

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

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### HAND DELIVERED

January 17, 2008

Wanda Santiago Regional Hearing Clerk U.S. Environmental Protection Agency, Region 1 One Congress Street, Suite 1100 (RAA) Boston, Massachusetts 02114-2023

Re: Administrative Complaint and Notice of Opportunity for Hearing in re: Presstek, Inc., <u>Docket Nos. CAA- 01-2008-0008 and CERCLA- 01-2008-0009</u>

Dear Ms. Santiago,

Enclosed for filing in the above-referenced matter, please find the original and one copy of an Administrative Complaint and Notice of Opportunity for a Hearing and the Certificate of Service.

Thank you for your attention to this matter.

Sincerely,

Amanda J. Helwig Enforcement Counsel

U.S. Environmental Protection Agency, Region 1

cc: James R. Van Horn, General Counsel Presstek, Inc.

Enclosures

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1 P 3: 52

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### I. STATEMENT OF AUTHORITY

- 1. The United States Environmental Protection Agency ("EPA") issues this

  Complaint to Respondent Presstek, Inc. ("Respondent"), pursuant to Section 113(a)(3) of the

  Clean Air Act ("CAA"), 42 U.S.C. §7413(a)(3), Section 109 of the Comprehensive

  Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9609, 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 ("Consolidated Rules"), 40 C.F.R. Part 22.
- 2. The Complaint notifies the Respondent of EPA's intention to assess penalties for violations of Section 112(r)(1) of the CAA, 42 U.S.C. §7412(r)(1), and Section 103(a) of CERCLA, 42 U.S.C. §9603(a). The Notice and Opportunity for Hearing describes Respondent's option to file an Answer to the Complaint and to request a formal hearing.

### II. STATUTORY AND REGULATORY FRAMEWORK

- 3. Section 112(r)(1) of the CAA, 42 U.S.C.§7412(r)(1), imposes a general duty on owners and operators of stationary sources producing, processing, handling, or storing substances listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C.§7412(r)(3), or any other extremely hazardous substances, to identify hazards that may result from accidental releases of such substances, using appropriate hazard assessment techniques, to design and maintain a safe facility, taking such steps as remain necessary to prevent releases, and to minimize the consequences of accidental releases.
- 4. The term "accidental release," as defined by Section 112(r)(2)(A) of the CAA, 42 U.S.C. §7412(r)(2)(A), means an unanticipated emission of a regulated substance, or other extremely hazardous substance, into the ambient air from a stationary source.
- 5. The term "regulated substance" is defined as a substance listed under Section 112(r)(2)(B), 42 U.S.C. §7412(r)(2)(B), and other extremely hazardous substances that are known to cause, or may be reasonably anticipated to cause, death, injury, or serious adverse effects to human health or the environment, including those listed under Section 112(r)(3), 42 U.S.C. §7412(r)(3), and in the list promulgated by the Administrator at 40 C.F.R. §68.130.
- 6. As used herein, the term "extremely hazardous substance" means an extremely hazardous substance within the meaning of Section 112(r)(1) of the Clean Air Act. Such substances include any chemical that may, as a result of short-term exposures because of releases to the air, cause death, injury, or property damage due to its toxicity, reactivity, flammability, or corrosivity.
- The term "stationary source" is defined by Section 112(r)(2)(C) of the CAA, 42
   U.S.C. §7412(r)(2)(C), in pertinent part, as any buildings, structures, equipment, installations or

substance-emitting stationary activities, located on one or more contiguous properties under the control of the same person, from which an accidental release may occur.

- 8. Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), and 40 C.F.R. § 302.6 require a person in charge of a facility to immediately notify the National Response Center, as soon as he or she has knowledge of a release (other than a federally permitted release) of a hazardous substance from such facility, in an amount equal to or greater than the reportable quantity of that substance.
- The term "person" is defined by Section 101(21) of CERCLA, 42 U.S.C.
   §9601(21), in pertinent part, as an individual, firm, corporation, association, partnership, consortium, joint venture, and commercial entity.
- 10. The term "facility" is defined by Section 101(9) of CERCLA, 42 U.S.C.
  §9601(9), in pertinent part, as any building, structure, installation, equipment, pipe or pipeline.
- 11. The term "release" is defined by Section 101(22) of CERCLA, 42 U.S.C. §9601(22), and 40 C.F.R. §302.3, in pertinent part, as "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment."
- 12. The term "hazardous substance" is defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), in pertinent part, as any substance designated pursuant to 33 U.S.C. §1321(b)(2)(A), any element, compound, mixture, solution or substance designated pursuant to 42 U.S.C. §9602, and any hazardous air pollutant listed under Section 112 of the Clean Air Act. "Hazardous substance" is defined by 40 C.F.R. §302.3 as "any substance designated pursuant to 40 C.F.R. Part 302."

 The term "reportable quantity" is defined by 40 C.F.R. §302.3 as that quantity set forth in 40 C.F.R. Part 302, the release of which requires notification pursuant to Part 302.

#### III. FACTUAL ALLEGATIONS

- Respondent Presstek, Inc. is a Delaware corporation, with its principal place of business located at 55 Executive Drive, Hudson, NH 03051.
- Respondent owns and operates a manufacturing facility, located at 755 New
   Ludlow Road, South Hadley, MA 01075 (the "Facility").
- 16. The Facility consists of two buildings, one of which manufactures digital plates, and one that, at the time of the release hereinafter described, engaged in analog plate manufacturing (the "analog building").
- 17. The analog plate manufacturing process involved the use of numerous hazardous substances, including hydrochloric acid, sodium hydroxide, ammonium bifluoride, and nitric acid.
- 18. The analog plate manufacturing process also required the use of sulfuric acid, an extremely hazardous substance.
- 19. Respondent pumped bulk chemicals employed in the analog plate manufacturing process from tank trucks into bulk storage tanks in the chemical receiving room, located within containment areas in the analog building.
- 20. Within the analog building, a sulfuric acid mixing tank (the "anode tank") was located adjacent to a bulk ammonium bifluoride storage tank, containing 24% concentration ammonium bifluoride ("24% ammonium bifluoride"), and within the same containment area as a bulk sulfuric acid storage tank, containing 98% concentration sulfuric acid ("98% sulfuric acid").

- 21. Routine procedures in the analog plate manufacturing process called for the preparation of 20% concentration sulfuric acid ("20% sulfuric acid") in the anode tank by mixing 98% sulfuric acid with municipal water in a controlled exothermic reaction.
- 22. The system operator typically estimated the amount of 98% sulfuric acid necessary for achieving target concentrations in the anode tank based upon the existing batch formulations, as well as the amount and concentration of sulfuric acid in the anode tank prior to commencing the 98% sulfuric acid dilution process.
- 23. On October 30, 2006, the system operator on duty ("the Operator") commenced the process to prepare a 20% sulfuric acid batch in the anode tank.
- 24. The Operator viewed the level of liquid in the anode tank and observed the freeboard, or the vertical distance from the surface of the liquid to the top of the tank, to estimate the amount of 20% sulfuric acid that was already in the tank and the amount of 98% sulfuric acid and water needed to create more 20% sulfuric acid while maintaining the desired concentration in the anode tank.
- 25. At the time of the October 30, 2006 batch preparation, the anode tank was already near its capacity with 20% sulfuric acid.
  - 26. The Operator transferred municipal water to the anode tank.
- 27. The Operator then began transferring 98% sulfuric acid from a bulk sulfuric acid storage tank to the anode tank.
- 28. The computerized control system intended for managing the transfer amount of 98% sulfuric acid to the anode tank was defective at the time of the transfer.
- 29. After initiating the 98% sulfuric acid transfer, the Operator left the anode tank process and proceeded to the area adjoining the containment room to prepare other operations.

- 30. The Operator left the transfer operation unattended, and no monitoring of temperature, flow, or chemical additions occurred for a period of as much as 40 minutes.
- 31. The transfer system lacked functioning automated process and safety controls, such as high and low level cutouts, temperature monitoring equipment, and sophisticated detection devices, including automatic level indicators and acid detectors.
- 32. While the transfer process proceeded unattended, approximately 1,200 gallons of 98% sulfuric acid were pumped from the sulfuric acid storage tank to the anode tank, which caused the anode tank to overfill at approximately 1955 hours on October 30, 2006.
- 33. The overfilling of the anode tank triggered an exit piping and/or bottom valve failure in the anode tank that caused the tank, containing approximately 1,400 gallons of 20% sulfuric acid, to completely empty into the containment area.
- 34. The exit piping and/or bottom valves on the 24% ammonium bifluoride storage tank, located adjacent to the anode tank, subsequently failed and emptied approximately 1,600 gallons of 24% ammonium bifluoride into the containment area.
- Approximately 4,200 gallons of combined sulfuric acid and ammonium bifluoride flowed into a common secondary containment structure in the storage area.
- 36. The mixing of the sulfuric acid and ammonium bifluoride, with the addition of moisture from the air, created an exothermic reaction, which generated an acid mist containing hydrofluoric acid.
- 37. When the Operator returned to the transfer operation, he observed the chemical spill and a dense vapor cloud.

- 38. From about 1955 hours to 2200 hours on October 30, 2006, approximately 751 pounds of hydrofluoric acid were released into the environment ("the Release") through the Facility's ventilation fan.
- Respondent had Material Safety Data Sheets ("MSDSs") for sulfuric acid and ammonium bifluoride available at the Facility.
- 40. The MSDSs document the incompatibility and reactivity of sulfuric acid and ammonium bifluoride, noting that a mixture of such chemicals generates hydrogen fluoride or hydrofluoric acid.
- 41. According to Respondent, Facility employees had ready access to MSDSs for the hazardous chemicals with which they worked or to which they could have been exposed.
- 42. According to Respondent, employees who worked with or could face exposure to hazardous chemicals, such as those used in the analog plate manufacturing process and hydrofluoric acid, were trained regarding the MSDS system, the chemical and physical properties of hazardous materials, and the measures employees must take in the event of hazardous chemical spills.
- 43. On October 30, 2006, at approximately 1955 hours, an unidentified caller notified the South Hadley Police Department of a visible plume leaving the Facility.
- 44. Respondent did not immediately notify the National Response Center or provide emergency responders with accurate information about the chemicals, the reaction byproducts, or the extent of the danger from the Release.
- Approximately 90 residents within a one mile radius of the Facility were evacuated from their homes between October 30, 2006 and November 1, 2006.

- 46. The South Hadley public schools were closed on October 31, 2006 as a precautionary measure to avoid possible exposure and contamination from the Release.
- 47. On April 30, 2007, authorized representatives of EPA conducted a chemical accident investigation and inspection of the Facility in order to identify the root cause of the Release and to determine the compliance status of the Facility with respect to the general duty clause of the CAA and the emergency response provisions of CERCLA (the "Inspection").
  - 48. The Inspection included an analysis of the piping in place at the Facility.

### IV. <u>VIOLATIONS</u>

# COUNT I: Failure to Design and Maintain a Safe Facility, in accordance with Section 112(r) of the Clean Air Act, 42 U.S.C. §7412(r).

- 49. The foregoing paragraphs 1 through 48 are incorporated by reference, as if fully set forth herein.
- Respondent is a "person," as that term is defined by Section 302(e) of the CAA,
   U.S.C. §7602(e).
- 51. The Facility is a "stationary source," as that term is defined by Section 112(r)(2)(C) of the CAA, 42 U.S.C. §7412(r)(2)(C).
- 52. Respondent is the "owner or operator," as those terms are defined by Section 112(a)(9) of the CAA, 42 U.S.C. §7412(a)(9), of a stationary source.
- 53. At the time of the Release, Respondent produced, processed, handled and/or stored sulfuric acid and other extremely hazardous substances at the Facility.
- Sulfuric acid constitutes an "extremely hazardous substance," pursuant to 40
   C.F.R. Part 355, App. B and Section 112(r)(1) of the CAA, 42 U.S.C. §7412(r)(1).
- 55. Hydrogen fluoride, an extremely hazardous and toxic substance, is a "regulated substance" pursuant to Section 112(r)(3) of the CAA.

- 56. The October 30, 2006 release of hydrofluoric acid from the Facility was an "accidental release," as that term is defined by Section 112(r)(2)(A) of the CAA, 42 U.S.C. §7412(r)(2)(A).
- 57. During the Inspection, EPA observed that the Facility lacked reliable safety equipment, such as high integrity process controls, high and low level cutouts, and alarms, to prevent or manage inadvertent overfilling of the anode tank.
- 58. Certain safety devices in place at the time of the incident, including an automatic water flow meter and temperature monitoring equipment, were either defective or inoperable at the time of the Release.
- 59. The Operator's leaving the sulfuric acid transfer process unattended, with no monitoring of critical operating parameters such as temperature, flow, and chemical additions, constituted an unsafe operating procedure.
- 60. Locating the 98% sulfuric acid and 24% ammonium bifluoride storage tanks, as well as the anode tank, in the same containment area within the Facility posed a risk of generating hydrogen fluoride or hydrofluoric acid, which is formed when sulfuric acid and ammonium bifluoride are mixed together.
- 61. Respondent's placement of the 98% sulfuric acid and 24% ammonium bifluoride storage tanks, as well as the anode tank, in close proximity to one another and in the same containment area was not a safe operating practice.
- 62. EPA's analysis of the piping at the Facility showed that the exit piping on Respondent's process tanks did not provide proper stress and strain relief.
- 63. Respondent's failure to implement sufficient safety controls, properly monitor the transfer process, segregate storage and mixing tanks containing incompatible chemicals, and

provide adequate exit piping on the process tanks, constitute violations of the general duty clause of Section 112(r) of the CAA, 42 U.S.C. §7412(r).

64. Respondent is therefore subject to an assessment of penalties, pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. §7413(a)(3).

## COUNT II: Failure to Immediately Notify the National Response Center of a Release of Hazardous Substance, in accordance with Section 103(a) of CERCLA, 42 U.S.C. §9603(a).

- 65. The foregoing paragraphs 1 through 64 are incorporated by reference, as if fully set forth herein.
- Respondent is a "person," as that term is defined by Section 101(21) of CERCLA,
   U.S.C. §9601(21).
- 67. Respondent is the owner or operator of a "facility," as that term is defined by Section 101(9) of CERCLA, 42 U.S.C. §9601(9).
- 68. On October 30, 2006, there was a "release," as that term is defined by Section 101(22) of CERCLA, 42 U.S.C. §9601(22), to the environment of approximately 751 pounds of hydrofluoric acid from the Facility.
- 69. Hydrofluoric acid constitutes a "hazardous substance" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. §9601(14), and 40 C.F.R. §302.4.
- 70. The federal reportable quantity for hydrofluoric acid is 100 pounds, pursuant to 40 C.F.R. §302.4.
- 71. The release of hydrofluoric acid, described in Paragraph 39 above, was not a "federally permitted release," as that term is defined in Section 101(10) of CERCLA, 42 U.S.C. §9601(10).
- Respondent failed to immediately notify the National Response Center of the
   Release of hydrofluoric acid after such release occurred.

- 73. Respondent's failure to notify the National Response Center of the release of an amount of hydrofluoric acid in excess of its reportable quantity immediately after learning of such release constitutes a violation of Section 103(a) of CERCLA, 42 U.S.C. §9603(a), and 40 C.F.R. §302.6.
- Respondent is therefore subject to an assessment of penalties, pursuant to Section 109(a)(1) of CERCLA, 42 U.S.C. §9609(a)(1).

#### V. ASSESSMENT OF PENALTY

- 75. In accordance with Section 109(a) of CERCLA, 42 U.S.C § 9609(a), Section 113(a) and (d) of the CAA, 42 U.S.C. § 7412(r)(1), and the applicable EPA penalty policies, and based on the facts alleged in the Complaint, Complainant proposes to assess a civil penalty of one hundred twenty-five thousand six hundred seventy-eight dollars (\$125,678) against Respondent, as follows:
- 76. Sections 113(a) and (d) of the CAA, 42 U.S.C. §§7413(a) and (d), and Section 109(a) of CERCLA, 42 U.S.C. § 9609(a), authorize EPA to assess a civil penalty of up to \$25,000 per day of violation for violations of Section 112(r) of the CAA, 42 U.S.C. §7412(r), and Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), respectively. Pursuant to the Debt Collection and Improvement Act of 1996, Pub. L. No. 104-134, 110 Stat. 1321 (1996) ("DCIA") and the regulations promulgated thereunder at 40 C.F.R. Part 19, the statutory maximum penalty for violations occurring after March 15, 2004 is \$32,500 for each day of violation.
- 77. In calculating the penalty for the CAA violation cited in this Complaint,
  Complainant considered the statutory factors listed in Section 113(e) of the CAA, 42 U.S.C.
  §7413(e). These factors include the size of the business, the economic impact of the penalty on
  the business, the violator's full compliance history and good faith efforts to comply, the duration

of the violation as established by any credible evidence, payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, the seriousness of the violation, and such other factors as justice may require.

- 78. In calculating the penalty for the CERCLA violation cited in this Complaint, Complainant took into account the statutory factors listed in Section 109(a)(3), 42 U.S.C. §9609(a)(3), including the nature, circumstances, extent, and gravity of the violation and, with respect to Respondent, its ability to pay, prior history of violations, degree of culpability, economic benefit or savings from the violations, and such other matters as justice may require.
- 79. Complainant calculated the penalty proposed for Count I in accordance with EPA's Penalty Policy for General Duty Clause Violations under Section 112(r) of the Clean Air Act. The violation is considered to be serious because it concerns an actual release. However, since no human or environmental harm occurred, Complainant determined that the "extent of noncompliance" was "moderate." Additionally, Complainant concluded that the "environmental impact" of the violation was "minor," based on the lack of human injuries or environmental damage. In accordance with Section 113(e) of the CAA, EPA determined that an upward adjustment of 50% of the base penalty was appropriate for deterrence purposes, based on the size of Respondent's business.
- 80. Complainant calculated the penalty proposed for Count II in accordance with EPA's Enforcement Response Policy for Sections 304, 311, and 312 of the Emergency Planning and Community Right-to-Know Act and Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act, dated September 30, 1999 ("ERP"). Respondent failed to notify the National Response Center after the Respondent knew or should have known that a reportable quantity of hydrofluoric acid had been released from the Facility to the

environment. Accordingly, the "extent" of the violation alleged in Count II was determined to be "Level 1" (no immediate notification occurred within 2 hours following the release). The "gravity" of the violation was determined to be "Level B" because the quantity of the chemical released was greater than five, but less than ten, times the reportable quantity.

81. Accordingly, Complainant proposes that Respondent be assessed a civil penalty in the amount of \$125,678 for the violations alleged in this Complaint. For each violation, the proposed penalty is as follows:

a.	Count	I																		\$	102,300
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82. If Respondent does not contest the findings and assessments set out above, payment of the penalties may be forwarded to EPA. Respondent shall submit two cashiers or certified checks in payment of this penalty. Respondent shall note on both checks the case name and applicable EPA Docket Number specified on the first page of the Complaint. Payment of the penalty for Count I shall be made payable to "Treasurer, United States of America." This check shall be sent to:

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

Payment of the penalty for Count II shall be made payable to "EPA Hazardous Substance Superfund." This check shall be sent to:

U.S. EPA Superfund Payments Cincinnati Finance Center P.O. Box 979076 St. Louis, MO 63197-9000 83. At the time of payment, Respondent shall send notice of such payments and copies of the checks to:

Ms. Wanda Santiago Regional Hearing Clerk (RAA) U.S. Environmental Protection Agency, Region 1 One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

### NOTICE OF OPPORTUNITY TO REQUEST A HEARING

Respondent has the right to request a formal hearing to contest any material fact set forth in this Complaint or to contest the appropriateness of the proposed penalty. Any such hearing will be conducted in accordance with the Consolidated Rules, 40 C.F.R. Part 22, a copy of which is enclosed with this Complaint.

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, and having the above-cited penalty assessed without further proceedings, 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, as well as the facts that Respondent intends to place at issue. Further, the Answer 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:

Ms. Wanda Santiago Regional Hearing Clerk (RAA) U.S. Environmental Protection Agency, Region 1 One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Respondent should also send a copy of the Answer and all other documents, including copies of any checks which Respondent files in this action, to Amanda J. Helwig, who has been authorized to accept service on behalf of the Complainant, at:

Amanda J. Helwig Enforcement Counsel (RAA) U.S. Environmental Protection Agency, Region 1 One Congress Street, Suite 1100 Boston, MA 02114-2023

### SETTLEMENT CONFERENCE

Whether or not Respondent requests a hearing, Respondent may contact Amanda J.

Helwig, the attorney assigned to represent EPA in this matter, at (617) 918-1180 to discuss the legal matters relating to this Complaint or to arrange for an informal settlement conference.

Respondent may wish to be represented by counsel at the informal conference. In the event a settlement is reached, its terms shall be expressed in a written Consent Agreement prepared by Complainant, signed by the parties, and incorporated into a Final Order signed by the Regional Judicial Officer.

Please note that a request for an informal settlement conference does not enlarge the thirty (30) day period within which a written Answer must be submitted to avoid default.

Date: 0104 08 Susan Studlien, Director
Office of Environmental Stewardship

U.S. Environmental Protection Agency, Region 1

### CERTIFICATE OF SERVICE

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

Original and one copy, by hand:

One copy of Complaint and 40 C.F.R. Part 22, by certified mail, return receipt requested:

Date: 1/17/08

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

James R. Van Horn, General Counsel Presstek, Inc. 55 Executive Drive Hudson, NH 03051

Amanda J. Helwig Enforcement Counsel U.S. EPA, Region 1

One Congress Street, Suite 1100 (RAA)

Boston, MA 02114-2023 Phone: (617) 918-1180 Fax: (617) 918-0180