules of Practice; Section 113(d)(1) and (d)(2)(B) of the Clean Air Act, 42 U.S.C. § 7413(d)(1) and (d)(2)(B), the attached Consent Agreement resolving this matter is incorporated by reference into this Final Order and is hereby ratified.

The Respondent is ORDERED to comply with the terms of the above Consent Agreement, effective on the date is filed with the Regional Hearing Clerk.

Date: _____

LeAnn Jensen
Regional Judicial Officer
U.S. Environmental Protection Agency, Region I

ATTACHMENT A

Recognized and Generally Accepted Good Engineering Practices

In collaboration with the American National Standards Institute, the International Institute of Ammonia Refrigeration (“IIAR”) has issued (and updates) Standard 9-2020: *Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems* (hereinafter “IIAR 9-2020”); “Standard 2: *Standard for Safe Design of Closed-Circuit Ammonia Refrigeration Systems* (“ANSI/IIAR 2”), specifically, Int’l Inst. of Ammonia Refrigeration, Standard 2-2014, Standard for Safe Design of Closed-Circuit Ammonia Refrigeration Systems (2014), [hereinafter “IIAR 2-2014”]¹; 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”), Standard 7: *Developing Operating Procedures for Closed-Circuit Ammonia Mechanical Refrigerating Systems* (“ANSI/IIAR 7”), Standard 9: *Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems* (“ANSI/IIAR 9”), *inter alia*, along with other applicable standards and guidance. Bulletins and guidance include, without limitation, 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”); IIAR Bulletin No. 114, *Guidelines for Identification of Ammonia Refrigeration Piping and Components* (1991, most recently updated in 2018) (“IIAR Bull. 114”); IIAR Bulletin No. 116, *Guidelines for Avoiding Component Failure in Industrial Refrigeration Systems Caused by Abnormal Pressure or Shock* (1992) (“IIAR Bull. 116”); and the Ammonia Refrigeration Management Program (2005, most recently updated in 2019) (“IIAR ARM Program”), which is intended to provide streamlined guidance to facilities that have less than 10,000 pounds of ammonia. Also in collaboration with the American National Standards Institute, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (“ASHRAE”) has issued (and updates) “Standard 15: Safety Standard for Refrigeration Systems.” These standards are consistently relied upon by refrigeration experts and are often incorporated into state building and mechanical codes.

In general, the standards of care cited below are those that were in effect in 2015 when Respondent completed its latest Process Hazard Analysis prior to EPA’s Inspection, except ANSI/IIAR 9-2020, which was approved by ANSI for publication on March 3, 2020. ANSI/IIAR 9-2020 is cited for informational purposes as it is IIAR’s latest pronouncement on minimum safety standards for ammonia refrigeration systems, regardless of size or age.

¹ Note that this standard most recently has been updated in 2019 as IIAR 2-2014 Addendum A, but this CAFO cites to the 2014 version.

| Count: | EPA-Alleged Condition: | Examples of RAGAGEP: |
|---------------|---|---|
| 1 | The main shutoff valve (“king valve”) was not operable from the floor level and did not have a handwheel or chain to allow closure. | It is standard industry practice for the emergency shut-off valve to be directly operable from the floor or chain operated from a permanent work surface. <i>See e.g., IIAR 9-2020, § 7.3.3.3; IIAR 2-2014, §§ 5.14.3, 6.3.3.1, 6.3.3.2, and 13.37; ASHRAE 15-2013, §§ 9.12.6 and 11.2.2a.</i> |
| 1 | The emergency stop button and ventilation override switch for the ammonia machinery room was located inside the ammonia machinery room rather than outside the primary entrance. | It is standard industry practice for the emergency shut-off switch to be located outside and adjacent to the designated principal machinery room door and to be clearly and uniquely identified at the valve itself and in schematic drawings. <i>See e.g., IIAR 9-2020, § 7.3.11.1; IIAR 2-2014, § 6.12.1.</i> |
| 1 | The entry door into the mezzanine area adjacent to the spiral freezer was not labeled to indicate the presence of ammonia, did not have required NFPA signage. | The standard industry practice is for buildings and facilities with refrigeration systems to include placards in accordance with NFPA 704, and include signage to indicate that only authorized personnel are permitted entry. <i>See e.g., IIAR 2-2014, §§ 6.15 and 7.2.2; IIAR 9-2020, § 7.2.91; and NFPA 704, Section 4.3 (2017).</i> |
| 1 | Audible ammonia alarms were not present in some required areas, including, but not limited to, outside the ammonia machinery room entry door. | It is standard industry practice to have ammonia leak detection, with audible and visible alarms located both inside the ammonia machinery room and outside of each entrance to the machinery room. <i>See e.g., IIAR 2-2014, § 6.13; IIAR 9-2020, § 7.3.12.1, ASHRAE 15-2019, § 8.13.10.1; and NFPA 1 2012, § 53.2.3.1.2.</i> It is also industry practice to have Level 1 detection and alarm in areas outside the machinery room where an ammonia refrigeration equipment is installed. <i>See e.g., IIAR 2-2014, §§ 6.13 and 7.2.3.</i> |
| 1 | Ammonia piping at some locations of the Facility lacked appropriate labelling or labelling was damaged or missing, including on the west exterior wall, in the processing area and in some locations on the roof. | The standard industry practice is for piping mains, headers, and branches to be identified as containing ammonia and as to the physical state of the refrigerant (that is, vapor or liquid, etc.), the relative pressure level of the refrigerant, and the direction of flow. <i>See e.g., IIAR 9-2020, § 7.2.9.4; IIAR 2-2014, § 5.14.5, IIAR Bull. 109, § 4.7.6, IIAR Bull. 114, § 4.2.1.</i> |

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| 1 | Ammonia piping below compressor was not protected from impacts. | The standard industry practice is for ammonia piping to be inspected throughout a facility to determine that no piping is exposed to possible physical damage through traffic hazards, for example, forklifts. <i>See e.g., IIAR Bull. 109, §§ 4.42 and 4.7.3.</i> It is standard industry practice for equipment to be protected where there is a risk of physical damage. For example, where equipment containing ammonia is located in an area with heavy vehicular traffic during normal operations and a risk of impact exists, it is standard industry practice to provide vehicle barriers or alternative protection in accordance with the fire code. <i>See e.g., IIAR 2-2014, §§ 5.17.1 and 7.2.4; IIAR 9-2020, §§ 7.2.11.1 and 7.2.12.1 (protection from physical damage) and §§ 7.2.7.1 (adequate support) and 7.3.2.2 (piping support).</i> |
| 1 | The ammonia machinery room at the Facility was not tightly sealed off from the rest of the Facility, which could allow ammonia to escape the ammonia machinery room in the event of a release. Such openings included: the primary entry door into the ammonia machinery room and the double entry doors from the boiler/compressor room were not tight fitting at the bottom; and locations at the north dock alleyway and from the boiler/air compressor room were not tightly sealed. | It is standard industry practice for the ammonia machinery room to be separated from the remainder of the building by tight-fitting construction with a one-hour first resistance rating. <i>See e.g., IIAR 2-2014, § 6.2.1; IIAR 9-2020, §§ 7.3.2.1, 7.3.2.5, and 7.3.9.2.</i> Specifically, it is standard industry practice for the doors to the ammonia machinery room to be self-closing and tight fitting. <i>See e.g., IIAR 2-2014, §§ 6.2.1, 6.10.2, and 7.2.1; IIAR 9-2020, §§ 7.3.2.5 and 7.3.9.2, and ASHRAE 15-2013, §§ 8.11.2 and 8.12(b).</i> |
| 1 | The ammonia machinery room at the Facility lacked required signage to display important information about the Process. | It is standard industry practice for the person in charge of a facility with an ammonia refrigeration system to provide directions for emergency shutdown of the system in a location that is readily accessible to trained refrigeration system staff and trained emergency responders. The schematic drawings or |

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| | | signage shall include several types of information including: (1) Instructions with details and steps for shutting down the system in an emergency; (2) The name and telephone numbers of the refrigeration operating, maintenance, and management staff, emergency responders, and safety personnel; (3) 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; (4) Quantity of ammonia in the system; (5) Type and quantity of refrigerant oil in the system; and, (6) Field test pressures applied. <i>See e.g., IIAR 2-2014, § 5.15; ASHRAE 15-2013, § 11.2.1; and IIAR 9-2020, § 7.2.10.</i> |
| 1 | Ventilation air intake in the Facility's ammonia refrigeration room had issues, including: the air intake location presented a potential short-circuiting risk; and one air intake draws air from the north dock alleyway where ammonia piping is located. | It is standard industry practice for make-up air supply locations in the machinery room to be located to prevent short-circuiting of the make-up air directly to the exhaust. <i>See e.g., IIAR 9-2020, § 7.3.14.2; IIAR 2-2014, § 6.14.5.2.</i> It is standard industry practice for air intakes for make-up air to draw only uncontaminated outdoor air. <i>See e.g., IIAR 9-2020, § 7.3.14.3; IIAR 2-2014, § 6.14.5.4.</i> |
| 1 | The Facility's pressure relief valve on the roof would discharge horizontally rather than vertically. | It is standard industry practice for the termination of the discharge from the pressure relief devices to be directed upward and arranged to avoid spraying ammonia on persons in the vicinity. <i>See e.g., IIAR 2-2014, § 15.5.1.5 and IIAR 2-2008 (Addendum B), § 11.3.6.3.</i> |
| 1 | There were electrical issues with the Facility's ammonia system including a broken electrical conduit, exposed wiring in the ammonia machinery room, and an extension cord being used instead of permanent wiring. | It is standard industry practice for electrical equipment and connections to not be damaged in such a way that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; or deteriorated by corrosion, chemical action, or overheating. <i>See e.g., NFPA 70-2014, Section 110.12(B).</i> It is standard industry practice for that extension cords should not be used as substitutes for permanent wiring. <i>See e.g., NFPA 1 – 2012, Section 11.1.7.6</i> |
| 1 | The Facility's low-level ammonia alarms will not | It is standard industry practice for ammonia detectors to activate an alarm so that corrective action can be |

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| | <p>activate at a low enough level (Facility's low-level alarm will only activate at ammonia concentrations of 75 ppm), and the Facility's high-level ammonia alarm will not activate at a low enough level (Facility's high-level ammonia detection starts at ammonia concentrations of 250 ppm rather than 150 ppm).</p> | <p>taken at an indicated ammonia concentration of 25 ppm or higher. <i>See e.g.</i>, <u>IIAR 2-2014</u>, §§ 6.13.1 and 6.13.2; <u>IIAR 9-2020</u>, § 7.3.12.2 (50 ppm). It is standard industry practice for ammonia detection of concentrations equal to or exceeding 150 ppm to activate visual indicators and audible alarms and activate emergency ventilation. <i>See e.g.</i>, <u>IIAR 2014</u>, § 6.13.2.3.</p> |
| 2 | <p>There were problems with insulation of ammonia piping at the Facility, including insulation that was damaged or corroded, indicating that the insulation was failing.</p> | <p>The standard industry practice is for piping and equipment surfaces not intended for heat exchange to 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 develop and become a hazard to occupants or cause damage to the structure, electrical equipment, or refrigeration system. <i>See e.g.</i>, <u>IIAR 9-2020</u>, § 7.2.6.1; <u>IIAR 2-2014</u>, § 5.10.1. In addition, the standard industry practice is to check piping for signs of corrosion and to treat corroded piping with rust preventative paint and to replace badly corroded pipe. <i>See e.g.</i>, <u>IIAR Bull. 109</u>, §§ 4.7.4 and 4.7.5.</p> |

