

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 Post Office Square Suite 100
Boston, MA 02109

Steven C. Schlang
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RECEIVED

OCT 28 2015

EPA ORC
Office of Regional Hearing Clerk

October 28, 2015

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

Re: In the Matter of: Waters Technologies Corporation
Docket Number: RCRA-01-2015-0084

Dear Ms. Santiago,

Please find enclosed for filing an original and one copy of an Administrative Complaint regarding the above-matter.

Please do not hesitate to contact me should you have any questions regarding the enclosed.

Sincerely,



Steven C. Schlang

cc: Richard Piligian
Christopher J. O'Connell, President.

In the Matter of: Waters Technologies Corporation
Docket Number RCRA-01-2015-0084

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Administrative Complaint has been sent to the following persons on the date noted below:

Original and one copy
hand delivered:

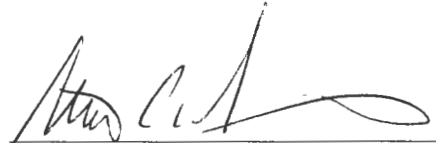
Wanda Santiago
Regional Hearing Clerk (RAA)
U.S. EPA, Region I
One Congress Street, Suite 1100
Boston, MA 02114-2023

Copy by Certified Mail-
Return Receipt Requested

Christopher J. O'Connell, President
Waters Technologies Corporation
34 Maple Street
Milford, MA 01757

Date:

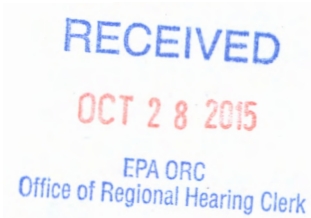
10/28/15



Steven C. Schlang
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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I**

| | | |
|---|---|---|
| In the Matter of: |) | EPA Docket No. RCRA-01-2015-0084 |
| |) | |
| Waters Technologies Corporation |) | COMPLAINT, COMPLIANCE |
| 177 Robert Treat Paine Drive |) | ORDER AND NOTICE OF |
| Taunton, MA 02780 |) | OPPORTUNITY FOR HEARING |
| |) | |
| |) | |
| Respondent |) | |
| |) | |
| Proceeding under Section 3008(a) of the |) | |
| Resource Conservation Recovery |) | |
| Act, 142 U.S.C. § 6928(a) |) | |



I. INTRODUCTION

1. This Complaint, Compliance Order and Notice of Opportunity for Hearing (“Complaint”) is filed pursuant to Section 3008(a) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments of 1984 (hereinafter, “RCRA”), 42 U.S.C. § 6928(a), and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits, 40 C.F.R. Part 22 (“Part 22”). Respondent, Waters Technologies Corporation, is hereby notified that the United States Environmental Protection Agency, Region 1 (“EPA”) has determined that Respondent violated Section 3002 of RCRA, 42 U.S.C. § 6922, 40 C.F.R. Part 262, Chapter 21C of the Massachusetts General Laws and the regulations promulgated thereunder found at Title 310, Chapter 30 of the Code of Massachusetts Regulations set forth at 310 C.M.R. § 30.100 *et seq.* EPA also provides notice of Respondent’s opportunity to request a hearing.

II. NATURE OF ACTION

2. This is an action under RCRA, 42 U.S.C. §§ 6901-6987, to obtain compliance with RCRA and the hazardous waste regulations promulgated to implement RCRA and to seek civil penalties under Sections 3008(a) and (g) of RCRA, 42 U.S.C. §§ 6928(a) and (g), for violations of RCRA and its implementing regulations.

3. Notice of commencement of this action has been given to the Commonwealth of Massachusetts ("Massachusetts") pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

III. STATUTORY AND REGULATORY FRAMEWORK

4. In 1976, Congress enacted RCRA, amending the Solid Waste Disposal Act, to regulate hazardous waste management. RCRA Subtitle C, 42 U.S.C. § 6921, *et seq.*, empowers EPA to identify and list hazardous wastes. It also authorizes EPA to regulate hazardous waste generators, transporters, and the owners and operators of hazardous waste treatment, storage, and disposal facilities. EPA has promulgated federal regulations to implement RCRA Subtitle C, which are set forth at 40 C.F.R. Parts 260-270.

5. Pursuant to Section 3001 of RCRA, 42 U.S.C. § 6921, EPA promulgated regulations to define what materials are "solid wastes," and of these solid wastes, what wastes are regulated as "hazardous wastes." These regulations are set forth at 40 C.F.R. Part 261.

6. Section 3002 of RCRA, 42 U.S.C. § 6922, required EPA to establish standards applicable to generators of hazardous wastes. These standards are codified at 40 C.F.R. Part 262 and relate to such matters as determining whether a waste is hazardous, container management,

labeling and dating containers, inspecting waste storage areas, training, and planning for emergencies.

7. In 1984, Congress substantially amended RCRA with the Hazardous and Solid Waste Amendments (“HSWA”) to, among other requirements, establish air emission standards for hazardous waste tanks, surface impoundments, and containers.

8. Subparts BB and CC of 40 C.F.R. Part 265 contain air emission standards applicable to owners and operators of facilities that treat, store, or dispose of hazardous waste. Through 40 C.F.R. Part 262, those standards are applicable to generators.

9. Pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, EPA may authorize a state to administer its hazardous waste program in lieu of the federal program when the Administrator deems the state program to be equivalent to the federal program.

10. The Commonwealth of Massachusetts received final authorization to implement its base hazardous waste management program on January 24, 1985, with an effective date of February 7, 1985. 50 Fed. Reg. 3,344. EPA authorized revisions to Massachusetts’s hazardous waste management program on September 30, 1998 (63 Fed. Reg. 52,180), October 12, 1999 (64 Fed. Reg. 55,153), March 12, 2004 (69 Fed. Reg. 11,801), January 31, 2008 (73 Fed. Reg. 5,753), and June 23, 2010 (75 Fed. Reg. 35,660).

11. Promulgated pursuant to the authority granted by M.G.L. c. 21C, §§ 4 and 6, M.G.L. c. 21E, § 6, and by St. 1987, c. 587, § 47, Massachusetts’s federally authorized hazardous waste management regulations are codified at Title 310, Chapter 30 of the Code of Massachusetts Regulations (“C.M.R.”), 310 C.M.R. §§ 30.001 *et seq.* (the “Massachusetts Hazardous Waste Regulations”).

12. Pursuant to Sections 3008(a) and 3006(g) of RCRA, 42 U.S.C. §§ 6928(a) and 6926(g), EPA may enforce the federally-approved Massachusetts hazardous waste program, as well as the federal regulations promulgated pursuant to HSWA, for which Massachusetts is not authorized, by issuing orders requiring compliance immediately or within a specified time for violations of any requirement of Subtitle C of RCRA, Sections 3001-3023 of RCRA, 42 U.S.C. §§ 6921-6939e. Sections 3008(a) and (g) of RCRA provide that any person who violates any order or requirement of Subchapter C of RCRA shall be liable to the United States for a civil penalty in an amount of up to \$25,000 per day for each violation. Pursuant to the Debt Collection Improvement Act of 1996 (“DCIA”), 31 U.S.C. § 3701 *et seq.*, as well as 40 C.F.R. Part 19, the inflation-adjusted civil penalty for a violation of Subchapter III of RCRA is up to \$32,500 per day per violation for violations that occurred after March 15, 2004 and before January 13, 2009. Violations that occur on or after January 13, 2009 are subject to penalties up to \$37,500 per day per violation.

13. Section 3006 of RCRA, 42 U.S.C. § 6926, as amended, provides, *inter alia*, that authorized state hazardous waste programs are carried out under Subtitle C of RCRA. Therefore, a violation of any requirement of law under an authorized state hazardous waste program is a violation of a requirement of Subtitle C of RCRA.

IV. GENERAL AND FACTUAL ALLEGATIONS

14. Waters Technologies Corporation (“Respondent” or “Waters”) is a limited liability corporation established under the laws of Delaware, maintaining a manufacturing facility located at 177 Robert Treat Paine Drive, Taunton, Massachusetts (“Facility”).

Respondent maintains a Massachusetts corporate headquarters located at 34 Maple Street in Milford, Massachusetts.

15. Respondent is a “person” as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(15), and 310 C.M.R. § 30.010.

16. At all times relevant to the allegations set forth in this Complaint, Respondent was and currently is the “owner,” of the Facility, as defined in 40 C.F.R. § 260.10 and 310 C.M.R. § 30.010.

17. At all times relevant to the allegations set forth in this Complaint, Respondent was and currently is the “operator” as defined in 40 C.F.R. § 260.10 and 310 C.M.R. § 30.010, of the Facility.

18. At all times relevant to the allegations set forth in this Complaint, Respondent was and currently is the manufacturer of micro-scale silica particles, to be used in high performance liquid chromatography (“HPLC”).

19. Pursuant to Section 3010(a) of RCRA, 42 U.S.C. § 6930(a), Respondent notified the Massachusetts Department of Environmental Protection that it was a large quantity generator of hazardous waste. The last date of notification was March 1, 2012.

20. At all times relevant to this Complaint, Respondent generated and continues to generate “hazardous waste,” as that term is defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), and 310 C.M.R. § 30.010, at the Facility. Hazardous wastes that are currently generated or have been generated at the Facility include, but are not limited to: ignitable wastes (D001); corrosive waste (D002); reactive waste (D003); characteristically toxic waste (D007,

D011, D035 and D038); listed solvents (F002, F003, and F005) and off-specification wastes (U003, U058, U154, and U220)

21. At all times relevant to the allegations set forth in this Complaint, Respondent was and is: (1) a “generator,” as that term is defined in 40 C.F.R. § 260.10 and 310 C.M.R. § 30.010; and (2) a “large quantity generator,” of hazardous waste pursuant to 310 C.M.R. § 30.340.

22. As the owner and operator of a facility that generates hazardous waste (“owner/operator”), Respondent is subject to the requirements for generators of hazardous wastes set forth at 310 C.M.R. § 30.300 *et seq.*

23. On March 19 and 20, 2014, duly authorized representatives of EPA conducted an inspection at the Facility (“Inspection”) to determine Respondent’s compliance with RCRA and the federal and state regulations promulgated thereunder. During the Inspection, the inspectors observed conditions at the Facility and reviewed documents related to hazardous waste management.

24. Respondent manufactures chromatographic materials using organic and aqueous based chemical reactions.

25. At the time of the Inspection, air emissions from Respondent’s manufacturing areas in Suites 1 and 2 were usually vented to a thermal oxidizer for treatment. According to Respondent’s personnel, the thermal oxidizer was shut down on weekends and when the main manufacturing processes were not operating. Waste lines, tanks, floor trenches, and equipment within the operating suites still contained waste solvents when the processes were shut down. Any emissions from these tanks would be released to the atmosphere during the intervals when the thermal oxidizer was not operating.

26. At the time of the Inspection, Respondent maintained a tank farm that was used to store bulk chemicals (products) as well as hazardous waste. The hazardous waste tanks in the tank farm consisted of organic hazardous waste tanks 1 and 2 and aqueous hazardous waste tanks 1 and 2.

27. Hazardous wastes stored in the tank farm were subsequently pumped-out to tank trucks and shipped off-site for disposal.

28. During the Inspection, one of Respondent's employees stated that any waste containing less than 10% solvent was sent to an aqueous waste tank and that all waste streams containing more than 10% solvent were sent to an organic solvent waste tank.

29. Subsequent to the Inspection, Respondent voluntarily conducted an environmental audit ("Audit") by a third-party consultant. The audit identified hundreds of pieces of equipment subject to the RCRA air emissions program.

V. VIOLATIONS

Based on the Inspection, EPA has identified the following violations of RCRA, M.G.L. Ch. 21C, and the Massachusetts hazardous waste regulations.

Count I: Failure to comply with standards for the storage of hazardous wastes in tanks.

30. Paragraphs 1 through 29 are incorporated herein by reference.

31. Pursuant to 310 C.M.R § 30.690, *et seq.*, as referenced by 310 C.M.R § 30.343(1), a generator is required to comply with regulatory standards for the storage of hazardous wastes in tanks. These standards are provided in 310 C.M.R. § 30.341(2) and 310 C.M.R. §§ 30.691-30.699, and include, but are not limited to, the requirements to: (a) obtain a written assessment

that has been reviewed and certified by a Massachusetts registered professional engineer and that attests to the integrity of existing hazardous waste tanks (310 C.M.R. § 30.692); (b) ensure the containment and detection of releases of hazardous wastes from tanks (310 C.M.R. § 30.694); (c) implement required standard practices pertaining to the safe operation of hazardous waste tanks (310 C.M.R. § 30.695); (d) perform and document daily inspections of tanks (310 C.M.R. § 30.696); and (e) clearly mark and label each hazardous waste tank with the words “Hazardous Waste”, words which clearly identify the hazardous wastes stored in the tank and words that describe the hazard(s) associated with the wastes, and the date upon which each period of accumulation began (310 C.M.R. § 30.341(2)).

32. **Vacuum Dryers:** At the time of the Inspection, there were eight vacuum dryers used in Respondent’s manufacturing process. Each dryer had a dedicated condenser and a solvent collection tank for the recovered solvent from the condensers. The recovered solvent collected in these tanks was sent directly to the organic solvent hazardous waste tanks. These tanks were approximately 100 gallons in volume. Two of these tanks were located at the north wall of Suite 1 and two were located at the southern wall of Suite 2.

33. At the time of the Inspection, these tanks containing hazardous waste solvents, were neither managed nor labeled as hazardous waste tanks.

34. **The Freshmade Process:** At the time of the Inspection, Respondent pumped the aqueous and solvent wastes from a freshmade reactor in Suite 1 to a filtrate accumulation tank. The filtrate accumulation tank held approximately 50-gallons and was open on the top. The EPA inspectors were informed by Respondent’s employee that, when the level in the filtrate receiving tank reached the high-level sensor, the aqueous and solvent wastes were pumped into

Respondent's hazardous waste piping system and piped directly to hazardous waste tanks in Respondent's tank farm.

35. In Suite 2, Respondent operated an additional set of equipment used in the freshmade process. This equipment was approximately one-third the size of the equipment in Suite 1. The aqueous and solvent wastes from this equipment was pumped to an approximately 20-gallon, open-topped filtrate accumulation tank on the first floor.

36. At the time of the Inspection, with respect to the tanks described in paragraphs 32-35 above, Respondent had not: (a) obtained a written assessment that had been reviewed and certified by a Massachusetts registered professional engineer and that attested to the integrity of existing hazardous waste tanks; (b) ensured the containment and detection of releases of hazardous wastes from tanks; (c) implemented required standard practices pertaining to the safe operation of hazardous waste tanks; (d) performed and documented daily inspections of tanks; and (e) clearly marked and labeled each hazardous waste tank with the words "Hazardous Waste," words which clearly identified the hazardous wastes stored in the tank, words that described the hazard(s) associated with the wastes, and the date upon which each period of accumulation began.

37. Respondent's failure to comply with hazardous waste tank standards, as set out in paragraphs 32-36 above, constitutes violations of 310 C.M.R. §§ 30.341(2), 30.692, 30.694, 30.695, and 30.696, as referenced by 310 C.M.R. § 30.343(1).

COUNT II: Failure to comply with hazardous waste tank air emission regulations (Subpart CC)

38. Paragraphs 1 through 37 are incorporated herein by reference.

39. Pursuant to 40 C.F.R. § 265.1083(b); 40 C.F.R. § 1085(b) and (c)(4), 40 C.F.R.

§ 265.1089 and 40 C.F.R. § 265.1090, as referenced by 40 C.F.R. § 262.34(a)(1)(ii), and 40 C.F.R. § 265.202, a generator of hazardous wastes containing volatile organic compounds (“VOCs”) that stores them in hazardous waste tanks must comply with 40 C.F.R. Part 265, Subpart CC (“Subpart CC”).

40. Pursuant to 40 C.F.R. § 265.1083(b), as referenced by 40 C.F.R. § 262.34(1)(a)(ii), a generator shall control air pollutant emissions from each hazardous waste management unit in accordance with the standards specified in 40 C.F.R. §§ 265.1085 through 265.1088, as applicable.

41. Forty C.F.R. § 265.1085(b) and (c)(4), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), requires a generator to inspect the air emission control equipment in accordance with the following procedures: the fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

42. Forty C.F.R. § 265.1089(a), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), requires a generator to inspect and monitor air emission control equipment used to comply with Subpart CC in accordance with the applicable requirements specified in §§ 265.1085-265.1088 of Subpart CC. Forty C.F.R. § 265.1089(b) requires the development and implementation of a written plan and schedule to perform the inspections and monitoring required by paragraph (a) of that section.

43. Forty C.F.R. § 265.1090(a), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), requires each generator to record and maintain the information specified in § 265.1090(b)-(j), as applicable to the facility. Except for air emission control equipment design documentation and information, records required by § 265.1090 shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service.

44. Forty C.F.R. § 265.1090(b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), requires the owner or operator of a tank using air emission controls in accordance with the requirements of 40 C.F.R. § 265.1085 of Subpart CC to prepare and maintain records for the tank that include, for each tank using air emission controls in accordance with the requirements of 40 C.F.R. § 265.1085 of Subpart CC, a record for each inspection, as required by 40 C.F.R. § 265.1085.

45. At the time of the Inspection, Respondent maintained eight solvent collection tanks for recovered solvents from eight dryers and two, open-topped filtrate collection tanks used in the freshmade process. The solvent from the eight solvent collection tanks was sent directly to the Facility's organic solvent hazardous waste tanks in the Facility's tank farm. The solvent from the two filtrate collection tanks was sent directly to either the organic solvent or aqueous solvent hazardous waste tanks depending on the point in the process.

46. At the time of Inspection, these ten hazardous waste storage tanks were not part of Respondent's Subpart CC compliance plan. Specifically, Respondent failed to apply any of the

applicable Subpart CC standards to the eight solvent collection tanks and two, open-topped filtrate accumulation tanks, referred to in paragraph 45 above.

47. At the time of the Inspection, Respondent had a Subpart CC compliance plan for organic hazardous waste tanks 1 and 2 and aqueous hazardous waste tanks 1 and 2 in the Facility's hazardous tank farm.

48. Despite the presence of a Subpart CC compliance plan, Respondent did not adequately inspect and/or monitor these tanks, or the air emission control equipment, in accordance with the Subpart CC compliance plan and as required by the Subpart CC regulations. At the time of the Inspection, small areas of corrosion were visible on the outer shell of organic waste tank 1. Corrosion was also visible on the seal area of the tank man-way and on the piping for the conservation vent line

49. At the time of the Inspection, each of the four waste tanks in the tank farm, in addition to inlet and outlet piping, had a minimum of four openings through the tank shell, as follows: (a) a man-way; (b) a level sensor equipment line; (c) a pipe outlet with a rupture disk; and (d) piping with a conservation valve and flame arrestor at the top end. The three 5,355-gallon hazardous waste tanks in the tank farm had additional openings. Respondent did not inspect and monitor any of these openings, as required under Subpart CC.

50. None of the tanks in the tank farm were directly connected to the thermal oxidizer for their emissions. Any emissions from these tanks would be released to the atmosphere during the intervals when the thermal oxidizer was not operating.

51. Respondent's failures to: (a) inspect air emission control equipment for defects; (b) develop and implement a written plan for performing inspection and monitoring of air

emission control equipment; (c) record information pertaining to air emission control equipment design; and (d) maintain records for each inspection of air control emission equipment violated 40 C.F.R. § 265.1083(b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), 40 C.F.R. § 265.1085(b) and (c)(4), as referenced by 40 C.F.R. § 262.34(a)(1)(ii); 40 C.F.R. § 265.1089(a), as referenced by 40 C.F.R. § 262.34(a)(1)(ii); and 40 C.F.R. § 265.1090(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

Count III: Failure to comply with hazardous waste air emission standards (Subpart BB) for marking/labeling Subpart BB equipment.

52. Paragraphs 1 through 51 are incorporated herein by reference.

53. Pursuant to 40 C.F.R. § 265.1050(b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), facilities that maintain equipment that contains or is in contact with hazardous wastes with organic concentrations of at least 10 percent by weight must comply with air emission standards for marking and labeling equipment set forth in 40 C.F.R. Part 265, Subpart BB (“Subpart BB”).

54. Forty C.F.R. § 265.1050(c) requires that each piece of equipment subject to Subpart BB requirements be marked in such a manner that it can be distinguished readily from other pieces of equipment.

55. At the time of the Inspection, Respondent maintained twelve (12) tanks at the Facility that contained hazardous wastes with organic concentrations of at least 10 percent by weight.

56. Respondent used these tanks to store hazardous waste for 90 days or less. The pumps, pipes, valves, flanges and other related connections to the tanks were subject to the operating, labeling and monitoring requirements of Subpart BB.

57. At the time of the Inspection, Respondent did not mark most pieces of equipment that were subject to Subpart BB, including pumps, pipes, valves, flanges, and other related connections to the Facility's hazardous waste tanks so that the pieces of equipment could be distinguished easily from other pieces of equipment.

58. Respondent's failure to mark each piece of equipment subject to Subpart BB requirements in such a manner that it could be distinguished readily from other pieces of equipment was a violation of 40 C.F.R. § 265.1050(c), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

COUNT IV: Failure to comply with hazardous waste air emission standards (Subpart BB) for valves in light liquid service, heavy liquid service and gas/vapor service and for pumps and flanges.

59. Paragraphs 1 through 58 are incorporated herein by reference.

60. Pursuant to 40 C.F.R. § 265.1050, 40 C.F.R. § 265.1052, 40 C.F.R. § 265.1057, 40 C.F.R. § 265.1058, and 40 C.F.R. § 265.1061, as referenced by 40 C.F.R. § 262.34(a)(1)(ii), a generator that manages hazardous wastes in tanks that contain greater than 10% VOCs must comply with hazardous waste air emission standards for equipment leaks in valves in light liquid service, heavy liquid service and gas/vapor service, as well as for pumps and flanges.

61. Pursuant to 40 C.F.R. § 264.1031, as referenced by 40 C.F.R. § 262.34(a)(1)(ii), "in gas/vapor service" means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions; "in light liquid service" means that the piece of equipment contains or contacts a hazardous waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20°C, the total concentration of the pure organic components having a vapor pressure greater

than 0.3 kilopascals (kPa) at 20°C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions; and “in heavy liquid service” means that the piece of equipment is not in gas/vapor service or in light liquid service.

62. Pursuant to 40 C.F.R. § 265.1052(a)(1), each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 265.1063(b). In addition, 40 C.F.R. § 265.1052(a)(2) requires that each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

63. Pursuant to 40 C.F.R. § 265.1052(e), any pump that is designated, as described in 40 C.F.R. § 265.1064(g)(2), for “no detectable emissions,” as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:

- (a) Must have no externally actuated shaft penetrating the pump housing.
- (b) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 C.F.R. § 265.1063(c).
- (c) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

64. Pursuant to 40 C.F.R. § 265.1057(a), each valve in light liquid and gas/vapor service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R.

§ 265.1063(b). Forty C.F.R. § 265.1057 also provides several options for the continued monitoring of subject valves.

65. Pursuant to 40 C.F.R. § 265.1057(f), any valve that is designated, as described in 40 C.F.R. § 265.1064(g)(2), for “no detectable emissions,” as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:

- (a) Has no external actuating mechanism in contact with the hazardous waste stream;
- (b) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 C.F.R. § 265.1063(c);
- (c) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

66. Pursuant to 40 C.F.R. § 265.1061(a), an owner or operator subject to the requirements of 40 C.F.R. § 265.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard which allows no greater than two percent of the valves to leak. Pursuant to 40 C.F.R. § 265.1061(b), the following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing two percent of valves to leak:

- (1) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Regional Administrator.

(2) If a valve leak is detected, it shall be repaired in accordance with 40 C.F.R. §§ 265.1057(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in 40 C.F.R. § 265.1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in 40 C.F.R. § 265.1063(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in 40 C.F.R. § 265.1057 for which leaks are detected by the total number of valves subject to the requirements in 40 C.F.R. § 265.1057 within the hazardous waste management unit.

67. Pursuant to 40 C.F.R. § 265.1058(a), each valve in heavy liquid service shall be monitored within 5 days by the method specified in 40 C.F.R. § 265.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

68. Pursuant to 40 C.F.R. § 265.1058(a), flanges and other connectors shall be monitored within 5 days by the method specified in 40 C.F.R. § 265.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

69. During the Inspection, Respondent was unable to produce any records documenting any of the methods for monitoring flanges or other connectors described above. Additionally, these pieces of equipment were not included in the Facility's annual Subpart BB

inspection checklist even though they were subject to the provisions of this Subpart. Respondent was unable to demonstrate that it had any program in place to monitor pumps, flanges and valves subject to the provisions of Subpart BB.

70. At the time of the Inspection, Respondent had only three pumps listed in its Subpart BB Compliance Plan as being regulated under 40 C.F.R. § 265.1052. Respondent designated these three pumps as having “No Detectable Emissions” status per 40 C.F.R. § 265.1052(e). Respondent failed to identify any other fixed pumps or any of the numerous portable pumps that were being used to pump wastes as a part of its Subpart BB Program. According to an audit report produced in December 2014 by Respondent’s environmental consultant, Respondent operated at least twenty-five (25) additional pumps that should have been managed under Respondent’s Subpart BB program. Weekly visual and monthly monitoring inspections for these pumps were not conducted.

71. At the time of the Inspection, Respondent utilized the approach listed above in 40 C.F.R. § 265.1057(f) and 40 C.F.R. § 265.1064(g)(2), for all check valves that were identified in the Facility’s Subpart BB Compliance Plan. The check valves that were identified and listed in the Subpart BB Compliance Plan were monitored annually.

72. At the time of the Inspection, Respondent utilized the approach listed above in 40 C.F.R. § 265.1061(a), for all ball valves that were identified in the Subpart BB Compliance Plan in the facility. Thus ball valves that were identified and listed in the Subpart BB Compliance Plan were monitored annually.

73. During the Inspection, Respondent did not produce any records documenting monitoring required for valves in heavy liquid service described in 40 C.F.R. § 265.1058(a) and these pieces of equipment were not included on the annual Subpart BB inspection checklists.

74. Respondent's audit report produced by its environmental consultant showed that at the time of the Inspection, Respondent's list of regulated valves in its Subpart BB Compliance Plan was missing over 300 valves in various types of Subpart BB service. Monitoring of these valves was not conducted under any part of the regulations.

75. Respondent's failure to comply with hazardous waste air emission standards (Subpart BB) for valves in light liquid service, heavy liquid service and gas/vapor service and for pumps and flanges were violations of 40 C.F.R. § 265.1052(a)(1), (a)(2), and/or (e), 40 C.F.R. § 265.1057(a), 40 C.F.R. § 265.1058(a), and 40 C.F.R. § 265.1061, as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

COUNT V: Failure to comply with hazardous waste air emission standards (Subpart BB) for open-ended valves and lines.

76. Paragraphs 1 through 75 are incorporated herein by reference.

77. Pursuant to 40 C.F.R. § 265.1050 and 40 C.F.R. § 265.1056, as referenced by 40 C.F.R. § 262.34(a)(1)(ii), owners/operators of all facilities that generate and store hazardous wastes must comply with hazardous waste air emission standards for equipment leaks (Subpart BB) in open-ended valves, and lines in gas/vapor service or in light liquid service.

78. Pursuant to 40 C.F.R. §§ 265.1056(a)(1) and (2), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

79. Pursuant to 40 C.F.R. § 265.1056(b), each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

80. Pursuant to 40 C.F.R. § 265.1056(c), when a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 C.F.R. § 265.1056(a) at all other times.

81. At the time of the Inspection, there were several hoses and lines in Suites 1 and 2 and at the pumping station outside the main building that were being used to transfer hazardous wastes. Many of these hoses and lines were open-ended and without caps. Several of the other hoses and lines had caps that were hanging loose.

82. Subsequent to the Inspection, an audit conducted by Respondent's independent consultant revealed that there were twenty-two (22) open-ended lines without proper controls in Suite 1 alone.

83. Respondent's failure to provide caps, flanges, or plugs for open valves, lines and hoses utilized in gas/vapor service or in light liquid service, is a violation of 40 C.F.R. § 265.1056(a)-(c), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

COUNT VI: Failure to comply with hazardous waste air emission standards (Subpart BB) for pressure release valves.

84. Paragraphs 1 through 83 are incorporated herein by reference.

85. Pursuant to 40 C.F.R. § 265.1050 and 40 C.F.R. § 265.1054, as referenced by 40 C.F.R. § 262.34(a)(1)(ii), generators who store hazardous wastes in tanks must comply with hazardous waste air emission standards (Subpart BB) for pressure release valves.

86. Pursuant to 40 C.F.R. § 265.1054(a), each pressure relief device in gas/vapor service shall be operated, except during pressure releases, with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 C.F.R. § 265.1063(c).

87. Pursuant to 40 C.F.R. § 265.1054(b)(1), each pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 C.F.R. § 265.1059.

88. Pursuant to 40 C.F.R. § 265.1054(b)(2), no later than 5 calendar days after a pressure release, the pressure relief device shall be monitored in order to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 C.F.R. § 265.1063(c).

89. At the time of the Inspection, Respondent was not monitoring the pressure relief devices for organic hazardous waste tanks 1 and 2.

90. Respondent's failure to monitor pressure relief devices within five calendar days after a pressure release to confirm the condition of no detectable emissions for organic hazardous waste tanks 1 and 2, violated 40 C.F.R. § 265.1054(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

COUNT VII: Failure to comply with air emission standards (Subpart BB) for maintaining records

91. Paragraphs 1 through 90 are incorporated herein by reference.

92. Pursuant to 40 C.F.R. § 265.1064(a)(1), as referenced by 40 C.F.R.

§ 262.34(a)(1)(ii), generators of hazardous waste subject to Subpart BB, must comply with record-keeping requirements. Pursuant to 40 C.F.R. § 265.1064(a)(2), the owner or operator of more than one hazardous waste management unit subject to the provisions of Subpart BB may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

93. Pursuant to 40 C.F.R. § 265.1064(b)(1), owners and operators must record the following information in the facility operating record for each piece of equipment to which Subpart BB applies:

- (i) Equipment identification number and hazardous waste management unit identification;
- (ii) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);
- (iii) Type of equipment (e.g., a pump or pipeline valve);
- (iv) Percent-by-weight total organics in the hazardous waste stream at the equipment;
- (v) Hazardous waste state at the equipment (e.g., gas/vapor or liquid); and
- (vi) Method of compliance with the standard (e.g., “monthly leak detection and repair” or “equipped with dual mechanical seals”).

94. Pursuant to 40 C.F.R. § 265.1064(g), the following information pertaining to all equipment subject to the requirements in 40 C.F.R. §§ 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of 40 C.F.R. §§ 265.1052(e), 265.1053(i), and 265.1057(f). (ii) The designation of this equipment as subject to the requirements of 40 C.F.R. §§ 265.1052(e), 265.1053(i), or 265.1057(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 C.F.R. § 265.1054(a).

95. Pursuant to 40 C.F.R. § 265.1064(k), the following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:

(1) An analysis determining the design capacity of the hazardous waste management unit.

(2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in 40 C.F.R. §§ 265.1052 through 265.1060 and an analysis determining whether these hazardous wastes are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in 40 C.F.R. §§ 265.1052 through 265.1060. The record shall include supporting

documentation as required by 40 C.F.R. § 265.1063(d)(3) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in 40 C.F.R. §§ 265.1052 through 265.1060, then a new determination is required.

96. At the time of the Inspection, Respondent was not maintaining the records required in paragraphs 93-95 above.

97. Respondent's failure to comply with Subpart BB's recordkeeping requirements violated 40 C.F.R. § 265.1064(a), (b), (g) and (k), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

COUNT VIII: Failure to comply with proper air monitoring methods

98. Paragraphs 1 through 97 are incorporated herein by reference.

99. Pursuant to 40 C.F.R. § 265.1063(a)-(c) and 40 C.F.R. § 265.1084(d), Method 21 of 40 C.F.R. Part 60, Appendix A, is the procedure to be used for determining no detectable organic emissions for the purpose of complying with Subparts BB and CC.

100. At the time of the Inspection, Respondent had at least fourteen hazardous waste tanks that were subject to Subpart CC standards. Hundreds of pieces of equipment associated with these tanks were subject to Subpart BB standards.

101. Pursuant to 40 C.F.R. § 265.1063(a)-(c) and 40 C.F.R. § 265.1084(d), Respondent was required to calibrate the monitoring equipment with gases that were: 1) zero air (less than

10 ppm of hydrocarbon in air) and 2) a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

102. At the time of the Inspection, Respondent's personnel informed the EPA inspectors that Respondent's consultant responsible for implementation of Respondent's air emission program calibrated monitoring equipment with zero air and isobutylene instead of the required methane or n-hexane. The use of the wrong calibration method renders any collected data inherently unreliable.

103. In addition, Respondent's consultant used a rented Mini-Rae photoionization detector with a 11.7 eV bulb for its emission monitoring. The rental company that owned the detector did not use appropriate maintenance procedures recommended by the manufacturer by using the 11.7 eV bulbs in the monitoring units for one year when the recommended life span of these bulbs is one month.

104. Respondent also failed to conduct or retain records on the calculations of response time tests required by Method 21 prior to monitoring equipment being placed in service.

105. Respondent's failures to use the proper calibration materials or equipment could have resulted in undetected emissions of VOCs in the environment.

106. Respondent's failure to follow Method 21 by using the proper calibration chemicals and equipment to conduct its RCRA emission tests violated 40 C.F.R.

§ 262.34(a)(1)(ii), which references 40 C.F.R. § 265.1063(a)-(c) and 40 C.F.R. § 265.1084(d), which reference 40 C.F.R. Part 60, Appendix A.

COUNT IX: Failure to design and operate a hazardous waste management unit to prevent and construct and maintain to minimize, the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.

107. Paragraphs 1 through 106 are incorporated herein by reference.

108. Pursuant to 310 C.M.R. § 30.524(1) as referenced by 310 C.M.R.

§ 30.341(1)(e)(1), a hazardous waste management unit shall be designed and operated to prevent, and constructed and maintained to minimize, the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.

109. At the time of the Inspection, Respondent operated a hazardous waste storage area (“HWSA”) in the northwest corner of Suite 1. There was a large walk-in fume hood adjacent to the HWSA.

110. During the Inspection, the EPA Inspectors observed one of Respondent’s employees carry an open 5-gallon stainless steel bucket from the production area to the HWSA where the employee poured the liquid from the bucket into the waste solvent disposal line header.

111. During the time that the employee carried the bucket and poured its contents, the EPA inspectors became aware of a strong vapor filling the area. At the same time, two photo-ionization devices (“PIDs”), being carried by Respondent’s personnel accompanying the EPA inspectors, went into alarm mode. The EPA inspectors immediately left the area and were told

by Respondent's personnel that the PIDs had readings of 150 parts per million ("ppm"), and remained over 50 ppm for more than 20 minutes.

112. Subsequent to this incident, Respondent's employees told the EPA inspectors that the employee had been carrying toluene, a hazardous, organic solvent waste, in the bucket. According to Respondent's personnel, maintenance workers had been draining a pipeline containing the toluene.

113. The EPA inspectors observed that, in addition to the open container of hazardous waste, there was inadequate ventilation within the fume hood to capture all emissions from this area. According to Respondent's personnel, workers used open buckets to move hazardous wastes from around the Facility to the solvent sumps in Suite 1.

114. During the Inspection, the EPA inspectors observed a drainage sump in Suite 1 that ran parallel to the line of reactor vessels along the outer wall of the suite and in front of the vessels towards the center of the suite. This drainage sump was designed to receive aqueous solvent waste. Drain lines from reactor vessels extend from the vessels to the drainage sump. Aqueous solvent wastes (10% solvent) were pumped to the drainage sump. There was a pump station located near the left end of the drainage sump. The waste from the drainage sump was pumped to the aqueous drain line that went to the aqueous solvent hazardous waste tanks. In addition, any spills that occurred in the suite were directed (via a sloped floor) to these drains. The waste in this drainage sump contained solvent. Respondent failed to maintain any method or mechanism to control VOC emissions from this drainage sump.

115. The emissions from the solvents contained in the open-topped bucket and drainage sump described above, posed a threat to human health and/or the environment.

116. Respondent's failure to design and operate its hazardous waste management units to prevent, and construct and maintain them to minimize, the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water, violated 310 C.M.R § 30.524(1), as referenced by 310 C.M.R § 30.341(1)(e)(1).

COUNT X: Failure to segregate incompatible hazardous waste.

117. Paragraphs 1 through 116 are incorporated herein by reference.

118. Pursuant to 310 C.M.R § 30.560(3), as referenced by 310 C.M.R § 30.341(1)(f), a generator must store incompatible wastes and materials in a way that does not threaten to:

(a) generate extreme heat or pressure, fire or explosion, or violent reactions; (b) produce uncontrolled toxic mists, fumes, dusts, or gases which may threaten public health, safety, or welfare or the environment; (c) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of explosion; (d) damage the structural integrity of the device or facility containing the waste; or (e) through other means threaten public health, safe, or welfare, or the environment.

119. At the time of the Inspection, Respondent maintained a HWSA in a separate building from the main manufacturing building. The HWSA was located on the left side of the storage building. Raw materials also were stored on both sides of this building.

120. At the time of the Inspection, Respondent stored drums of hazardous waste, raw material residues to be shipped off-site as hazardous waste, and product hydrochloric acid in the HSWA. The containers of hazardous waste in the HSWA included: (a) six 55-gallon drums of

hazardous waste labeled as “flammable solids (D001, F003 and F005);” (b) a 5-gallon container of waste hydrofluoric acid (D002, D009); and (c) a 5-gallon container of waste flammable solids (D001, F003 and F005). The product hydrochloric acid was stored on racks behind the waste drums.

121. In addition, Respondent stored other types of raw materials in this building, including: numerous types of acid; flammable solvents; and chlorinated solvents (formic acid, sulfuric acid, phosphoric acid, glacial acetic acid, methanol, ethanol, acetone, acetonitrile, isopropyl alcohol and methylene chloride).

122. The floor in the building sloped to the northwest corner of the HWSA where there was a sump. This sump would collect spills from the HWSA and all other areas of the building. There were no physical barriers between raw materials and the wastes stored in the HWSA.

123. Hazardous wastes stored in the HSWA were incompatible with other materials stored in the building. Respondent’s storage of potentially incompatible hazardous wastes and raw materials created conditions that could have allowed incompatible wastes and raw materials to be mixed together had there been a release. Also, the wastes stored in the HSWA itself contained potentially hazardous incompatible materials. Mixtures of these materials and wastes could have caused dangerous reactions resulting in the generation of heat (exothermic reaction), gas, fire and/or explosions.

124. According to the National Oceanographic and Atmospheric Agency’s (“NOAA’s”) CAMEO chemicals software program, one such example was hydrofluoric acid which was incompatible with several of the raw materials stored in the building, including:

phosphoric acid (exothermic reaction), hydrochloric acid and acetic acid (exothermic reaction, generates gas), methanol and ethanol and isopropanol (exothermic reaction, generates heat.)

125. Respondent's failure to store incompatible hazardous waste and other materials in a manner that did not threaten to (a) generate extreme heat or pressure, fire or explosion, or violent reactions; (b) produce uncontrolled toxic mists, fumes, dusts, or gases which may threaten public health, safety, or welfare or the environment; (c) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of explosion; (d) damage the structural integrity of the device or facility containing the waste; or (e) through other means threaten public health, safe, or welfare, or the environment, violated 310 C.M.R § 30.560(3), as referenced by, 310 C.M.R. § 30.341(1)(f).

COUNT XI: Failure to provide hazardous waste training

126. Paragraphs 1 through 125 are incorporated herein by reference.

127. Pursuant to 310 C.M.R. § 30.516(1), as referenced by 310 C.M.R. § 30.341(1)(a), a generator is required to ensure that all site personnel assigned to manage hazardous wastes have completed a training program that teaches them to perform their duties in a way that ensures the facility's compliance with RCRA. The program must be directed by a person trained in hazardous waste management procedures and must include instruction in hazardous waste management procedures relevant to the position in which the employee is employed. Personnel may not work in unsupervised positions until they have such training, and they must receive it within six months of starting their position. Additionally, they must receive annual training refresher courses. Further, training records for current personnel must be kept until closure of the site.

128. During the Inspection, EPA inspectors reviewed Respondent's training records from January 2012 to March 2014.

129. At the time of the Inspection, Respondent did not have records showing that two of Respondent's employees received RCRA training in 2012. One of these employees, Mr. Derrick St. Laurent, was the teacher of Respondent's in-house, on-site RCRA training course, responsible for training over fifty employees in RCRA hazardous waste standards annually.

130. Respondent's failure to ensure that its in-house trainer and another employee received required annual training violated 310 C.M.R. § 30.516(1), as referenced by 310 C.M.R. § 30.341(1)(a).

VI. COMPLIANCE ORDER

131. Based on the foregoing findings, Respondent is hereby ordered to achieve and maintain compliance with all applicable requirements of RCRA, 40 C.F.R. Part 260 *et seq.* and 310 C.M.R. 30.100 *et seq.* Specifically, Respondent shall do the following:

132. Within 30 days of receipt of this Complaint, Respondent shall comply with hazardous waste tank standards, in accordance with the requirements of 310 C.M.R. §§ 30.341(2), 30.692, 30.694, 30.695, and 30.696, as referenced by 310 C.M.R. § 30.343(1).

133. Within 30 days of receipt of this Complaint, Respondent shall comply with Subpart CC requirements for the eight solvent collection tanks and two filtrate collection tanks described in paragraph 45 above. Specifically, Respondent shall comply with the requirements of 40 C.F.R. § 265.1083(b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), 40 C.F.R. § 265.1085(b) and (c)(4), as referenced by 40 C.F.R. § 262.34(a)(1)(ii); 40 C.F.R.

§ 265.1089(a), as referenced by 40 C.F.R. § 262.34(a)(1)(ii); and 40 C.F.R. § 265.1090(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii), by: (a) inspecting air emission control equipment for defects; (b) developing and implementing a written plan for performing inspection and monitoring of air emission control equipment; (c) recording information pertaining to air emission control equipment design; and (d) maintaining records for each inspection of air control emission equipment.

134. Immediately upon receipt of this Complaint, Respondent shall mark each piece of equipment subject to Subpart BB requirements in such a manner that it can be distinguished readily from other pieces of equipment in accordance with the requirements of 40 C.F.R. § 265.1050(c), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

135. Immediately upon receipt of this Complaint, Respondent shall comply with hazardous waste air emission standards (Subpart BB) for valves in light liquid service, heavy liquid service and gas/vapor service and for pumps and flanges, in accordance with the requirements of 40 C.F.R. § 265.1052(a)(1), (a)(2), and/or (e), 40 C.F.R. § 265.1057(a), 40 C.F.R. § 265.1058(a), and 40 C.F.R. § 265.1061, as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

136. Immediately upon receipt of this Complaint, Respondent shall provide caps, flanges, or plugs for open valves, lines and hoses utilized in gas/vapor service or in light liquid service, in accordance with the requirements of 40 C.F.R. § 265.1056(a)-(c), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

137. Immediately upon receipt of this Complaint, Respondent shall begin monitoring pressure relief devices within five calendar days after a pressure release to confirm the condition

of no detectable emissions for organic hazardous waste tanks 1 and 2, in accordance with the requirements of 40 C.F.R. § 265.1054(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

138. Immediately upon receipt of this Complaint, Respondent shall begin complying with Subpart BB's recordkeeping requirements in accordance with 40 C.F.R. § 265.1064(a), (b), (g) and (k), as referenced by 40 C.F.R. § 262.34(a)(1)(ii).

139. Immediately upon receipt of this Complaint, Respondent shall comply with Method 21 by using the proper calibration chemicals and equipment to conduct its RCRA emission tests in accordance with the requirements of 40 C.F.R. § 262.34(a)(1)(ii), which references 40 C.F.R. § 265.1063(a)-(c) and 40 C.F.R. § 265.1084(d), which reference 40 C.F.R. Part 60, Appendix A.

140. Within 30 days of receipt of this Complaint, Respondent shall ensure that it is operating and managing its hazardous waste management units in a manner that minimizes the potential for a release to the environment in accordance with the requirements of 310 C.M.R § 30.524(1), as referenced by 310 C.M.R § 30.341(1)(e)(1).

141. Immediately upon receipt of this Complaint, Respondent shall ensure that it is storing incompatible hazardous waste and other materials in a manner that does not threaten to:

- (a) generate extreme heat or pressure, fire or explosion, or violent reactions;
- (b) produce uncontrolled toxic mists, fumes, dusts, or gases which may threaten public health, safety, or welfare or the environment;
- (c) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of explosion;
- (d) damage the structural integrity of the device or facility containing the waste; or
- (e) through other means threaten public health, safe, or welfare, or the

environment, in accordance with the provisions of 310 C.M.R § 30.560(3), as referenced by, 310 C.M.R. § 30.341(1)(f).

142. Within 30 days of receipt of this Complaint, Respondent shall ensure that that all site personnel assigned to manage hazardous wastes have completed a training program that teaches them to perform their duties in a way that ensures the facility's compliance with RCRA, in accordance with 310 C.M.R. § 30.516(1), as referenced by 310 C.M.R. § 30.341(1)(a).

143. To ensure compliance with the requirements cited in paragraphs 132 through 142 above, Respondent shall submit to EPA, within 35 days of receipt of this Complaint, a written confirmation of compliance (accompanied by a copy of any appropriate supporting documentation, such as hazardous waste manifests) or noncompliance with the requirements set forth in paragraphs 132 through 142. Any notice of noncompliance with the requirements of paragraphs 132 through 142 shall state the reasons for the noncompliance and when compliance is expected. Notice of noncompliance will in no way excuse the noncompliance. This statement shall specify all actions taken by Respondent to comply with paragraph 132 through 142 of this Complaint.

144. The information requested in this Order is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. §3501 et seq.

145. Respondent shall submit the copies of any information, reports, and/or notices required by this Order to:

Richard Piligian
RCRA, EPCRA and Federal Programs Unit
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code OES05-1
Boston, MA 02109-3912

and

Steven Schlang, Senior Enforcement Counsel
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code OES04-4
Boston, MA 02109-3912

146. If Respondent fails to comply with the requirements of this Complaint within the time specified, Section 3008(c) of RCRA, 42 U.S.C. § 6928(c), 31 U.S.C. § 3701 *et seq.* and 40 C.F.R. Part 19 provide for further enforcement action in which EPA may seek the imposition of penalties of up to \$37,500 for each day of continued noncompliance.

147. This Complaint shall become effective immediately upon receipt by Respondent.

148. In accordance with 40 C.F.R. § 22.37(b), this Compliance Order shall automatically become a final order unless, no later than 30 days after the Complaint is served, Respondent requests a hearing pursuant to 40 C.F.R. § 22.15.

VII. PROPOSED PENALTY

149. The civil penalty proposed below has been determined in accordance with Section 3008(a) of RCRA, 42 U.S.C. 6928(a). In determining the amount of any RCRA penalty to be assessed, Section 3008(a) requires EPA to take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. To develop the proposed penalty for the violations cited in this Complaint, Complainant has taken into account the particular facts and circumstances of this case with specific reference to EPA's RCRA Civil Penalty Policy, dated June 2003 ("Penalty Policy"). A copy of the Penalty Policy is enclosed

with this Complaint. The Penalty Policy provides a rational, consistent, and equitable calculation methodology for applying the statutory penalty factors identified above to particular cases.

150. Based on the nature, circumstances, extent, and gravity of the above-cited violations, a RCRA civil penalty in the amount of \$395,694 is hereby proposed to be assessed against Respondent. Attachment I to this Complaint explains the reasoning for this penalty.

The penalties proposed to be assessed for each count pled in Section V above are as follows:

| <u>COUNT</u> | <u>PROPOSED PENALTY</u> |
|---|-------------------------|
| I. Failure to Comply with hazardous Waste Tank Standards | \$ 64,089 |
| II. Failure to Comply with Subpart CC Standards for Tanks | \$109,870 |
| III. Failure to Comply with Subpart BB Standards (Pumps) | \$ 8,289 |
| IV. Failure to Comply with Subpart BB Standards (Valves) | \$ 8,289 |
| V. Failure to Comply with Subpart BB Standards (Open-ended Lines and Flanges) | \$ 29,624 |
| VI. Failure to Comply with Subpart BB Standards (Pressure Relief Devices) | \$ 29,624 |
| VII. Failure to Comply with Subpart BB Standards (Records) | \$ 22,311 |
| VIII. Failure to Comply with Method 21 Standards | \$ 29,624 |
| IX. Failure to Minimize the Potential for a Release | \$ 59,247 |
| X. Failure to Segregate Incompatible Hazardous Waste | \$ 29,624 |
| XI. Failure to Conduct Adequate Training | \$ 5,103 |
| TOTAL PROPOSED PENALTY | \$395,694 |

VIII. OPPORTUNITY TO REQUEST A HEARING AND FILE ANSWER

151. As provided by Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and in accordance with 40 C.F.R. § 22.15, Respondent has a right to request a hearing on the issues raised in this Complaint. Any such hearing would be conducted in accordance with Part 22. **To avoid being found in default, which constitutes an admission of all facts alleged in the Complaint and a waiver of the right to a hearing, Respondent must file a written Answer within thirty (30) days of Respondent's receipt of this Complaint.** The Answer must clearly and directly admit, deny, or explain each of the factual allegations contained in this Complaint with regard to which Respondent has any knowledge. If Respondent has no knowledge of a particular fact and so states, the allegation is considered denied. Failure to admit, deny, or explain an allegation constitutes an admission of that allegation. Respondent's Answer must also state all arguments or circumstances that are alleged to constitute grounds for a defense; the facts that Respondent intends to place at issue; and must specifically request an administrative hearing if such a hearing is desired. If Respondent denies any material fact or raises any affirmative defense, Respondent will be considered to have requested a hearing. The Answer must be sent to:

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

152. Respondent shall also serve a copy of the Answer, as well as a copy of all other documents that Respondent files in this action, to Steven Schlang, the attorney assigned to represent Complainant in this matter, and the person who is designated to receive service in this matter under 40 C.F.R. § 22.5(c)(4), at the following address:

Steven Schlang

Enforcement Counsel
U.S. EPA, Region 1
5 Post Office Square – Suite 100
Mail Code: OES04-4
Boston, Massachusetts 02109-3912

153. The filing and service of documents, other than the complaint, rulings, orders, and decisions, in all cases before the Region 1 Regional Judicial Officer governed by the Consolidated Rules of Practice may be filed and served by email, consistent with the “Standing Order Authorizing Filing and Service by E-Mail in Proceedings Before the Region 1 Regional Judicial Officer,” a copy of which has been provided with the Complaint.

IX. DEFAULT ORDER

154. If Respondent fails to file a timely Answer to the Order, Respondent may be found to be in default pursuant to 40 C.F.R. § 22.17. For purposes of this action only, default by Respondent constitutes an admission of all facts alleged in the Order and a waiver of Respondent’s right to a hearing on such factual allegations under Section 3008 of RCRA, 42 U.S.C. § 6928. In addition, default will preclude Respondent from thereafter obtaining adjudicative review of any of the provisions contained in the Order.

X. INFORMAL SETTLEMENT CONFERENCE

155. Whether or not a hearing is requested upon filing an Answer, Respondent may confer informally with Complainant or her designee concerning the violations alleged in this Complaint. Such conference provides Respondent with an opportunity to respond informally to the allegations, and to provide whatever additional information may be relevant to the disposition of this matter. To explore the possibility of settlement, Respondent or Respondent’s counsel

should contact Steven Schlang, Enforcement Counsel, at the address cited above or by calling 617-918-1773.

156. Please note that a request for an informal settlement conference by Respondent does not automatically extend the 30-day time period within which a written Answer must be submitted in order to avoid becoming subject to default.

157. Quick Resolution: Respondent may also resolve the proceeding at any time by paying the specific penalty proposed in the Complaint, as more fully explained in 40 C.F.R. § 22.18. If Respondent pays the proposed penalty in full within 30 days of after receiving the Complaint then no Answer need be filed.

XI. CONTINUED COMPLIANCE OBLIGATION

158. Neither assessment nor payment of an administrative penalty shall affect Respondent's continuing obligation to comply with RCRA, 42 U.S.C. §§ 6901-6987 and the RCRA regulations promulgated at 40 C.F.R. Part 265.

For Complainant:



Joanna Jerison
Legal Enforcement Manager
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1

10/27/15

Date

ATTACHMENT I
In the Matter of: Waters Technologies Corporation
EPA Docket Number: RCRA-01-2015-0084

EXPLANATION OF PENALTY CALCULATION

The following represents the penalty calculation and justification for Waters Technologies Corporation (“Waters”), located in Taunton, Massachusetts. The memo addresses violations of certain provisions under the State of Massachusetts Hazardous Waste Management Regulations found at 310 C.M.R. Sections 30.100 *et seq.* and Federal Hazardous Waste Management Regulations found at 40 C.F.R. Part 260-272.

A gravity-based penalty was proposed for the violations in accordance with the RCRA Civil Penalty Policy, dated June 23, 2003 (“RCPP”), the Debt Collection Improvement Act, and the Civil Monetary Inflation Adjustment Rule, effective January 13, 2009. Adjustment factors examined by EPA in determining the amount of the proposed penalty against Waters include: economic benefit of noncompliance; history of non-compliance; the degree of willfulness or negligence; good faith effort; and other unique factors. Adjustments for some of these factors have been deemed appropriate as discussed below. Economic benefit estimates were calculated by using the 1997 EPA manual “Estimating Costs for the Economic Benefit of RCRA Noncompliance” and EPA’s BEN model.

The alleged violations are based upon observations made by inspectors from the U.S. Environmental Protection Agency (EPA) during a Compliance Evaluation Inspection (CEI) conducted at the Waters facility on March 19 - 20, 2014.

The following violations have been documented and included in the complaint to be issued pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), against Waters:

1. Failure to comply with standards for the storage of hazardous wastes in tanks.

- (a) Provision Violated** – 310 C.M.R. §§ 30.341(2), 30.692, 30.694, 30.695, and 30.696, as referenced by 310 C.M.R. § 30.343(1)

Respondent failed to: (a) clearly mark and label each hazardous waste tank with the words “Hazardous Waste”, words which clearly identify the hazardous wastes stored in the tank and words that describe the hazard(s) associated with the wastes, the date upon which each period of accumulation began; (b) conduct and document certified tank integrity assessments; (c) conduct testing on the tightness of the connecting joints; (d) maintain secondary containment around the tanks; (e) conduct and maintain documentation of regular inspections of the tanks; and (f) maintain documentation that these tanks met design and operational standards for tanks containing ignitable, reactive and incompatible wastes.

- (b) Potential for Harm** – Major

Justification - Waters failed to conduct hazardous waste tank assessments for ten hazardous waste tanks. These assessments are essential to insuring the structural stability of the system and its compatibility with the wastes it handles. They are needed to prevent the leaking or rupturing of the tanks and to prevent their failure. In addition, Waters did not include these tanks in their hazardous waste program. As a result, Waters did not have adequate secondary containment systems for these tanks or their ancillary equipment. Waters also did not do daily inspections of these tanks or their ancillary equipment. There was no documentation present that these tanks met design and operational standards for tanks containing ignitable, reactive and incompatible wastes. These failures present a substantial risk of harm to the environment and the regulatory program. The potential for harm is major.

(c) Extent of Deviation - Major

Justification – Waters did not include ten of the fourteen observed hazardous waste tanks in their hazardous waste management program and did not comply with the applicable regulations for those units. The extent of deviation from the regulations is major.

(d) Penalty Assessment¹

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

(1) Matrix Cell Range² (gravity-based penalty) \$28,330 - \$37,500.

Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

EPA has chosen to propose penalties for each of these ten hazardous waste tanks. Multiple penalties are being assessed for the second through tenth violation of this requirement. In accordance with Section A. 3., on page 22 of the RCPP, EPA has chosen to treat multiple violations of RCRA as multi-day violations, because of the number and similarity of the violations, rather than assessing each failure to manage hazardous waste tanks according to applicable requirements as an

¹When determining the gravity-based penalty of a violation in accordance with the Policy, EPA considers two factors: the violation's potential for harm and its extent of deviation from the requirements.

²Factors such as seriousness of the violation (as compared to other violations in the same matrix cell), size and sophistication of the company, efforts to remediate the violation, number of days of the violation and other relevant factors specific to the violation are considered in determining the appropriate range within the matrix cell for all components of the gravity-based penalty throughout this justification.

independent and non-continuous act. The matrix cell range for multi-day penalties is \$1,420 to \$7,090 for violations which pose a major potential for harm and a major extent of deviation. It has been determined that the violations associated with this count warrant a per-day penalty rate of \$4,255. This value is appropriate based on the seriousness of the violation.

Matrix range: \$1,420 - \$7,090;
Instance 2-10 are assessed at \$4,255 (mid-point)
Penalty = (\$4,255 x 9) = \$38,295

(3) Adjustment for Economic Benefit (BEN)

There is no significant economic benefit associated with these violations of failing to comply with hazardous waste tank standards.

TOTAL PENALTY AMOUNT: \$71,210

2. Failure to comply with hazardous waste tank air emission regulations (Subpart CC) for the filtrate tanks in the freshmade process, the waste collection tanks associated with the vacuum dryers and for the hazardous waste collection tanks in the tank farm (organics hazardous waste tanks #1 & 2 and aqueous hazardous waste tanks #1 & 2.

- (a) **Provisions Violated** – 40 C.F.R. § 265.1083(b), as referenced by 40 C.F.R. § 262.34(a)(1); 40 C.F.R. § 265.1085(c)(4), as referenced by 40 C.F.R. § 262.34(a)(1); 40 C.F.R. § 265.1089(a), as referenced by 40 C.F.R. § 262.34(a)(1); and 40 C.F.R. § 265.1090(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1)

Respondent failed to manage its hazardous waste tanks in compliance with Subpart CC air emissions standards.

(b) **Potential for Harm – Major**

Justification - Tanks containing hazardous wastes with high VOC concentrations have the potential to pollute when tank openings are not properly maintained and monitored. The Subpart CC regulations are intended to be self-implementing and to regulate emissions that may not otherwise be regulated. By failing to properly comply with the CC regulations, Waters circumvented the RCRA air emissions program. The violations pose major harm to the regulatory program and pose a major potential for harm to the environment. The potential for harm is major.

(c) **Extent of Deviation - Major**

Justification – These violations represent a substantial deviation from the regulatory requirements. At the time of the inspection, Waters was operating ten

hazardous waste tanks, all of which were subject to Subpart CC, outside their Subpart CC program. All ten of these tanks were not in compliance with the above CC requirements. The violations represent a major extent of deviation from the regulations.

(d) Penalty Assessment

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

(1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.

Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

EPA has chosen to propose penalties for each of these ten hazardous waste tanks. Multiple penalties are being assessed for the second through fourteenth violation of this requirement. In accordance with Section A. 3., on page 22 of the RCPP, EPA has chosen to treat multiple violations of RCRA as multi-day violations, because of the number and similarity of the violations, rather than assessing each failure to comply with Subpart CC standards as an independent and non-continuous act. The matrix cell range for multi-day penalties is \$1,420 to \$7,090 for violations which pose a major potential for harm and a major extent of deviation. It has been determined that the violations associated with this count warrant a per-day penalty rate of \$4,255. This value is appropriate based on the extent and nature of the violation.

Matrix range: \$1,420 - \$7,090;

Instance 2-14 are assessed at **\$4,255** (mid-point)

Penalty = (**\$4,255** x 13) = **\$55,315**

(3) Adjustment for Economic Benefit (BEN)

This benefit calculation incorporates the economic benefit for violations #2 through #8. The economic benefit estimate was calculated by using data from the third party consultant report and EPA's BEN model. The calculated economic benefit is **\$30,463**.

TOTAL PENALTY AMOUNT: \$118,693

3. Failure to comply with hazardous waste air emission standards (Subpart BB) for marking/labeling Subpart BB equipment.

- (a) **Provisions Violated** – 40 C.F.R. § 265.1050(c), as referenced by 40 C.F.R. § 262.34(a)(1).

Respondent failed to mark each piece of equipment to which 40 C.F.R Part 265, Subpart BB, applies in such a manner that it could be identified and distinguished readily from other pieces of equipment.

(b) Potential for Harm – Moderate

Justification – The ability to identify and locate equipment subject to these regulations is essential. By not meeting this requirement, Waters made it difficult to locate the equipment to conduct monitoring and visual inspections. By failing to properly comply with Subpart BB regulations, Waters circumvented a significant portion of the RCRA air emissions program. The violations pose significant harm to the regulatory program and pose a significant potential for harm to the environment. The potential for harm is moderate.

(c) Extent of Deviation - Moderate

Justification – These violations represent a significant deviation from the regulatory requirements. At the time of the inspection, Waters had identified less than 20% of the regulated equipment under Subpart BB. Waters, however, did have a program in which some of the subject equipment was labeled.

(d) Penalty Assessment

EPA has determined that Waters' violation of these requirements warrants a classification of Moderate/Moderate.

(1) Matrix Cell Range (gravity-based penalty): \$7,090 - \$11,330.
Penalty Amount: \$9,210. (Mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. EPA has chosen to address this violation on a facility-wide basis.

(3) Economic Benefit

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$9,210

4. **Failure to comply with hazardous waste air emission standards (Subpart BB) for monitoring valves in light liquid service, heavy liquid service and gas/vapor service, pumps and flanges.**

- (a) **Provisions Violated** – 40 C.F.R. § 265.1052(a)(1), (a)(2), and/or (e), 40 C.F.R. § 265.1057(a), 40 C.F.R. § 1058(a), and 40 C.F.R. § 265.1061, as referenced by 40 C.F.R. § 262.34(a)(1).

Respondent failed to comply with hazardous waste air emission standards (Subpart BB) for valves in light liquid service, heavy liquid service and gas/vapor service and for pumps and flanges.

- (b) Potential for Harm – Moderate

Justification – Valves, pumps and flanges in hazardous waste service with high VOC concentrations have the potential to release hazardous constituents effecting human health and the environment when these pieces of equipment are not properly maintained and monitored. The Subpart BB regulations are intended to be self-implementing and to regulate emissions that may not otherwise be regulated. By failing to properly comply with these BB regulations, Waters circumvented the RCRA air emissions program. The majority of the subject equipment was located within the suites connected to the thermal oxidizer. The thermal oxidizer does not operate at all times. The violations pose significant harm to the regulatory program and pose a significant potential for harm to the environment. The potential for harm is moderate.

- (c) Extent of Deviation - Moderate

Justification – These violations represent a significant deviation from the regulatory requirements. At the time of the inspection, Waters was monitoring a subset of their hazardous waste Subpart BB equipment. Many of the valves, pumps and flanges subject to this standard were not a part of the Subpart BB Compliance Program and were not monitored. Waters, however, did have a program in which some of the subject equipment was monitored.

- (d) Penalty Assessment

EPA has determined that Waters' violation of these requirements warrants a classification of Moderate/Moderate.

(1) Matrix Cell Range (gravity-based penalty): \$7,090 - \$11,330.
Penalty Amount: \$9,210. (Mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. EPA has chosen to address this violation

on a facility-wide basis.

(3) Economic Benefit

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$9,210

5. Failure to comply with hazardous waste air emission standards (Subpart BB) for open-ended valves and lines.

- (a) **Provisions Violated** – 40 C.F.R. § 265.1056(a)-(c), as referenced by 40 C.F.R. § 262.34(a)(1).

Respondent failed to provide caps or plugs for open valves, lines and hoses utilized in gas/vapor service or in light liquid service and to meet Subpart BB standards for leaks and emissions from these valves, and lines.

- (b) **Potential for Harm – Major**

Justification – Open-ended valves and lines in hazardous waste service with high VOC concentrations create a substantial risk of release of hazardous constituents effecting human health and the environment when these valves are not properly maintained and monitored. These conduits have the potential to allow a substantial flow of VOC emissions due to the size of their openings. This violation poses a substantial potential for harm to the regulatory program and poses a substantial potential for harm to the environment. The potential for harm is major.

- (c) **Extent of Deviation - Major**

Justification – These violations represent a substantial deviation from the regulatory requirements. At the time of the inspection, there were many open-ended lines without proper controls in place. The extent of deviation from the regulations is major.

- (d) **Penalty Assessment**

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.
Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. EPA has chosen to address this violation as a single facility-wide violation.

(3) Adjustment for Economic Benefit (BEN)

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$32,915

6. Failure to comply with hazardous waste air emission standards (Subpart BB) for pressure relief valves.

- (a) **Provisions Violated** – 40 C.F.R. § 265.1054(a) and (b), as referenced by 40 C.F.R. § 262.34(a)(1).

Respondent failed to address, mention, or provide for inspections or monitoring of the pressure relief vents for organic hazardous waste tanks 1 and 2.

- (b) **Potential for Harm – Major**

Justification – Pressure relief vents on tanks with high VOC concentrations create a substantial risk of release of hazardous constituents effecting human health and the environment when these vents are not properly maintained and monitored. These vents are direct conduits from the tanks of organic wastes and have the potential to allow a substantial flow of VOC emissions. This violation poses a substantial potential for harm to the regulatory program and poses a substantial potential for harm to the environment. The potential for harm is major.

- (c) **Extent of Deviation - Major**

Justification – These violations represent a substantial deviation from the regulatory requirements. At the time of the inspection, these two vents were the only vents observed that were subject to this standard. The extent of deviation from the regulations is major.

- (d) **Penalty Assessment**

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.
Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. EPA has chosen to address this violation as a single facility-wide violation.

(3) Adjustment for Economic Benefit (BEN)

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$32,915

7. Failure to comply with hazardous waste air emission standards (Subpart BB) for maintaining records.

- (a) **Provisions Violated** – 40 C.F.R. §§ 265.1064(a), (b), (g) and (k), as referenced by 40 C.F.R. § 262.34(a)(1).

Respondent failed to comply with Subpart BB's requirement to maintain records.

- (b) **Potential for Harm – Major**

Justification – Not maintaining adequate records concerning waste streams and equipment subject to air emission regulations, creates a substantial risk of release of hazardous constituents effecting human health and the environment. Equipment not identified and labeled are not properly maintained and monitored. This violation poses a substantial potential for harm to the regulatory program and poses a substantial potential for harm to the environment. The potential for harm is major.

- (c) **Extent of Deviation - Moderate**

Justification – This violation represents a significant deviation from the regulatory requirements. Many required records required by this Subpart were not maintained by Waters. The extent of deviation from the regulations is moderate.

- (d) **Penalty Assessment**

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Moderate.

1) Matrix Cell Range (gravity-based penalty) \$21,250 - \$28,330.
Penalty Amount: \$24,790 (mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. EPA has chosen to address this violation as a single facility-wide violation.

(3) Adjustment for Economic Benefit (BEN)

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$24,790

8. Failure to comply with air monitoring methods that fulfill method 21, 40 C.F.R. Part 60, Appendix A, as referenced by 40 C.F.R. § 265.1084(d), for the purposes of determining compliance with 40 C.F.R. Subparts BB and CC

- (a) **Provisions Violated** – 40 C.F.R. § 265.1063(a) and (c) and 40 C.F.R. § 265.1084(d), as referenced by 40 C.F.R. § 262.34(a)(1)

Respondent failed to follow Method 21 in using the proper calibration materials or equipment to conduct its RCRA emission tests.

- (b) Potential for Harm – Major

Justification - The purpose of the Subpart BB and CC regulations is to minimize emissions of VOCs from hazardous waste tanks and associated equipment. In order to determine when leaking conditions exist, appropriate equipment must be used for emission monitoring. In Waters' case, it was not using appropriate monitoring equipment for its tanks and associated equipment. Therefore, Waters may have unknowingly contributed VOC emissions to the atmosphere because they were using a Mini Rae with a bulb that is too old and using the wrong calibration gas for the Method. The potential for harm to the environment is substantial.

Air emission standards for hazardous waste tanks require, as an essential component, effective air monitoring. Regulators rely on owners/operators of facilities to properly conduct monitoring. The use of ineffective air monitoring equipment undermines the regulatory program. The potential for harm to the regulatory program is substantial.

The potential for harm is major.

- (c) Extent of Deviation - Major

Justification – This violation deviates to a major extent from the regulatory requirement because Waters’ monitoring for BB and CC compliance left substantial doubt that actual levels of compliance were being determined. The extent of deviation from the regulations is major.

(d) Penalty Assessment

EPA has determined that Waters’ violation of these requirements warrants a classification of Major/Major.

(1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.
Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

EPA has chosen to assess this violation as a facility-wide failure for not using equipment that is effective in monitoring air emissions from tanks and equipment that are operated by Waters.

(3) Adjustment for Economic Benefit (BEN)

The economic benefit associated with this count has been incorporated into Count #2. Therefore, no value is added here.

TOTAL PENALTY AMOUNT: \$32,915

9. Failure to design and operate a hazardous waste management unit to prevent and/ minimize, the possibility of a release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.

(a) Provision Violated – 310 C.M.R § 30.524(1), as referenced by 310 C.M.R § 30.341(1)(e)(1).

Respondent failed to design and operate its hazardous waste management units to prevent and construct and maintain to minimize, the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.

(b) Potential for Harm – Major

Justification – Each of the two violations in this count involved the release of VOCs impacting human health and/or the environment. Solvent waste handling locations/units/containers containing hazardous wastes with high VOC

concentrations have a substantial potential to emit pollutants when openings are not properly closed, maintained and monitored.

Waters' failure to minimize the release of these VOCs increased the likelihood of spills, accidents, accidental ignition, and direct contact with the waste by facility personnel. A fire or uncontrolled reaction of wastes would lead to additional releases of hazardous constituents to the environment. These violations present a substantial potential for harm to human health and the environment from a spill, fire or explosion as well as from emissions from normal daily operations. The violations also pose major harm to the regulatory program. RCRA regulations are designed to limit potential releases to the environment. The potential for harm is major.

(c) Extent of Deviation - Major

Justification – These violations represent a substantial deviation from the regulatory requirements. In all instances cited, no mechanisms were in place to limit the release of hazardous constituents. The extent of deviation from the regulations is major.

(d) Penalty Assessment

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

(1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.

Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are sought for each instance where this violation occurred. Each instance is assessed the same gravity-based penalty. This is appropriate based on the extent and nature of the violation.

Matrix range: \$28,330 - \$37,500

Instance 2 is assessed at \$32,915

Penalty = (\$32,915 x 1) = **\$32,915**

(3) Adjustment for Economic Benefit (BEN)

No adjustment is recommended. No significant economic benefit resulted from this violation.

TOTAL PENALTY AMOUNT: \$65,830

10. Failure to segregate incompatible hazardous waste.

- (a) **Provision Violated** – 310 C.M.R § 30.560(3), as referenced by 310 C.M.R § 30.341(1)(f).

Respondent failed to separate potentially incompatible hazardous wastes and materials in its hazardous waste storage area.

- (b) Potential for Harm – Major

Justification - Storage of incompatible hazardous wastes and materials poses a substantial risk of harm to human health and the environment. If the incompatible wastes and other materials from these containers were released and mixed together, the reaction could include the generation of heat, fire and other violent chemical reactions. Since this storage occurred in and around the HWSA, a large volume of hazardous wastes and products could become involved in a fire. The potential for harm is deemed to be major.

- (c) Extent of Deviation - Major

Justification – On average, Waters stored hundreds of hazardous waste drums in the HWSA each week. Storage conditions (products and wastes stored in combined containment) were consistent week to week. The extent of deviation from the regulations is major.

- (d) Penalty Assessment

EPA has determined that Waters' violation of these requirements warrants a classification of Major/Major.

(1) Matrix Cell Range (gravity-based penalty) \$28,330 - \$37,500.

Penalty Amount: \$32,915 (mid-point)

(2) Multiple/Multi-day Assessment

EPA has chosen to assess this violation as a facility-wide failure for not separating incompatible wastes and materials.

(3) Adjustment for Economic Benefit (BEN)

No adjustment is recommended. No significant economic benefit resulted from this violation.

TOTAL PENALTY AMOUNT: \$32,915

11. Failure to provide hazardous waste training.

- (a) **Provision Violated** – 310 C.M.R. § 30.516(1), as referenced by 310 C.M.R. § 30.341(1)(a).

Respondent failed to ensure that its in-house trainer and one other employee received required annual training.

- (b) Potential for Harm – Moderate

Justification – Applicable regulations require employees who manage hazardous waste as part of their normal job duties to be properly trained. This training is an essential part of proper hazardous waste management. The failure to provide training is a significant violation. This violation included the missed training by the individual who directed the Waters hazardous waste training program. The facility did provide adequate RCRA training to most employees. The potential for harm is therefore moderate.

- (c) Extent of Deviation - Minor

Justification – - Based upon EPA’s review of Waters’ hazardous waste training program, Waters only had two employees that did not complete all of the RCRA training needed. Therefore, the extent of deviation is minor.

- (d) Penalty Assessment

EPA has determined that Waters’ violation of these requirements warrants a classification of Moderate/Minor.

(1) Matrix Cell Range (gravity-based penalty): \$4,250 - \$7,090.

Penalty Amount: \$5,670. (Mid-point)

(2) Multiple/Multi-day Assessment

Multiple penalties are not being sought. It is a single violation.

(3) Economic Benefit

There is no significant economic benefit associated with this violation of failing to have adequate hazardous waste training.

TOTAL PENALTY AMOUNT: \$5,670

| Requirements Violated | Gravity based Penalty | Economic Benefit Penalty | Multiple/ multi-day Penalty | **Degree of Cooperation | Total |
|--|-----------------------|--------------------------|-----------------------------|-------------------------|----------------|
| Failure to Comply With Hazardous Waste Tank Standards | 32,915 | N/A | 38,295 | (7,121) | 64,089 |
| Failure to Comply With Subpart CC Standards for Tanks | 32,915 | 30,463 | 55,315 | (8,823) | 109,870 |
| Failure to Comply With Subpart BB Standards (Pumps) | 9,210 | * | N/A | (921) | 8,289 |
| Failure to Comply With Subpart BB Standards (Valves) | 9,210 | * | N/A | (921) | 8,289 |
| Failure to Comply With Subpart BB Standards (Open-ended Lines and Flanges) | 32,915 | * | N/A | (3,291) | 29,624 |
| Failure to Comply With Subpart BB Standards (Pressure Relief Devices) | 32,915 | * | N/A | (3,291) | 29,624 |
| Failure to Comply With Subpart BB Standards (Records) | 24,790 | * | N/A | (2,479) | 22,311 |
| Failure to Comply With Method 21 Standards | 32,915 | * | N/A | (3,291) | 29,624 |
| Failure to Minimize the Potential For a Release | 32,915 | N/A | 32,915 | (6,583) | 59,247 |
| Failure to Segregate Incompatibles | 32,915 | N/A | N/A | (3,291) | 29,624 |
| Failure to Maintain an Adequate Training | 5,670 | N/A | N/A | (567) | 5,103 |

| | | | | | |
|-------------------|----------------|---------------|----------------|----------|----------------|
| Program | | | | | |
| Total – 11 Counts | 279,285 | 30,463 | 126,525 | (40,579) | 395,694 |

* - This BEN calculation incorporated into BEN calculation for Count #2.

** - A 10% reduction in penalty has been taken to reflect the cooperation of Waters.