

EPA ENFORCEMENT ACCOUNTS RECEIVABLE CONTROL NUMBER FORM FOR ADMINISTRATIVE ACTIONS

This form was originated by Wanda I. Santiago for Laura J. Berry 9/25/14
Name of Case Attorney Date

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

Case Docket Number CAA-DI-2014-0052

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:

Borden of Remington Corp.
63 Water Street
Fall River, MA 02721

Total Dollar Amount of Receivable \$ 114,118 Due Date: 10/25/14

SEP due? Yes _____ No Date Due _____

Installment Method (if applicable)

INSTALLMENTS OF:
1st \$ _____ on _____
2nd \$ _____ on _____
3rd \$ _____ on _____
4th \$ _____ on _____
5th \$ _____ 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 25, 2014

BY HAND

Wanda Santiago, Regional Hearing Clerk
U.S. Environmental Protection Agency
Region 1 (ORA 18-1)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Re: *In re Borden & Remington Corp.*, Docket No. CAA-01-2014-0052

Dear Ms. Santiago:

Enclosed for filing are the following original documents, and one copy of each, relating to the above-referenced matter:

1. Consent Agreement and Final Order; and
2. Certificate of Service.

Kindly file the documents in the usual manner. Thanks very much for your help.

Very truly yours,

A handwritten signature in blue ink that reads "Laura J. Berry".

Laura J. Berry
Enforcement Counsel

Enclosures

cc: Jonathon Pearlson, Esq. (Respondent's counsel)
Leonard Wallace, OES, EPA Region 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1

RECEIVED

SEP 25 2014

EPA ORC WS
Office of Regional Hearing Clerk

In the matter of)

BORDEN & REMINGTON CORP.)

63 Water Street)
Fall River, MA 02721)

Respondent.)

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

Docket No. CAA-01-2014-0052

CONSENT AGREEMENT AND FINAL ORDER

1. The United States Environmental Protection Agency Region 1 (“EPA” or “Complainant”) and Borden & Remington Corp. (“Borden Corp.” 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/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” or the “Act”), 42 U.S.C. § 7412(r)(7), implementing federal regulations found at 40 C.F.R. Part 68, and Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1) (the “General Duty Clause”).

2. EPA and Respondent hereby 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).

3. EPA and Respondent agree that settlement of this matter is in the public interest, and that entry of this CAFO without further litigation is the most appropriate means of resolving this matter.

4. The facts and violations alleged herein were also alleged in a Notice of Violation and Administrative Order issued to Respondent on March 28, 2014 (the “NOV/AO”). Respondent was cooperative in responding to the NOV/AO and addressing the issues cited therein. Respondent developed a Work Plan and Schedule to correct the violations cited in the NOV/AO and submitted to EPA a certification that the Work Plan has been fully implemented and that Respondent has corrected all of the violations cited in the NOV/AO.

5. Therefore, before taking any testimony, upon the pleadings, without adjudication or admission of any issue of fact or law, it is hereby ordered as follows:

I. PRELIMINARY STATEMENT

6. 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 storage and handling of hazardous substances at its Fall River, Massachusetts facility:

a. *Failure to prepare and submit a Risk Management Plan that includes all covered processes*, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. §§ 68.12(a) and 68.150(a);

b. *Failure to comply with process safety information requirements*, including documentation of compliance with recognized and generally accepted good engineering practices, in violation of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. §§ 68.65 and/or 68.48;

c. *Failure to comply with 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; and

d. *Failure to design and maintain a safe facility*, in violation of the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

II. STATUTORY AND REGULATORY AUTHORITY

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

8. Section 112(r) of the CAA, 42 U.S.C. § 7412(r), authorizes EPA to promulgate regulations and programs to prevent, and minimize the consequences of, the accidental release of certain regulated substances. In particular, Section 112(r)(3), 42 U.S.C. § 7412(r)(3), requires EPA to 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, and Section 112(r)(5), 42 U.S.C. § 7412(r)(5), requires EPA to establish for each regulated substance a 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. 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 (“RMP”).

9. Pursuant to Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), EPA promulgated RMP regulations, found at 40 C.F.R. §§ 68.1-68.220 (“Part 68”).

10. Under Section 112(r)(7)(e) of the CAA, 42 U.S.C. § 7412(r)(7)(e), it is unlawful for any person to operate any stationary source subject to the regulations promulgated pursuant to Section 112(r) of the CAA, 42 U.S.C. § 7412(r), in violation of such regulations.

11. Section 68.130 of 40 C.F.R. lists the substances regulated under Part 68 (“RMP chemicals” or “regulated substances”) and their associated threshold quantities, in accordance with the requirements of Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3).

12. 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.

13. 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.

14. Each process in which a regulated substance is present in more than a threshold quantity (a “covered process”) is subject to one of three risk management programs, whose eligibility requirements are set forth in 40 C.F.R. § 68.10. Program 1 is the least comprehensive, and Program 3 is the most comprehensive. Under 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 certain specified NAICS codes or subject to the Occupational Safety and Health Administration (“OSHA”) process safety management (“PSM”) standard set forth at 29 C.F.R. § 1910.119. Under 40 C.F.R. § 68.10(c), a covered process meeting neither Program 1 nor Program 3 eligibility requirements is subject to Program 2.

15. Forty C.F.R. § 68.12 mandates that the owner or operator of a stationary source implement the chemical accident prevention provisions of Part 68 to which it is subject and submit an RMP, including a registration that reflects all covered processes. The RMP documents compliance with Part 68. For example, the RMP for a Program 3 process documents compliance with the elements of a Program 3 Risk Management Program, including 40 C.F.R. § 68.12 (General Requirements); 40 C.F.R. § 68.15 (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).

16. Additionally, 40 C.F.R. § 68.190(b) dictates that the owner or operator of a stationary source must revise and update the RMP submitted to EPA at least once every five years from the date of its initial submission or most recent update.

17. Pursuant to 40 C.F.R. § 68.65, the owner or operator of a Program 3 process is required to, among other things, compile written process safety information, document information pertaining to the hazards of the regulated substances, technology, and equipment in the process, document that the equipment complies with recognized and generally accepted good

engineering practices, and, for equipment that was designed according to outdated standards, document that the equipment is designed, maintained, inspected, tested, and operated in a safe manner.

18. Pursuant to 40 CFR § 68.48, the owner or operator of a Program 2 process is required to, among other things, ensure that the process is designed in compliance with recognized and generally accepted good engineering practices.

19. Pursuant to 40 C.F.R. § 68.69, the owner or operator of a stationary source with processes subject to RMP Program 3 requirements must develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process at a facility, including steps for each operating phase (including initial startup, normal operations, temporary operations, emergency shutdown, emergency operations, normal shutdown, and startup following a turnaround or after an emergency shutdown), operating limits (including consequences of deviation and steps required to correct or avoid deviation), safety and health considerations (including properties and hazards of the chemicals used in each process, precautions necessary to prevent exposure, control measures to be taken if exposure occurs, quality control for raw materials and control of hazardous chemical inventory levels, and any special or unique hazards), and safety systems and their functions.

20. Pursuant to 40 C.F.R. § 68.52, the owner or operator of a stationary source with processes subject to RMP Program 2 requirements must develop and implement written operating procedures that provide clear instructions or steps for safely conducting activities associated with each covered process at a facility, including initial startup, normal operations, temporary operations, emergency shutdown and operations, normal shutdown, startup following

a normal or emergency shutdown or a major change that requires a hazard review, consequences of deviation and steps required to correct or avoid deviation, and equipment inspections.

21. Section 112(r)(7)(E) makes it unlawful for any person to operate any stationary source subject to Section 112(r) of the CAA, 42 U.S.C. § 7412(r), in violation of the regulations promulgated thereunder. *See* 42 U.S.C. § 7412(r)(7)(E); *see also* 40 C.F.R. Part 68.

22. 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.

23. 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

24. Borden Corp. is the operator of a chemical manufacturing, warehouse, and distribution facility located at 63 Water Street in Fall River, Massachusetts (the "Facility").

25. Borden Corp. manufactures ammonium hydroxide and sodium hypochlorite at the Facility for distribution. Borden stores and uses chlorine and anhydrous ammonia, among other chemicals, in the preparation of its finished products.

26. Borden Corp. also stores, distributes, or otherwise uses hydrochloric acid, nitric acid, sulfuric acid, acetic acid, phosphoric acid, potassium hydroxide, sodium hydroxide, hydrogen peroxide, potassium permanganate, ferric chloride, sodium bisulfite, sodium persulfate, sodium silicate, potassium fluoride, and copper sulfate.

27. The Facility abuts Mount Hope Bay, a tidal estuary located near the mouth of the Taunton River. The Facility is located less than 0.1 miles from a bridge that carries Interstate 195 over the Taunton River, less than 0.2 miles from a state park, several museums, a war memorial, a performing arts center, and an elementary school, and less than 0.3 miles from a marina and several residential houses.

28. Borden Corp. is a corporation organized under the laws of the Commonwealth of Massachusetts with its principal office located in Fall River, Massachusetts.

29. Borden Corp. 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).

30. The Facility is a “stationary source” as that term is defined at Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C), and 40 C.F.R. § 68.3.

31. Borden Corp. is the “operator,” as that term is defined at Section 112(a)(9) of the CAA, 42 U.S.C. § 7412(a)(9), of a stationary source.

32. The use, storage, manufacturing, handling or on-site movement of a regulated substance at the Facility (in any vessel, group of interconnected vessels, or separate vessels that are located such that a regulated substance could be involved in a potential release) is a “process,” as defined by 40 C.F.R. § 68.3.

33. Respondent uses and/or stores anhydrous ammonia, ammonia (20 percent or greater), and chlorine, each an RMP Chemical, at the Facility.

34. Other chemicals found at the Facility, such as hydrochloric acid, nitric acid, sulfuric acid, acetic acid, phosphoric acid, polyphosphoric acid, potassium hydroxide, sodium hydroxide, sodium hypochlorite, hydrogen peroxide, potassium permanganate, ferric chloride,

sodium bisulfite, sodium persulfate, sodium silicate, potassium fluoride, and copper sulfate, either alone or improperly co-located with at least one of the other chemicals listed in this paragraph, are chemicals that may, as a result of short-term exposures associated with releases to the air, cause death, injury, or property damage due to their toxicity, reactivity, flammability, volatility, or corrosivity. Accordingly, they are “extremely hazardous substances” subject to the General Duty Clause of the CAA. Additionally, chlorine, ammonia, nitric acid, and sulfuric acid are “extremely hazardous substances” by virtue of their inclusion on the list of extremely hazardous substances published under Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), 40 C.F.R. § 68.130, and/or the Emergency Planning and Community Right-to-Know Act of 1986 (“EPCRA”), 40 C.F.R. Part 355, Appendix A.

35. On May 1 and 2, 2012, EPA conducted an inspection at the Facility to determine its compliance with Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and EPCRA (the “Inspection”).

Applicability of RMP requirements to the sodium hypochlorite production process

36. At the time of the Inspection, the Facility housed approximately 160,000 pounds of chlorine in a railcar which was connected with other containers and mixing vessels that also contained chlorine in a bleach production process in and around what Respondent refers to as Room A in Building 17 at the Facility (“sodium hypochlorite production process”). One of the vessels attached to this process was a tank labeled only with the notation “P 765,” which was later identified as containing sodium hypochlorite.

37. Chlorine is an RMP Chemical listed at 40 C.F.R. § 68.130, having a threshold quantity of 2,500 pounds.

38. The use of chlorine in an interconnected system is a “covered process” as that term is defined in 40 C.F.R. § 68.3.

39. In 2008, Borden Corp. filed a Program 3 RMP in which it reported that it used 720,000 pounds of chlorine in the sodium hypochlorite production process.

40. In 2013, Borden Corp. filed a Program 3 RMP in which it reported that it used 800,000 pounds of chlorine in the sodium hypochlorite production process.

41. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA indicate that it used chlorine in amounts over the threshold quantity in the sodium hypochlorite production process in 2009, 2010, 2011, and 2012.

42. Currently, Respondent uses more than the threshold quantity of chlorine in the sodium hypochlorite production process.

43. Accordingly, from at least 2008 through the present, chlorine is or has been “used,” “stored,” and “handled” in a covered process at the Facility in amounts greater than the threshold amount under 40 C.F.R. § 68.130.

44. The distance to a toxic or flammable endpoint for a worst-case release assessment of chlorine from the sodium hypochlorite production process at the Facility is greater than the distance to a public receptor.

45. Chlorine in an amount over the threshold quantity of 1,500 pounds is subject to OSHA’s PSM requirements at 29 C.F.R. § 1910.119.

46. As the operator of a stationary source that has more than the threshold amount of a regulated substance in a covered process, Respondent was, at all times relevant to the allegations herein, subject to the RMP requirements of Part 68. In accordance with 40 C.F.R. § 68.10(a)-(d), Respondent’s storage, use, and processing of chlorine in the sodium hypochlorite production process is subject to Program 3 because (1) the distance to a toxic or flammable endpoint for a worst-case release of chlorine is greater than the distance to a public receptor,

making the process ineligible for Program 1; and (2) the process is subject to OSHA's PSM regulations.

Applicability of RMP requirements to the ammonium hydroxide production process

47. At the time of the Inspection, the Facility housed approximately 160,000 pounds of anhydrous ammonia in a railcar which was connected with other containers and mixing vessels that contained ammonia in an ammonium hydroxide production process located in the southwest corner of the Facility outdoors near several piers along Mount Hope Bay ("ammonium hydroxide production process").

48. Anhydrous ammonia is an RMP Chemical listed at 40 C.F.R. § 68.130, having a threshold quantity of 10,000 pounds.

49. Ammonia (20% or greater) is an RMP Chemical listed at 40 C.F.R. § 68.130, having a threshold quantity of 20,000 pounds.

50. The ammonium hydroxide production process also includes the manufacture, handling, and storage of ammonia (20% or greater) in interconnected containers and tanks in an amount greater than the threshold quantity.

51. The use, storage, manufacture, and/or handling of anhydrous ammonia and ammonia (20% or greater) in the ammonium hydroxide production process is a "covered process" as that term is defined in 40 C.F.R. § 68.3.

52. In 2008, Borden Corp. filed a Program 3 RMP in which it reported that it used 720,000 pounds of anhydrous ammonia and 500,000 pounds of ammonia (20% or greater) in the ammonium hydroxide production process.

53. In 2013, Borden Corp. filed a Program 3 RMP in which it reported that it used 720,000 pounds of anhydrous ammonia and 681,000 pounds of ammonia (20% or greater) in the ammonium hydroxide production process.

54. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA indicate that it used and stored anhydrous ammonia in amounts over the threshold quantity in the ammonium hydroxide production process in 2009, 2010, 2011, and 2012.

55. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA further indicate that it used and stored ammonia (20% or greater) in amounts over the threshold quantity in the ammonium hydroxide production process in 2009, 2010, 2011, and 2012.

56. Currently, Respondent uses more than the threshold quantity of anhydrous ammonia and ammonia (20% or greater) in the ammonium hydroxide production process.

57. Accordingly, from at least 2008 through the present, anhydrous ammonia and ammonia (20% or greater) are or have been “used,” “stored,” and “handled” in a covered process at the Facility in amounts greater than the threshold amounts under 40 C.F.R. § 68.130.

58. The distance to a toxic or flammable endpoint for a worst-case release assessment of anhydrous ammonia from the ammonium hydroxide production process at the Facility is *greater* than the distance to a public receptor.

59. 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.

60. As the operator of a stationary source that has more than the threshold amount of a regulated substance in a covered process, Respondent was, at all times relevant to the allegations herein, subject to the RMP requirements of Part 68. In accordance with 40 C.F.R. § 68.10(a)-(d), Respondent’s storage and processing of anhydrous ammonia and ammonia (20 percent or greater) is subject to Program 3 because (1) the distance to a toxic or flammable endpoint for a worst-case release of anhydrous ammonia is greater than the distance to a public

receptor, making the process ineligible for Program 1; and (2) the process is subject to OSHA's PSM regulations.

Applicability of RMP requirements to the Railcar Receiving, Storage, and Handling process

61. Borden Corp. also regularly receives, stores, and handles more than the respective threshold quantities of chlorine and anhydrous ammonia in railcars for a period of time before connecting the railcars to the sodium hypochlorite production process or the ammonium hydroxide production process. Borden Corp. regularly receives notification that railcars of chlorine and/or anhydrous ammonia it ordered have been delivered to a fenced rail yard located approximately 0.15 miles from the sodium hypochlorite production process and 0.25 miles from the ammonium hydroxide production process (the "Fenced Rail Yard"). Once these railcars are delivered to the Fenced Rail Yard, the railcars are disconnected from an engine and left in the Fenced Rail Yard for Borden Corp. to pick up. Borden Corp. employees use an onsite Track Mobile to move the railcars from the Fenced Rail Yard to the process areas or to other areas of the Facility for temporary storage before being hooked up to the sodium hypochlorite and ammonium hydroxide production processes.

62. The storage and handling of chlorine and anhydrous ammonia prior to connection to the sodium hypochlorite or ammonium hydroxide production process (the "railcar receiving, storage, and handling process") is a "covered process" as that term is defined in 40 C.F.R. § 68.3.

63. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA indicate that it used, stored, and handled chlorine in amounts over the threshold quantity in the railcar receiving, storage, and handling process in 2009, 2010, 2011, and 2012.

64. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA indicate that it also used, stored, and handled anhydrous ammonia in amounts over the threshold quantity in the railcar receiving, storage, and handling process in 2009, 2010, 2011, and 2012.

65. Currently, Respondent uses more than the threshold quantity of anhydrous ammonia and chlorine in the railcar receiving, storage, and handling process.

66. Accordingly, from at least 2008 through the present, anhydrous ammonia and chlorine are or have been “stored” and “handled” in a covered process at the Facility in amounts greater than the threshold amounts under 40 C.F.R. § 68.130.

67. The distance to a toxic or flammable endpoint for a worst-case release assessment of chlorine or anhydrous ammonia from the railcar receiving, storage, and handling process at the Facility is *greater* than the distance to a public receptor.

68. Chlorine in an amount over the threshold quantity of 1,500 pounds and anhydrous ammonia in an amount over the threshold quantity of 10,000 pounds are subject to OSHA’s PSM requirements at 29 C.F.R. § 1910.119.

69. As the operator of a stationary source that has more than the threshold amount of a regulated substance in a covered process, Respondent was, at all times relevant to the allegations herein, subject to the RMP requirements of Part 68. In accordance with 40 C.F.R. § 68.10(a)-(d), Respondent’s storage and handling of chlorine and anhydrous ammonia in the railcar receiving, storage, and handling process is subject to Program 3 because (1) the distance to a toxic or flammable endpoint for a worst-case release of chlorine or anhydrous ammonia is greater than the distance to a public receptor, making the process ineligible for Program 1; and (2) the process is subject to OSHA’s PSM regulations.

Applicability of RMP requirements to the ammonium hydroxide repackaging process

70. Borden Corp. also regularly handles and stores more than the threshold quantity of ammonia (20 percent or greater) in a series of interconnected and/or separate vessels located such that it could be involved in a potential release, inside and immediately outside Building 17, where Borden Corp. repackages ammonium hydroxide from tanker trucks into drums, totes, and other containers and stores them prior to distribution (the “repackaging process”).

71. The on-site movement, handling, and storage of ammonia (20 percent or greater) in the repackaging process is a “covered process” as that term is defined in 40 C.F.R. § 68.3.

72. In 2008, Borden Corp. filed a Program 3 RMP in which it reported that it used 50,000 pounds of ammonia (20% or greater) and 50,000 pounds of formaldehyde in the repackaging process.

73. In 2013, Borden Corp. filed a Program 3 RMP in which it reported that it used 120,000 pounds of ammonia (20% or greater) in the repackaging process.

74. Chemical inventory reports submitted by Borden Corp. pursuant to EPCRA also indicate that it handled and stored ammonia (20 percent or greater) in amounts over the threshold quantity in the repackaging process in 2011 and 2012.

75. Currently, Respondent uses more than the threshold quantity of ammonia (20% or greater) in the repackaging process.

76. Accordingly, from at least 2008 through the present, ammonia (20 percent or greater) is or has been “stored” and “handled” in the repackaging process at the Facility in amounts greater than the threshold amount under 40 C.F.R. § 68.130. Also, in 2008, formaldehyde was “stored” and “handled” in the repackaging process at the Facility in amounts greater than the threshold amount under 40 C.F.R. § 68.130.

77. The distance to a toxic or flammable endpoint for a worst-case release assessment of ammonia (20% or greater) from the repackaging process at the Facility is *greater* than the distance to a public receptor. Likewise, the distance to a toxic or flammable endpoint for a worst-case release assessment of formaldehyde from the repackaging process at the Facility was *greater* than the distance to a public receptor.

78. As the operator of a stationary source that has more than the threshold amount of a regulated substance in a covered process, Respondent was, at all times relevant to the allegations herein, subject to the RMP requirements of Part 68. The Facility's storage and repackaging of ammonia (20% or greater) and formaldehyde was subject to the requirements of Program 3, in accordance with the requirements of 40 C.F.R. § 68.10(a) through (d), because (1) the distance to a toxic or flammable endpoint for a worst-case release of ammonia (20% or greater) or formaldehyde is or was greater than the distance to a public receptor, making the process ineligible for Program 1; and (2) the process was subject to OSHA's PSM regulations. Now that formaldehyde is no longer used in this process¹, it could be re-categorized as subject to the requirements of Program 2 instead. Respondent may also choose to continue to categorize the repackaging process as Program 3, for ease of administration.

Applicability of General Duty Clause to Facility

79. As the operator of a stationary source that processes, handles or stores extremely hazardous substances, Respondent is and has been, at all times relevant to the allegations herein, subject to the General Duty Clause found in Section 112(r)(1) of the CAA, 42 U.S.C.

§ 7412(r)(1).

¹ Information submitted by Borden Corp. in response to EPA's Request for Information pursuant to Section 114 of the Clean Air Act indicates that formaldehyde is no longer used or stored at the Facility or in this process.

RMP Update History

80. In June 1999, Borden Corp. submitted a Program 3 RMP, which it updated in January 2002, July 2003, December 2008, and December 2013.

81. The RMP updates filed by Borden Corp. in 2008 and 2013 did not include or address the railcar receiving, storage, and handling process.

Potentially Dangerous Conditions Observed

82. During the Inspection, EPA inspectors observed some potentially dangerous conditions at the Facility, including but not limited to:

a. **Potentially dangerous conditions in the storage and handling of chlorine and anhydrous ammonia in the railcar receiving, storage, and handling process.**

The following potentially dangerous conditions were observed during the Inspection:

i. *Unprotected chlorine railcar on siding:* A railcar containing chlorine that was not protected by concrete barriers, a sea wall, or any other form of protection, was observed sitting unattended on rail siding in an area where trucks and other vehicles regularly parked and drove over the rail siding to access other areas of the Facility and the waterfront docks. This was a high traffic area that was regularly accessed by employees, contractors, and guests of Respondent and other tenants, including fishing and tugboat companies who require access to the docks. Two trucks were observed parked approximately twenty feet from the unattended railcar on the day of the Inspection. The lack of adequate protection or isolation of the railcars from vehicular traffic created a significant risk of a collision that could result in an accidental release of chlorine.

ii. *Unprotected anhydrous ammonia railcar on siding:* A railcar containing anhydrous ammonia that was not protected by concrete barriers, a sea wall, a derailer,

chocks, or any other form of protection, was observed sitting unattended on rail siding in an area where trucks and other vehicles regularly parked and drove over the rail siding to access other areas of the Facility and the waterfront docks. This was a high traffic area that was regularly accessed by employees, contractors, and guests of Respondent and other tenants, including fishing and tugboat companies who require access to the docks. Two cars were observed parked less than fifteen feet from the unattended railcar on the day of the Inspection, and tanker trucks were observed nearby. The lack of adequate protection or isolation of the railcars from vehicular traffic created a significant risk of a collision that could result in an accidental release of anhydrous ammonia.

b. Potentially dangerous conditions in the storage and processing of chlorine and other hazardous substances in the sodium hypochlorite production process.

The sodium hypochlorite process, which is located inside and immediately outside Room A in Building 17, is where chlorine and sodium hydroxide are used to manufacture sodium hypochlorite. The following potentially dangerous conditions relating to the sodium hypochlorite production process were observed during the Inspection:

i. *Tank not properly labeled:* A large tank labeled “P 765” was not labeled with its contents or associated hazards. According to a Facility representative, the tank contained sodium hypochlorite. Adjacent tanks were labeled with the words “sodium hypochlorite,” but they were not labeled with a placard warning of the hazards of the contents. In the event of an accidental release, emergency responders might not know what was in tank “P 765” or the associated hazards and how that would determine the proper response. Tank “P 765” was interconnected with the chlorine reactor vessels such that a failure to label it might complicate an emergency response to a chlorine release. Quick identification of the contents of

tank “P 765” would also be important in the event of an accidental release from that tank since formaldehyde, which is incompatible with sodium hypochlorite, was also stored in the same room.

ii. *Piping not properly labeled:* Most of the piping used in the sodium hypochlorite production process was not labeled with the contents or direction of flow of the materials contained therein. In order to understand the hazards resulting from and minimize the likelihood of an accidental release, piping that contains hazardous materials should have been labeled with at minimum the identity of the contents and the direction of flow.

iii. *Deficient secondary containment/spill protection:* The sodium hypochlorite production process includes a number of large tanks, reactors, and other vessels that contain hazardous and potentially reactive materials, including, among other things, chlorine, sodium hydroxide, and sodium hypochlorite. A small berm was placed around the entire process, but it was ineffective because it would not segregate accidental releases of incompatible chemicals in the process (such as sodium hypochlorite or chlorine and sodium hydroxide), large cracks in the flooring ran underneath the berm in several places, and it was only a few inches high and thus would not be able to contain the full volume of the large process vessels were they to rupture or otherwise release their contents. Proper berming was particularly important given that containers of formaldehyde, which is incompatible with sodium hypochlorite, were located in the same room.

iv. *Corroded electrical equipment and piping supports:* Piping that carried chlorine from a railcar to the reactors was being supported by a severely corroded piping support system. An electrical pump and several support brackets for piping used in the process were also severely corroded, creating a heightened risk of a chlorine release.

v. *Unprotected piping:* PVC piping located near the ground that carried materials between tanks/reactors in the process had no physical protection, such as a metal covering, to prevent from breaking in the event that it was stepped on or something was dropped on it. Such protection would have minimized the chance of an accidental release.

c. **Potentially dangerous conditions in the storage and processing of anhydrous ammonia and ammonium hydroxide in the ammonium hydroxide production unit.**

i. *Corroded tanks and tank supports:* Tanks and/or reactor vessels containing anhydrous ammonia and/or ammonium hydroxide and support systems for those vessels showed signs of corrosion, further increasing the likelihood of an ammonia release. For instance, EPA observed depressions on the back end of the anhydrous ammonia tank that suggested the tank had been hit by a vehicle or other object, and some portions of the tank surface showed signs of rusting and corrosion. In addition, the ammonium hydroxide tanks, the supports for those tanks, and associated piping showed signs of corrosion.

ii. *Piping not properly labeled:* Most of the piping used in the ammonium hydroxide production process was not labeled with the contents or direction of flow of the materials contained therein. On the second day of the Inspection, EPA inspectors observed that some of the piping was labeled with arrows indicating the direction of flow, but not the contents of the piping. When asked when those labels were installed, a Facility representative stated that they were added the night before and earlier that morning, before EPA inspectors arrived for Day 2 of the Inspection. In order to understand the hazards resulting from and minimize the likelihood of an accidental release, piping that contains hazardous materials should have been labeled with at minimum the identity of the contents and the direction of flow.

d. **Potentially dangerous conditions in the storage and handling of ammonia (20% or greater) and other hazardous substances in the repackaging process.**

i. *Corroded electrical equipment:* The electrical panels that supplied electricity to the process were heavily corroded. In the event of a fire, the ammonium hydroxide drums and other containers in the area could have released toxic ammonia vapors to the environment.

ii. *Piping not properly labeled:* Most of the piping used in the repackaging process was not labeled with the contents or direction of flow of the materials contained therein. In order to understand the hazards resulting from and minimize the likelihood of an accidental release, piping that contains hazardous materials should have been labeled with at minimum the direction of flow.

e. **Potentially dangerous conditions arising from deficient chemical management practices in various areas throughout the Facility.** During the Inspection, EPA inspectors observed the following examples of incompatible chemicals stored sufficiently close together such that a spill or release of one chemical could have resulted in a chemical reaction with other chemicals, creating toxic gases and/or causing a fire or explosion²:

i. In Building 17, Room C, ammonium hydroxide was stored adjacent to sodium hydroxide and ferric chloride. The interaction of these substances could have caused an exothermic reaction liberating toxic gases, and the reaction products may be flammable and corrosive.

² The reactivity of chemicals at the facility was predicted through the use of CAMEO Chemicals, an on-line tool designed for people who are involved in hazardous material incident response and planning, developed by the National Oceanic and Atmospheric Administration's Office of Response and Restoration in partnership with the Environmental Protection Agency's Office of Emergency Management and the U.S. Coast Guard's Research and Development Center.

ii. In Building 17, Room C, nitric acid was stored adjacent to hydrochloric acid and potassium hydroxide. The interaction of these substances could have caused an exothermic, violent reaction liberating toxic, flammable, and/or explosive byproducts. Borden Corp.'s material safety data sheet ("MSDS") for hydrochloric acid indicates that it is highly reactive with hydroxides.

iii. In Building 17, Room C, hydrochloric acid was stored adjacent to ammonium hydroxide. The interaction of these substances could have caused an exothermic, violent reaction liberating corrosive gases and may cause pressurization. Borden Corp.'s MSDS for ammonium hydroxide indicates that co-location with acids should be avoided due to their reactivity with this chemical.

iv. In Building 17, Room B, acetic acid was stored adjacent to potassium hydroxide. The interaction of these substances could have caused an exothermic, violent reaction liberating corrosive, toxic, and/or flammable gases. Borden Corp.'s MSDS for potassium hydroxide indicates that co-location with strong acids should be avoided due to their reactivity with this chemical.

v. In Building 17, Room B, sulfuric acid was stored adjacent to sodium hypochlorite and acetic acid. The interaction of these substances could have caused an exothermic, violent reaction liberating corrosive, toxic, explosive, and/or flammable gases. Borden Corp.'s MSDS for sodium hypochlorite indicates that acids should be avoided due to their reactivity with this chemical.

vi. In Building 17, Room B, copper sulfate was stored adjacent to sodium persulfate. The interaction of these substances could have caused a violent reaction

liberating gases that may cause pressurization and/or products that may be explosive or sensitive to shock or friction.

vii. In Building 17, Room B, potassium permanganate was stored adjacent to hydrogen peroxide. The interaction of these substances could have caused an exothermic, violent reaction liberating corrosive, explosive, flammable, and/or toxic byproducts. Borden Corp.'s MSDS for potassium permanganate indicates that it should be segregated from peroxides due to their reactivity with this chemical.

viii. In Building 17, Room A, potassium fluoride was stored adjacent to calcium oxide and transformer fluid. The interaction of potassium fluoride and calcium oxide could have caused an exothermic, violent reaction liberating toxic gases. The interaction of potassium fluoride and transformer fluid could have caused an exothermic, violent reaction liberating corrosive, toxic, and/or flammable gases.

ix. In Building 17, Room A, phosphoric acid was stored adjacent to sodium bisulfite. The interaction of these substances could have caused an exothermic reaction liberating corrosive and toxic gases.

x. In Building 17, Room A, sodium bisulfite was stored adjacent to sodium hydroxide. The interaction of these substances could have caused an exothermic reaction liberating corrosive and toxic gases.

xi. In Building 17, Room A, polyphosphoric acid, glacial acetic acid, sodium silicate star/clear, and sodium bisulfite stored adjacent to each other. The interaction of these substances could have caused an exothermic, violent reaction liberating corrosive, flammable, and/or toxic gases. Borden Corp.'s MSDS for sodium silicate indicates that co-location with acids should be avoided due to their reactivity with this chemical.

xii. In Building 17, Room A, lime and glacial acetic acid were stored in large tanks with a capacity of approximately 6,000 gallons each, neither of which had any form of secondary containment, and which were located less than thirty feet apart. The interaction of these substances could have caused a violent reaction liberating corrosive, flammable, and toxic gases. Borden Corp.'s MSDS for hydrated lime indicates that it reacts violently with strong acids.

83. As described in paragraph 4, Respondent has asserted that it has corrected the dangerous conditions identified in paragraph 82 and has submitted documentation to EPA in support of this assertion.

IV. VIOLATIONS

COUNT I – FAILURE TO PREPARE AND SUBMIT RMP THAT INCLUDES ALL COVERED PROCESSES

84. The allegations in paragraphs 1 through 83 are hereby realleged and incorporated herein by reference.

85. As described in paragraph 15 above, pursuant to 40 C.F.R. §§ 68.12(a) and 68.150(a), the owner or operator of a Program 3 process is required to prepare and submit an RMP that reflects all covered processes.

86. As described in paragraph 81 above, the RMP updates filed by Borden Corp. in 2008 and 2013 did not include or address the railcar receiving, storage, and handling process.

87. Accordingly, Respondent violated the requirement to prepare an RMP and submit an RMP registration that includes all covered processes in 40 C.F.R. §§ 68.12(a) and 68.150(a).

COUNT II – FAILURE TO COMPLY WITH PROCESS SAFETY INFORMATION REQUIREMENTS

88. The allegations in paragraphs 1 through 87 are hereby realleged and incorporated herein by reference.

89. As described in paragraphs 17 and 18 above, an owner or operator of a Program 2 or Program 3 covered process must compile process safety information for RMP chemicals, including but not limited to demonstrating that each covered process complies with recognized and general accepted good engineering practices. *See* 40 C.F.R. §§ 68.48, 68.65.

90. As described in paragraphs 82.a.i - 82.a.ii, 82.b.i - 82.b.v, 82.c.i - 82.c.ii, and 82.d.i - 82.d.ii above, Respondent failed to document that equipment used in the railcar receiving, storage, and handling process, the sodium hypochlorite production process, the ammonium hydroxide production process, and the repackaging process complies with recognized and generally accepted good engineering practices.

91. As described in paragraph 82.a.i above, Respondent was not adequately protecting railcars containing chlorine from vehicles and other on-site traffic. The recommended industry practice and standard of care is to place bulk containers of chlorine behind barriers or other protection and to ensure those containers are located in a position where that the possibility of damage by vehicles will be minimized. *See, e.g.,* The Chlorine Institute's *Pamphlet 6: Bulk Storage of Liquid Chlorine* (June 2011) § 3.1.

92. As described in paragraph 82.a.ii above, Respondent was not adequately protecting railcars containing anhydrous ammonia from vehicles and other on-site traffic. The recommended industry practice and standard of care is to place containers of anhydrous ammonia behind barriers or other protection and to ensure those containers are located in a position where that the possibility of damage by vehicles will be minimized. *See, e.g.,* American National Standards Institute ("ANSI") K61.1: *Safety Requirements for the Storage and Handling of Anhydrous Ammonia* (1999) §§ 5.3.1 (location for anhydrous ammonia storage should be selected considering the surroundings of the proposed site), 6.7.1 (containers and

appurtenances shall be located or protected by suitable barriers so as to avoid damage by trucks of other vehicles)³.

93. As described in paragraph 82.b.i above, Respondent was not adequately labeling all tanks containing hazardous materials used in the RMP processes. Due to its high reactivity and in order to avoid accidental mixing, the recommended industry practice and standard of care is to place signs that identify the contents as “sodium hypochlorite” on all vessels that contain it. *See, e.g.,* The Chlorine Institute’s *Pamphlet 96: Sodium Hypochlorite Manual* (October 2011) § 5.1; the Center for Chemical Process Safety of the American Institute of Chemical Engineers’ (“CCPS”) Guidelines for Safe Warehousing of Chemicals § 2.2 (“containerized and packaged chemicals should be readily identifiable through the container labels, shipping papers, or material safety data sheets”). Moreover, the recommended industry practice and standard of care is to place a visible hazard identification signs as specified in the National Fire Prevention Association’s (“NFPA”) Standard 704 on all stationary containers and aboveground tanks containing hazardous materials. *See, e.g.,* NFPA 704: *Standard System for the Identification of the Hazards of Materials for Emergency Response* (2012); the International Fire Code (2009) (“IFC”)⁴ § 2703.5 (requiring visible hazard identification signs as specified in NFPA 704 on stationary containers and aboveground tanks and at entrances to locations where hazardous materials are stored); NFPA 1: *Fire Code* (2012) § 60.5.1.8.2.1 (same). Failure to do so was particularly hazardous in an environment like this one where there were incompatible chemicals

³ ANSI K61.1 is incorporated into the Massachusetts Board of Fire Prevention Regulations. *See* 527 CMR 14.03(12)(c).

⁴ The Massachusetts Board of Building Regulations and Standards (“BBRS”) adopted the International Building Code (2009) (“IBC”) and incorporated it by reference into the Massachusetts State Building Code. 780 CMR 101.1. Massachusetts also adopts the IFC where it is referenced by the IBC and not otherwise addressed by the Board of Fire Prevention Regulations (527 CMR). 780 CMR 101.4.5.

in close proximity and the tank is part of a covered process involving chlorine, an RMP chemical.

94. As described in paragraphs 82.b.ii, 82.c.ii, and 82.d.ii above, Respondent was not adequately labeling all piping containing hazardous materials used in the RMP processes. The recommended industry practice and standard of care is to label all piping containing hazardous materials to indicate the contents, direction of flow, and any additional details necessary to identify hazards. *See, e.g.,* the American Society of Mechanical Engineers (“ASME”) A13.1-2007: *Scheme for the Identification of Piping Systems*; NFPA 400: *Hazardous Materials Code* (2010) § 6.1.6.2(2) (referencing ASME A13.1).

95. As described in paragraph 82.b.iii above, Respondent failed to provide adequate secondary containment for the tanks, reactors, and other vessels that make up the sodium hypochlorite production process. Given the hazardous nature of chlorine and other materials used in the production of sodium hypochlorite, the recommended industry practice and standard of care is to use secondary containment to mitigate the potential consequences of a release. *See, e.g.,* The Chlorine Institute’s *Pamphlet 96: Sodium Hypochlorite Manual* (October 2011) §§ 6.1.3 (storage locations should be selected “to allow containment in the event of accidental spillage”), 7.12.4 (recommending precautionary use of containment structures for bulk or drum sodium hypochlorite storage); IFC § 2704.2.2 (requiring secondary containment for vessels of corrosive liquids with an individual capacity over 55 gallons, or multiple vessels with a total capacity greater than 1,000 gallons); NFPA 400 (2013) §§ 6.2.1.9.3.1(1), 6.3.2.2.4.2, 6.3.2.3.3.2 (same).

96. Respondent was aware of the need for secondary containment for vessels in the sodium hypochlorite process. A process hazard analysis (“PHA”) for the sodium hypochlorite

reactor dated January 2011 considered the consequences of a catastrophic rupture of the reactor, and resulted in the recommendation of installing a berm around the process area. Other portions of the PHA, considering potential hazards at different stages of the sodium hypochlorite process, resulted in twelve additional instances in which it was recommended that a berm should be installed around the process in order to contain potential releases.

97. As described in paragraphs 82.b.iv and 82.d.i above, electrical equipment in the sodium hypochlorite production process and the repackaging process was heavily corroded. The recommended industry practice and standard of care is to use electrical equipment identified for use in this type of damp environment with regular exposure to corrosive fumes, and to maintain electrical equipment in good condition, free from corrosive residues or other contaminants that might adversely affect the safe operation or mechanical strength of the equipment. *See, e.g., NFPA 70: National Electrical Code (2011)*⁵ §§ 110.11 (unless identified for use in that environment, no equipment shall be located “in damp or wet locations [or] where exposed to gases, fumes, liquids, or other agents that have a deteriorating effect on the conductors or equipment”), 110.12 (electrical equipment should be installed in a “neat and workmanlike manner” and should not be damaged or contaminated by foreign materials such as corrosive residues), and 300.6 (boxes, cabinets, and support hardware shall be of materials suitable for the environment in which they are installed).

98. As described in paragraph 82.b.iv above, the piping support systems in the sodium hypochlorite production process were severely corroded. The recommended industry practice and standard of care is to maintain piping support systems in good condition, free from metal wear or corrosion. *See, e.g., The Chlorine Institute’s Pamphlet 6: Piping Systems for Dry*

⁵ NFPA 70 was adopted and incorporated by reference into the Massachusetts Electrical Code. 527 CMR 12.00.

Chlorine (May 2005) §§ 10.2 (chlorine piping should not be hung from other piping and should be adequately supported by a system that does not allow metal to metal wear or corrosion), 10.9 (recommending painting or use of other protective coatings to limit corrosion), 12.2 (recommending periodic checks of paint condition and condition of piping supports to maximize pipe life and minimize leaks due to corrosion); The Chlorine Institute's *Pamphlet 96: Sodium Hypochlorite Manual* (April 2006) § 6.3.2 (factors to consider when selecting piping materials include structural strength and chemical resistance, noting that virtually all common metals will corrode rapidly on contact with sodium hypochlorite solutions).

99. As described in paragraph 82.b.v above, PVC piping used in the sodium hypochlorite production process was not adequately protected from impact from foot or other traffic. The recommended industry practice and standard of care is to provide protection and/or support systems for PVC piping used in chlorine and sodium hypochlorite service. *See, e.g.*, The Chlorine Institute's *Pamphlet 96: Sodium Hypochlorite Manual* (October 2011) § 6.3.2 (recommending support systems for PVC piping systems if there is any risk of impact, including "foot/vehicle traffic" or "maintenance or operations activities"); The Chlorine Institute's *Pamphlet 6: Piping Systems for Dry Chlorine* (May 2005) § 9 (recommends protection of PVC piping from impact).

100. As described in paragraph 82.c.i above, tanks and other vessels used in the ammonium hydroxide production process and support systems for those vessels were heavily corroded. The recommended industry practice and standard of care is to maintain tanks that contain ammonia in good condition, free from corrosion, to minimize the risk of an accidental release. *See, e.g.*, ANSI K61.1: *Safety Requirements for the Storage and Handling of Anhydrous Ammonia* (1999) §§ 5.12 (containers should have a reflective surface maintained in

good condition), 6.4.2 (recommending a means for preventing corrosion on the portion of the container in contact with supports).

101. Accordingly, Respondent failed to ensure that its processes complied with recognized and generally accepted good engineering practices, and thereby violated the process safety information requirements of 40 C.F.R. §§ 68.65 and/or 68.48.

COUNT III – FAILURE TO COMPLY WITH OPERATING PROCEDURES REQUIREMENTS

102. The allegations in paragraphs 1 through 101 are hereby realleged and incorporated herein by reference.

103. As described in paragraphs 19 and 20 above, an owner or operator of a Program 2 or Program 3 covered process must develop and implement written operating procedures that include certain specified elements, including but not limited to information regarding the consequences of deviation, steps required to correct or avoid deviation, emergency operations, and emergency shutdown. *See* 40 C.F.R. §§ 68.52, 68.69.

104. Standard operating procedures (“SOPs”) for the ammonium hydroxide production process and for the hypochlorite production process that were submitted to EPA following the Inspection did not contain all of the elements required by 40 C.F.R. § 68.69.

105. For instance, the SOPs for unloading anhydrous ammonia and bulk loading of anhydrous ammonia did not include adequate information regarding operating limits (including consequences of deviation and steps required to correct or avoid deviation), nor did they include information regarding emergency operations or emergency shutdown (or an internal cross reference to any other SOP that addressed emergency operations or emergency shutdown).

106. Further, the SOP for the bleach plant start-up and shutdown did not include adequate information regarding operating limits (including consequences of deviation and steps

required to correct or avoid deviation), nor did it reference the SOP for emergency shutdown procedures for chlorine. In addition, the SOP for emergency shutdown procedures for chlorine did not include the consequences of deviation or steps required to avoid deviation.

107. Accordingly, Respondent did not have adequate operating procedures and thereby violated the operating procedures requirements of 40 C.F.R. § 68.51 and/or 68.69.

COUNT IV – FAILURE TO DESIGN AND MAINTAIN A SAFE FACILITY

108. The allegations in paragraphs 1 through 107 are hereby realleged and incorporated herein by reference.

109. As described in paragraph 7 above, pursuant to the General Duty Clause, Section 112(r)(1) of the CAA, owners and operators of stationary sources producing, processing, handling, or storing extremely hazardous substances have a general duty to identify hazards which may result from accidental releases of such substances and to design and maintain a safe facility, taking the appropriate steps to prevent accidental releases and minimize the consequences of releases that do occur.

110. The term “extremely hazardous substance” means an extremely hazardous substance within the meaning of Section 112(r)(1) of the Clean Air Act. Such substances include any chemical which may, as a result of short-term exposures associated with releases to the air, cause death, injury, or property damage due to its toxicity, reactivity, flammability, or corrosivity.⁶ The term includes but is not limited to regulated substances listed in Section 112(r)(3), 42 U.S.C. § 7412(r)(3), and 40 C.F.R. § 68.130. Also, the release of any substance that causes death or serious injury because of its acute toxic effect or as a result of an explosion

⁶ S. Rep. No. 101-228 (1989), as reprinted in 1990 U.S.C.C.A.N. 3385, 3596.

or fire or that causes substantial property damage by blast, fire, corrosion, or other reaction would create a presumption that such substance is extremely hazardous.⁷

111. As described in paragraph 82.e above, EPA's inspector observed deficient storage practice associated with numerous chemicals that, alone or improperly co-located with at least one of the other chemicals listed in that paragraph, are "extremely hazardous substances" subject to the requirements of the General Duty Clause.

112. The storage of these incompatible chemicals in close proximity to one another, as alleged in paragraph 82.e, created risk of explosion, liberation of toxic, corrosive, and flammable gases, and other violent reactions.

113. The recommended industry practice and standard of care is to segregate and separate incompatible chemicals by a distance of not less than 20 feet. *See, e.g.*, NFPA 400 (2013) § 6.1.12; NFPA 1 (2012) § 60.5.1.12; IFC § 2703.9.8; CCPS's Guidelines for Safe Warehousing of Chemicals § 2.6; *see also* Borden Corp.'s MSDSs, *available at* <http://boremco.com/msds-2010.html>.

114. The deficient storage practices alleged in paragraph 82.e constituted a failure to design and maintain a safe facility, and take such steps as are necessary to prevent accidental releases.

115. Accordingly, Respondent violated the requirement to design and maintain a safe facility, as required under the General Duty Clause, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

⁷ *Id.*

V. TERMS OF SETTLEMENT

116. The provisions of this CAFO shall apply to and be binding on EPA and on Respondent, its officers and directors in their capacity as officers and directors of Respondent, and its successors and assigns.

117. Respondent stipulates that EPA has jurisdiction over the subject matter alleged in this CAFO and that this CAFO states a claim upon which relief may be granted against Respondent. Respondent hereby waives any defenses it might have as to jurisdiction and venue relating to the violations alleged in this CAFO.

118. Respondent neither admits nor denies the specific factual allegations contained in Section III of this CAFO or the violations alleged in Section IV of this CAFO. Respondent consents to the assessment of the penalty stated herein.

119. 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.

120. Respondent certifies, to the best of its knowledge and after thoroughly reviewing and responding to the NOV/AO issued by EPA in March 2014 citing the same violations alleged in Section IV of this CAFO, that it is currently operating the Facility in compliance with Sections 112(r)(1) and (7) of the CAA, 42 U.S.C. §§ 7412(r)(1) and (7), and 40 C.F.R. Part 68.

121. 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 in this CAFO, and such other circumstances as justice may require, EPA has determined that it is fair and proper to assess a civil penalty of one hundred fourteen thousand, one hundred eighteen dollars (\$114,118) for the violations alleged in this matter.

122. Respondent consents to the issuance of this CAFO and to the payment of the civil penalty cited in paragraph 121.

123. Within thirty (30) days of the effective date of this CAFO, Respondent shall submit a company, bank, cashier's, or certified check in the amount of \$114,118 payable to the order of the "Treasurer, United States of America." The check should be sent to:

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

Or, Respondent may make payment by electronic funds transfer via:

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

Respondent shall include the case name and docket number ("*In re Borden & Remington Corp.*, Docket No. CAA-01-2014-0052") on the face of the check or wire transfer confirmation. In addition, at the time of payment, Respondent shall simultaneously send notice of the payment and a copy of the check or electronic wire transfer confirmation to:

Wanda I. Santiago
Regional Hearing Clerk (Mail Code ORA 18-1)
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code ORA18-1
Boston, MA 02109-3912

and

Laura J. Berry
Enforcement Counsel (Mail Code OES 04-2)
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code OES 04-2
Boston, MA 02109-3912

124. In the event that any portion of the civil penalty amount described in paragraph 123 is not paid when due without demand, pursuant to Section 113(d)(5) of the CAA, 42 U.S.C. § 7413(d)(5), Respondent 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 when due. 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 the 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. Moreover, 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.

125. The civil penalty under this CAFO and any interest, nonpayment penalties, and other charges described herein shall represent penalties assessed by EPA, and shall not be deductible for purposes of federal taxes. Accordingly, Respondent agrees to treat all payments made pursuant to this CAFO as penalties within the meaning of Section 1.62-21 of the Internal Revenue Code, 26 U.S.C. § 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.

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

127. This CAFO constitutes a settlement and release by EPA of all claims for civil penalties against Respondent 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.

128. 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 provisions of law.

129. Nothing in this CAFO is intended to resolve any criminal liability of Respondent, and EPA reserves all its other criminal and civil enforcement authorities, including the authority to seek injunctive relief and the authority to address imminent hazards.

130. Each party shall bear its own costs and fees in this proceeding, including attorneys' fees, and specifically waives 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.

131. The terms, conditions, and requirements of this CAFO may not be modified without the written agreement of both parties and approval of the Regional Judicial Officer.

132. 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.

133. 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 U.S. ENVIRONMENTAL PROTECTION AGENCY:

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

Date: 09/19/14

FOR RESPONDENT BORDEN & REMINGTON CORP.:

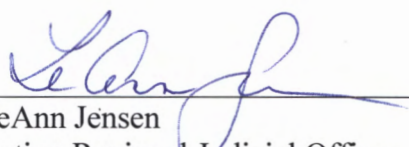
Robert F. Bogan
Robert F. Bogan, President
Borden & Remington Corp.

Date: 9/9/2014

FINAL ORDER

The foregoing Consent Agreement is hereby approved and incorporated by reference into this Final Order. The Respondent is hereby ordered to comply with the terms of the above Consent Agreement, which will be effective on the date is filed with the Regional Hearing Clerk.

Date: 9/23/14



LeAnn Jensen
Acting Regional Judicial Officer
U.S. Environmental Protection Agency, Region 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1

IN THE MATTER OF)
)
BORDEN & REMINGTON CORP.)
)

63 Water Street)
Fall River, MA 02721)

Respondent)
)

Docket No. CAA-01-2014-0052

RECEIVED

SEP 25 2014

EPA ORC WS
Office of Regional Hearing Clerk

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 Rivera
Regional Hearing Clerk
U.S. EPA, Region I (ORA18-1)
5 Post Office Square, Suite 100
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