

EPA ENFORCEMENT ACCOUNTS RECEIVABLE CONTROL NUMBER FORM FOR ADMINISTRATIVE ACTIONS

This form was originated by Wanda I. Santiago for Christine M. Foot 9/29/15  
Name of Case Attorney Date

in the ORC (RAA) at 918-1113  
Office & Mail Code Phone number

Case Docket Number CAA-01-2015-0064

Site-specific Superfund (SF) Acct. Number \_\_\_\_\_

This is an original debt: \_\_\_\_\_ This is a modification

Name and address of Person and/or Company/Municipality making the payment:

Gary A. Pasternak  
Dept of the Army - Corps of Engineers  
Engineer Research and Development Center Cold Regions Research and Engineering Laboratory  
72 Lyme Road  
Hanover, NH 03755

Total Dollar Amount of Receivable \$ 85,059 Due Date: 10/28/15

SEP due? Yes \_\_\_\_\_ No \_\_\_\_\_ Date Due \_\_\_\_\_

Installment Method (if applicable)

INSTALLMENTS OF:

1<sup>st</sup> \$ \_\_\_\_\_ on \_\_\_\_\_

2<sup>nd</sup> \$ \_\_\_\_\_ on \_\_\_\_\_

3<sup>rd</sup> \$ \_\_\_\_\_ on \_\_\_\_\_

4<sup>th</sup> \$ \_\_\_\_\_ on \_\_\_\_\_

5<sup>th</sup> \$ \_\_\_\_\_ on \_\_\_\_\_

For RHC Tracking Purposes:

Copy of Check Received by RHC \_\_\_\_\_ Notice Sent to Finance \_\_\_\_\_

**TO BE FILLED OUT BY LOCAL FINANCIAL MANAGEMENT OFFICE:**

IFMS Accounts Receivable Control Number \_\_\_\_\_

If you have any questions call: \_\_\_\_\_  
in the Financial Management Office

Phone Number \_\_\_\_\_



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 1  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

September 28, 2015

**BY HAND**

Wanda I. Santiago, Regional Hearing Clerk  
U.S. Environmental Protection Agency-Region 1  
5 Post Office Square, Suite 100  
Mail Code OES04-2  
Boston, MA 02109-3912

RECEIVED

SEP 28 2015

EPA ORC WS  
Office of Regional Hearing Clerk

Re: In the Matter of: U.S. Army Corps of Engineers – Cold Regions Research and Engineer Laboratory; Docket No. CAA-01-2015-0064

Dear Ms. Santiago:

Enclosed for filing, please find a Consent Agreement and Final Order (CAFO) settling the matter referenced above.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in blue ink that reads "Christine M. Foot".

Christine M. Foot  
Enforcement Counsel  
EPA Region 1

Enclosures

cc: Gary A. Pasternak, Esq.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

\_\_\_\_\_) )  
IN THE MATTER OF ) )  
 ) ) Docket No. CAA-01-2015-0064  
U.S. Army Corps of Engineers – ) )  
Cold Regions Research and Engineering ) )  
Laboratory ) ) **CONSENT AGREEMENT**  
 ) ) **AND FINAL ORDER**  
Hanover, New Hampshire ) )  
 ) )  
Proceeding under Section 113 ) )  
of the Clean Air Act ) )  
\_\_\_\_\_)

**CONSENT AGREEMENT**

The United States Environmental Protection Agency (“EPA” or “Complainant”) and the United States Army Corps of Engineers (“Army Corps” or “Respondent”), consent to the entry of this Consent Agreement and Final Order (“CAFO”) pursuant to 40 C.F.R. § 22.13(b) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination, or Suspension of Permits, 40 C.F.R. Part 22 (“Consolidated Rules of Practice”). This CAFO resolves Respondent’s liability for alleged violations of the chemical accident prevention provisions of Section 112(r)(7) of the Clean Air Act (“CAA”), 42 U.S.C. § 7412(r)(7), and implementing federal regulations found at 40 C.F.R. Part 68.

EPA and Respondent agree to settle this matter through this CAFO without the filing of an administrative complaint, as authorized under 40 C.F.R. § 22.13(b) and 22.18(b). EPA and Respondent agree that settlement of this cause of action is in the public interest and that entry of this CAFO without litigation is the most appropriate means of resolving this matter.

RECEIVED  
SEP 28 2015  
EPA ORC WJS  
Office of Regional Hearing Clerk

NOW, THEREFORE, before taking any testimony, without adjudication of any issue of fact or law, and upon consent and agreement of the parties, it is hereby ordered and adjudged as follows:

**I. PRELIMINARY STATEMENT**

1. This CAFO both initiates and resolves an administrative action for the assessment of monetary penalties, pursuant to Section 113(d) of the CAA, 42 U.S.C. § 7413(d). As more thoroughly discussed in Sections III and IV below, the CAFO resolves the following CAA violations that Complainant alleges occurred in conjunction with Respondent's handling of ammonia at its Cold Regions Research and Engineering Laboratory in Hanover, New Hampshire:

- (a) *Failure to comply with safety information requirements*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.65;
- (b) *Failure to adequately identify, evaluate, and control hazards*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.67(e);
- (c) *Failure to comply with Program 3 operating procedures requirements*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.69;
- (d) *Failure to comply with Program 3 mechanical integrity requirements*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.73;
- (e) *Failure to comply with Program 3 compliance audit requirements*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.79; and
- (f) *Failure to have an adequate emergency response program*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. § 68.95.

## **II. APPLICABLE STATUTES AND REGULATIONS**

### **Statutory and Regulatory Authority**

2. 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. In particular, Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), mandates that EPA promulgate a list of substances that are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment if accidentally released. Section 112(r)(5) of the CAA, 42 U.S.C. § 7412(r)(5), requires that EPA establish, for each listed substance, the threshold quantity over which an accidental release is known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health. Finally, Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), requires EPA to promulgate requirements for the prevention, detection, and correction of accidental releases of regulated substances, including a requirement that owners or operators of certain stationary sources prepare and implement a Risk Management Plan.

3. The Risk Management Program (“RMP”) regulations promulgated pursuant to Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), are found at 40 C.F.R. Part 68.

4. Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E), renders it unlawful for any person to operate a stationary source subject to the regulations promulgated under the authority of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), in violation of such regulations.

5. Forty C.F.R. § 68.130 lists the substances regulated under Part 68 (“RMP chemicals” or “regulated substances”) and their associated threshold quantities, in accordance with the requirements of Sections 112(r)(3) and (7) of the CAA, 42 U.S.C. §§ 7412(r)(3) and (7). This

list includes anhydrous ammonia as an RMP chemical and identifies a threshold quantity of 10,000 pounds.

6. 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.

7. Under 40 C.F.R. § 68.10, an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process must comply with the requirements of Part 68 by no later than the latest of the following dates: (a) June 21, 1999; (b) three years after the date on which a regulated substance is first listed under 40 C.F.R. § 68.130; or (c) the date on which a regulated substance is first present above a threshold quantity in a process.

8. 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. Program 1 is the least comprehensive, and Program 3 is the most comprehensive. Pursuant to 40 C.F.R. § 68.10(b), a covered process is subject to Program 1 if, among other things, the distance to a toxic or flammable endpoint for a worst-case release assessment is *less* than the distance to any public receptor. Under 40 C.F.R. § 68.10(d), 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. Under 40 C.F.R. § 68.10(c), a covered process that meets neither Program 1 nor Program 3 eligibility requirements is subject to Program 2.

9. 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.

10. Forty C.F.R. § 68.12 mandates that the owner or operator of a stationary source subject to the requirements of Part 68 submit an Risk Management Plan to EPA, as provided in 40 C.F.R. § 68.150. The Risk Management Plan documents compliance with Part 68 in a summary format. For example, the Risk Management Plan for a Program 3 process documents compliance with the elements of a program 3 Risk Management Program, including 40 C.F.R. § Part 68, Subpart A (including General Requirements and a Management System to Oversee Implementation of RMP); 40 C.F.R. Part 68, Subpart B (Hazard Assessment to Determine Off-Site Consequences of a Release); 40 C.F.R. Part 68, Subpart D (Program 3 Prevention Program); and 40 C.F.R. Part 68, Subpart E (Emergency Response Program).

11. Additionally, 40 C.F.R. § 68.190(b) also requires that the owner or operator of a stationary source must revise and update the Risk Management Plan submitted to EPA at least once every five years from the date of its initial submission or most recent update. Other aspects of the prevention program must also be periodically updated.

12. Pursuant to CAA Section 118, 42 U.S.C. § 7418, federal facilities must comply with requirements of the CAA and are subject to enforcement under the CAA in the same manner and to the same extent as any nongovernmental entity.

13. Sections 113(a) and (d) of the CAA, 42 U.S.C. §§ 7413(a) and (d), as amended by EPA's 2008 Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19, promulgated in accordance with the Debt Collection Improvement Act of 1996 ("DCIA"), 31 U.S.C. § 3701, provide for the assessment of civil penalties for violations of Section 112(r) of the CAA, 42

U.S.C. § 7412(r), in amounts up to \$37,500 per day for violations occurring after January 12, 2009.

14. EPA and the U.S. Department of Justice have jointly determined that this action is an appropriate administrative penalty action under Section 113(d)(1) of the Act, 42 U.S.C. § 7413(d)(1).

### **III. GENERAL ALLEGATIONS**

15. Respondent Army Corps operates a controlled temperature laboratory, where it conducts research on the effect of cold temperatures on equipment, structures and technological systems, at its Cold Regions Research and Engineering Laboratory located at 72 Lyme Road, Hanover, New Hampshire (“CRREL” or “Facility”).

16. The Facility is located approximately two miles north of the center of Hanover, New Hampshire. The 30-acre site is bordered on the north and south by small housing areas, to the west by a narrow buffer of undeveloped land and the Connecticut River, and on the east by a state highway and a public school. Within a half-mile radius of the Facility, there are additional housing complexes, office buildings, the Hanover Fire and Police Department, the Emergency Medical Response complex, a nursing home, and a few small businesses. Approximately 350 people work at the Facility, and there is a day-care center for young children on-site.

17. Respondent uses anhydrous ammonia within its Ice Engineering Facility (“IEF”) located at CRREL. The IEF, constructed in 1977, is a unique hydraulic research facility, which houses three cold rooms for sophisticated modeling of hydraulic processes in cold regions. The IEF is a two-story building that includes an ammonia machinery room (“Machinery Room”) on the lower level and several refrigerated rooms where research is conducted. The Machinery



Room has three access doors: an internal double-door, an internal single door, and a third door that leads to a vestibule with two other internal doors and a door that leads to the outside. In addition to typical refrigeration equipment, such as compressors, evaporators, and condensers, the Facility has an emergency ammonia dump system on the outside of the building from which ammonia can be discharged during an emergency to a storm water detention pond. This pond is located to the west of, and in close proximity to, the IEF building. The pond drains into the adjacent Connecticut River. The Facility's day care center is located on the eastern side of the IEF.

18. Respondent is an agency, department, or instrumentality of the United States. As an agency, department, or instrumentality of the United States, Respondent is a "person" within the meaning of Section 302(e) of the Act, 42 U.S.C. § 7602(e), against whom an administrative penalty order may be issued under Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3).

19. The IEF 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).

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

21. Respondent uses anhydrous ammonia in its "process," as defined by 40 C.F.R. § 68.3, within the IEF. Within the IEF, the room air and test water are refrigerated using a 250-ton, two-stage ammonia refrigeration system charged with 14,000 pounds of ammonia. The IEF is capable of producing cold temperatures as low as -20 degrees Fahrenheit.

22. Accordingly, the process conducted in the IEF (the “Process”) is a “covered process” subject to the RMP provisions of Part 68 because Respondent “uses,” “stores,” and “handles” the RMP chemical anhydrous ammonia in the Process in an amount greater than 10,000 pounds.

23. According to Respondent’s Risk Management Plan completed in 2010, 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 IEF Process is subject to the requirements of RMP Program 3.

26. On August 13, 2013, EPA inspectors visited CRREL (“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.

27. 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 16% to 25% 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 (“RAGAGEP”) in the ammonia refrigeration industry. In collaboration with the American National Standards Institute,

the International Institute of Ammonia Refrigeration (“IIAR”) 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 (“ASHRAE”) 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.<sup>1</sup>

28. During the Inspection of CRREL, EPA requested and received certain documentation from Respondent pertaining to the Process, including the Facility’s emergency response plan (“ERP”).

29. Following the Inspection, EPA issued an Administrative Order (“AO”) pursuant to CAA Section 113, 42 U.S.C. § 7413, which became effective on September 23, 2014. The AO summarized RMP deficiencies and potentially dangerous conditions observed by the EPA inspectors; ordered Respondent to comply with RMP requirements at the Facility; and ordered Respondent to certify and document its compliance with applicable RMP requirements. Respondent had begun to address its compliance deficiencies after the Inspection and was likewise cooperative after receiving the AO.

30. On November 24, 2014, Respondent provided EPA with a Work Plan and Schedule for addressing the issues identified in the AO by May 27, 2015. Respondent later requested an

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<sup>1</sup> For example, the Building Code of the State New Hampshire incorporates the International Building Code 2009, with certain amendments. N.H. Admin. R. Bcr 303.01(a)(1) (2010). The New Hampshire Building Code also specifically states that the International Mechanical Code 2009 edition “shall be considered part of the requirements of this code.” *Id.* 303.01(a)(2) (also stating: “The provisions of the International Mechanical Code shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and *refrigeration systems*, incinerators, and other energy-related systems.”) (emphasis added). The International Mechanical Code 2009 edition, in turn, specifies that “[a]mmonia-refrigerating systems shall comply with this code and, except as modified by this code, ASHRAE 15 and IIAR 2.” Int’l Mech. Code § 1101.6 (2009).

extension on three items in the Work Plan. EPA granted an extension until September 23, 2015 for the following items: 1) revising standard operating procedures; 2) addressing deficiencies in the design of the ventilation system in the Machinery Room; and 3) permanently disabling the ammonia dump station. As of this time, all of the issues identified by the AO have been corrected except for these three above-listed deficiencies, which will be completed by February 28, 2016, as more thoroughly discussed below in Paragraph 79.

31. The Inspection and EPA's review of subsequently submitted information revealed some potentially dangerous conditions relating to the Process, including that Respondent:

- a. Had incomplete, outdated documentation pertaining to the equipment used in the Process. Specifically, the piping and instrument diagram did not reflect a shut-off valve installed on the second floor of the IEF;
- b. Had not adequately installed and labeled switches controlling emergency ventilation and emergency shutdown immediately outside the principal access doors to the Machinery Room. The only emergency shut-off and ventilation switches were near the outer door next to the ammonia dump station, but the position of the shut-off switch was not clearly identified, and the switches on the control box were not clearly marked. Respondent's representatives were unable to explain the purpose of several of these switches. Further, there were no switches for shut-off or operation of an emergency ventilation system in the vicinity of any of the interior doors to the Machinery Room, including the double-door entry;
- c. Had not configured ammonia detectors to actuate audible and visual alarms at each Machinery Room entrance;

- d. Did not have signs warning of the presence of ammonia and restricting entry on any of the doors to the Machinery Room, and did not have any signage posted near the Machinery Room identifying emergency instructions, telephone numbers of emergency safety and operating personnel, or an evacuation plan;
- e. Had not labeled or had inadequately labeled some of the piping for the ammonia refrigeration system in several locations throughout the IEF, including certain overhead pipes containing anhydrous ammonia and glycol fluids in the Machinery Room and certain pipes on the second floor;
- f. In the largest IEF room, had not installed two ammonia detectors in areas where leaked ammonia, which would rise upward, would concentrate. Instead, two ammonia detectors were improperly mounted directly onto piping at shoulder level below some of the piping in the room;
- g. Had not properly prevented corrosion on pipes. For example, heavily rusted conditions were observed on the anhydrous ammonia fill pipe inside the IEF building and on the lower portion of the header pipe on the roof of the IEF building;
- h. Had not located discharge points for ammonia pressure relief at an adequate distance from a fire escape from the second level;
- i. Had not labeled or tagged one of the three main shut-off valves, or King Valves, for anhydrous ammonia piping;
- j. Had not located air intakes in proper locations to ensure adequate ventilation and air sweep of the room. Air intakes in the Machinery Room were located near the ceiling. Because the air intakes were near the ceiling and the exhaust fans were installed in

- the roof, the air circulation pattern in the Machinery Room would not provide adequate ventilation of lower elevations near the machinery located in this room;
- k. Had not properly maintained the vestibule leading from the Machinery Room to the only door that opened directly to the outside of the building, in that the vestibule was being used for storage and the other two interior doors were not labeled “No Exit,” both of which could impede egress in an emergency;
  - l. Had two single doors to the Machinery Room that were not tight-fitting;
  - m. Had no safety eyewash/showers located in close proximity to the exits from the Machinery Room;
  - n. Had not maintained sufficient documentation to establish that Respondent’s practice of performing pieces of a Process Hazard Analyses (“PHA”) annually resulted in the preparation of a complete PHA within a five-year period, had not developed a schedule for addressing recommendations identified in the PHA, nor documented that recommended actions were taken in a timely manner. In addition, Respondent’s PHA (which its Risk Management Plan submission indicates was completed in 2010) failed to identify the hazards associated with the ammonia dump station discussed below in subparagraphs (s) and (t). Nor did it address hazards that exist at the Facility due to possible earthquakes, floods, tornadoes, and hurricanes, which are all credible threats at this Facility. CRREL is located in a Federal Emergency Management Agency (“FEMA”) moderate intensity earthquake zone, and is located along the Connecticut River;
  - o. Had an inadequate standard operating procedures (“SOPs”), including for operating the ammonia dump station, in that CRREL’s SOPs did not include all RMP elements,

like health and safety information for anhydrous ammonia and standards for responding to deviations from typical operations;

- p. Had no windsocks that were visible from the street;
- q. Had no documentation of any RMP compliance audits performed at the IEF;
- r. Had not included the name of the proper RMP contact on the Facility's emergency response call list;
- s. Had inadequate emergency response equipment. Respondent's emergency "ammonia dump station" had a dangerous piping system with an approximately one-half foot gap between the discharge pipe and the ground receiving pipe, which might result in a further release of ammonia through this gap during an emergency. This potential release would likely be at knee level, which could result in serious injury because ammonia is lighter than air and rises in the event of a release;
- t. Had inadequate, outdated procedures for emergency response in that the "ammonia dump station" relied on a pumper truck from the fire department to supply water in the event that municipal water was unavailable. However, the local fire department advised EPA that it was unaware of its potential role in an emergency at the Facility, and that it was not equipped to provide assistance of this nature in the event of an emergency. In addition, Respondent had failed to evaluate or update the "ammonia dump station" design, which called for the discharge of ammonia to the storm water detention pond located at the Facility, with drainage from the pond to the Connecticut River; and
- u. Failed to report ten chemicals in use at the Facility, in addition to anhydrous ammonia, in its 2009, 2010, and 2012 Tier II reports. Among the chemicals not

reported on these Tier II reports were sulfuric acid, lead-acid batteries (which contain sulfuric acid and lead), glycol, propane, fuel oil, and refrigerants other than anhydrous ammonia.

#### **IV. VIOLATIONS**

##### **Count 1: Failure to Comply with Safety Information Requirements**

32. The allegations in Paragraphs 1 through 31 of this document are realleged and incorporated herein by reference.

33. Pursuant to 40 C.F.R. § 68.65, the owner or operator of a Program 3 process is required, among other things, to compile written process safety information before completing the PHA, in order to perform an adequate PHA and to enable proper maintenance of process equipment. This requirement includes documenting information pertaining to the hazards of the RMP chemical in the process; information pertaining to the technology and equipment of the process, including that the equipment complies with RAGAGEP; and information showing that any equipment that was designed according to outdated standards is designed, maintained, inspected, tested, and operated in a safe manner. This compilation enables appropriate identification and understanding of hazards posed by regulated substances in the process and the technology and equipment of the process.

34. As described in Paragraph 31(a), above, at the time of Inspection, Respondent had not compiled all of the necessary process safety information pertaining to the technology and equipment of the IEF because it did not have an up-to-date piping and instrument diagram, as required under 40 C.F.R. § 68.65(d)(1)(ii).



35. Additionally, as described in Paragraphs 31(b) through (m), above, Respondent also failed to document that the Process complied with RAGAGEP, as discussed more thoroughly below in paragraphs 36 through 47.

36. As described above in Paragraph 31(b), at the time of the Inspection, Respondent did not have adequate, and adequately labeled, emergency shut-off and ventilation switches immediately outside of the principal Machinery Room doors. The recommended industry practice and standard of care for ammonia refrigeration systems is to provide clearly marked emergency shutdown and ventilation switches immediately outside the principal doors (and, preferably, all access doors). See, e.g., Int’l Inst. of Ammonia Refrigeration, Standard 2-2008: Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems §§ 13.3.1.6 (2008) [hereinafter “IIAR 2-2008”]<sup>2</sup> (emergency shutdown switches); 13.2.1.4 (emergency mechanical ventilation system switches); Am. Nat’l Standards Inst./Am. Soc’y of Heating, Refrigerating and Air-Conditioning Eng’rs, Standard 15-2007: Safety Standard for Refrigeration Systems §§ 8.12(i) (2007) [hereinafter “ASHRAE 15-2007”] (provide switches), 11.2.2 (identify switches). The shutdown switch should be of the break-glass type and the ventilation switch should have “on/auto” settings. See, e.g., Int’l Inst. of Ammonia Refrigeration, Bulletin No. 111: Ammonia Machinery Room Ventilation §§ 3.5.1 & 3.5.2 (2002) [hereinafter “IIAR Bull. 111”].<sup>3</sup>

37. As described above in Paragraph 31(c), at the time of the Inspection, Respondent had not equipped the ammonia detector to actuate audible and visual alarms outside of each of the Machinery Room entrances. The recommended industry practice and standard of care is to equip

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<sup>2</sup> This CAFO cites the industry standards in effect at the time of the of CRREL’s most recent PHA, which, as reported in its Risk Management Plan submission to EPA, was May 2010.

<sup>3</sup> IIAR Bulletin No. 111 was in effect from 2002 until 2010, when it was withdrawn and its requirements were incorporated into the August 2010 update to IIAR Standard 2-2008.

the detectors to activate visual and audible alarms inside the Machinery Room and at each of its entrances. See, e.g., ASHRAE 15-2007, supra, § 8.11.2.1; Bull. No. 111, supra, § 3.5.3.

38. As described above in Paragraph 31(d), at the time of the Inspection, Respondent did not have sufficient signs on the doors to, or within, the Machinery Room. The recommended industry practice and standard of care for ammonia refrigeration systems 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., ASHRAE 15-2007, supra, §§ 8.11.8, 11.2.4, and to post other signs with information about the operation of the process, including about the alarms and the emergency shutdown procedures, outside the principal Machinery Room door. See, e.g., id., §§ 8.11.2.1 (meaning of alarms), 11.7 (emergency shutdown procedures and precautions).

39. As described above in Paragraph 31(e), at the time of the Inspection, Respondent had not labeled or had inadequately labeled the piping for the ammonia refrigeration system in several locations throughout the IEF. The recommended industry practice and standard of care is to identify all piping as to physical state, relative pressure level, and direction of the flow, and to employ a standard identification system. See, e.g., IIAR 2-2008, supra, § 10.5; ASHRAE 15-2007, supra, §11.2.2; Int'l Inst. of Ammonia Refrigeration, Bulletin No. 109: IIAR Minimum Safety Criteria for a Safe Ammonia Refrigeration System, § 4.7.6 (1997) [hereinafter "IIAR Bull. 109"]. See generally, Int'l Inst. of Ammonia Refrigeration, Bulletin No. 114: Guidelines for Identification of Ammonia Refrigeration Piping and System Components (1991).

40. As described above in Paragraph 31(f), at the time of the Inspection, in the largest IEF Room, Respondent had placed two ammonia detectors in an area where leaked ammonia is not likely to concentrate. The recommended industry practice and standard of care is to locate

detectors in an area where refrigerant from a leak is likely to concentrate. See, e.g., IIAR 2-2008, supra, § 13.2.2.1.

41. Additionally, as described above in Paragraph 31(g), at the time of the Inspection, Respondent had not properly prevented corrosion on piping. The recommended industry practice and standard of care is to prevent corrosion on ammonia piping and insulate designated piping to prevent condensation and corrosion. See, e.g., Int'l Inst. of Ammonia Refrigeration, IIAR Bulletin No. 110, Startup, Inspection and Maintenance of Ammonia Mechanical Refrigerating Systems § 6.7 (1993); IIAR Bull. 109, supra, § 4.7.4.

42. As described above in Paragraph 31(h), at the time of the Inspection, Respondent had not located ammonia pressure relief device discharge points at an adequate distance from the fire escape on the second level. The recommended industry practice and standard of care is to locate the pressure relief device discharge at least twenty feet from personnel exits. See, e.g., IIAR 2-2008, supra, § 11.3.6.3; ASHRAE 15-2007, supra, § 9.7.8.

43. As described above in Paragraph 31(i), at the time of the Inspection, there was an unlabeled untagged King Valve for the Process. The recommended industry practice and standard of care is to label all system pipes and valve systems, including the main shut-off valve. See, e.g., ASHRAE 15-2007, supra, §§ 9.12.6, 11.2.2; IIAR Bull. 109, supra, § 4.10.3 (the main shut-off valve should be readily accessible and identified with a prominent sign having letters sufficiently large to be easily read).

44. As described in Paragraph 31(j), above, at the time of Inspection, in the Machinery Room, Respondent had not located intakes for air in proper locations to ensure an adequate air sweep of the room. The recommended industry practice is to provide adequate ventilation and air sweep in Machinery Rooms. See, e.g., IIAR 2-2008, supra, §§ 13.2.3.8 (openings for inlet air

shall be positioned to be near the machinery), 13.2.3.9 (openings for inlet air shall be positioned to avoid recirculation of exhaust air); ASHRAE 15-2007, supra, § 8.11.4 (opening for inlet air shall be positioned to avoid recirculation).

45. As described in Paragraph 31(k), above, at the time of Inspection, Respondent had not properly maintained the vestibule so as to provide a clear and unobstructed egress to the outdoors from the Machinery Room. The recommended industry practice and standard of care is to allow unencumbered egress from any part of the room. See, e.g., IIAR 2-2008, supra, § 13.1.1; ASHRAE 15-2007, supra, § 8.3.

46. As described in Paragraph 31(l), above, at the time of Inspection, Respondent had two doors to the Machinery Room that were not tight-fitting. The recommended industry practice and standard of care is to ensure that each machinery room door is tight-fitting. See, e.g., IIAR 2-2008, supra, § 13.3.3.1; ASHRAE 15-2007, supra, § 8.11.2.

47. As described in Paragraph 31(m) above, Respondent had not installed personnel safety eyewash and showers just outside of the Machinery Room doors. The recommended industry practice and standard of care is to locate an emergency eyewash station immediately outside the machine room exit door. See, e.g., IIAR 2-2008, supra, § 13.3.1.4; IIAR Bull. 109, supra, § 4.10.10.

48. By failing to compile the necessary information about the technology and equipment of the Processes, including by documenting that the Process complied with RAGAGEP, 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 Adequately Identify, Evaluate, and Control Hazards**

49. The allegations in Paragraphs 1 through 48 of this document are realleged and incorporated herein by reference.

50. 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 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, the owner or operator must establish a system for addressing 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.

51. As described in Paragraph 31(n), above, Respondent had performed a PHA in piecemeal fashion, ending in 2010 and identified recommended action items. However, Respondent did not have a system for cross-referencing those PHA subparts so as to clearly comprise a complete PHA and did not establish a schedule for addressing the identified items not document that, or when, they were completed.

52. As also described in Paragraph 30(n) above, the PHAs did not identify or address hazards that exist at the Facility due to possible earthquakes, floods, tornadoes, and hurricanes, which are all credible threats at CRREL.

53. Additionally, as described in Paragraphs 31(s) and (t), Respondent's PHAs failed to identify the readily discernible hazards to personnel and the environment associated with operating the ammonia dump station. Current industry standards would prohibit dump systems that could cause ammonia to flow into surface water. See, e.g., ASHRAE 15-2007, supra, § 11.3

(with very limited exception, “no refrigerant shall be discharged to the atmosphere or to locations such as a sewer, river, stream, or lake”).

54. By failing to adequately identify, evaluate, and control hazards, Respondent violated 40 C.F.R. § 68.67(e) and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E).

**Count 3: Failure to Comply with Program 3 Operating Procedures Requirements**

55. The allegations in Paragraphs 1 through 54 of this document are realleged and incorporated herein by reference.

56. Pursuant to 40 C.F.R. § 68.69, the owner or operator of a Program 3 process is required to develop and implement written operating procedures that provide instructions or steps for safely conducting activities associated with the covered process. These operating procedures must address steps for each operating phase, operating limits, safety and health considerations, and safety systems. The owner or operator must make these procedures available to employees involved in the process, keep them up-to-date with current practices, and certify annually that they are current. The owner or operator must also develop and implement safe work practices to control hazards during specific operations.

57. As described in Paragraph 31(o), above, at the time of Inspection, Respondent did not have sufficient written RMP operating procedures, including for the ammonia dump station.

58. By failing to comply with the operating procedures requirements, Respondent violated 40 C.F.R. § 68.69 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E).

**Count 4: Failure to Comply with Program 3 Mechanical Integrity Requirements**

59. The allegations in Paragraphs 1 through 58 of this document are realleged and incorporated herein by reference.

60. 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 inspect and test the equipment either in accordance with the 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.

61. As described in Paragraph 31(g), above, at the time of Inspection, Respondent had not maintained the mechanical integrity of the Process, given that there were pipes at the IEF that were heavily corroded.

62. By failing to establish and implement a sufficient mechanical integrity program and by not correcting equipment deficiencies before further use or in a safe and timely manner, 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).

**Count 5: Failure to Comply with Program 3 Compliance Audit Requirements**

63. The allegations in Paragraphs 1 through 62 of this document are realleged and incorporated herein by reference.

64. Pursuant to 40 C.F.R. § 68.79, the owner or operator of a Program 3 process must evaluate compliance with the provisions of the RMP prevention program at least every three years; document the audit findings; promptly determine and document a response to each of the

findings of the audit; document that deficiencies have been corrected; and retain the two most recent compliance reports.

65. As described in Paragraph 31(q), above, Respondent had no documentation showing any RMP compliance audits had been performed at the IEF.

66. By failing to comply with the compliance audit requirements, Respondent violated 40 C.F.R. § 68.79 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E).

**Count 6: Failure to Implement an Adequate Emergency Response Program**

67. The allegations in Paragraphs 1 through 66 of this document are realleged and incorporated herein by reference.

68. Pursuant to 40 C.F.R. § 68.90, the owner or operator of a stationary source of a Program 3 process must comply with the emergency response program requirements of 40 C.F.R. § 68.95 unless such owner or operator's employees will not be responding to accidental releases and various other requirements are met. Forty C.F.R. § 68.95 requires the owner or operator of a Program 3 process to develop and implement an emergency response program, including by: maintaining an emergency response plan; having procedures and measures for emergency response after an accidental release; outlining procedures for using, inspecting, testing and maintaining response equipment; training employees on response procedures; and creating procedures to review and update the emergency response plan to reflect current conditions at the Facility and to inform employees accordingly.

69. Respondent indicates that its employees will respond to accidental releases at the Facility in certain circumstances (for example, the standard operating procedure for the ammonia dump system specifies that a Facility employee will don a respirator and operate the system). Accordingly, 40 C.F.R. § 68.95 applies.



70. As described in Paragraph 31(b), (c), and (s), above, at the time of the Inspection, Respondent had inadequate measures for emergency response after an accidental release. Respondent's emergency "ammonia dump station" had an inadequate piping system with gap in piping that could release ammonia onto an operator during an emergency. Also, Respondent had no audio/visual alarms and inadequate emergency ventilation and shut-off controls.

71. As described in Paragraph 31(t), above, at the time of Inspection, Respondent had inadequate, outdated procedures for emergency response in that the "ammonia dump station" relied on a pumper truck from the fire department to supply water in the event that municipal water was unavailable but the fire department was not prepared to fulfill this role. In addition, Respondent had failed to evaluate or update the "ammonia dump station" design, which called for the discharge of ammonia to the storm water detention pond located at the Facility, with drainage from the pond to the Connecticut River.

72. As described in Paragraph 31(d) and (r) above, at the time of the Inspection, Respondent had no signage near the Machinery Room identifying emergency instructions, telephone numbers of emergency safety and operating personnel or an evacuation plan; nor had Respondent included the name of the proper RMP contact on the Facility's emergency response call list. The recommended industry practice and standard of care is to post signs with emergency instructions and phone numbers and an evacuation plan. See, e.g., IIAR Bull. 109, supra, §§ 4.10.5; 4.10.6.

73. Accordingly, due to Respondent's failure to have adequate measures and procedures for emergency response after an accidental release, adequate signage and instructions, and adequate procedures for use, testing, and maintenance of emergency response equipment,

Respondent violated the emergency response program requirements of 40 C.F.R. § 68.95 and Section 112(r)(7)(E) of the CAA, 42 U.S.C. § 7412(r)(7)(E).

#### **V. TERMS OF SETTLEMENT**

74. The provisions of this CAFO shall apply to and be binding on EPA and on Respondent, its officers, directors, successors, and assigns officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns. From the Effective Date of this Agreement until the end of the Tolling Period, as set out in Paragraph 82, Respondent must give written notice and a copy of this Agreement to any successors in interest prior to any transfer of ownership or control of any portion of or interest in the Facility. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to the EPA. In the event of any such transfer, assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this Agreement unless the EPA has provided written approval of the release of said obligations or liabilities.

75. Respondent stipulates that EPA has jurisdiction over the subject matter alleged in this CAFO and that the CAFO states a claim upon which relief can be granted against Respondent. Respondent waives any defenses it might have as to jurisdiction and venue and, without admitting or denying the factual and legal allegations contained herein, consents to the terms of this CAFO.

76. Respondent hereby waives its right to a judicial or administrative hearing on any issue of law or fact set forth in this CAFO and waives its right to appeal the Final Order.

77. Respondent consents to the issuance of this CAFO and consents for purposes of settlement to the performance of the non-penalty conditions described below in Paragraph 79 and to the payment of the civil penalty cited in paragraph 83 below.

## Conditions

78. Respondent certifies that it has addressed the majority of the deficiencies alleged above and that once all remaining issues have been addressed, according to the terms outlined in Paragraph 79 below, it will continue to operate the Facility in compliance with 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. Part 68.

79. As a condition of settlement, Respondent shall complete implementation of the following items, which address the remaining Facility compliance deficiencies identified above, by the listed deadlines:

- a. By December 31, 2015, complete revisions to the Facility's SOPs;
- b. By February 28, 2016, reconfigure the ventilation system in the Machinery Room so that the air intakes are positioned to ensure an adequate air sweep of the room and so that the exhaust outlets are not in the vicinity of the emergency exit stairway; and
- c. By February 28, 2016, permanently disable the ammonia dump station.

80. By no later than March 31, 2016, Respondent shall certify that it has completed the work required in Paragraph 79 above by submitting to EPA a written report in which Respondent describes the steps it took to comply with the terms of this CAFO, including a report on any instance of noncompliance with the requirements Paragraph 79 above.

81. Respondent must pay the following stipulated penalties to the United States for failure to perform the compliance actions described in Paragraph 79 above in a manner consistent with the terms of this CAFO, or within the time required by this CAFO: \$375 per day for the first fifteen (15) days of such violation; \$750 per day for the sixteenth (16th) through

thirtieth (30th) days of such violation, and \$1,125 per day for each day of such violation, thereafter.

82. Respondent agrees that the time period from the Effective Date of this Agreement until all of the conditions specified in Paragraph 79 are completed (the “Tolling Period”) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by Complainant on any claims (the “Tolled Claims”) set forth in Section IV of this Agreement. Respondent shall not assert, plead, or raise in any fashion, whether by answer, motion or otherwise, any defense of laches, estoppel, or waiver, or other similar equitable defense based on the running of any statute of limitations or the passage of time during the Tolling Period in any action brought on the Tolled Claims.

#### **Civil Penalty**

83. Pursuant to Section 113(e) of the CAA, 42 U.S.C. § 7413(e), and taking into account the relevant statutory penalty criteria, the facts alleged above, and such other circumstances as justice may require, including Respondent’s significant cooperation in agreeing to expeditiously perform the non-penalty obligations in Paragraph 79 above, EPA has compromised the maximum civil penalty of \$37,500 per day per violation. Accordingly, EPA has determined that it is appropriate to assess a civil penalty of \$85,059 for the violations alleged in this CAFO, and Respondent consents to payment of this penalty.

84. Within thirty (30) days of the effective date of this CAFO, Respondent shall make a payment by cashier’s or certified check, or by wire transfer, in the amount of \$85,059 and shall include the case name and docket number (CAA-01-2015-0064) on the face of the check or wire transfer confirmation. A check should be payable to “Treasurer, United States of America.” The payment shall be remitted as follows:

If remitted by regular U.S. mail:

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

If remitted by any overnight commercial carrier:

U.S. Bank  
1005 Convention Plaza  
Mail Station SL-MO-C2GL  
St. Louis, Missouri 63101

If remitted by wire transfer: Any wire transfer must be sent directly to the Federal Reserve Bank in New York City using the following information:

Federal Reserve Bank of New York  
ABA = 021030004  
Account = 68010727  
SWIFT address = FRNYUS33  
33 Liberty Street  
New York, New York 10045  
Field Tag 4200 of the Fedwire message should read:  
“D 68010727 Environmental Protection Agency”

In addition, at the time of payment, Respondents should also forward notice of payment of the civil penalty as well as copies of the payment check or payment receipt 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

and

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

**85. Collection of Unpaid Civil Penalty:** Pursuant to Section 113(d)(5) of the CAA, 42 U.S.C. § 7413(d)(5), if Respondent fails to pay the civil penalty referenced in paragraph 83 in

full, it will be subject to an action to compel payment, plus interest, enforcement expenses, and a nonpayment penalty. Interest will be assessed on the civil penalty if it is not paid within thirty (30) calendar days of the effective date of this CAFO. In that event, interest will accrue from the effective date of this CAFO at the “underpayment rate” established pursuant to 26 U.S.C § 6621(a)(2). In the event that a penalty is not paid when due, an additional charge will be assessed to cover the United States’ enforcement expenses, including attorneys’ fees and collection costs. In addition, a quarterly nonpayment penalty will be assessed for each quarter during which the failure to pay the penalty persists. Such nonpayment penalty shall be 10 percent of the aggregate amount of Respondent’s outstanding civil penalties and nonpayment penalties hereunder accrued as of the beginning of such quarter. In any such collection action, the validity, amount, and appropriateness of the penalty shall not be subject to review.

**86. Collection of Unpaid Stipulated Penalty:** Pursuant to 31 U.S.C. § 3717, EPA is entitled to assess interest and penalties on debts owed to the United States and a charge to cover the cost of processing and handling a delinquent claim. In the event that any portion of the stipulated penalty relating to the performance of the compliance actions and accrued pursuant to paragraph 81 above is not paid when due, the penalty shall be payable, plus accrued interest, without demand. Interest shall be payable at the rate of the United States Treasury tax and loan rate in accordance with 31 C.F.R. § 901.9(b)(2) and shall accrue from the original date on which the penalty was due to the date of payment. In addition, a penalty charge of six percent per year will be assessed on any portion of the debt which remains delinquent more than ninety (90) days after payment is due. Should assessment of the penalty charge on the debt be required, it will be assessed as of the first day payment is due under 31 C.F.R. § 901.9(d). In any such collection action, the validity, amount, and appropriateness of the penalty shall not be subject to review.

87. All penalties, interest, and other charges shall represent penalties assessed by EPA within the meaning of 26 U.S.C. § 162(f) and are not deductible for purposes of federal, state or local law. Accordingly, Respondent agrees to treat all payments made pursuant to this CAFO as penalties within the meaning of 26 C.F.R. § 1.162-21, and further agrees not to use these payments in any way as, or in furtherance of, a tax deduction under federal, state, or local law.

88. This CAFO shall not relieve Respondent of its obligation to comply with all applicable provisions of federal, state, or local law.

89. This CAFO constitutes a settlement by EPA of all claims for civil penalties pursuant to Sections 113(a) and (d) of the CAA for the specific violations alleged in this CAFO. Compliance with this CAFO shall not be a defense to any other actions subsequently commenced pursuant to federal laws and regulations administered by EPA, and it is the responsibility of Respondent to comply with said laws and regulations.

90. By signing this Agreement, both parties agree that each party's obligations under this Consent Agreement and attached Final Order constitute sufficient consideration for the other party's obligations. Additionally, both parties agree that Complainant's covenant not to sue Respondent (stated in Paragraph 92) during the time period between the issuance of the attached Final Order and the deadline (stated in Paragraph 79) for Respondent to complete the non-penalty conditions of this Consent Agreement constitutes sufficient consideration for Respondent's obligation to completely perform the non-penalty conditions of this Consent Agreement as stated in Paragraph 79, regardless of whether the covenant not to sue subsequently terminates.

91. By signing this Agreement, 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 or misleading information, including the possibility of fines and imprisonment for knowing submission of such information, under 18 U.S.C. § 1001.

92. Complainant covenants not to sue Respondent for injunctive or other equitable relief for the violations and facts alleged in this matter, but such covenant automatically terminates if and when Respondent fails to timely and satisfactorily complete every condition stated in Paragraph 79 (including payment of any stipulated penalties owed). If and when such covenant terminates, the United States at its election may seek to compel performance of the conditions stated in Paragraph 79 in a civil judicial action under the CAA or as a matter of contract. The covenant not to sue becomes permanent upon satisfactory performance of the conditions stated in Paragraph 79.

93. Nothing in this CAFO shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this CAFO or of the statutes and regulations upon which this CAFO is based, or for Respondent's violation of any applicable provision of law.

94. 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.

95. Each party shall bear its own costs and fees in this proceeding including attorney's fees, and specifically waive any right to recover such costs from the other party pursuant to the Equal Access to Justice Act, 5 U.S.C § 504, or other applicable laws.

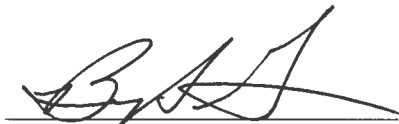


96. The terms, conditions, and requirements of this CAFO may not be modified without the written agreement of all Parties and the approval of the Regional Judicial Officer, except that the Regional Judicial Officer need not approve written agreements modifying the compliance action deadlines listed in Paragraph 79.

97. In accordance with 40 C.F.R. § 22.31(b), the effective date of this CAFO is the date on which it is filed with the Regional Hearing Clerk.

98. Each undersigned representative of the parties certifies that he is fully authorized by the party responsible to enter into the terms and conditions of this CAFO and to execute and legally bind that party to it.

**For Respondent:**



Bryan S. Green  
Colonel, Corps of Engineers  
Commander

15 SEP 2015  
Date

**For Complainant:**



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

09/23/2015  
Date

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I**

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<b>IN THE MATTER OF:</b>	)	
	)	
U.S. Army Corps of Engineers	)	
Cold Regions Research and	)	EPA Docket No.
Engineering Laboratory	)	CAA-01-2015-0064
	)	
Hanover, New Hampshire	)	
	)	
Respondent.	)	
<hr/>	)	


**FINAL ORDER**

Pursuant to 40 CFR §§ 22.13(b) and 22.18(b) of the United States Environmental Protection Agency’s Consolidated Rules of Practice, the Parties to this matter have forwarded an executed Consent Agreement for final approval. In accordance with Section 113(e) of the Clean Air Act, 42 U.S.C. § 7413(e), and in consideration Respondent’s agreement to perform the non-penalty conditions in paragraphs 79 and 80 of the Consent Agreement, as authorized by Section 113(d)(2)(B), 42 U.S.C. § 7413(d)(2)(B), Complainant has compromised the administrative penalty to be assessed in this matter.

By entering into this settlement, Respondent consents to the payment of a civil penalty in the amount of \$85,059, and agrees to perform the conditions described in paragraphs 79 and 80 of the Consent Agreement.

The Consent Agreement resolving this matter is hereby ratified. The Respondent is ordered to comply with the terms of this Consent Agreement, which is effective on the date it is filed with the Regional Hearing Clerk.

SO ORDERED THIS 21<sup>st</sup> DAY OF SEPTEMBER 2015



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LeAnn Jensen  
Acting Regional Judicial Officer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1 – NEW ENGLAND

\_\_\_\_\_)  
IN THE MATTER OF )  
)  
U.S. Army Corps of Engineers – )  
Cold Regions Research and Engineering )  
Laboratory )  
)  
Hanover, New Hampshire )  
)  
Proceeding under Section 113 )  
of the Clean Air Act )  
\_\_\_\_\_)

Docket No. CAA-01-2015-0064

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing Consent Agreement and Final Order has been sent to the following persons on the date noted below:

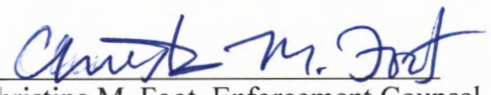
Original and one copy  
(hand-delivered):

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 (certified mail, return  
receipt requested):

Gary A. Pasternak, Esq.  
Department of the Army – Corps of Engineers  
Engineer Research and Development Center  
Cold Regions Research and Engineering Laboratory  
72 Lyme Road  
Hanover, NH 03755

Dated: 9/28/15

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