

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
EPA NEW ENGLAND

IN THE MATTER OF:
Aerovox
New Bedford, Bristol County,
Massachusetts

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON
CONSENT FOR NON-TIME CRITICAL
REMOVAL ACTION

AVX CORPORATION,
Respondent

U.S. EPA Region 1
CERCLA Docket No. 01-2010-0017

Proceeding Under Sections 104, 106(a), 107
and 122 of the Comprehensive
Environmental Response, Compensation,
and Liability Act, as amended,
42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

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APPENDICES

- Appendix A -- Action Memorandum
(includes TSCA Determination)
- Appendix B -- Scope of Work
- Appendix C -- Site Map
- Appendix D -- Form of Escrow Agreement

EXHIBITS
(FOR REFERENCE PURPOSES ONLY)

- Exhibit 1 -- Cooperation and Settlement Agreement
- Exhibit 2 -- Cooperative Agreement
- Exhibit 3 -- State Agreement

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (“Settlement Agreement”) is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and AVX Corporation (“Respondent”). This Settlement Agreement provides for Respondent’s performance of the Work identified in this Settlement Agreement which activities comprise a portion of a non-time critical removal action (“NTCRA”) at the Aerovox property located at 740 Belleville Avenue in New Bedford, Bristol County, Massachusetts (the “Site”), and the reimbursement of response costs incurred by the United States in connection with the NTCRA. The City of New Bedford (the “City”), acting pursuant to a Cooperative Agreement with EPA, will be responsible for a portion of the NTCRA activities. This Settlement Agreement is also entered into pursuant to the authority of the Attorney General of the United States to compromise and settle claims of the United States, which authority, in the circumstances of this settlement, has been delegated to the Section Chief or Deputy Section Chief of the Environmental Enforcement Section, Environment and Natural Resources Division.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended (“CERCLA”).

3. EPA has notified the Commonwealth of Massachusetts (the “Commonwealth”) of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith, and that neither execution of this Settlement Agreement by Respondent, nor any actions undertaken by Respondent in accordance with this Settlement Agreement constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact and legal determinations in Sections IV and V, respectively, of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to, is binding upon and inures to the benefit of EPA and Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent’s responsibilities under this Settlement Agreement.

6. Respondent is jointly and severally liable for carrying out all activities required by this Settlement Agreement.

7. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Site signed on January 27, 2010 by the EPA Assistant Administrator, Office of Solid Waste and Emergency Response, and all attachments thereto. The Action Memorandum is attached hereto as Appendix A.

b. "Aerovox Disbursement Special Account" shall mean the special account established for the Site pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3), and this Settlement Agreement.

c. "Aerovox Escrow Agreement" shall mean the Agreement to be entered into between Respondent, the City and an escrow agent in accordance with Paragraph 84 of this Settlement Agreement, in substantially the form attached hereto as Appendix D.

d. "Aerovox Future Response Oversight Costs Special Account" shall mean the special account established for the Site pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3), and this Settlement Agreement.

e. "Aerovox Special Account" shall mean the Aerovox Superfund Site Special Account within the EPA Hazardous Substance Superfund established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

f. "Aerovox Waste Material" shall mean all Waste Material described in Section III.D. of the SOW that is to be transported off-site by Respondent pursuant to this Settlement Agreement.

g. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

h. "City" shall mean the City of New Bedford, Massachusetts.

i. "City Waste Material" shall mean all Waste Material described in Section III.E. of the SOW that is to be transported off-site by the City of New Bedford pursuant to the Cooperative Agreement.

j. "Commonwealth" shall mean the Commonwealth of Massachusetts.

k. "Cooperation and Settlement Agreement" shall mean the agreement entered into between Respondent and the City on the Effective Date. The Cooperation and Settlement Agreement is attached to this Settlement Agreement as Exhibit 1 for reference purposes only.

l. "Cooperative Agreement" shall mean the agreement between EPA and the City and all attachments thereto pursuant to which the City will undertake certain NTCRA activities. The Cooperative Agreement was awarded by EPA on September 7, 2006, affirmed by the City on September 29, 2006, and amended by agreement of the parties on September 29, 2009. The Cooperative Agreement as amended is attached to this Settlement Agreement as Exhibit 2 for reference purposes only.

m. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

n. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXV (Effective Date).

o. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

p. "Future Response Costs" shall mean all costs, including direct and indirect costs that the United States incurs after the Effective Date pursuant to the provisions of this Settlement Agreement other than the costs specifically included in the definition of Future Response Oversight Costs. Future Response Costs shall include costs incurred by the United States in implementing, overseeing or enforcing this Settlement Agreement, including but not limited to payroll costs, contractor costs, travel costs, community relations costs, all litigation costs, enforcement support costs, records management costs, the costs incurred pursuant to Paragraph 71 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 81 (emergency response), Paragraph 123 (work takeover), Section XVIII (Dispute Resolution), and all accrued Interest, if any, on Future Response Costs.

q. "Future Response Oversight Costs" shall mean all direct and indirect costs EPA incurs after the Effective Date in monitoring and supervising Respondent's performance of the Work to determine whether such performance is consistent with the requirements of this Settlement Agreement, including payroll costs, contractor costs, travel costs, laboratory costs, costs incurred in reviewing and developing plans, reports and other documents submitted pursuant to this Settlement Agreement, as well as costs incurred in overseeing implementation of the Work; however, Future Response Oversight Costs do not include Future Response Costs.

r. "IAG" shall mean the Interagency Agreement entered into between EPA and the United States Army Corps of Engineers for the Site, IAG No. DW96-940318-01.

s. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

t. "Interest Earned" shall mean Interest earned on amounts in the Aerovox Special Account, which shall be computed monthly at a rate based on the annual return on investments of the EPA Hazardous Substance Superfund. The applicable rate of Interest shall be the rate in effect at the time the Interest accrues.

u. "MassDEP" shall mean the Massachusetts Department of Environmental Protection and any successor departments or agencies of the Commonwealth.

v. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

w. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

x. "Parties" shall mean EPA and Respondent.

y. "Post-Removal Site Control" shall mean the measures that are necessary to ensure the effectiveness and integrity of the NTCRA after the completion of the removal action.

z. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

aa. "Respondent" shall mean AVX Corporation.

bb. "Scope of Work" or "SOW" shall mean the scope of work for implementation of the Work, as set forth in Appendix B to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.

cc. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

dd. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXXIV). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

ee. "Site" shall mean the Aerovox property, encompassing approximately 10.3 acres, located at 740 Belleville Avenue, New Bedford, Bristol County, Massachusetts as depicted on the map attached hereto as Appendix C, and further described below:

The **northern boundary** of the Site is the existing Aerovox northern property line, which is located approximately in the middle of the alley (Graham Street) between the Aerovox building and the Precix building as shown on Appendix C. This northern Site boundary line continues in a westerly direction until it intersects with the western property line, and in an easterly direction until it intersects with the mean high water (“MHW”) line along the Acushnet River.

In its northeast corner, the Site boundary line follows the MHW line southward until it reaches the landward face of the stone seawall. The Site boundary line then continues easterly along the landward face of the stone seawall, then turning southerly at the northeast corner of the stone seawall. The Site boundary line then continues southerly for approximately ten feet until it is due east of the northeastern corner of the sheet pile wall. The Site boundary line then continues due west approximately ten feet until it intersects the northeastern corner of the sheet pile wall. The stone seawall and the land area on the river side of the boundary line in the northeast corner is part of the New Bedford Harbor Superfund Site, and is NOT part of the Site.

The **eastern boundary** of the Site is the existing sheet pile wall (inclusive of such wall) running generally in a north-south orientation along the Acushnet River. The land area on the eastern (*i.e.*, river) side of this sheet pile wall is part of the New Bedford Harbor Superfund Site, and is NOT part of the Site.

The **southern boundary** of the Site is the existing Aerovox southern property line, which is located approximately in the middle of Hadley Street as shown on Appendix C. This southern Site boundary line continues in a westerly direction until it intersects with the western property line, and in an easterly direction until it intersects with the southeastern corner boundary line described below.

In its southeast corner, the Site boundary line extends from the southwestern terminus of the sheet pile wall due south approximately 10 feet until it intersects with the southern Site boundary line.

The **western boundary** of the Site is the existing Aerovox western property line.

The “Site” referred to herein is physically separate and distinct from the New Bedford Harbor Superfund Site.

ff. “State Agreement” shall mean the administrative settlement entered into by and between Respondent and the Commonwealth on the Effective Date, entitled *Administrative Consent Order and Notice of Responsibility*, involving the cleanup of the Aerovox facility pursuant to M.G.L. c. 21E and the regulations promulgated thereunder, the Massachusetts Contingency Plan, 310 CMR 40.0000 (“MCP”). The State Agreement is attached to this Settlement Agreement as Exhibit 3 for reference purposes only.

gg. "TSCA" shall mean the Toxic Substances Control Act, as amended, 15 U.S.C. §§ 2601, *et seq.*

hh. "TSCA Determination" shall mean the determination by the Division Director, Office of Remediation and Restoration, EPA Region 1, consistent with Section 761.61(c) of the TSCA regulations, as delegated by the Regional Administrator pursuant to EPA Region 1 Delegation of Authority for TSCA Management of Polychlorinated Biphenyls (PCBs), Delegation No. 12-5 (May 15, 2008) that as long as the conditions in the determination are satisfied, the NTCRA does not pose an unreasonable risk of injury to health or the environment. The TSCA Determination is contained in the Action Memorandum attached hereto as Appendix A.

ii. "United States" shall mean the United States of America.

jj. "Waste Material" shall mean: (1) any hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any solid waste under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); (4) any oil or hazardous material under Section 2 of M.G.L. c. 21E; and, (5) for the purposes of this Settlement Agreement, any material regulated under the TSCA regulations at 40 C.F.R. § 761.

kk. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement in accordance with the Action Memorandum.

ll. "Work Schedule" shall mean the schedule for the Work.

IV. FINDINGS OF FACT

9. The Site is located at 740 Belleville Avenue, Bristol County, New Bedford, Massachusetts abutting Hadley Street and a factory operated by Acushnet Company (Titleist) to the south, a factory operated by Precix, Inc. to the north, the Acushnet River to the east, and a residential area along Belleville Avenue to the west. The Site is depicted on the map attached as Appendix C.

10. The Site contains a vacant approximately 450,000 square foot former manufacturing building along with a parking lot located on approximately 10.3 acres of industrially-zoned land. The building consists of a western section containing two floors, and an eastern section containing three floors. The exterior walls are brick; the roof is constructed of wood. The first floor, which is the building foundation floor, is constructed of concrete; the second floor consists of both concrete and wood; and the third floor is constructed of wood. Ancillary structures include a brick sewer pump station and a brick boiler house located along the south side of the main manufacturing building, and a brick structure housing electrical switching equipment located at the southwest corner of the main building.

11. The Site began to be used for electrical component manufacturing in approximately 1938. Beginning in approximately the 1940s, dielectric fluid containing

polychlorinated biphenyls ("PCBs") was used in capacitor manufacturing. Various solvents were also used in manufacturing operations. Use of PCBs in the manufacturing process ceased on or about October 1978.

12. Respondent's predecessor, Aerovox Corporation, owned and operated an electronic component manufacturing business at the Site from 1938 to January 2, 1973. On June 4, 1973, Aerovox Corporation merged into AVX Ceramics Corporation, which changed its name to AVX Corporation. Operations and disposal practices during this period which involved the use of PCBs and solvents constituted a release and a disposal of hazardous substances that contributed to the contamination of soils, building materials and equipment, surface water runoff and groundwater at the Site.

13. On or about January 2, 1973, the Site and the Aerovox name, among other assets, were purchased from Aerovox Corporation by a company named Belleville Industries, Inc., which later changed its name to Aerovox Industries, Inc. Aerovox Industries, Inc. operated the Site from January 1973 to October 1978.

14. In October 1978, Aerovox, Inc. ("Aerovox") became the owner and operator of the Site.

15. On June 18, 1981, Versar, Inc., an authorized representative of EPA and the Massachusetts Department of Environmental Quality Engineering ("DEQE"), inspected the Site. In the course of the inspection, Versar took samples from the soil on-site in a yard area outside the factory. Versar subsequently reported the results of its analysis of the soil samples, which indicated the presence of PCBs in the soil of the yard.

16. In May 1982, EPA and Aerovox entered into an administrative order pursuant to Section 106 of CERCLA (the "1982 Order"), which applied to that portion of Aerovox's property lying to the west of the seawall separating the factory grounds from the waters of the Acushnet River. The 1982 Order required Aerovox to: (i) conduct an investigation of certain areas of the Site; (ii) assess the relative costs and benefits of alternative remedial actions; (iii) recommend a course of action to EPA; and (iv) implement such course of action, subject to EPA approval.

17. The investigation conducted by Aerovox pursuant to the 1982 Order revealed that PCBs were present in soil and in shallow groundwater at the Site. Aerovox recommended the installation of a cap over certain contaminated soils and a steel sheet pile cutoff wall to serve as a vertical barrier to groundwater.

18. In June 1982, DEQE and Aerovox executed a Consent Agreement which imposed virtually the same requirements on Aerovox as those in the 1982 Order.

19. Under the 1982 Order with EPA and the Consent Agreement with DEQE, Aerovox installed a hydraulic asphalt concrete cap over a portion of the Site soils and a steel sheet pile cutoff wall to serve as a vertical barrier between PCB-contaminated soils and groundwater and tidal flow into and out of the Acushnet River.

20. In 1984, EPA and Aerovox entered into a Supplemental CERCLA Consent Order pursuant to Section 106 of CERCLA (the "1984 Supplemental Order"), as part of which Aerovox agreed to commence and carry out a long-term monitoring and maintenance program, including compliance with the reporting requirements outlined in the program, and to take maintenance measures as necessary to maintain on-site containment and prevent the release of PCBs.

21. On May 29, 1997, EPA inspected the Site for compliance with TSCA. During the inspection, heavy oil staining was observed in several areas, including the impregnation tank room and a nearby capacitor degreasing room.

22. On June 25 and June 26, 1997, EPA inspectors took samples from one of the manufacturing areas, known as the impregnation tank room, consisting of shavings from the wood floor. EPA took 20 samples: twelve randomly selected and eight selected after a visual inspection of the tank room. Tests of the samples revealed very high PCB levels in the wood shavings, well above the TSCA regulatory level of 50 parts per million or greater that constitutes the disposal of PCBs from a spill and other uncontrolled discharges of PCBs.

23. In July 1998, EPA issued an Approval Memorandum for the performance of an Engineering Evaluation/Cost Analysis ("EE/CA") at the Site. In August 1998, a consultant hired by Aerovox completed the EE/CA, which recommended demolition of the building, with a combination of proposals for on- and off-site disposal of building material and equipment, followed by capping.

24. In October 1998, EPA published a Cleanup Proposal. The recommended proposal included demolition of the building, off-site disposal of all TSCA demolition waste, leaving the first floor concrete slab in place, covering the building footprint with clean fill, and capping the entire Site. No public comments were received.

25. Under an Administrative Order on Consent pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, which became effective on December 2, 1999 (the "1999 AOC"), Aerovox agreed to pay for and conduct the cleanup of the Site. Among other things, the 1999 AOC required that Aerovox: (i) deposit funds, in specified installments, into a trust fund called the Aerovox Facility Fund (the "Fund"); (ii) begin demolition of the manufacturing facility and the installation of a cap at the Site when the Fund reached the lesser of \$4.8 million or 60% of the total estimated cost; and (iii) relocate to another manufacturing facility (by 16 months from the effective date of the order, or April 2, 2001). Completion of demolition of the manufacturing facility and cap installation were required within nine (9) months of accumulating the required funds, but no later than November 1, 2011.

26. An Administrative Consent Order between MassDEP (successor to DEQE) and Aerovox in connection with the Site became effective on February 3, 2000 (the "2000 ACO").

27. Aerovox relocated to a new manufacturing facility by April 2, 2001, leaving behind, among other things, a substantial amount of contaminated equipment and machinery, PCB-contaminated rinse water, PCB-contaminated personal protective gear, solvents, acids and compressed gas cylinders.

28. Aerovox filed a voluntary petition for Chapter 11 bankruptcy on June 6, 2001 in the United States Bankruptcy Court for the District of Massachusetts, *In re New Bedford Capacitor, Inc. (f/k/a Aerovox, Inc.)* (Case No. 01-14680-JNF). As a result, Aerovox never implemented the primary response actions required by the 1999 AOC or the 2000 ACO.

29. On or about November 15, 2001, EPA filed a proof of claim in the Aerovox bankruptcy, asserting in part that Aerovox, as the owner and operator of the Site, was required to clean up and perform operation and maintenance measures with respect to the PCBs and other hazardous substances disposed of in and around the Site, pursuant to the administrative orders under CERCLA and RCRA.

30. On or about November 26, 2002, EPA filed an *Application of the United States for Reimbursement of Administrative Expenses* in part for recovery of response costs EPA expected to incur in cleaning up and performing operation and maintenance measures with respect to PCBs and other hazardous substances disposed of in and around the Site.

31. On or about November 15, 2001, the Commonwealth filed a proof of claim in the bankruptcy proceeding asserting that Aerovox was required to perform various ongoing activities pursuant to the 2000 ACO, as well as state and federal law. On or about November 27, 2002, the Commonwealth filed a *Request for Administrative Expenses of the Commonwealth of Massachusetts*, which reiterated Aerovox's environmental obligations under the 2000 ACO and applicable state and federal law.

32. On or about November 27, 2002, the City filed a proof of claim for an administrative priority claim in the amount of \$323,300. The City represented that this estimated amount reflected a projection of five years of maintenance of the Site.

33. On or about August 11, 2003, Aerovox, EPA, the Commonwealth and the City entered into a settlement agreement (the "Bankruptcy Settlement") with respect to the costs for the cleanup of the Site. The Bankruptcy Settlement was approved by the Court on September 30, 2003. EPA settled all its claims against Aerovox with respect to the Site in exchange for: (1) payment of the \$750,000 placed in the Fund by Aerovox prior to its bankruptcy, plus interest and any appreciation; (2) allowance of EPA's administrative priority claim in the amount of \$200,000; and (3) allowance of a prepetition, non-priority, general unsecured claim in the amount of \$8,235,000 (reduced by the amount by which the Fund exceeded \$830,000).

34. Pursuant to the Bankruptcy Settlement, EPA received \$2,723,385.32 to be used solely to conduct or finance response actions at the Site. The total amount was deposited by EPA in the Aerovox Special Account. As of December 31, 2009, the Bankruptcy Settlement funds with Interest Earned had a value of \$3,170,216.80.

35. Under the Bankruptcy Settlement, the City was designated as first responder for problems at the Site during the time that Aerovox retained legal and record title to the Site. The City received \$250,000 on its administrative claim for the purpose of maintaining the fire suppression system and performing other property maintenance and security measures at the Site.

36. Under the Bankruptcy Settlement, upon sale of the Site, the City is to share the sale proceeds with EPA and the Commonwealth *pro rata* in proportion to the amount of their expenses in excess of the amount each recovered pursuant to the terms of the Bankruptcy Settlement.

37. In March 2004, EPA issued an action memorandum to initiate a time-critical removal action ("TCRA") at the Site. The purpose of the TCRA was to remove drums and containers abandoned at the Site and general repair of the cap installed by Aerovox pursuant to the 1982 Order.

38. EPA implemented the TCRA to remove waste drums and containers and to remove vegetation from and seal cracks in the existing cap. Funds from the Aerovox Special Account in the amount of approximately \$291,212 were used to pay for the TCRA.

39. A January 2005 Site Information and Preplan prepared by the City's Fire Department describes the fire hazards posed by the manufacturing building, includes a fire plan as to how the Fire Department should respond to a fire at the building, and describes the existing fire suppression equipment in the building.

40. As a result of the Bankruptcy Settlement, after a certain holding period, the Site became the property of 740 Belleville Avenue LLC, which was organized as a Massachusetts limited liability company for the purpose of facilitating the transfer of the property to a brownfields developer and whose members are the City and the New Bedford Redevelopment Authority.

41. In April 2006, EPA issued a supplement to the 1998 EE/CA (the "SEE/CA"). On June 7 and 11, 2006, EPA published notice of a public meeting and the beginning of a 30-day public comment period on the SEE/CA. The majority of comments received reflected dissatisfaction with leaving PCB-contaminated material on-site.

42. On June 2, 2006, Respondent received a letter from EPA dated May 31, 2006. EPA demanded payment of its past costs as well as all future Site-related costs.

43. On September 7, 2006, EPA awarded and on September 29, 2006 the City affirmed a Cooperative Agreement in connection with the Site pursuant to which the City was to implement the SEE/CA's preferred alternative and to coordinate the cleanup with redevelopment of the Site. Under the Cooperative Agreement, EPA was to provide \$8,043,902 to the City which the City would use to procure a site cleanup contractor, implement all cleanup activities, and coordinate redevelopment with cleanup. A portion of the funds in the Aerovox Special Account, in the amount of approximately \$1,543,910, was included in this amount.

44. Sampling and analysis performed since the EE/CA, including that performed as recently as 2007, confirms the presence of widespread PCB contamination throughout the building, in soils under the concrete foundation, in soils outside the building, and mixed into the asphalt parking lot.

45. The building has remained vacant since 2001, and, despite implementation of site security measures and the TCRA, the building has deteriorated considerably. Flooding from burst pipes caused water damage to the PCB-contaminated wooden floors causing them to weaken and buckle; the wooden roof, sections of which are highly deteriorated, leaks into the interior of the building; and structural columns have fallen out of plumb and PCB-contaminated stormwater continues to runoff the building.

46. On October 4, 2006, the City's Collector of Taxes recorded and filed an Instrument of Taking with the Bristol South District Registry of Deeds (the "Registry") in Book 8345, Page 326 and the Bristol South Registry District of the Land Court (the "Registry District") as Document No. 105416, and on October 28, 2008, the Land Court entered a Judgment in Tax Lien Case, foreclosing all rights of redemption to the property, which decree the City recorded with the Registry in Book 9206, Page 104 and filed with the Registry District as Document No. 105418.

47. Despite implementation of site security measures, trespassing and vandalism have occurred and continue at the Site, including illegal entry into the building. Damage includes broken windows which could allow PCB-contaminated dust to be released outside the building. Broken switches, thermostats and other mercury containing equipment resulted in mercury spills and releases. Direct contact with mercury and PCB-contaminated floors, building material and equipment allows contamination to be tracked outside the building. Asbestos is also present in the building.

48. In November 2007, Jacobs Engineering Group, an authorized representative of EPA, began collecting the visible mercury containing manufactured articles ("MCMA") used as controls and switches within the building, as well as the visible elemental mercury which had spilled on to various interior surfaces. This spilled mercury and MCMA were removed and disposed off-site between November 2007 and February 2008.

49. On January 27, 2010 EPA issued an Action Memorandum for a NTCRA to achieve a controlled demolition of the facility, off-site disposal of Waste Material, capping and implementation of Post-Removal Site Control measures.

50. Pursuant to this Settlement Agreement EPA has requested and Respondent has agreed to implement all aspects of the Action Memorandum except for the transportation and disposal of City Waste Material. The City will be responsible for the transportation and disposal of all City Waste Material under the terms of the Cooperative Agreement.

51. On September 29, 2009, the Cooperative Agreement was amended to provide \$9,843,902 to the City to fund the transportation and disposal of all City Waste Material, and, if any funds remain, to fund implementation of Post-Removal Site Control measures and certain other NTCRA activities.

52. A total of approximately \$1,221,637 from the Aerovox Special Account was transferred to a technical assistance IAG for use by the United States Army Corps of Engineers for response actions at the Site including oversight during the NTCRA. As of February 2, 2010,

approximately \$260,750 of this amount has been spent pursuant to the IAG on response actions at the Site, leaving a balance of approximately \$960,887.

53. Respondent and MassDEP have entered into the State Agreement, which shall be effective on the Effective Date, which requires Respondent to complete the cleanup of the Site pursuant to M.G.L. c. 21E and the MCP, and to commence such work within thirty (30) days of Respondent's receipt of written notice from EPA pursuant to Section XXXI (Notice of Completion of Work).

54. Respondent and the City have entered into a Cooperation and Settlement Agreement, which shall be effective on the Effective Date, which establishes a framework to coordinate and complete the NTCRA pursuant to CERCLA and to achieve the cleanup of the Site pursuant to M.G.L. c. 21E and the MCP in a manner that will assist and not impede the redevelopment of the property to the extent reasonable and feasible.

55. Hazardous substances were disposed of and released at or from the Site as a result of historical manufacturing operations at the facility during the period from 1938 to 2001. Such substances include, without limitation, PCBs and volatile organic compounds ("VOCs") such as chlorobenzene and trichloroethene. PCBs have been detected in Site soil, air, building materials and equipment, surface water runoff, parking lot asphalt and groundwater. VOCs have been detected in Site soils and groundwater. PCBs are very stable compounds that can persist for years when released into the environment.

56. Based upon data derived from animal experiments and human studies, EPA has concluded that human exposure to PCBs constitutes a health threat. EPA has classified PCBs as a B2, probable human carcinogen, under its weight of evidence classification system. Exposure pathways to PCBs at the Site after an indoor spill include inhalation, dermal exposure, and ingestion. PCBs spilled indoors may be distributed into other areas of a building in a number of ways, such as through ventilation equipment or ductwork or by tracking. Industrial equipment and other non-structural materials such as clothing also can become contaminated. As a result, trespassers may be subject to dermal exposure during illegal entry into the plant, and may also be subject to oral exposure during smoking or eating. Inhalation of PCBs can also result from the inhalation of dust particles contaminated with PCBs and by PCB volatilization.

57. PCBs also may be released outside the facility in various ways, by trespassers whose clothes and shoes have become contaminated with PCBs as they enter and exit the Site. PCBs can be released through volatilization and release of PCB-contaminated dust out a window, through openings in the deteriorated roof, or other openings. PCBs may also be released in stormwater runoff.

58. There is the potential for a release of PCBs and other hazardous substances in the event of a fire at the facility. If PCBs are exposed to fire, breakdown products may include dioxin and furans, potentially exposing nearby populations to inhalation and dermal contact threats.

V. LEGAL DETERMINATIONS

59. Based on the Findings of Fact set forth above, and the Administrative Record supporting the Work required by this Settlement Agreement, EPA has determined that:

- a. The Site is a “facility” as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes “hazardous substances” as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a “person” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for performance of response actions and for response costs to be incurred at the Site.
- e. The conditions described in Paragraphs 9 through 58 of the Findings of Fact above constitute an actual or threatened “release” of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), which may present an imminent and substantial danger to the public health or welfare.
- f. The Work required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

60. Based upon the foregoing Findings of Fact and Legal Determinations, and the Administrative Record for the Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement, and shall perform the Work required by this Settlement Agreement, including the SOW, attached to this Settlement Agreement as Appendix B.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

61. Within fifteen (15) days of the Effective Date, Respondent shall retain the lead contractor to perform the Work, and shall notify EPA of the name and qualifications of such contractor. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least seven (7) days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected

contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within seven (7) days of EPA's disapproval.

62. Within fifteen (15) days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on-site or readily available during the Work at the Site. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within seven (7) days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

63. EPA has designated Elaine Stanley of the EPA New England Regional Office as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC at 5 Post Office Square, Suite 100 (OSRR07-4), Boston, MA 02109-3912.

64. EPA and Respondent shall have the right, subject to Paragraph 62, to change their respective designated OSC or Project Coordinator. The party making such change shall notify the other three (3) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

65. Respondent shall perform all actions necessary to implement the requirements of this Settlement Agreement and the SOW. Notwithstanding any other provision of this Settlement Agreement, Respondent is not responsible for the off-site transportation and disposal of any City Waste Material, including without limitation complying with any legal requirement with respect to the off-site transfer of any City Waste Material, including the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440.

66. Work Submittals and Implementation.

a. In accordance with Sections II and III of the SOW, Respondent shall submit to EPA for approval an overall Work Schedule for performing the Work and a number of submittals specified therein. The Work Schedule shall, at a minimum, list the start and end date for each major Work element listed in the SOW and this Settlement Agreement.

b. EPA may approve, disapprove, require revisions to, or modify all submittals required by this Settlement Agreement in whole or in part. If EPA requires revisions, Respondent shall submit a revised submittal within fourteen (14) days of receipt of EPA's written notification of the required revisions or within such other period of time agreed to by EPA and Respondent. Respondent shall implement the Work as approved in writing by EPA in accordance with the approved Work Schedule. Once approved, or approved with modifications,

the submittal and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. In the event that EPA provides comments or an approval pursuant to Paragraph 66.b. more than thirty (30) days after any submission, EPA acknowledges that Respondent may seek to extend the Work Schedule by the number of days such approval was delayed.

d. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of any Work described in any submittal until receiving written EPA approval pursuant to Paragraph 66.b.

67. Post-Removal Site Control.

a. In accordance with Section III.L. of the SOW, Respondent will implement Post-Removal Site Control measures in the form of restrictions on land and groundwater use. Upon the completion of the cleanup of the Site in accordance with M.G.L. c. 21E and the MCP, which Respondent will undertake pursuant to the State Agreement, Respondent shall implement or, pursuant to the Cooperation and Settlement Agreement, cause to be implemented deed restrictions and one or more Activity and Use Limitations in accordance with M.G.L. c. 21E and the MCP in order to regulate the future use of the Site, including the groundwater thereunder, each of which will include terms consistent with the TSCA Determination. In the event deed restrictions and one or more Activity and Use Limitations are not required in accordance with M.G.L. c. 21E and the MCP, Respondent shall implement or cause the City and/or the City's successor(s) in title, pursuant to the Cooperation and Settlement Agreement, to implement restrictions on land and groundwater use consistent with the TSCA Determination.

b. In accordance with Sections III.H. and III.I. of the SOW, Respondent will implement Post-Removal Site Control measures in the form of a monitoring and maintenance plan for the capped areas, containment barrier and groundwater wells. Upon the completion of the cleanup of the Site in accordance with M.G.L. c. 21E and the MCP, which Respondent will undertake pursuant to the State Agreement, Respondent shall implement or, pursuant to the Cooperation and Settlement Agreement, cause the City and/or the City's successor(s) in title to implement, long-term monitoring and maintenance of the capped areas, containment barrier and groundwater wells consistent with the TSCA Determination. In the event these long-term monitoring and maintenance obligations are not required in accordance with M.G.L. c. 21E and the MCP, Respondent shall implement or cause the City and/or the City's successor(s) in title, pursuant to the Cooperation and Settlement Agreement, to implement long-term monitoring and maintenance for the capped areas, containment barrier and groundwater wells consistent with the TSCA Determination.

c. Respondent shall provide financial assurance in accordance with Section XV (Aerovox Escrow Fund) of this Settlement Agreement to enable implementation of the Post-Removal Site Control measures necessary to ensure the effectiveness and integrity of the NTCRA.

68. Reporting.

a. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement every 30th day after the date of receipt of EPA's approval of the Work Schedule until EPA issues a written Notice of Completion of Work in accordance with Section XXXI (Notice of Completion of Work) of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall submit two (2) copies of all plans, reports or other submissions required by this Settlement Agreement, SOW, or any approved Work submittal. Upon request by EPA, Respondent shall submit such documents in electronic form.

69. Final Report. Within thirty (30) days after completing all Work required by this Settlement Agreement, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. In addition to the requirements in Section III.K. of the SOW, the final report shall include: (a) a description of the Work undertaken and completed at the Site, including a statement with respect to the costs of the Work compared with the estimated costs in the Action Memorandum; (b) an as-built plan prepared in accordance with Section III.K. of the SOW; (c) investigatory and monitoring data obtained during implementation of the Work; (d) details and documentation of the management of Aerovox Waste Material and remedial wastewater, including a listing of the quantities and types of materials removed, handled and processed on-site and the ultimate destination(s) of those materials; (e) a presentation of the analytical results of all sampling and analyses performed; (f) accompanying appendices containing all relevant documentation generated during the Work (e.g., manifests, contracts and permits); and (g) a succinct statement of findings and conclusions resulting from implementation of the Work. The information provided in accordance with (a) through (g) above will conform to the maximum extent practical, as approved by EPA, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and with "Superfund Removal Procedures: Removal Response Reporting - POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

70. Off-Site Shipments.

a. Prior to any off-site shipment of Aerovox Waste Material by Respondent from the Site to an out-of-state waste management facility, Respondent shall provide written

notification of such shipment of Aerovox Waste Material to the appropriate state environmental official in the receiving facility's state and to the OSC. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

1. Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Aerovox Waste Material is to be shipped; (2) the type and quantity of the Aerovox Waste Material to be shipped; (3) the expected schedule for the shipment of the Aerovox Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Aerovox Waste Material to another facility within the same state, or to a facility in another state.

2. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the Work. Respondent shall provide the information required by Paragraphs 70.a. and 70.b. as soon as practicable after the award of the contract with a receiving facility and before the Aerovox Waste Material is actually shipped.

b. Before shipping any Aerovox Waste Material from the Site to an off-site location, Respondent shall obtain EPA's written certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send Aerovox Waste Material from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. ACCESS

71. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within thirty (30) days after the Effective Date, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if after using best efforts, it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent to gain access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate.

72. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

73. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or this Settlement Agreement, including, but not limited to, sampling,

analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

74. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.

75. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

76. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

77. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXXI (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXXI (Notice of Completion of Work), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

78. At the conclusion of this document retention period, Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such records or documents, and, upon

request by EPA, Respondent shall deliver any such records or documents to EPA. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

79. Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the Commonwealth or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

80. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable state and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e) and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements under federal environmental or state environmental or facility siting laws.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

81. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, a required submittal under the SOW, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of her unavailability, the Regional Duty Officer, Emergency Planning and Response Branch, EPA Region 1, (617) 918-1236, and the EPA Regional Emergency 24-hour telephone number at (617) 723-8928 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, EPA reserves its right, pursuant to Paragraph 120.b. of this Settlement Agreement, to pursue Respondent for reimbursement of all costs of the response action not inconsistent with the NCP.

82. In addition, in the event of any release of a hazardous substance from the Site prior to EPA's issuance of the Notice of Completion of Work in accordance with Section XXXI (Notice of Completion of Work) of this Settlement Agreement, Respondent shall immediately notify the OSC at (617) 918-1332 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

XIV. AUTHORITY OF ON-SCENE COORDINATOR

83. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other activity consistent with the removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of Work unless specifically directed by the OSC.

XV. AEROVOX ESCROW FUND

84. Within twenty (20) days after EPA issues a Notice of Completion of Work in accordance with Section XXXI (Notice of Completion of Work) of this Settlement Agreement, the Aerovox Escrow Fund shall be established by Respondent pursuant to an escrow agreement (the "Aerovox Escrow Agreement") in substantially the form attached hereto as Appendix D which agreement shall confer upon the escrow agent powers and authorities sufficient to facilitate the purposes of the Aerovox Escrow Fund stated in Paragraph 85 hereof.

85. The purposes of the Aerovox Escrow Fund are to pay for:

a. Respondent's performance of or, if Respondent causes the City or the City's successor(s) in title to perform, the City's and/or the City's successor(s) in title's performance of the Post-Removal Site Control measures described in Paragraph 67 of this Settlement Agreement, and other long-term operation and maintenance and monitoring obligations assumed by the City and/or the City's successor(s) in title pursuant to the Cooperation and Settlement Agreement; and

b. the expenses of administering the Aerovox Escrow Fund.

86. Within thirty (30) days after EPA issues a Notice of Completion of Work in accordance with Section XXXI (Notice of Completion of Work) of this Settlement Agreement, Respondent shall pay into the Aerovox Escrow Fund, established pursuant to Paragraph 84, the sum of \$351,000 to be used solely and exclusively to pay for the purposes of the Aerovox Escrow Fund stated in Paragraph 85. The total of \$351,000 includes \$299,500 for Post-Removal Site Control measures described in Paragraph 67, and \$51,500 for the expenses of administering the Aerovox Escrow Fund. In addition, Respondent shall pay, pursuant to the Cooperation and

Settlement Agreement, all additional funds necessary, if any, for long-term monitoring and maintenance requirements under M.G.L. c. 21E and the MCP assumed by the City pursuant to the Cooperation and Settlement Agreement, so that the total amount of money available to the City will be not less than \$517,400. Respondent shall provide written notice of the payments to EPA, with copies to MassDEP and the City.

XVI. PAYMENT OF FUTURE RESPONSE OVERSIGHT COSTS

87. Respondent shall pay all Future Response Oversight Costs required under this Settlement Agreement not inconsistent with the NCP. In no event shall Respondent pay to EPA more than \$650,000 in Future Response Oversight Costs.

a. Within thirty (30) days after the Effective Date, Respondent shall pay to EPA \$350,000 as pre-payment of Future Response Oversight Costs ("Pre-Payment One"). Pre-Payment One shall be made to EPA by Electronic Funds Transfer ("EFT") as follows:

Federal Reserve Bank of New York
 ABA = 021030004
 Account = 68010727
 33 Liberty Street
 New York, NY 10045

Field Tag 4200 of the Fed wire message should read "D68010727 Environmental Protection Agency,"

and shall be accompanied by a statement identifying the name and address of the party making payment, the Site name, the EPA Region and Site/Spill ID Number 0120, and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that Pre-Payment One has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
 26 Martin Luther King Drive
 Cincinnati, OH 45268

c. In the event that the amount on a statement issued by EPA pursuant to Paragraph 88 reflects that the sum of the funds (i) in the IAG, and (ii) from Pre-Payment One are less than or equal to \$100,000, Respondent shall pay to EPA, within ten (10) days after receiving such statement from EPA, in pre-payment of Future Response Oversight Costs, the amount equal to 15% of Respondent's estimated cost of performance of the unperformed Work as of the date of the statement, after EPA approval of such estimated cost ("Pre-Payment Two"). Pre-Payment Two shall not exceed \$300,000. If Respondent is due a credit pursuant to Paragraph 89, Respondent shall deduct the amount of the credit from the payment due under this Paragraph. Pre-Payment Two is in addition to and not in lieu of Pre-Payment One. Respondent shall make the payment required by this Paragraph 87.c. in the manner required by Paragraph 87.a., with notice as required by Paragraph 87.b. of this Settlement Agreement.

d. The full amounts paid by Respondent pursuant to Paragraphs 87.a. and 87.c. will be deposited by EPA in the Aerovox Future Response Oversight Costs Special Account within the EPA Hazardous Substance Superfund. These funds shall be retained and used by EPA to conduct and finance Future Response Oversight Costs at or exclusively in connection with the Site, and, to the extent any of these funds remain in the Aerovox Future Response Oversight Costs Special Account after EPA issues a written Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), such funds shall be disbursed in accordance with Section XVII (Post-Work Disbursement of Special Account Funds).

88. Beginning on the Effective Date and continuing until EPA issues a written Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), bi-monthly to the extent practicable, EPA will send to Respondent a statement that includes a Region 1 standard cost summary, which is a line-item summary of Future Response Oversight Costs in dollars by category of costs (including but not limited to payroll, travel, indirect costs, and contracts) incurred by EPA and its contractors.

89. Respondent may contest payment of any Future Response Oversight Costs which it pre-paid pursuant to Paragraph 87, that are included in a statement issued in accordance with Paragraph 88 reflecting costs incurred during the bi-monthly period summarized by such statement, if Respondent determines that EPA has made a mathematical or accounting error, or if it alleges that a cost item that was included represents costs that are inconsistent with the NCP. Such objection shall be made in writing to the OSC within thirty (30) days of receipt of a statement issued in accordance with Paragraph 88. Any such objection shall specifically identify the contested Future Response Oversight Costs and the basis for objection. Simultaneously, Respondent may initiate the Dispute Resolution procedures in Section XVIII (Dispute Resolution). If EPA prevails in the dispute, the dispute shall be deemed resolved, with no further action required by either party. If Respondent prevails concerning any aspect of the contested costs, with respect to that portion of the costs (plus associated accrued Interest) for which it did not prevail, EPA shall either (a) credit such amount against Pre-Payment Two, if resolution occurs before EPA issues a statement in accordance with Paragraph 88 which statement triggers the requirement for Respondent to pay Pre-Payment Two, or (b) pay such amount to Respondent if resolution occurs after EPA issues such statement. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to pay EPA for its Future Response Oversight Costs.

90. In the event that the pre-payment of Future Response Oversight Costs is not made within thirty (30) days of the Effective Date as to Paragraph 87.a., and within thirty (30) days of the date of EPA's statement as to Paragraph 87.c., Respondent shall pay Interest on any unpaid balance. The Interest on unpaid Future Response Oversight Costs shall begin to accrue on the Effective Date as to Paragraph 87.a., and thirty (30) days of the date of EPA's statement as to Paragraph 87.c., and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XX (Stipulated Penalties).

91. Within six months after EPA issues its Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), EPA will provide Respondent with a final accounting of Future Response Oversight Costs.

XVII. POST-WORK DISBURSEMENT OF SPECIAL ACCOUNT FUNDS

92. EPA may, in its unreviewable discretion and not subject to Section XVIII (Dispute Resolution) of this Settlement Agreement or resolution in any other forum:

a. transfer into the Aerovox Special Account any amount up to \$1.5 million from the funds made available through the Cooperative Agreement. This transfer may not occur earlier than the date the City receives bids on a contract for performance of the transportation and disposal of City Waste Material pursuant to the Cooperative Agreement; and

b. at any time after making a transfer pursuant to Paragraph 92.a., transfer back to the Cooperative Agreement all or any portion of the amount transferred into the Aerovox Special Account pursuant to Paragraph 92.a.

93. After EPA issues its Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), and EPA has performed and provided to Respondent a final accounting of Future Response Oversight Costs in accordance with Paragraph 91, if there are any funds remaining in the Aerovox Future Response Oversight Costs Special Account, including any Interest Earned on such funds, EPA will pay any outstanding costs, in the following order:

a. to the City for any costs for or relating to the transportation and disposal of City Waste Material that were not paid for by, due to the exhaustion of, the funds made available through the Cooperative Agreement; and

b. to EPA for any Future Response Costs.

After making payments, if any, in accordance with this Paragraph, if the final accounting provided to Respondent in accordance with Paragraph 91 indicates that there are any unused funds remaining in the Aerovox Future Response Oversight Costs Special Account, EPA shall remit and return those funds to Respondent, including any Interest Earned on such funds.

94. Not later than six (6) months after EPA issues a written Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), EPA will transfer into the Aerovox Special Account any unused portion of the funds in the IAG and any Interest Earned on such funds, EPA will pay any outstanding costs, in the following order:

a. to the City for any costs for or relating to the transportation and disposal of City Waste Material that were not paid for by, due to the exhaustion of, the funds made available through the Cooperative Agreement; and

b. to EPA for any Future Response Costs.

95. Creation of Aerovox Disbursement Special Account and Agreement to Disburse Funds to Respondent. After making payments in accordance with Paragraph 94, if the final accounting provided to Respondent pursuant to this Paragraph indicates that there are any unused funds remaining in the Aerovox Special Account, EPA shall establish a new special account, the Aerovox Disbursement Special Account, within the EPA Hazardous Substance Superfund and shall transfer any remaining funds up to \$1.5 million from the Aerovox Special Account to the Aerovox Disbursement Special Account. Subject to the terms and conditions set forth in this Section, EPA agrees to make the funds in the Aerovox Disbursement Special Account, including Interest Earned on such funds, available for disbursement to Respondent as partial reimbursement for performance of the Work under this Settlement Agreement; however, such disbursement to Respondent shall not exceed \$1.5 million, inclusive of Interest. EPA shall disburse funds from the Aerovox Disbursement Special Account to Respondent in accordance with the procedures set forth in this Section. Within five (5) days of the creation of the Aerovox Disbursement Special Account pursuant to this Paragraph, EPA will provide to Respondent a statement providing a final accounting of the transfers to and from and payments from the Aerovox Special Account made pursuant to Paragraphs 92 and 94, and the transfer to the Aerovox Disbursement Special Account made pursuant to this Paragraph.

96. Timing, Amount and Method of Disbursing Funds from Aerovox Disbursement Special Account. Within ten (10) days of EPA's receipt of a Cost Summary and Certification, as defined by Paragraph 97, or if EPA has requested additional information within ten (10) days of receipt of the additional information or revised Cost Summary and Certification, and subject to the conditions set forth in this Section, EPA shall disburse the funds from the Aerovox Disbursement Special Account to Respondent.

97. Request for Disbursement of Aerovox Disbursement Special Account.

a. Within thirty (30) days of the date of the statement issued by EPA pursuant to Paragraph 95, if such statement reports that money has been transferred from the Aerovox Special Account to the Aerovox Disbursement Special Account, Respondent shall submit to EPA a Cost Summary and Certification, as defined in Paragraph 97.b., covering the portion of the Work which it performed pursuant to this Settlement Agreement for which it seeks reimbursement.

b. The Cost Summary and Certification shall include a complete and accurate written cost summary and certification of the necessary costs incurred and paid by Respondent for the portion of the Work covered by the particular submission, excluding costs not eligible for disbursement under Paragraph 98. The Cost Summary and Certification shall contain the following statement signed by the Chief Financial Officer of Respondent:

“To the best of my knowledge, after thorough investigation and review of Respondent's documentation of costs incurred and paid for Work performed pursuant to this Settlement Agreement, I certify that the information contained in or accompanying this submittal is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.”

The Chief Financial Officer of Respondent shall also provide to EPA a list of the documents that he or she reviewed in support of the Cost Summary and Certification. Upon request by EPA, Respondent shall submit to EPA any additional information that EPA deems necessary for its review and approval of the Cost Summary and Certification.

c. If EPA finds that the Cost Summary and Certification includes a mathematical accounting error, costs excluded under Paragraph 98, or costs that are inadequately documented, it will notify Respondent and provide an opportunity to cure the deficiency by submitting a revised Cost Summary and Certification. If Respondent fails to cure the deficiency within thirty (30) days after being notified of, and given the opportunity to cure, the deficiency, EPA will recalculate Respondent's costs eligible for disbursement for the submission and disburse the corrected amount to Respondent in accordance with the procedures in Paragraph 96. Respondent may dispute EPA's recalculation under this Paragraph pursuant to Section XVIII (Dispute Resolution). In no event shall Respondent be disbursed funds from the Aerovox Disbursement Special Account in excess of amounts properly documented in a Cost Summary and Certification accepted or modified by EPA.

98. Costs Excluded from Disbursement. The following costs are excluded from, and shall not be sought by Respondent for disbursement from the Aerovox Disbursement Special Account: (a) Future Response Oversight Costs paid pursuant to Section XVI (Payment of Future Response Oversight Costs); (b) any other payments made by Respondent to the United States pursuant to this Settlement Agreement including, but not limited to any Interest or stipulated penalties paid pursuant to Section XX (Stipulated Penalties); (c) attorneys' fees and costs; (d) costs of any response actions Respondent performs that are not required under or approved by EPA pursuant to this Settlement Agreement, including costs incurred for Site activities pursuant to the State Agreement or the Cooperation and Settlement Agreement; (e) costs related to Respondent's litigation, settlement, development of potential contribution claims or identification of potentially responsible parties; (f) internal costs of Respondent, including but not limited to, salaries, travel, or in-kind services, except for those costs that represent the work of employees of Respondent directly performing the Work; (g) any costs incurred by Respondent prior to the Effective Date; or (h) any costs incurred by Respondent pursuant to Section XVIII (Dispute Resolution).

99. Termination of Disbursements from Aerovox Disbursement Special Account. EPA's obligation to disburse funds from the Aerovox Disbursement Special Account under this Settlement Agreement shall terminate upon EPA's determination that Respondent: (a) has knowingly submitted a materially false or misleading Cost Summary and Certification; (b) has submitted a materially inaccurate or incomplete Cost Summary and Certification, and has failed to correct the materially inaccurate or incomplete Cost Summary and Certification within thirty (30) days after being notified of, and given the opportunity to cure, the deficiency; or (c) failed to submit a Cost Summary and Certification as required by Paragraph 97 within thirty (30) days (or such longer period as EPA agrees) after being notified that EPA intends to terminate its obligation to make disbursements pursuant to this Section because of Respondent's failure to submit the Cost Summary and Certification as required by Paragraph 97. EPA's obligation to disburse funds from the Aerovox Disbursement Special Account shall also terminate upon EPA's assumption of performance of any portion of the Work pursuant to Paragraph 123, when such assumption of performance of the Work is not challenged by Respondent or, if challenged, is

upheld under Section XVIII (Dispute Resolution). Respondent may dispute EPA's decision to terminate disbursements from the Aerovox Disbursement Special Account under Section XVIII (Dispute Resolution).

100. Recapture of Disbursements from the Aerovox Disbursement Special Account.

Upon termination of disbursements from the Aerovox Disbursement Special Account under Paragraph 99, if EPA has previously disbursed funds from the Aerovox Disbursement Special Account for activities specifically related to the reason for termination (e.g., discovery of a materially false or misleading submission after disbursement of funds based on that submission), EPA shall submit a bill to Respondent for those amounts already disbursed from the Aerovox Disbursement Special Account specifically related to the reason for termination, plus Interest on that amount covering the period from the date of disbursement of the funds by EPA to the date of repayment of the funds by Respondent. Within thirty (30) days of receipt of EPA's bill, Respondent shall reimburse the Hazardous Substance Superfund for the total amount billed in the manner required by Paragraph 87.a., with notice as required by Paragraph 87.b. of this Settlement Agreement. Upon receipt of payment, EPA, at its sole discretion, may deposit all or any portion thereof in the Aerovox Special Account, the Hazardous Substance Superfund or the Cooperative Agreement. The determination of where to deposit or how to use the funds shall not be subject to challenge by Respondent pursuant to Section XVIII (Dispute Resolution) of this Settlement Agreement or resolution in any other forum. Respondent may dispute, pursuant to Section XVIII (Dispute Resolution), EPA's determination to seek the recapture of funds.

101. Balance of Special Account Funds. After EPA issues its written Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work) of this Settlement Agreement, and after EPA completes all disbursements to Respondent in accordance with this Section XVII, if any funds remain in the Aerovox Disbursement Special Account, EPA, at its sole discretion, may transfer such funds to the Aerovox Special Account, the Hazardous Substance Superfund or the Cooperative Agreement. Any transfer of funds to the Aerovox Special Account, the Hazardous Substance Superfund or the Cooperative Agreement shall not be subject to challenge by Respondent pursuant to Section XVIII (Dispute Resolution) of this Settlement Agreement or resolution in any other forum.

XVIII. DISPUTE RESOLUTION

102. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

103. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, it shall notify EPA in writing of its objection(s) within seven (7) days of such action, unless the objection(s) has/have been resolved informally. Notwithstanding the preceding sentence, if Respondent contests payment of any Future Response Oversight Costs pursuant to Paragraph 89, Respondent shall notify EPA in writing of its objection(s) within thirty (30) days of receipt of a statement issued in accordance with Paragraph 88. The Parties shall have seven (7) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through

formal negotiations (the “Negotiation Period”). The Negotiation Period may be extended at the sole discretion of EPA.

104. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by both Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Regional Branch Chief level or higher will issue a written decision on the dispute to Respondent. EPA’s decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent’s obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA’s decision, whichever occurs.

XIX. FORCE MAJEURE

105. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent’s best efforts to fulfill the obligation.

a. *Force majeure* does not include financial inability to complete the Work, increased cost of performance, or a failure to attain performance standards or action levels set forth in the Action Memorandum and SOW.

b. *Force majeure* explicitly includes any performance delay or stoppage based on the actions or inactions of the City or the City’s contractor under the Cooperative Agreement or the Cooperation and Settlement Agreement, including delays or stoppages caused by the insufficiency of funds to pay for the transportation and/or disposal of all City Waste Material, or based on the unavailability of funds to pay for the transportation and disposal of City Waste Material due to a rescission or voiding of the Cooperative Agreement by EPA. Respondent shall continue with such portion(s) of the Work unaffected by any such performance delay or stoppage, if any, and shall implement site stabilization measures with respect to portions of the Work affected by any such performance delay or stoppage, if any.

106. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 24 hours of when Respondent first knew that the event might cause a delay. Within three (3) days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent’s rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may

cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

107. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XX. STIPULATED PENALTIES

108. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraph 109 for failure to comply with the requirements of this Settlement Agreement unless excused under Section XIX (*Force Majeure*). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans, submittals, or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

109. Stipulated Penalty Amounts.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 109.b.:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$100.00	1 st through 14 th day
\$500.00	15 th through 30 th day
\$1,000.00	31 st day and beyond

b. Compliance Milestones: Each day or portion thereof, that Respondent fails to perform, fully, any requirement of the Settlement Agreement and SOW in accordance with the Work Schedule shall be deemed to be a violation and non-compliance with the Settlement Agreement and SOW.

110. In the event EPA assumes performance of a portion or all of the Work pursuant to Paragraph 123 of Section XXII (Reservation of Rights by EPA), Respondent shall be liable for a stipulated penalty in the amount of \$500,000. In the event, however, that Respondent, in accordance with Paragraph 123.c. of this Settlement Agreement, invokes the procedures set forth in Section XVIII (Dispute Resolution), the accrual and payment of this stipulated penalty shall be governed by Paragraph 115 of this Settlement Agreement.

111. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the non-compliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section VIII (Work to Be Performed), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (2) with respect to a decision by the EPA management official at the Regional Branch Chief level or higher, under Paragraph 104 of Section XVIII (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

112. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the non-compliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

113. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVIII (Dispute Resolution). Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 115. All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to:

United States Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000;

shall indicate that the payment is for stipulated penalties; and shall reference the EPA Region and Site/Spill ID Number 0120, and the EPA Docket Number for this action, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 87.a.

114. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

115. Penalties shall continue to accrue during any dispute resolution period, but need be paid only if the dispute is resolved by an agreement which provides for the payment of penalties or by a decision favorable to EPA issued in accordance with Paragraph 104. In such instances, accrued penalties shall be paid to EPA within fifteen (15) days of the effective date of agreement or the receipt of EPA's decision.

116. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 113. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 123.

117. Notwithstanding any other provision of this Section:

a. No stipulated penalties will accrue for *force majeure* pursuant to Paragraph 105.b. of this Settlement Agreement.

b. EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XXI. COVENANT NOT TO SUE BY EPA

118. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), relating to the Site. This covenant not to sue shall take effect upon receipt by EPA of the payments required by Sections XV (Aerovox Escrow Fund) and XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement, and any amount due under Section XX (Stipulated Penalties). This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement, including, but not limited to, performance of the Work, payment to the Aerovox Escrow Fund pursuant to Section XV (Aerovox Escrow Fund) and payment of Future Response Oversight Costs pursuant to Section XVI (Payment of Future Response Oversight Costs), and Respondent's performance of the obligations assumed under the simultaneously-executed State Agreement. MassDEP's issuance of the written notice in accordance with Paragraph 14(f) of the State Agreement shall conclusively demonstrate Respondent's performance of such obligations. This covenant not to sue extends only to Respondent and does not extend to any other person. This covenant not to sue is limited to the Site and does not extend to response actions and response costs taken or paid, or to be taken or paid, in connection with the New Bedford Harbor Superfund Site which is the subject of Civil Action No. 83-3882-Y.

XXII. RESERVATIONS OF RIGHTS BY EPA

119. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from (a) seeking legal or equitable relief to enforce the terms of this Settlement Agreement, (b) taking other legal or equitable action pursuant to applicable law other than CERCLA as it deems appropriate and necessary, or (c) requiring Respondent in the future to perform additional activities at any other site pursuant to CERCLA or any other applicable law.

120. The covenant not to sue set forth in Section XXI (Covenant Not to Sue By EPA) does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all matters not expressly included within the Covenant Not to Sue by EPA in Paragraph 118. Notwithstanding any other provision of this Settlement Agreement, EPA reserves all rights against Respondent with respect to:

- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. claims for Future Response Costs;
- c. criminal liability;
- d. liability for damages for injury to, destruction of, or loss of Site-specific natural resources, and for the costs of any Site-specific natural resource damage assessments;
- e. liability for costs incurred by the Agency for Toxic Substances and Disease Registry following completion of the Work related specifically to the Site;
- f. liability for response actions, response costs, and damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments in connection with the New Bedford Harbor Superfund Site, subject to the Consent Decree entered into between the parties in Civil Action No. 83-3882-Y;
- g. liability arising from the past, present or future disposal, release or threat of release of Aerovox Waste Material outside of the Site; and
- h. in the event Respondent, after signature of this Settlement Agreement, becomes an owner or operator of the Site, liability based upon such status, or, having such future owner or operator status, upon Respondent's transportation, treatment, storage, or disposal, or arrangement for the transportation, treatment, storage, or disposal of Waste Material at or from the Site.

121. Reopener. Notwithstanding any other provision of this Settlement Agreement, EPA reserves, and this Settlement Agreement is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Respondent

- a. to perform further response actions relating to the Site, or
- b. to reimburse the United States for additional costs of response if, subsequent to the Effective Date:
 1. conditions at the Site, previously unknown to EPA, are discovered, or
 2. information, previously unknown to EPA, is received in whole or in part,

and EPA determines that these previously-unknown conditions or information together with other relevant information indicate that the Work performed under this Settlement Agreement is not protective of human health or the environment.

122. For the purposes of Paragraph 121, the information and conditions known to EPA shall include only that information and those conditions known to EPA as of the Effective Date and set forth in the Action Memorandum and the administrative record supporting the Action Memorandum.

123. Work Takeover.

a. In the event EPA determines that Respondent (1) has ceased implementation of any portion of the Work, or (2) is seriously or repeatedly deficient or late in its performance of the Work, or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Except in potential endangerment situations where EPA determines that Respondent is implementing the Work in a manner that may cause an endangerment to human health or the environment, any Work Takeover Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondent a period of ten (10) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the 10-day notice period specified in Paragraph 123.a., Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA shall notify Respondent in writing (which writing may be delivered by electronic transmission, with a follow up hard copy delivered by mail) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 123.b.

c. Respondent may invoke the procedures set forth in Section XVIII (Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 123.b. However, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 123.b. until the earlier of (1) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a final decision is rendered in accordance with Section XVIII (Dispute Resolution), requiring EPA to terminate such Work Takeover.

124. Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXIII. COVENANT NOT TO SUE BY RESPONDENT

125. Except as otherwise provided in this Settlement Agreement, Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States or its contractors or employees with respect to the Site, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through Sections 106(b)(2), 107, 111, 112 or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612 or 9613, or any other provision of law;

b. any claim arising out of response actions at or in connection with the Site, to the extent such claim does not arise out of response actions at or in connection with the New Bedford Harbor Superfund Site, including any claim under the United States Constitution, the Commonwealth's Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law;

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site, but excluding any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, to the extent such claim relates to the New Bedford Harbor Superfund Site;

d. any direct or indirect claim for disbursement from the Aerovox Special Account, other than as provided for in Section XVII (Post-Work Disbursement of Special Account Funds) of this Settlement Agreement;

e. any direct or indirect claim for disbursement from the Aerovox Disbursement Special Account, other than as provided for in Section XVII (Post-Work Disbursement of Special Account Funds) of this Settlement Agreement; or

f. any direct or indirect claim for disbursement from the Aerovox Future Response Oversight Costs Special Account other than as provided for in Section XVII (Post-Work Disbursement of Special Account Funds) of this Settlement Agreement.

Except as provided for in Paragraph 127, these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 120.b., 120.d., 120.e., 120.g. and 120.h., but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

126. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

127. Respondent agrees not to assert any claims and to waive all claims or causes of action, including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA, 42 U.S.C. §§ 9607(a) and 9613, that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

128. The waiver in Paragraph 127 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines that:

a. such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

129. The covenants not to sue in this Section XXIII (Covenant Not to Sue By Respondent) shall not apply to the City or any other present or past owners and/or operators of the Site.

XXIV. OTHER CLAIMS

130. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of

Respondent. Neither the United States nor EPA shall be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

131. Except as expressly provided in Section XXI (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

132. Respondent reserves any and all rights, defenses, claims, demands, and causes of action relating to the New Bedford Harbor Superfund Site, as set forth in the Consent Decree entered into between the parties in Civil Action No. 83-3882-Y.

133. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXV. CONTRIBUTION

134. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement.

135. The "matters addressed" in this Settlement Agreement are all response actions taken or to be taken and all response costs incurred or to be incurred, at or in connection with the Site, by the United States, Respondent or any other person (other than the Commonwealth and the City); provided, however, that if the United States exercises rights under the reservations in Section XXII (Reservation of Rights by EPA), other than in Paragraph 120.a. (claims for failure to comply with this Settlement Agreement) and Paragraph 120.c. (criminal liability), the "matters addressed" in this Settlement Agreement will no longer include those response costs or response actions that are within the scope of the exercised reservation.

136. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Site.

137. In any subsequent administrative or judicial proceeding initiated by EPA, or the United States on behalf of EPA, for injunctive relief, recovery of response costs or other relief relating to the Site, Respondent shall not assert and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-

splitting, or other defenses based upon any contention that the claims raised by EPA, or the United States on behalf of EPA, in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the Covenant Not to Sue by EPA set forth in Section XXI.

138. Except as provided in Paragraph 127, nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXVI. INDEMNIFICATION

139. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

140. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

141. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

XXVII. NOTICES AND SUBMISSIONS

142. Unless otherwise expressly provided for in this Settlement Agreement, whenever, under the terms of this Settlement Agreement, written notice is required to be given, a report or other document is required to be sent by one Party to another, or a courtesy copy is to be forwarded to a third party, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors have given written notice of a change to the other Party or third-parties. Electronic transmission may be used for notices and submissions unless otherwise directed by this Settlement Agreement. All notices and submissions shall be considered effective upon receipt, unless otherwise provided.

Parties:

To EPA:

Elaine Stanley, On-Scene Coordinator
U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OSRR07-4)
Boston, MA 02109-3912
Stanley.Elainet@epamail.epa.gov

with a copy to:

Cynthia E. Catri
Senior Enforcement Counsel
U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (OES04-2)
Boston, MA 02109-3912
Catri.Cynthia@epamail.epa.gov

To Respondent:

AVX Corporation
c/o Larry Blue
801 17th Avenue South
P.O. Box 867
Myrtle Beach, SC 29578
lblue@avxus.com

with a copy to:

Gary L. Gill-Austern, Esq.
Nutter, McCennen & Fish, LLP
155 Seaport Boulevard
Boston, MA 02210
ggill-austern@nutter.com

Others:**To MassDEP:**

Gerard Martin
 Department of Environmental Protection
 Southeast Regional Office
 Bureau of Waste Site Cleanup
 20 Riverside Drive
 Lakeville, MA 02347
 Gerard.Martin@state.ma.us

with a copy to:

Rebecca Tobin, Esq.
 Department of Environmental Protection
 Southeast Regional Office
 20 Riverside Drive
 Lakeville, MA 02347
 Rebecca.Tobin@state.ma.us

To the City:

Mayor Scott W. Lang
 City of New Bedford
 133 William Street
 New Bedford, MA 02740

with a copy to:

Irene B. Schall, Esq.
 City Solicitor
 City of New Bedford
 Office of the City Solicitor
 133 William Street
 New Bedford, MA 02740
 Irene.Schall@newbedford-ma.gov

143. Unless otherwise directed by this Settlement Agreement, the Parties will provide to the City a copy of submittals and notifications pursuant to Paragraphs 61, 62, 64, 66, 68, 69, 70, and 152 and Section XIX (*Force Majeure*), except for any documents constituting all or a portion of any submittal or notification Respondent has asserted, in accordance with Section X (Access to Information), to be business confidential.

XXVIII. INSURANCE

144. At least seven (7) days prior to commencing any on-site Work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of the Work, comprehensive general liability insurance and automobile insurance with limits of \$5,000,000, combined single limit, naming EPA as an additional insured. Within the same time period, Respondent shall provide EPA with certificates of such insurance and, upon request, a copy of each insurance policy. Respondent shall submit such certificates and, upon request, each insurance policy, each year on the anniversary of the Effective Date, until EPA issues the notification pursuant to Section XXXI (Notice of Completion of Work) of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent needs to provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

145. Beginning at least seven (7) days prior to commencing any on-site Work and for the duration of the Work until EPA issues the notification pursuant to Section XXXI (Notice of Completion of Work) of this Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the

provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement.

XXIX. FINANCIAL ASSURANCE

146. Within thirty (30) days of the Effective Date, Respondent shall establish and maintain financial security ("Performance Guarantee") in the amount of \$11,000,000 demonstrating that it satisfies the requirements of 40 C.F.R. § 264.143(f)(1) through (3), except that, in lieu of the independent certified public accountant's reports required pursuant to 40 C.F.R. § 264.143(f)(3)(ii) and (iii), and the figures from independently audited year-end financial statements referenced in 40 C.F.R. § 264.151(f), Respondent may provide a certification signed by Respondent's chief financial officer that the information supplied in support of such demonstration is accurate. Until it submits the final report in accordance with Paragraph 69, Respondent shall resubmit sworn statements conveying the information required by 40 C.F.R. § 264.143(f)(1) through (3) (as modified in accordance with the prior sentence) annually on the anniversary of the Effective Date. Respondent's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Settlement Agreement.

147. Within thirty (30) days of the Effective Date, Respondent shall submit all executed and /or otherwise finalized instruments or other documents required by Paragraph 146 to the EPA Regional Financial Management Officer, EPA New England, 5 Post Office Square, Suite 100 (OARM16-1), Boston, MA 02109-3912.

148. In the event that EPA determines at any time that the Performance Guarantee provided by Respondent pursuant to Paragraph 146 is inadequate or otherwise no longer satisfies the requirements set forth in this Section, whether due to an increase in the estimated cost of completing the Work or for any other reason, or in the event that Respondent becomes aware of information indicating that the Performance Guarantee provided pursuant to Paragraph 146 is inadequate or otherwise no longer satisfies the requirements set forth in this Section, whether due to an increase in the estimated cost of completing the Work or for any other reason, Respondent, within thirty (30) days of receipt of notice of EPA's determination or, as the case may be, within thirty (30) days of Respondent becoming aware of such information, shall obtain and present to EPA for approval a written proposal for a revised or alternative form of Performance Guarantee in one or more of the following forms, which must be satisfactory in form and substance to EPA:

a. A surety bond unconditionally guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. One or more irrevocable letters of credit, payable to or at the direction of EPA, that is issued by one or more financial institution(s) (i) that has the authority to issue letters of credit, and (ii) whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee (i) that has the authority to act as a trustee, and (ii) whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that (i) provides EPA with acceptable rights as a beneficiary thereof; and (ii) is issued by an insurance carrier (a) that has the authority to issue insurance policies in the applicable jurisdiction(s), and (b) whose insurance operations are regulated and examined by a state agency; or

e. A written guarantee to fund or perform the Work executed in favor of EPA by one or more of the following: (i) a direct or indirect parent company of Respondent; or (ii) a company that has a “substantial business relationship” (as defined in 40 C.F.R. § 264.141(h)) with Respondent; provided, however, that any company providing such a guarantee must demonstrate to the satisfaction of EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the estimated cost of the Work that it proposes to guarantee hereunder.

f. Notwithstanding the foregoing, Respondent may respond to EPA’s determination that the Performance Guarantee provided by Respondent pursuant to Paragraph 146 is inadequate by presentation of a revised Performance Guarantee in the same form as provided pursuant to Paragraph 146 in an amount satisfactory to EPA. If EPA determines that this revised Performance Guarantee is inadequate, Respondent shall, within fifteen (15) days of receipt of EPA’s determination, obtain and present to EPA for approval a written proposal for an alternate Performance Guarantee in one or more of the forms in Paragraphs 148.a. through 148.e.

149. Respondent’s written proposal in accordance with Paragraph 148 shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated, and the proposed revised form of Performance Guarantee, including all proposed instruments or other documents required in order to make the proposed Performance Guarantee legally binding. The proposed revised or alternative form of Performance Guarantee must satisfy all requirements set forth or incorporated by reference in this Section. Respondent shall submit such proposed revised or alternative form of Performance Guarantee to the EPA Regional Financial Management Officer in accordance with Paragraph 147. EPA shall notify Respondent in writing of its decision to accept or reject a revised or alternative Performance Guarantee submitted pursuant to Paragraph 148. Within ten (10) days after receiving a written decision approving the proposed revised or alternative Performance Guarantee(s), Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected Performance Guarantee(s) legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal, and such Performance Guarantee(s) shall thereupon be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected Performance Guarantee(s) legally binding to the EPA Regional Financial Management Officer within thirty (30) days of receiving a written decision approving the proposed revised or alternative Performance Guarantee(s) in accordance with Paragraph 147.

XXX. MODIFICATIONS

150. This Settlement Agreement, with the exception of the SOW or submittals thereunder, may only be modified upon the written agreement of EPA by signature of the Director, Office of Site Remediation and Restoration (“OSRR”), and Respondent.

151. The OSC may make modifications to any plan, submittal or schedule in writing or by oral direction. The OSC may make modifications to the SOW to the extent that such modification is consistent with the Work. Any oral modification to any plan, submittal, schedule or the SOW will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC’s oral direction. Any modification to the SOW that fundamentally alters any basic elements of the Work with respect to scope, performance or cost shall be made only with the written agreement of Respondent and EPA by signature of the Director, OSRR, after a reasonable opportunity for review and comment by the Commonwealth.

152. If Respondent seeks permission to deviate from any approved Work plan, submittal, schedule or SOW, Respondent’s Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 151. Any oral approval from the OSC will be memorialized in writing.

153. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXXI. NOTICE OF COMPLETION OF WORK

154. When EPA determines, after EPA’s review of the final report submitted in accordance with Paragraph 69, that all Work has been fully performed in accordance with this Settlement Agreement except for (a) any continuing obligation required by this Settlement Agreement, and (b) satisfaction of the condition in Paragraph 118 with respect to EPA’s covenant not to sue requiring Respondent’s performance, as determined by MassDEP, of the obligations assumed under the simultaneously-executed State Agreement, EPA shall provide written notice to Respondent, with copies to MassDEP and the City. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify any plans or submittals if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved plans or submittals and shall submit a modified final report in accordance with the EPA notice. Failure by Respondent to implement the approved modified plans or submittals shall be a violation of this Settlement Agreement.

155. In the event of a sale of the Aerovox property to a redeveloper or other entity for a price which exceeds all unreimbursed expenses of EPA, the Commonwealth and the City in connection with the Aerovox property by at least \$100,000, then after all unreimbursed expenses of EPA, the Commonwealth and the City, incurred in connection with the Aerovox property are

reimbursed in accordance with the Bankruptcy Settlement, EPA agrees to make reasonable efforts to modify the Bankruptcy Settlement and to cooperate with all necessary parties, including without limitation the Commonwealth and the City to effect such modification, so that the remaining proceeds from such sale, if any, shall be paid to AVX for its unreimbursed expenses in connection with the Aerovox property.

XXXII. PUBLIC COMMENT

156. Final acceptance by EPA of Section XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement is subject to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment solely on the cost recovery component of the proposed settlement, and to consider comments filed in determining whether to consent to the proposed settlement. EPA may withhold consent from, or seek to modify pursuant to Paragraph 150 in Section XXX (Modifications) of this Settlement Agreement, all or part of Section XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement if comments received disclose facts or considerations that indicate that Section XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement is inappropriate, improper or inadequate. Otherwise, Section XVI (Payment of Future Response Oversight Costs) shall become effective when EPA issues notice to Respondent that public comments received, if any, do not require EPA to modify or withdraw from Section XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement.

XXXIII. ATTORNEY GENERAL APPROVAL

157. The Attorney General or his designee has approved the response cost settlement embodied in this Settlement Agreement in accordance with Section 122(h)(1) of CERCLA, 42 U.S.C. § 9622(h)(1).

XXXIV. INTEGRATION/APPENDICES

158. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement: A) Action Memorandum (includes TSCA Determination); B) Scope of Work; C) Site Map; and D) form of Escrow Agreement.

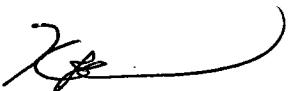
XXXV. EFFECTIVE DATE

159. This Settlement Agreement shall be effective on the date EPA issues notice to Respondent that public comments received, if any, pursuant to Paragraph 156, do not require EPA to modify or withdraw from Section XVI (Payment of Future Response Oversight Costs) of this Settlement Agreement.

The undersigned representative of Respondent certifies that he is fully authorized to enter into and bind Respondent to the terms and conditions of this Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action for the Aerovox Site.

AGREED this 16 day of March, 2010.

For AVX Corporation

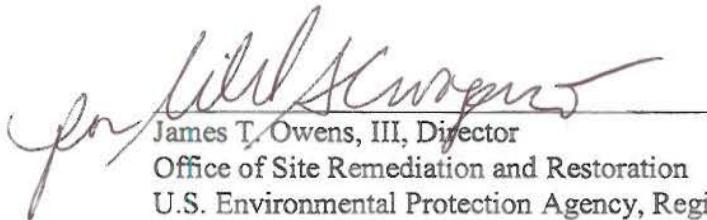


Kurt P. Cummings
Vice President, Chief Financial Officer,
Treasurer and Secretary

For the Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action for the Aerovox Site.

It is so ORDERED and AGREED this 25th day of March, 2010.

For the U.S. Environmental Protection Agency



James T. Owens, III, Director
Office of Site Remediation and Restoration
U.S. Environmental Protection Agency, Region 1

EFFECTIVE DATE: 6/3/2010

Appendix A

Action Memorandum including TSCA Determination

Aerovox Non-Time Critical Removal Action
Action Memorandum
Enforcement Confidential Materials Attached

Superfund Records Center
SITE: Aerovox
BREAK: 2.9
OTHER: 461060

UNITES STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1

MEMORANDUM

DATE: December 23, 2009

SUBJ: ACTION MEMORANDUM; Request for a Non-Time-Critical Removal Action (NTCRA) at the Aerovox Site, New Bedford, Massachusetts

FROM: James T. Owens, III, Director
Office of Site Remediation & Restoration

TO: Mathy Stanislaus, Assistant Administrator
Office of Solid Waste & Emergency Response

THRU: Larry Brill, Branch Chief
Office of Site Remediation and Restoration

Debbie Dietrich, Director
Office of Emergency Management

ATTN: Gilberto Irizarry, Director
Program Operations and Coordination Division

Site ID # 0120

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of a NTCRA for the Aerovox Site (the "Site"), located at 740 Belleville Avenue, New Bedford, Bristol County, Massachusetts. This Action Memorandum also requests and documents the approval of a "consistency" exemption from the \$2 million and 12-month statutory limits for Fund-financed removal sites. This NTCRA is expected to be completed within 22 months and cost not more than \$24 million (in 2010 dollars, see Section VI.B.2 below), but will be implemented in a mixed-work approach with a potentially responsible party (PRP) financing and performing mill demolition and capping and the City of New Bedford (using \$9.8 million through a Cooperative Agreement with EPA) performing transportation and offsite disposal of the demolition debris, and with any remaining funds, providing backfill and conducting post-removal site controls. No regional Removal Authority funds will be used; instead, the Cooperative Agreement funding for the City portion of the work is a combination of Aerovox bankruptcy funds and EPA funds made available by the exchange of appropriated annual funds for the New Bedford Harbor Site for Harbor settlement funds held in a court registry account. The NTCRA is necessary to prevent, minimize, stabilize, and mitigate potential threats to human health and the environment posed by a release of hazardous substances to the environment at the Site.



**Aerovox Non-Time Critical Removal Action
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In particular, the NTCRA will address the threats posed by the Site's deteriorating mill facility which is severely contaminated with polychlorinated biphenyls (PCBs) and other hazardous materials by demolishing the facility and leaving the foundation in place. The basement will be filled to the existing grade with clean fill and all areas of the Site with soil PCB levels above 2 ppm will be capped under a protective cap that complies with the requirements of the Toxic Substances Control Act, 15 U.S.C. §§2601, *et. seq.* (TSCA). The demolition debris will be transported offsite for disposal to appropriately-licensed facilities.

The NTCRA is consistent with the long-term remedial strategy for this Site to minimize exposure to and migration of contaminants. While the Site is not expected to be listed on the National Priorities List (NPL), the NTCRA is consistent with future expected remedial actions under Chapter 21E of the Massachusetts General Laws (21E) and the regulations promulgated thereunder, the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000 (e.g., groundwater assessment and remediation, additional capping), which will be conducted under the direction of a Massachusetts Licensed Site Professional (LSP). As part of the forthcoming global settlement for the Site, the 21E assessment and cleanup will begin immediately after the NTCRA work is completed and approved by EPA. AVX Corporation (AVX), the PRP, will perform the demolition and capping work as authorized by this Action Memorandum pursuant to the forthcoming settlement with EPA. AVX will then, as part of the 21E cleanup, further evaluate the full nature and extent of contamination at the Site, not addressed by this NTCRA, and implement further cleanup actions to address remaining soil and groundwater contamination. This work will be performed pursuant to the anticipated settlement with the Commonwealth of Massachusetts (State). As part of the forthcoming global settlement, AVX will also implement institutional controls at the Site that are required to ensure both the NTCRA and 21E cleanups are protective under CERCLA, TSCA and 21E in the long-term. Moreover, AVX will fund an escrow account that will finance long-term operation and maintenance of the cap and groundwater response actions as well as groundwater monitoring activities.

Finally, although the Aerovox Site was not included in the New Bedford Harbor Site when EPA settled with the responsible parties in the 1990s, the Aerovox facility, which abuts the Harbor, is one of the major sources of PCB contamination to New Bedford Harbor. The response action authorized by this Action Memorandum, along with the 21E cleanup, will result in a complete source control and management of migration remedy for the Aerovox site, effectively controlling or eliminating any further source of PCBs or other contaminants (e.g., volatile organic compounds (VOCs)) from this facility to the Harbor. The actions taken pursuant to this NTCRA are thus consistent with the long-term remedial actions for both the Aerovox Site and the New Bedford Harbor Superfund Site.

AVX will perform the NTCRA work pursuant to a forthcoming EPA Administrative Order on Consent (AOC). The City of New Bedford (the City) will perform portions of the NTCRA pursuant to a Cooperative Agreement with EPA, including the offsite transportation and disposal (T&D) of the demolition waste. The 21E cleanup will be conducted by AVX pursuant to a forthcoming Administrative Consent Order (ACO) with the State.

**Aerovox Non-Time Critical Removal Action
Action Memorandum
Enforcement Confidential Materials Attached**

II. SITE CONDITIONS AND BACKGROUND

CERCLIS Identifier: MAN000103307

Site Identifier: 0120

Removal Category: Non-Time-Critical

NPL status: Non-NPL

A. Site Description

1. Removal Site Evaluation

The vacant Aerovox plant located at 740 Belleville Avenue in New Bedford, MA, consists of an approximately 450,000 square foot former manufacturing facility located on approximately 10.3 acres of industrial-zoned land abutting the Acushnet River. From c.1940 to c.1978, PCBs were used at the facility in the manufacture of electrical capacitors. As a result of this manufacturing history, soil and groundwater at the Site as well as the mill facility itself are heavily contaminated with PCBs. The soil and groundwater are also contaminated with VOCs, most notably trichloroethylene and chlorobenzene. The facility is considered one of the major sources of historic PCB contamination to the New Bedford Harbor Superfund Site.

In 1997, EPA conducted an inspection of the building and performed building and soil sampling, with Aerovox, Inc. (Aerovox), a prior owner of the Site, performing follow-up sampling. High levels of PCBs were identified throughout the interior of the building and in Site soils. Subsequent sampling found PCBs and VOCs in groundwater and PCBs mixed into the asphalt parking lot. In July 1998, EPA issued an Approval Memorandum to initiate the non-time critical removal action process by having Aerovox perform an Engineering Evaluation/Cost Analysis (EE/CA) for the implementation of a NTCRA for the Site. The EE/CA was prepared by Blasland, Bouck & Lee, Inc., contractor to Aerovox, under EPA oversight, and issued in August 1998. The EE/CA evaluated three alternatives for demolishing the contaminated building, disposing of the demolition waste and then capping the entire Site. EPA's preferred alternative included the demolition of the facility, offsite disposal of most demolition debris, leaving the concrete foundation in-place, backfilling the building footprint with clean fill and capping the entire Site. Pursuant to the National Contingency Plan (NCP), the EE/CA and its administrative record were made available for public comment in 1998, but no comments were received.

In 2000, Aerovox entered into a consent order with the Commonwealth of Massachusetts to monitor groundwater elevations at the Site. Aerovox also entered into a RCRA Section 7003 Administrative Order on Consent with EPA in late 1999 in which Aerovox was required to, among other things, demolish the building and cap the entire Site. Interim measures were taken to protect workers in the building. However, the building was vacated in 2001 when operations were relocated to an alternate site in New Bedford. While relocating, Aerovox left behind, among other things, a substantial amount of contaminated equipment and machinery, PCB-contaminated rinse water, PCB-contaminated personal protective gear, solvents, acids and compressed gas cylinders. Aerovox subsequently filed for bankruptcy in June 2001 and the primary response actions required by the RCRA consent order were never implemented. EPA settled its claim against Aerovox in the bankruptcy proceedings in 2003.

**Aerovox Non-Time Critical Removal Action
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Since 2001, the facility has deteriorated. The main manufacturing building has been subject to flooding from burst pipes and a malfunction in the sprinkler system, as well as lack of maintenance to pump out routine basement flooding. There has been resulting significant water damage to the PCB-contaminated wooden floors causing them to weaken and buckle; the wooden roof, sections of which are highly deteriorated, leaks into the interior of the building; and structural columns have fallen out of plum. PCB-contaminated stormwater continues to run off the contaminated buildings and parking lot into the Acushnet River. The capped area of the Site also showed signs of deterioration with cracks in the pavement and vegetation pushing through the hydraulic asphalt concrete (HAC) cap.

In addition, despite implementation of Site security measures, trespassing (with the potential for tracking contamination offsite) and vandalism have occurred at the Site. Damage includes broken windows which could allow PCB-contaminated dust to be released outside the building. Broken switches, thermostats and other mercury-containing equipment resulted in mercury spills. Direct contact with mercury and PCB-contaminated floors, building material and equipment allows contamination to be tracked outside the building. Asbestos is also present in the building.

A Preliminary Assessment/Site Investigation (PA/SI) was conducted in February 2004. Representatives from EPA, MassDEP and the City of New Bedford were in attendance. Various drums, gas cylinders and containers of waste material were found inside the building. (A second PA/SI was performed in 2007 specifically for mercury; see below.)

In 2004, EPA issued an action memorandum to initiate a Time-Critical-Removal Action (TCRA) at the Site. The purpose of the TCRA was to remove drums and containers abandoned at the Site and general repair of the cap installed by Aerovox pursuant to a 1982 order (See Section II.B.1. below for more details regarding this order). EPA implemented the TCRA to remove waste drums and containers and to remove vegetation from and seal cracks in the existing cap.

From 2004 to 2008 EPA performed further sampling at the Site and found PCBs mixed into the asphalt parking lot, the continued presence of PCBs in groundwater, stormwater runoff and in building materials, and elevated levels of airborne PCBs at the eastern end of the Site. A January 2005 Site Information and Preplan prepared by the New Bedford Fire Department describes the fire hazards posed by the manufacturing building, includes a fire plan as to how the Fire Department should respond to a fire at the building, and describes the existing fire suppression equipment in the building.

In April 2006, EPA issued a Supplemental EE/CA (SEE/CA) to the 1998 EE/CA to update the costs, and to reflect Site activities and conditions since the 1998 EE/CA was issued, including the continuing deterioration of the facility and the significant potential for fire. The SEE/CA also identified two new alternatives: disposal of all demolition waste onsite; and disposal of all demolition waste offsite. The SEE/CA recommended that all demolition waste be disposed of onsite. Additional objectives were added including coordination of the NTCRA with future reuse of the Site.

Sixteen comments regarding the SEE/CA were received. These comments and EPA's response to the comments may be found as part of the administrative record for the NTCRA and are

**Aerovox Non-Time Critical Removal Action
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Enforcement Confidential Materials Attached**

attached as Appendix A of this document. Based on these comments, EPA has selected offsite disposal rather than onsite disposal for the NTCRA demolition waste. See Section VI below for more details on all the alternatives considered and the selected alternative.

See also Sections II.B.1. and II.B.2 below, which detail other previous and recent response actions taken at the Site.

2. Physical Location

The property is located at 740 Belleville Avenue, Bristol County, New Bedford, Massachusetts, and directly abuts two active industrial mills to the north and south, and a large, densely populated, urban residential neighborhood on the opposite (west) side of Belleville Avenue (Figure 1). Nearby residential areas also exist one block north of the Site (east side of Belleville Avenue), as well as in the towns of Acushnet and Fairhaven on the opposite side of the Acushnet River. The Acushnet River abuts the property to the east. The elevation along Belleville Avenue at the western boundary of the Site is approximately 14 feet above mean sea level (MSL) while the elevation at the eastern boundary of the property (at a seawall constructed along the bank of the Acushnet River) is generally between 3 and 4 feet above MSL.

Portions of the Site are also located within the 100-year floodplain. Because of its unique location along the shoreline, the property could provide public access to the shoreline once cleanup actions are complete and fencing is relocated.

3. Site Characteristics

The Aerovox main building consists of a western section that contains two floors and an eastern section that contains three floors. A parking lot is located south of the building. The exterior walls of the building are brick while the roof is constructed of wood. The first floor in the western section of the main building varies between 4 and 8 feet below ground surface, while the first floor in the eastern section of the main building varies between 4 and zero feet below grade. The floor and walls of the first floor of the entire building is constructed of concrete, and serves as the main building's foundation. Structural components of the building include interior wood columns and steel I-beam floor joists. The second floor of the building consists of both concrete and wood; and the third floor is constructed of wood. Ancillary structures include a brick sewer pump station, a brick smoke-stack, a wooden loading dock building, a concrete block tank enclosure, a concrete block boiler house and a brick structure housing electrical switching equipment.

The Site began to be used for electrical component manufacturing in approximately 1938. Beginning in approximately the 1940's, dielectric fluid containing PCBs was used in capacitor manufacturing. Various solvents were also used in manufacturing operations. Operations and disposal practices during this period involving PCBs and solvents constituted a release and a disposal of hazardous substances that contributed to the contamination of soils, building materials and equipment, surface water runoff and groundwater at the Site. Use of PCBs in the

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manufacturing process ceased on or about October 1978. The building has been vacant since 2001.

AVX's predecessor, Aerovox Corporation, owned and operated an electronic component manufacturing business at the Site from 1938 to January 2, 1973. On June 4, 1973, Aerovox Corporation merged into AVX Ceramics Corporation, which changed its name to AVX Corporation. On or about January 2, 1973, the Site and the Aerovox name, among other assets, were purchased from Aerovox Corporation by a company named Belleville Industries, Inc., which later changed its name to Aerovox Industries, Inc. Aerovox Industries, Inc. operated the Site from January 1973 to October 1978. In October 1978, Aerovox, Inc. (Aerovox) became the owner and operator of the Site, but relocated and then filed for bankruptcy in 2001. As a result of the bankruptcy settlement, after a certain holding period, the Site became the property of 740 Belleville Avenue LLC. In October 2008, the City acquired a majority of the Site through a tax foreclosure action and subsequently took title to the remainder of the Site in September 2009.

4. Release or Threatened Release into the Environment of a Hazardous Substance or Pollutant or Contaminant

The facility building, soils beneath the building foundation, soils outside the building, and groundwater are contaminated with PCBs. VOCs, most notably trichloroethylene and chlorobenzene, have been found in groundwater. PCBs are also mixed into the asphalt parking lot.

On June 25 and 26, 1997, EPA inspectors took samples from one of the manufacturing areas, known as the impregnation tank room, consisting of shavings from the wood floor. Tests of the samples revealed very high PCB levels in the wood shavings, well above the TSCA regulatory level of 50 ppm, with one sample as high as 128,000 ppm. Aerovox's contractor conducted subsequent investigations and found the following:

Building materials (wood, brick, concrete): PCBs at concentrations of greater than 50 ppm were present in the wood floors, concrete floors, dust and dirt scrape samples; PCBs were detected in full core samples collected from the brick exterior walls and wood ceilings. Analytical results of wipe samples collected from non-porous building materials, appurtenances and equipment contained PCBs at concentrations greater than 10 ug/100cm²;

Soil samples: Beneath the building PCBs were present at concentrations up to 18,000 ppm and VOCs were detected between 0.7 ppm and 30 ppm; underneath the asphalt parking lot PCBs were detected at concentrations up to 2,900 ppm and VOCs were detected between 0.22ppm and 1.1 ppm;

Groundwater samples: PCBs were present at 36 ppb and VOCs were detected up to 5,000 ppb;

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Interior air samples: PCBs were detected at concentrations exceeding 0.001 mg/m³ inside the building.

In July 1998, EPA issued an Approval Memorandum for the performance of an EE/CA at the Site. Aerovox completed the EE/CA in August 1998. See Section I.A.1. above for details regarding the EE/CA.

In 2004-2005, EPA commissioned additional groundwater and stormwater monitoring at the Site. Evaluation of data estimated that a relatively low mass flux of 0.4 kg of PCBs per year enters the Harbor via groundwater and similarly 0.4 kg/year of PCBs enters the Harbor via stormwater. Stormwater monitoring showed continued releases of PCBs to the Acushnet River from the Site's drainage system.

During this same period EPA also performed PCB analysis of the top ½ inch of the asphalt parking lot and found PCBs in all but one of 14 samples ranging from 0.8 to 46 ppm. Fuel oil impacted Site soils, potentially contaminated with PCBs, had been used to manufacture the base course of the asphalt parking lot.

EPA conducts ambient air monitoring as part of the New Bedford Harbor Superfund Site cleanup. At the Aerovox Site, two locations are monitored, one at the eastern boundary of the Site near the river and one at the western boundary near Belleville Avenue. Results from the eastern boundary routinely show airborne PCBs that are the highest of any location monitored around the harbor. Results from the western location show significantly lower levels of airborne PCBs.

The building continues to deteriorate with time as explained more fully above; more recent inspections inside the building report that roof leaks have increased. Trespassing and vandalism of the fire suppression system's copper piping had been a recurring problem until the last few months when site security was increased. The City has installed temperature monitoring which is designed to notify the fire department in the event of fire. In addition, without on-going maintenance, the HAC cap will continue to deteriorate.

Elemental mercury was identified in the building (used as controls and switches within the mill), some of which had spilled onto the floor. Approximately 25 pounds of mercury were removed and disposed offsite in December 2007, and approximately 1,000 pounds of mercury and associated debris were removed and disposed offsite in February and March 2008. Additional mercury spills and releases will be investigated and addressed by AVX during its demolition activities.

Fire and fire suppression pose significant potential release threats to area workers and residents and to the harbor environment. There are two industrial facilities which abut the Site; one to the immediate north of the Aerovox building and one which is south of the Aerovox parking lot. Hundreds of employees work three shifts per day at these facilities. Directly across Belleville Avenue to the west is a densely populated residential neighborhood made up of double and triple-decker homes. If a fire were to erupt, building materials would emit airborne PCBs,

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asbestos and other hazardous materials as well as the potential for emission of dioxins and furans formed by PCB combustion. A large scale evacuation of the impacted neighborhoods would likely be required, depending on the size of the fire and weather conditions present.¹ Expanded offsite cleanup of PCBs and other residues could be required. In addition, fire suppression activities would likely produce contaminated surface water runoff that would discharge to the Acushnet River.

5. NPL Status

This Site is not listed, nor is it expected to be listed, on the NPL.

B. Other Actions to Date

1. Previous Actions

Pursuant to a 1982 Consent Order entered into by Aerovox and EPA, Aerovox (which was an operating facility at the time) conducted a site investigation, focusing on an unpaved area at the eastern end of the Site bordering the Acushnet River and an unpaved strip of land north of the manufacturing building. At the same time, Aerovox also entered into a similar Consent Agreement with the Massachusetts Department of Environmental Quality Engineering now named MassDEP. Results of the investigation indicated that PCBs were present in the soil at concentrations exceeding 50 ppm, and as high as 65,000 ppm, and also present within the shallow, perched groundwater at the Site.

Under the EPA and State Consent Orders, Aerovox capped the impacted soil areas with the HAC cap and installed a steel sheet pile cutoff wall to serve as a vertical barrier to groundwater and tidal flow into and out of the impacted soils. Construction was completed in June 1984.

In 1984, EPA and Aerovox entered into a Supplemental CERCLA Consent Order. As part of the agreement, Aerovox commenced a long-term monitoring and maintenance program, including compliance with reporting requirements outlined in the program and to take maintenance measures, as necessary, to maintain onsite containment and prevent the release of PCBs.

In 1988, Aerovox removed two 10,000 gallon No. 6 fuel oil storage tanks and one 250 gallon condensate collection tank from a bunker following a request by MassDEP after Aerovox reported a release of petroleum on the property. After removal of the tanks, soil borings and groundwater monitoring wells were installed to assess the extent of petroleum released in the vicinity of a former concrete oil bunker located south of the manufacturing building boiler room.

Upon another request by MassDEP in 1989, an additional assessment of soil and groundwater was conducted by Aerovox in this area. MassDEP required that a short-term measure be

¹ The Emergency Management Department of the City of New Bedford has prepared an Aerovox Evacuation Plan in the event of a facility fire that includes 500-foot, 1/4- mile and 1/2- mile evacuation zones. This plan, included in the administrative record, identifies all special needs facilities and special institutions (i.e., schools, child care facilities and assisted living facilities) within each of these zones.

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implemented to eliminate or significantly reduce the potential for further oil migration by removing source material from the vicinity of the bunker. Petroleum product and water from the bunker was removed; petroleum impacted soils were excavated and treated and recycled onsite into an asphalt base course for the parking lot; an oil-water separator was installed to control and recover floating petroleum product; and post construction monitoring of the oil-water separator system was performed. The work was completed in 1990.

2. Current Actions

In 2008, PCB-contaminated wall panels and carpeting in the western-most office annex portion of the building were removed by EPA/U.S. Army Corps of Engineers (Corps) contractors and placed elsewhere in the building to allow the remainder of the office annex to be demolished and disposed offsite as non-TSCA waste. In fall 2008, EPA/Corps contractors resealed the HAC cap after the shoreline area was used during mechanical dredging of Aerovox shoreline sediment as part of the New Bedford Harbor Superfund cleanup. The HAC cap area impacted by these operations was protected from truck traffic during the implementation of this work.

More recently, since early February 2009, 24-hour manned security has been provided by the City, with funding assistance provided by AVX.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

Beginning in the 1980's, the State issued various cleanup orders to prior property owners to address soil and groundwater contamination at the Site. See Section I.B1 above for details of these enforcement actions.

Under the bankruptcy settlement, the City was designated as first responder for problems at the Site during the time that Aerovox retained legal and record title to the Site. The City received \$250,000 on its administrative claim for the purpose of maintaining the fire suppression system and performing other property maintenance and security measures at the Site. Since that time, the City has provided Site security, electricity, fire suppression measures and purchased insurance for the vacant building. In January 2005 a Site Information and Preplan was prepared by the City's Fire Department and, within the last few months, the City, with financial assistance from AVX, has hired 24-hour guard service at the Site.

Also pursuant to the bankruptcy settlement, after a certain holding period, the Site became the property of 740 Belleville Avenue LLC, which was organized as a Massachusetts limited liability company for the purpose of facilitating the transfer of the property to a Brownfield's developer and whose members were the City and the New Bedford Redevelopment Authority. In October 2008, the City took possession of the majority of the Site after a judgment was issued in a tax lien case for the property; the City subsequently took title to the remainder of the property in September 2009.

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Since 2001, the City has targeted the Site for Brownfields redevelopment but efforts to attract a developer have been unsuccessful to date. In 2006, with the release of the SEE/CA, EPA entered into a Cooperative Agreement with the City in an effort to jump start Site cleanup activities and attract a potential developer. With the change in cleanup approach from onsite to offsite disposal, the Cooperative Agreement remains in place and the funds will be used by the City for offsite disposal of the building demolition debris and, if funds are remaining, for backfilling and post-removal site controls.

2. Potential for Continued State/Local Response

The City and MassDEP will continue to be involved with the Site; both are expected in the near future to enter into settlement agreements with AVX for cleanup activities at the Site. Once the NTCRA is complete, AVX, pursuant to the forthcoming settlement with the State, is expected to further evaluate the full nature and extent of contamination at the Site not addressed by this NTCRA or the prior removal actions, and implement further cleanup actions to address remaining soil and groundwater contamination. This work will be performed in cooperation with the City, under State oversight. Once the NTCRA and 21E cleanups have been completed, the Site is expected to enter into the operation, maintenance and monitoring phase (OMM) required under TSCA and expected to be required under 21E which the City is expected to perform using funds that will include the escrow account funds provided by AVX (see Section I).

As part of its settlement with AVX, the City will implement institutional controls in the form of a deed restriction to prevent future use of groundwater, required pursuant to TSCA and, upon completion of the 21E cleanup, an activity and use limitation (AUL) to ensure the integrity of the capped areas pursuant to 21E. To ensure future Site use is consistent with these cleanup actions, any future redevelopment of the Site, subsequent to the NTCRA and 21E cleanups, will be required to involve an LSP.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Based on Site conditions and information available on the hazardous substances present, the Site poses the following threats to public health, welfare, or the environment:

"Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants" [300.415(b)(2)(i)];
The property is bordered by a residential neighborhood to the west, two large industrial facilities to the north and south, and the Acushnet River to the east.

Contaminant migration during a fire, as a result of further deterioration of the roofs and other structural components of the buildings, or through unauthorized or unintentional removal of contaminated materials could potentially expose nearby human populations, animals, or the food chain to PCBs, VOCs and other breakdown products. In responding to a fire at the Site, firefighters may be exposed to various hazardous substances present in the buildings, including PCBs, asbestos, and potentially dioxins and furans formed by PCB combustion. In addition, if access to the buildings and its contents is not sufficiently restricted, this could result in exposure to humans from hazardous substances should trespassers come into contact with these materials or if these materials are intentionally or unintentionally removed from the Site.

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"Actual or potential contamination of drinking water supplies or sensitive ecosystems" [40 CFR 300.415(b)(2)(ii)];

There is potential that releases from within the buildings to an existing network of drain lines or to sub-slab soils could potentially affect groundwater or the Acushnet River. It is likely that unsealed cracks in the facility floors and sumps have been pathways for migration of the contamination into the groundwater or river. Site groundwater is contaminated at levels exceeding state standards for industrial/commercial areas (groundwater in this area is not a drinking water source). In addition, precipitation runoff from the highly contaminated buildings or water runoff from firefighting should the facility catch on fire could further contaminate stormwater and groundwater, and would discharge into the Harbor, causing recontamination issues to areas already dredged during Harbor remediation.

"Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release" [300.415(b)(2)(iii)];

Drums and containers of hazardous materials have been removed from the facility as part of the TCRA (see above). Only miscellaneous items such as small propane tanks, fire extinguishers and refrigerants remain.

"Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released" [300.415(b)(2)(v)];

Due to the deteriorating condition of the facility and leaks in the roof, the PCB-contamination present throughout the interior of the facility can be released to the environment through rainwater or snowmelt entering the buildings through these leaks, followed by contaminant migration through floor drains, cracks and sumps. Similarly, PCB-contamination on the exterior of the facility can be released to the environment through weather-related processes. In addition, friable asbestos and asbestos-laden dust within the building can be released through broken windows. Over the long term and absent routine maintenance, weather conditions and UV radiation could damage the HAC cap and contribute to further PCB contamination of groundwater.

"Threat of fire or explosion" [300.415(b)(2)(vi)]; and

There is a threat of fire or explosion at the Site for several reasons. At least two other vacant mills in the area have caught on fire in recent years. There are large volumes of combustible material (e.g. office paper, wooden furniture, wooden building materials, wooden pallets) that may ignite. The dilapidated condition of the building and potential for trespassers and vandals also increases the potential for fire. Since building materials throughout the facility are contaminated with PCBs, in a fire or explosion these PCBs, as well as potentially dioxins and furans caused by combustion, could be released and expose nearby human populations, animals, or the food chain. In responding to a fire, firefighters may be exposed to various hazardous substance present in the building, including PCBs, asbestos, and potentially dioxins and furans formed by PCB combustion.

"The availability of other appropriate federal or state response mechanisms to respond to the release" [300.415(b)(2)(vii)].

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EPA is the lead agency for this NTCRA, and has negotiated a settlement wherein a) AVX will demolish the facility, b) the City, using EPA funds through a Cooperative Agreement, will properly dispose the demolition debris offsite, and c) AVX will implement further characterization and cleanup under 21E. No other funds or response mechanisms are known to be available to respond to the release.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances at or from the Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, and the environment. Hazardous substances were disposed of and released at or from the Site as a result of historical manufacturing operations at the facility during the period from 1938 to 2001. Such substances include, without limitation, PCBs and VOCs such as chlorobenzene and trichloroethylene. PCBs have been detected in Site soil, air, building materials and equipment, surface water runoff, parking lot asphalt and groundwater. VOCs have been detected in Site soils and groundwater. PCBs are very stable compounds that can persist for years when released into the environment.

Based on data derived from animal experiments and human studies, EPA has concluded that human exposure to PCBs constitutes a health threat. EPA has classified PCBs as a B2, probable human carcinogen, under its weight of evidence classification system. PCBs above regulatory levels have been detected in virtually all interior building materials and equipment. Specifically, exposure pathways to PCBs at the Site after an indoor spill include inhalation, dermal exposure, and ingestion. PCBs spilled indoors may be distributed into other areas of a building in a number of ways, such as through ventilation equipment or ductwork or by tracking. Industrial equipment and other non-structural materials such as clothing also can become contaminated. Trespassers may thus be subject to dermal exposure during illegal entry into the plant, may be subject to oral exposure during smoking or eating, and may inadvertently track contamination outside of the building.

In addition, vacancy of the former manufacturing facility poses a significant fire threat (other vacant mill buildings in the area have caught on fire in recent years). Air emissions created by a fire and run off from fire suppression activities into the harbor pose threats to human health and the environment. In the event of a fire, firefighters and abutters may be exposed to various hazardous substances present in the building, including PCBs, asbestos, and potentially dioxins and furans formed by PCB combustion. Since Aerovox vacated the building, significant deterioration has occurred, including increased roof leaks and heavy water damage throughout the building. Trespassing and vandalism (and the potential for tracking contamination offsite) has been a recurring problem.

V. EXEMPTION FROM STATUTORY LIMITS

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This removal will require funding above \$2 million and will require more than one year to implement, thereby exceeding the statutory cost and time limits on Fund-financed removal actions established under Section §104(c) of CERCLA and Section 300.415(b)(5) of the NCP. The NTCRA is estimated to cost not more than \$24 million (in 2010 dollars) and take approximately 22 months to complete. A “consistency” exemption as explained below is invoked through this Action Memorandum to allow for the proposed removal action to exceed the \$2 million ceiling and the 12-month limit for Fund-financed removal actions. Note that a previous time-critical removal action was undertaken in 2004 using approximately \$290,000 of Aerovox bankruptcy funds: that action removed various drums and containers and other wastes abandoned at the Site and included general repair of the cap installed by Aerovox pursuant to the 1982 Order.

CERCLA §104(c) states that Fund-financed removal actions can exceed the \$2 million and 12-month statutory limits if conditions meet either the “emergency exemption” criteria or the “consistency exemption” criteria. The consistency exemption requires that the proposed removal be appropriate and consistent with the remedial action to be taken. As described below, conditions and proposed actions at the Site meet the criteria for a consistency exemption.

A. Appropriateness

EPA OSWER directive 9360.0-12A, “Final Guidance on Implementation of the “Consistency” Exemption to the Statutory Limits on Removal Actions,” June 12, 1989, states that an action is appropriate if the activity is necessary for any *one* of the following reasons:

1. To avoid a foreseeable threat;
2. To prevent further migration of contaminants;
3. To use alternatives to land disposal; or,
4. To comply with the offsite policy.

The NTCRA described herein meets criteria one and two identified above. The proposed removal action permanently avoids the foreseeable threat of fire and subsequent release of PCBs (and the potential breakdown products of dioxins and furans) and other contaminants to the surrounding urban neighborhoods posed by the manufacturing facility and its contents. The proposed NTCRA also prevents further migration of contaminants via stormwater to the harbor and exposure to contaminated soils and elevated airborne PCBs due to the contaminated building materials. In addition, by addressing the building and capping the Site at this time, the removal action will reduce the scope of the 21E cleanup. The state cleanup will also address the need for permanent groundwater source control.

The proposed removal action is therefore appropriate and necessary.

B. Consistent With the Remedial Action

The proposed NTCRA is consistent with EPA’s remedial action at the abutting New Bedford Harbor Superfund Site, since it serves to minimize further releases of PCBs from the Aerovox

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Site to the harbor as a result of surface water runoff and groundwater flow, and since it eliminates potential releases of PCBs to the harbor in the event of a mill fire (e.g., from fire fighting water runoff and PCB-contaminated soot deposition). Two other vacant mills in the area have caught fire in recent years.

The proposed NTCRA is also consistent with the anticipated additional cleanup actions to be performed pursuant to 21E under the direction of an LSP. (No additional EPA remedial action beyond the NTCRA is anticipated.) Since the highly contaminated and deteriorating building would need to be demolished under a state cleanup action, the proposed NTCRA is consistent in the broadest sense with the remedial action for the Site. Demolition of the building also provides AVX the ability to conduct a full site characterization (e.g., including underneath the building foundation) pursuant to 21E. Once the NTCRA has been completed, AVX pursuant to the ACO between AVX and MassDEP, will further evaluate the full nature and extent of contamination at the Site not addressed by the NTCRA and implement further cleanup actions to address remaining soil and groundwater contamination. All 21E activities will be conducted under the direction of an LSP, with oversight by MassDEP.

As part of its settlement with AVX, the City will implement institutional controls in the form of a deed restriction to prevent future use of groundwater, required pursuant to TSCA, and an AUL to ensure the integrity of the capped areas pursuant to 21E. Moreover, AVX will fund an escrow account that will finance long-term operation and maintenance of the cap and a groundwater containment system as well as groundwater monitoring activities that are required pursuant to TSCA.

Finally, the response action authorized by this Action Memorandum, along with the 21E cleanup, will result in a complete source control and management of migration remedy for the Aerovox Site, effectively controlling or eliminating any further source of PCBs or potential VOCs from this facility over the long term to the New Bedford Harbor sediments and waters.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Removal Action Alternatives

Virtually all building samples indicate that building materials are contaminated at or above TSCA-regulated levels for PCBs. While developing the 1998 EE/CA, Aerovox commissioned a Preliminary Building Cleanup Alternatives Evaluation, which is now part of the Administrative Record for this Site. In that evaluation Aerovox looked at two alternatives that might have allowed continued use rather than demolition of the existing building. Alternative A consisted of removal of TSCA-regulated materials (\$13,200,000); Alternative B consisted of encapsulation of the TSCA-regulated materials (\$4,500,000) but both included a number of unrealistic major assumptions. Both were ultimately rejected in favor of the building demolition alternatives that were evaluated in the EE/CA and SEE/CA. Both alternatives involved interior surface cleaning techniques, and a surface cleaning pilot study of non-porous surfaces was conducted as part of the evaluation. Results of that pilot study indicated that a one time washing process was NOT

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effective in reaching the safe regulatory criteria of 10 ug/100 cm² PCB concentrations for non-porous surfaces. Because a) cost estimates were based on the assumption that repeated rounds of verification sampling and recleaning of interior surfaces would NOT be required, b) the pilot study showed that cleanup levels would NOT be reached and c) it was unknown how many washings of the 450,000 square foot building would be needed (or that all non-porous surfaces could ever reach safe levels), neither alternative was carried forward into the EE/CA.

Therefore, the 1998 EE/CA evaluated three alternatives for demolition and capping of the Aerovox Site, with the underlying assumption for all alternatives that the land use would remain industrial/commercial. The alternatives differ in the way the first floor's concrete walls and floor (i.e., the main building's foundation, portions of which are PCB-contaminated) would be dealt with.

Alternative 1: Building Demolition - the concrete foundation would be left in place.

Alternative 2: Building Demolition - the more highly contaminated western portion of the concrete foundation would be removed and disposed offsite.

Alternative 3: Building Demolition – the entire concrete foundation would be removed and disposed off-site.

All three alternatives include the following basic components:

- asbestos and other hazardous materials inside the building would be inventoried and removed prior to demolition;
- the building would be demolished in compliance with health and safety and air monitoring plans;
- demolished waste above TSCA thresholds would be disposed at a licensed offsite TSCA facility;
- demolished waste below TSCA thresholds would be disposed both on- and offsite;
- highly PCB-contaminated soils below the basement's concrete floor and in soil outside of the building would remain in place; and
- the entire 10.3 acre Site would be covered with an impermeable cap.

The 1998 EE/CA recommended that the first alternative be implemented, concluding that it was equally effective and implementable as the other two alternatives, yet would cost significantly less. As mentioned above, the EE/CA was issued for public comment, but no comments were received. The subsequent bankruptcy of Aerovox, the performing party at the time, caused a significant delay in executing the proposed EE/CA cleanup.

As a result, in the 2006 SEE/CA, EPA updated the EE/CA to reflect the current status of the Site by modifying the objectives to minimize releases of PCBs via stormwater, groundwater and air through demolition and capping, to coordinate the NTCRA with future reuse plans and to assist in establishing post-removal site controls. In addition, the SEE/CA included a draft TSCA risk-based determination that found the recommended alternative did not pose an unreasonable risk to

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human health or the environment as long as certain conditions were met, including the need for institutional controls that prohibit any use or contact with groundwater and which prohibit land use activities that would adversely affect the site cover.

In addition, the SEE/CA evaluated two additional alternatives for the Site - New Alternative 1 and New Alternative 2, as explained below:

New Alternative 1: Building Demolition with Disposal of All Demolition Waste Onsite

Similar to the first three alternatives, the basic components are the same except that all of the demolition waste, including that above the TSCA regulatory thresholds would be disposed onsite within the building footprint. During the demolition and disposal process, the waste would be segregated and/or processed for size reduction and ease of handling prior to final disposition in the basement. The concrete foundation would be left in place, similar to the 1998 EE/CA Alternative 1. Once the demolition waste is placed inside the basement, all areas of the Site with soil PCB levels greater than 2 ppm would be covered with a protective cap.

New Alternative 2: Building Demolition with Disposal of All Demolition Waste OffSite (the selected alternative)

This is the same as New Alternative 1 except that under this alternative (now EPA's selected alternative) all demolition waste would be disposed offsite at properly licensed facilities. Unless certain waste streams can be shown to be non-TSCA, the demolition waste would be disposed at licensed TSCA landfills.

The demolition and segregation/processing and environmental standards would be the same as for New Alternative 1; similarly, the first floor's concrete floor and walls would remain in place, and all areas of the Site with soil PCB levels greater than 2 ppm would be covered with a protective cap.

Recognizing the lapse of time and the changed Site circumstances, EPA issued the SEE/CA for public comment. Of the sixteen comments received, fifteen did not support the initial remedy selected by EPA (New Alternative 1) and instead supported an alternative that did not leave contaminated building debris buried onsite. Based on the negative public comment received, this Action Memorandum includes offsite disposal of contaminated building debris.

Comparison of Alternatives

As required under CERCLA and the NCP, during the EE/CA and SEE/CA process, all of the alternatives were evaluated independently based upon cost, effectiveness, and implementability. Cost was used to assess options of similar effectiveness and implementability. Effectiveness was based upon the ability of the alternative to meet the removal action objectives. The effectiveness evaluation also involved the assessment of federal and state applicable or relevant and appropriate requirements (ARARs). Implementability involved the assessment of technical

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feasibility, availability, and administrative feasibility. After comparing these alternatives and after considering public comments received on the SEE/CA, EPA has selected New Alternative 2 as presented below as the best balance of human health, environmental protection and public acceptance considering cost, effectiveness, and implementability of each of the alternatives. Immediately below is a comparison of the five alternatives based on effectiveness, implementability, and cost. Please see the 1998 EE/CA and the 2006 SEE/CA for a more detailed presentation of the cost and components of each alternative.

Effectiveness

Since all five alternatives include the demolition of the mill facility and capping of soils with PCB levels above 2 ppm, all alternatives are considered effective at meeting the removal action goals. However, since New Alternative 2 removes all demolition material from the site, this alternative is considered the most effective and protective of human health and the environment and provides for easier redevelopment of the Site.

All five alternatives would require post removal site controls (e.g., cap maintenance and institutional controls) to maintain a protective response action.

Implementability

Technical Feasibility – All alternatives are technically feasible, and have been implemented at other similar sites around the country. Removal of the increased volumes of concrete foundation pursuant to Alternatives 2 and 3 would involve additional technical issues and the potential for increased emissions from the concrete cutting and processing that would be required.

Also, for New Alternative #1, the inherent uncertainty of the final volume of processed demolition material creates some uncertainty regarding whether the disposal volume offered by the basement would be sufficient. If the basement volume proved to be insufficient, a slight mounding of the waste might be required in order to implement this alternative.

Administrative feasibility – All alternatives are considered administratively feasible with respect to the need for disposal facility approvals, access issues and implementing institutional controls since the City is the current Site owner. All alternatives would require exemptions from statutory limits for cost and duration for removal actions.

Cost

The updated capital cost estimates from the SEE/CA for all five alternatives considered are summarized below. **Costs listed are in 2007 dollars.** Also see the further discussion on cost in section VI.B.2. Again, none of the funding for this NTCRA will be from the Regional removal allowance. Rather it will be funded by a mix of sources including a PRP and a Cooperative Agreement between EPA and the City (with funds from the Aero vox bankruptcy and funds made available through an exchange of appropriated annual funds for the New Bedford Harbor Site for Harbor settlement funds held in a court registry account.

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	EE/CA Alt. 1	EE/CA Alt. 2	EE/CA Alt. 3	SEE/CA New Alt. 1	SEE/CA New Alt. 2
Capital cost	\$15.0 million	\$16.4 million	\$18.1 million	\$7.9 million	\$14.5 million

B. Proposed Action

The proposed action for this NTCRA is to achieve a controlled demolition of the PCB-contaminated vacant mill building, leaving the concrete foundation in place, with offsite disposal of all demolition materials (New Alternative 2). This response action also includes capping of all site soils above 2 ppm PCBs. Upon completion of all NTCRA work, there will be an efficient transition to the state cleanup program in accordance with the ACO between AVX and MassDEP, under the direction of a Massachusetts LSP, and with oversight by MassDEP, that will include capping of impacted soils as required by 21E and that will address contaminated groundwater.

This NTCRA entails the following work elements:

- Comply with air and water quality performance standards;
- Utility decommissioning;
- Hazardous and regulated material removal and offsite disposal;
- Other interior equipment and material removal;
- Demolition of building;
- Debris processing and loading for offsite disposal;
- Offsite disposal;
- Basement backfilling;
- Filling of subsurface features;
- Placement of a TSCA compliant asphalt cap in areas exceeding 2 ppm PCBs in soil (including soil covered by the current asphalt parking lot);
- TSCA groundwater monitoring;
- Post-removal site control;

In this instance, the NTCRA is to be implemented in a mixed-work approach, wherein a PRP will perform all demolition and capping activities, and the City (using EPA funds in a Cooperative Agreement) will perform all transportation and disposal activities and, with any remaining funds, provide backfill and perform post-removal site controls. The PRP will also fund the City's performance of groundwater monitoring and any remaining post-removal site controls not funded by the Cooperative Agreement.

1. Removal Action Objectives

Based on the conditions described above, the overall removal action goals are to minimize impacts to human health and the environment caused by the presence of high levels of PCBs in the vacated mill facility and in surrounding Site soils. These conditions present a significant risk

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that will be addressed under this NTCRA, while long-term remedial actions for the Site will be evaluated and implemented under the 21E program.

The following performance standards and Removal Action Objectives have been developed with respect to disposition of the building and its contents. The Removal Action Objectives were developed in consideration of the potential human health and ecological risks associated with exposure to these media.

a. Meet Performance Criteria during Removal Action

Performance standards for air and water quality shall be complied with at all times during the performance of the work. In the event of an exceedance, the work shall immediately stop and a proposed corrective action plan shall be submitted. Work shall only resume with EPA's approval and upon implementation of the corrective action plan.

i. Air Quality

Work shall be designed and implemented in a manner that minimizes airborne PCBs, particulates, asbestos, silica, mercury and lead to the maximum degree possible. The point of compliance for air quality performance standards shall be the Site boundary for the northern, southern and eastern boundaries. The point of compliance for the western boundary shall be on the western side of Belleville Avenue, due west of the Aerovox property. At no time shall the levels exceed the following standards:

- Airborne particulates (PM₁₀): not to exceed 100 $\mu\text{g}/\text{m}^3$ (10 hour Time Weighted Average)
- Airborne PCBs:
 - at the northern, southern and eastern points of compliance: not to exceed 10 $\mu\text{g}/\text{m}^3$
 - at the western point of compliance: station-specific average not to exceed 0.25 $\mu\text{g}/\text{m}^3$
- Airborne asbestos: not to exceed 0.1 fiber/cubic centimeter
- Airborne silica: not to exceed 25 $\mu\text{g}/\text{m}^3$
- Airborne mercury (inorganic): not to exceed 50 $\mu\text{g}/\text{m}^3$
- Lead: not to exceed 50 $\mu\text{g}/\text{m}^3$

ii. Water Quality

Stormwater

Contaminant migration in stormwater during the work shall be designed to meet the stormwater performance standards listed below. An active stormwater collection program shall be installed prior to implementation of the work. Best management practices shall be employed during the work to minimize the potential for PCB contamination of stormwater.

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Best management practices shall include, but not be limited to:

- Placement of hay bales or similar erosion control devices and oil booms around all catch basins, stockpiles and debris processing areas;
- Strategic placement of debris processing facilities to minimize travel distance to and from the building unless such processing is performed inside the existing building; and
- Whenever possible, avoiding processed debris stockpiling by loading the transportation and disposal vehicles directly from the debris processing area.

The point of compliance for collected stormwater runoff shall be the end of the discharge pipe if direct discharge to the Acushnet River is selected. PCB concentrations in stormwater runoff shall not exceed the maximum PCB level of 13 $\mu\text{g/l}$ as measured at any one of the stormwater discharge outfalls. Collected stormwater runoff may also be discharged to the City sewer located on Belleville Avenue, provided that the maximum PCB concentration is less than or equal to 5 $\mu\text{g/l}$ and a discharge permit from the City is secured and is fully complied with, including the required monitoring frequency.

Once a stormwater PCB level exceeding 13 $\mu\text{g/l}$ has been documented, the stormwater management program shall continue to be operated for all non-compliant outfalls until compliance is documented and EPA approves discontinuing the active stormwater collection program. Compliance at the outfalls shall be documented by achieving the 13 $\mu\text{g/l}$ discharge standard during a significant rain event (<0.25 inches) or during a lesser rain event with EPA's prior approval.

Dust Suppression Water

Prior to implementation of dust suppression activities, runoff control measures shall be implemented to prevent offsite migration of dust suppression water. Runoff control measures may be part of or in addition to the stormwater control measures described above. All dust suppression water runoff exterior to the building footprint will be collected, treated if necessary, and discharged to the Acushnet River or the City sewer on Belleville Avenue provided that the PCB concentration is less than or equal to 13 $\mu\text{g/l}$ and 5 $\mu\text{g/l}$ respectively (a discharge permit from the City shall be secured for City sewer discharge).

T&D Vehicle Decontamination Water

All T&D vehicle decontamination water will be collected, treated if necessary, and discharged to the Acushnet River or the City sewer on Belleville Avenue provided that the PCB concentration is less than or equal to 13 $\mu\text{g/l}$ and 5 $\mu\text{g/l}$ respectively (a discharge permit from the City shall be secured for City sewer discharge).

b. Safely Demolish Building

The PCB-contaminated building shall be safely demolished in a manner, to the extent practicable, that is both in compliance with ARARs (applicable or relevant and appropriate

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regulations) and cost-effective, and which occurs in a timely manner prior to excessive building deterioration or a potential mill fire.

c. Prevent Direct Contact with Site Soils

Direct contact with Site soils containing PCBs at concentrations greater than 2 ppm will be prevented through the installation of a protective cap.

Once the buildings have been demolished and the building footprint backfilled with clean soil, the building footprint will be covered with an asphalt cap within 12 months of completing the building demolition.

Cracks, depressions, holes or other damage to the existing HAC cap will be repaired using material similar to the existing HAC material.

Any other portion of the Site where soil or asphalt PCB levels exceed 2 ppm (at surface or depth) will be covered with an asphalt cap that includes, at a minimum, the following:

- placement of a visual barrier layer (e.g., warning tape, orange snow fence) on existing (or reconditioned) grade;
- placement of a 2-inch thick asphalt binder coarse; and
- placement of a 1-inch thick asphalt wearing coarse.

In areas where the existing ground conditions are unsuitable to support a new asphalt cap, the existing ground surface will be reconditioned or engineered as appropriate to support such a cap.

For the portions of Hadley and Graham Streets that are part of the Site, the existing asphalt surface shall suffice in lieu of the above asphalt cap requirements, provided that an EPA-approved representative sampling program demonstrates that the PCB levels in these existing surfaces are below 2 ppm.

All capped areas shall be maintained in accordance with an EPA-approved monitoring and maintenance plan until a 21E-based monitoring and maintenance program, consistent with the TSCA Determination (Appendix C to this Action Memorandum), is in place.

d. Minimize Future Releases

Demolition of the building and placement of a protective cap at the Site will minimize future releases of PCBs via stormwater and groundwater discharges to New Bedford Harbor and will minimize future emissions of airborne PCBs from the Site.

e. Coordinate Activities for Future Redevelopment of the Site

To the extent practicable, building demolition and site capping will be performed so that these activities do not interfere with future commercial or industrial redevelopment of the Site.

f. Establish Institutional Controls

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As part of its settlement with AVX, the City will implement institutional controls in the form of a deed restriction to prevent future use of groundwater, required pursuant to TSCA, and, upon completion of the 21E cleanup, an AUL to ensure the integrity of the capped areas pursuant to 21E. To ensure future Site use is consistent with these cleanup actions, any future redevelopment of the Site, subsequent to the NTCRA and 21E cleanups, will be required to involve an LSP.

2. Proposed action description

The removal action includes demolition of the manufacturing building, leaving the concrete foundation in place; disposal of all demolition waste offsite; filling the basement to grade with clean fill; capping the Site where PCB concentrations in soil are equal to or greater than 2 ppm; and performing post-removal site controls (including cap monitoring and maintenance and groundwater monitoring). See Section VI.B above for additional information on the proposed action.

Effectiveness

This alternative would eliminate the threat of fire and its attendant consequences. This alternative also provides the greatest protection in that the risk from direct contact, from a release, or from exposure to the building and its contents would be eliminated since hazardous substances on or in the facility would be removed permanently from the Site and contaminated site soils would be capped. During the performance of this work, all short-term risks posed to the community, onsite workers, or the environment would be fully addressed through stringent air monitoring, stormwater monitoring and through other engineering controls (such as dust suppression and erosion control measures). Protection of workers conducting removal action activities would include the use of engineering controls, personal protective equipment, worker and area air monitoring, and compliance with a site-specific health and safety plan.

Ability to Achieve Removal Objectives – This alternative would fully meet all of the Removal Action Objectives. The threats of release and direct exposure would be eliminated by removing contaminated materials and building materials for offsite disposal and capping site soils. New Alternative 2 would effectively contribute to the additional site characterization and cleanup to be performed under 21E.

Ability to Achieve ARARs – This alternative would attain ARARs to the extent practicable.

Implementability

Technically feasibility – This alternative is technically feasible, and has been performed on other similar sites. This work is currently estimated to take approximately 22 months from the effective date of this Action Memorandum to complete, more than the statutory one-year limit for Fund-financed removal actions.

Availability – Equipment, personnel, transportation and offsite disposal services and laboratory testing capacity are available to complete this alternative.

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Administrative Feasibility – This alternative is considered administratively feasible, in that no permits will be required for onsite work (although AVX has agreed to secure a demolition permit), no easements or rights-of-way will be required, nor are impacts to adjoining properties considered likely. The City has also provided access to the Site to all parties involved with the work. The cost of this alternative, however, exceeds the statutory limit of \$2,000,000 for a Fund-financed removal action. As noted above, the duration of this alternative also exceeds the statutory time limit for a Fund-financed removal action. However, as provided above, the “consistency” exemption from the statutory limits has been satisfied. The technical scope of the removal action would be “appropriate and consistent with the remedial action to be taken” (as defined in the *Final Guidance on Implementation of the “Consistency” Exemption to the Statutory Limits on Removal Actions* (OSWER Directive 9360.0-12A, June 1989), as outlined above.

Cost

The cost for New Alternative 2 was estimated to be \$14.5 million in the 2006 SEE/CA, in 2007 dollars. Consistent with EPA guidance, cost estimates at the feasibility study stage (which the SEE/CA represents) are considered accurate within a range of 50% above and 30% below the actual estimated value. The upper end of the cost range for New Alternative 2, when converted to 2010 dollars (assuming 3.5% escalation per year due to inflation)², is therefore estimated to be approximately \$24.1 million. Given the uncertainties regarding the total tonnage of the large amount of equipment and materials left inside the building when it was vacated, EPA believes the final cost of the NTCRA could be closer to this upper end of the estimate.

3. Community relations

In advance of and during performance of this NTCRA, EPA will continue its active outreach and information campaign to keep residents, local citizen groups and abutters well informed of the NTCRA activities. Public meetings will be held as necessary during the NTCRA work. See the Community Relations Plan attached as Appendix B to this Action Memorandum.

The City and State fully support EPA’s decision to pursue New Alternative #2 for this NTCRA.

4. Contribution to remedial performance

Contribution to the efficient performance of remedial activities

Under Section 104(a)(2) of CERCLA and Section 300.415(d) of the NCP, removal activities shall, to the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action with respect to the release concerned. See EPA’s OSWER Directive 9360.0-13, “Guidance on Implementation of the ‘Contribute to Remedial Performance’ Provision.” This provision was meant to avoid repetitive removal actions that do not take into account their impact on the performance of subsequent remedial actions and to allow for more

² A 3.5% escalation factor was used in order to create a conservative cost estimate for New Alternative 2 and provide an upper bound on the estimated cost range.

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permanent tasks to be completed under removal authorities. 53 Federal Register 51409-51410 (December 21, 1988). Together, Sections 104(a)(2) and 104(c) ("consistency" exemption) are intended to promote and enhance efficiency and continuity.

This removal action will contribute to the efficient performance of the long term cleanup action to be conducted at the Site under 21E by eliminating the potential for further release of hazardous substances found on or in the facility buildings at the Site. The NTCRA will also facilitate soil borings underneath the concrete foundation needed for the 21E cleanup as it will be easier to mobilize drilling rigs with the buildings demolished. Demolition will also be required under any long-term cleanup plan due to the deteriorating condition of the buildings and the potential for collapse of the buildings due to disrepair or fire. The proposed NTCRA therefore contributes to the efficient performance of the long term remedial work expected to take place, for this Site, under 21E.

In addition, while the Aerovox Site is not part of the New Bedford Harbor Site, its location abutting the Harbor and its historic connection to the contamination in the Harbor heighten the importance that the NTCRA action be consistent with the remedial action underway at the Harbor. This NTCRA action, combined with the 21E cleanup will ensure long-term source control of PCB discharges from the Aerovox Site via stormwater or groundwater to the New Bedford Harbor sediment and waters.

5. Description of alternative technologies considered

As discussed above in Section VI.A., Aerovox commissioned a Preliminary Building Cleanup Alternatives Evaluation to determine if the building could be decontaminated. This evaluation determined that it was unrealistic to expect that the building could be decontaminated.

In addition, EPA commissioned an evaluation of alternative methods and decontamination approaches to reduce the PCB contamination of the building materials to be disposed. This evaluation concluded that certain debris materials (e.g., granite window sills), but not the majority of materials, have the potential to be disposed as non-TSCA waste. The T&D contractor will be required to use these decontamination approaches to the extent they can be used cost-effectively during offsite disposal of the demolition debris.

6. Applicable or Relevant and Appropriate Requirements (ARARs)

Pursuant to 40 CFR 300.415(j), removal actions shall, to the extent practicable considering the exigencies of the situation, attain ARARs. A comprehensive list of ARARs that will be met to the extent practicable during the performance of this NTCRA, including state ARARs, is attached as Table 1. MassDEP had been informed of the revised removal action and, in February 2009, reviewed the ARARs in the August 1998 EE/CA and the April 2006 SEE/CA. As a result, MassDEP has clarified certain ARARs and identified some additional guidance documents that it believes should be included in the ARARs list. Table 1 reflects the final universe of ARARs from the potential ARARs set out in Tables 13 and 14 of the EE/CA, Table 2 of the SEE/CA and those identified by the State.

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Also attached as Appendix C is the final TSCA Determination issued in accordance with 40 CFR 761.61(c) of TSCA which finds that the NTCRA will not pose an unreasonable risk of injury to health or the environment as long as the conditions set out in the Determination are met. These conditions require that all performance standards be met during demolition, processing and capping activities, that a long-term operation, monitoring and maintenance program be implemented and that institutional controls be imposed that prohibit any use or contact with groundwater and prohibit land use activities that would adversely affect the site cover or containment barrier.

The list below reflects the revised ARARs resulting from the changes made to the recommended alternative in the SEE/CA based on public comments received by EPA.

TSCA: 49 CFR 761.61(a) which includes prescriptive cleanup standards for porous, non-porous and bulk remediation waste has been deleted since this removal action is being conducted under the risk based cleanup process in 40 CFR 761.61(c). If material is being cleaned for recycling, reuse or smelting purposes, the decontamination standards in 40 CFR 761.79 will apply.

Asbestos: The requirements set out in 40 CFR 763, Appendix D to Subpart E relating to asbestos containing materials in schools were included in the SEE/CA as applicable to offsite disposal or onsite landfilling of asbestos. The option for onsite landfilling of asbestos has been eliminated in this Action Memorandum; therefore, the provisions regulating onsite landfilling no longer apply. In addition, because these regulations directly apply to schools, they are not applicable but rather relevant and appropriate since handling of asbestos, whether from a school or this facility, is either the same or similar. Asbestos will be properly wetted during loading into leak-tight containers in accordance with the requirements set out in 40 CFR 763, Appendix D to Subpart E.

Hazardous Waste: MassDEP asked that 310 CMR 30.305, 30.310 and 30.320 of the Massachusetts Hazardous Waste Regulations be included as ARARs. Originally, the 1998 EE/CA included certain substantive provisions of these regulations. However, they were subsequently eliminated in the SEE/CA based on the exemption provided in 310 CMR 30.105 for PCB waste that is regulated pursuant to TSCA³. MassDEP correctly points out that in addition to PCB waste, other hazardous or listed waste or potentially regulated recyclable material will likely be generated during site preparation and building demolition. It is true that transportation and disposal of these materials would be governed by 310 CMR 30.305, 30.310 and 30.320; however, ARARs only apply to activities conducted onsite. Therefore, EPA is not including them in Table 1; instead, EPA expects that those parts of the response action involving offsite disposal activities will comply with these and any other laws that apply to actions occurring offsite.

Acknowledging the State's concern that waste other than adequately regulated PCB waste will be generated during site preparation and building demolition, EPA is adding back the substantive requirements of Massachusetts Hazardous Waste Regulations 310 CMR 30.100 which establish standards for the identification and listing of hazardous waste including 310 CMR 30.125 as it applies to mercury and mercury-containing equipment onsite, 310 CMR 30.680 governing the use and management of containers as it applies to the containerization of mercury or other hazardous waste encountered onsite, and 310 CMR 30.1044 which establishes standards for

³ EPA acknowledges that some of the demolition waste may be listed waste under MA02 and would not be exempt from the Massachusetts Hazardous Waste regulations.

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management of universal waste, including batteries, thermostats, mercury-containing devices and mercury containing lamps.

Finally, for clarification, EPA is eliminating the requirements for closure and post closure care of a landfill or cell (310 CMR 30.633, 30.660-669) since all demolition material will be disposed of offsite, a TSCA-compliant cap will be installed onsite wherever PCB concentrations in soil equal or exceed 2 ppm, and a 21E action to address remaining contamination left onsite will directly follow this NTCRA. Post-removal site controls consisting of long-term monitoring of the cap, containment barrier and groundwater and institutional controls consistent with the TSCA Determination will also be implemented at the Site.

Massachusetts Contingency Plan: MassDEP had requested that the provisions of 310 CMR 40.0996(4) and (5), which govern capping requirements where soil remaining onsite under a protective cover may exceed the MCP Upper Concentration Limits (UCL) for certain contaminants, be considered as ARARs. However, MassDEP also noted in its request that these requirements would not be relevant if the NTCRA is followed by further cleanup under 21E and the MCP. Because that is the case, EPA will not evaluate these requirements as ARARs. (See further discussion concerning MCP requirements below.)

MassDEP also requested that 310 CMR 40.0017, which sets forth administrative requirements for environmental sample collection and analyses, and 310 CMR 40.0191(2), which describes criteria for response action performance standards, be considered as ARARs. Several guidance documents concerning environmental sampling were also identified. As the State noted, these regulations and policies will control the subsequent 21E cleanup after the removal is completed. Should any data collected during the removal action be used to support the MCP response action, risk characterization and/or Site closure under the MCP, then these regulations and policies would apply. For informational purposes, these guidance documents have been included in Table 1 for consideration with a notation to also refer to the specific statutory citations.

MassDEP, pursuant to 310 CMR 40.0110, considers response actions at a disposal site to be adequately regulated for the purposes of complying with the MCP if the site is regulated by, among other things, another government agency. In particular, MassDEP considers a site adequately regulated if the site is subject to a CERCLA response action (310 CMR 40.0111). Because this removal is conducted under CERCLA, EPA will not consider these regulations of the MCP as ARARs. Similarly, EPA is deleting the reference to the MCP in Table 13 of the EE/CA which had cited the Method 1 soil and groundwater cleanup standards. Groundwater is beyond the scope of this NTCRA and will be addressed as part of the 21E action that follows the NTCRA cleanup. In accordance with the final TSCA Determination attached as Appendix C any soil remaining onsite with PCB concentrations of 2 ppm or above will be covered with a TSCA compliant cover and maintained in accordance with the TSCA Determination.

Again, EPA notes that a 21E cleanup will occur directly after the removal action is completed. Inasmuch as that action will be governed by the MCP, EPA recommends that any portion of the CERCLA action that will be carried forward into the 21E action, including sampling activities, be conducted in accordance with the MCP.

Solid Waste Regulations: MassDEP also identified the now promulgated 310 CMR 19.017, governing the disposal of certain identified solid waste streams as an ARAR and requested that MassDEP's Guide to Regulations for Using or Processing Asphalt, Brick and Concrete Rubble be included as a guidance document. While EPA believes that a very high percentage of the waste stream resulting from the demolition will be TSCA waste not subject to 310 CMR 19.017,

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the SEE/CA included 310 CMR 19.017 as a “to be considered” (TBC) since portions of the regulation were not yet effective. The entire regulation is now effective and applies to all offsite transportation and disposal activities. Consistent with the paragraph above concerning offsite disposal of hazardous waste, only regulations governing onsite actions are ARARs; EPA expects that any part of the response action occurring offsite will comply with all laws, including this regulation. EPA understands that coordination with MassDEP would be required for disposal of waste ban material that does not exceed levels requiring disposal at a TSCA or hazardous waste landfill, but still remains contaminated above recycling or reuse levels for compliance with this regulation.

Clean Water Act: The substantive requirements of Section 402 (NPDES) and its implementing regulations (40 CFR 122-125, 131) which regulate the discharge of collected stormwater, dust suppression water and decontamination water that may be discharged to the Harbor, and of 40 CFR 122.4(i) which can be interpreted to prohibit any discharge to a degraded water body will be met to the extent practicable considering the urgency of the situation and the scope of the removal action. If discharge to the Harbor occurs, concentrations of contaminants will be treated so as not to exceed 13 ug/l, which is recent background levels detected in site stormwater runoff. The discharge of dust suppression and decontamination water is only temporary and it is preferable to keep this discharge in a class SB waterway rather than an SA waterway which is the discharge area for the City POTW. Upon completion of the NTCRA, PCBs in site stormwater runoff will likely be below detection levels or greatly reduced from current levels.

Wetlands: No wetlands have been identified at the Site therefore, the Wetlands Protection – Executive Order 1190 and its associated Appendix to Part 6, initially identified in the EE/CA as a potential ARAR, is eliminated as an ARAR. It should be noted that the State wetland regulations encompass other resource areas and, except as otherwise noted below, those ARARs have been retained.

Resource Areas: The actions to be taken to comply with the regulations protecting resource areas (310 CMR 10.00) have been clarified. Section 10.25 (Land Under the Ocean) is eliminated since the Site is not located under the ocean nor is it located below mean low water; 310 CMR 10.34 (Land Containing Shellfish) is eliminated because this Site is not located on land under the ocean, in a tidal flat, rocky intertidal shore, a salt marsh or under a salt pond; 310 CMR 10.35 (Banks of or Land Under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run) is eliminated since the Site is not located within these areas.

7. Project schedule

The NTCRA is estimated to be complete within approximately 22 months from the effective date of this Action Memorandum.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

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In the absence of the removal action described herein, conditions at the Site can be expected to remain unaddressed, and threats associated with the presence of the contaminated facility, the contaminated equipment and materials contained therein and contaminated site soils will continue to pose a threat of release. In addition, the threat of a mill fire is expected to increase as the vacant mill facility continues to deteriorate; as mentioned above two other vacant mills in the area have caught on fire in recent years.

VIII. OUTSTANDING POLICY ISSUES

There have been no outstanding policy issues identified to date.

IX. ENFORCEMENT

As described above, EPA, AVX, MassDEP and the City have agreed to achieve a mixed-work type approach to the NTCRA, wherein AVX will demolish the building and the City (using EPA funds through a Cooperative Agreement) will perform the transportation and offsite disposal work. Also, as discussed above, upon completion of the NTCRA, AVX, with MassDEP oversight will further characterize and cleanup the Site pursuant to 21E. The City, with funding provided by AVX and potentially the Cooperative Agreement (if unused funds are available after offsite disposal) will take on the responsibility for post-removal site controls.

X. RECOMMENDATION

This decision document represents the selected removal action for the Aerovox Site in New Bedford, MA, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. The decision is based on documents contained in the Administrative Record for the Site.

Conditions at the Site meet the criteria set out in the NCP due to:

"Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants" [300.415(b)(2)(i)];

"Actual or potential contamination of drinking water supplies or sensitive ecosystems" [300.415(b)(2)(ii)];

"Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released" [300.415(b)(2)(v)];

"Threat of fire or explosion" [300.415(b)(2)(vi)]; and

"The availability of other appropriate federal or state response mechanisms to respond to the release" [300.415(b)(2)(vii)].

Conditions at the Site meet the NCP section 300.415(b)(2) criteria for a removal and the CERCLA Section 104(c) consistency exemption from the \$2 million and 12-month limitation, and I recommend your approval of the proposed removal action and 12-month exemption. The

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proposed NTCRA, if approved, is estimated to not exceed \$24 million (in 2010 dollars). None of this funding will be from the Regional removal allowance; instead the work will be funded by a mix of sources including a PRP, Aerovox bankruptcy funds, and a Cooperative Agreement between EPA and the City.

Your signature will also reflect that an exemption pursuant to Section 104(c) of CERCLA and Section 300.415(b)(5)(ii) of the NCP has been granted.

APPROVAL:



DATE:



Assistant Administrator
Office of Solid Waste and Emergency Response

DISAPPROVAL:

DATE:

Assistant Administrator
Office of Solid Waste and Emergency Response

Figure 1 – Site Map

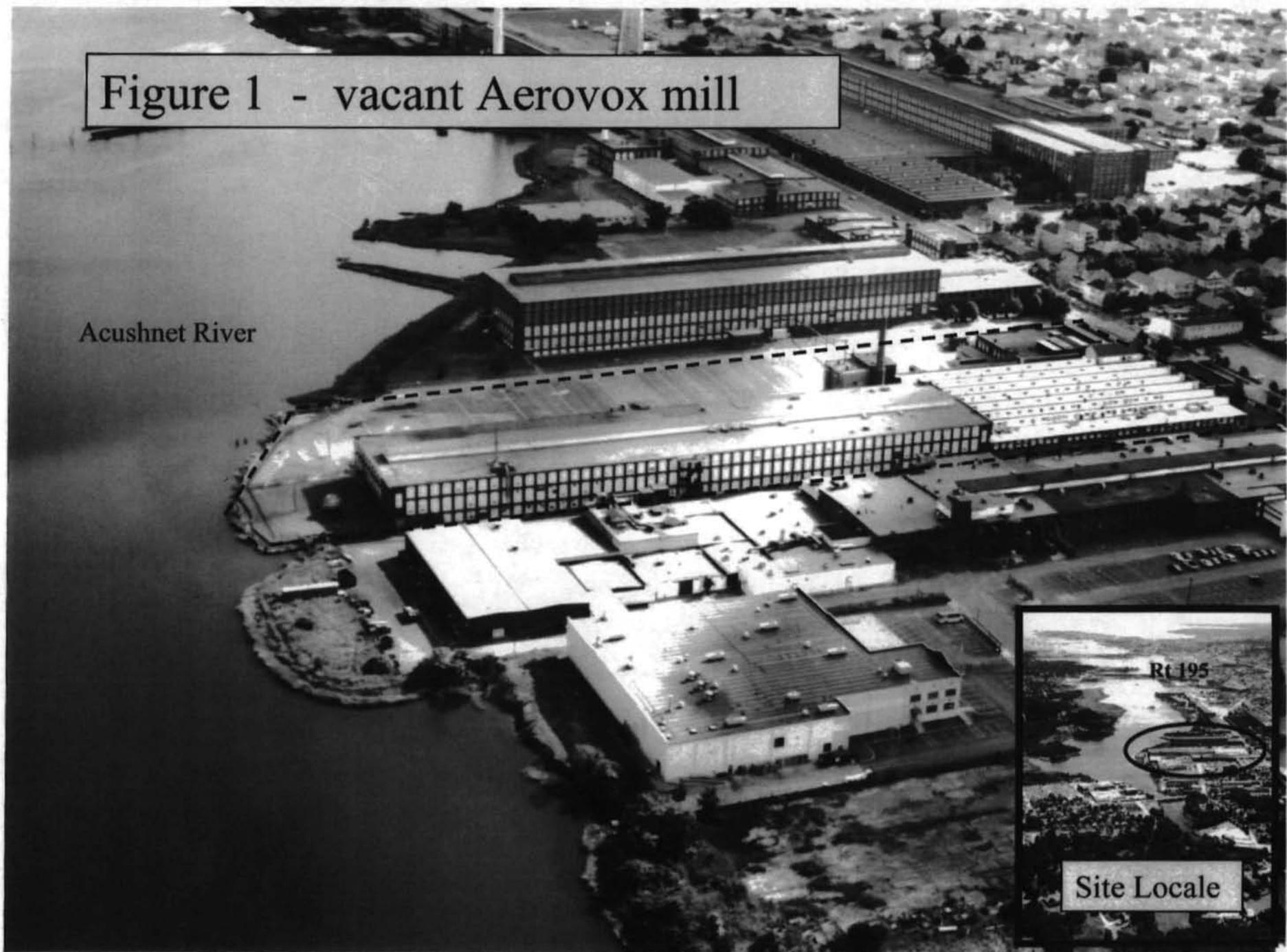
Table 1 – ARARs

Appendix A – Responsiveness Summary

Appendix B – Community Action Plan

Appendix C – TSCA Determination

Figure 1 - vacant Aerovox mill



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TABLE 1 – ARARs

Chemical-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Toxic Substance Control Act (TSCA) 40 CFR 761.61(c) Risk-based cleanup approval requirements for PCB remediation waste	Applicable	Applies to sampling, cleanup or disposal of PCB remediation waste in a manner other than the self-implementing provisions of 40 CFR 761.61(a) or performance-based provisions of 40 CFR 761.61(b), or storage of PCB remediation waste in a manner other than in 40 CFR 761.65.	The EPA Regional Administrator has determined in the TSCA Determination attached to this Action Memorandum that, if the conditions in the Determination are followed, the removal action will not pose an unreasonable risk of injury to health or the environment. In particular, any area where soil PCBs meet or exceed 2 ppm will be capped with a TSCA-compliant cover.
USEPA's Integrated Risk Information System (IRIS) Cancer Slope Factors (CSFs) and Reference Doses (RfDs)	To Be Considered	CSFs and RfDs are guidance values used to evaluate the potential carcinogenic and noncarcinogenic hazard, respectively, caused by exposure to certain contaminants from the site.	Demolition of the facility and installing a TSCA-compliant cover will minimize exposure to potential receptors and provide protection of human health from dermal contact.
PCB Cancer Dose – Response Assessment and Application for Environmental Mixtures (EPA/600/P-96/001A, January 1996) <i>Note: Citation corrected from previous tables.</i>	To Be Considered	Guidance for USEPA's reassessment of the carcinogenicity of PCBs.	Demolition of the facility and installing a PCB-compliant cover will minimize exposure to potential receptors and provide protection of human health from dermal contact.

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TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 40.0111 Federal Superfund Program	Applicable	Establishes requirements and procedures for limiting the applicability of M.G.L. c. 21E and 310 CMR 40.0000 (MCP) to response actions at disposal sites subject to CERCLA.	This removal action is conducted pursuant to CERCLA and is therefore adequately regulated for the purposes of compliance with 310 CMR 40.0000 (MCP) for the scope of the removal action. Subsequent site work pursuant to M.G.L. c. 21E will be subject to the MCP.
Toxic Substance Control Act (TSCA) 40 CFR 761.61(c) Risk-based cleanup approval requirements for PCB remediation waste	Applicable	Applies to sampling, cleanup or disposal of PCB remediation waste in a manner other than the self-implementing provisions of 40 CFR 761.61(a) or performance-based provisions of 40 CFR 761.61(b), or storage of PCB remediation waste in a manner other than in 40 CFR 761.65.	The EPA Regional Administrator has determined in the TSCA Determination attached to this Action Memorandum that, if the conditions in the determination are followed, the removal action will not pose an unreasonable risk of injury to health or the environment.
TSCA 40 CFR 761.60 Disposal requirements for certain PCB containing materials	Applicable	Applies to the disposal of certain PCB containing materials, including PCB liquids and PCB articles which include PCB small capacitors.	PCB liquids and PCB articles will be disposed of in accordance with this requirement during the building demolition process in accordance with this regulation.
TSCA 40 CFR 761.62 Disposal requirements for PCB bulk product waste	Applicable	Applies to the disposal of PCB bulk product waste resulting from implementation of the removal action, including fluorescent light ballasts containing PCBs in potting material	Fluorescent light ballasts, and any other qualifying PCB bulk product waste will be disposed of in accordance with this regulation or decontaminated in accordance with the provisions of 40 CFR 761.79.

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TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
TSCA 40 CFR 761.65(a) and (c)(9) Storage for disposal	Applicable	Applies to PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater.	Any PCB waste generated from the removal action will be disposed of within one year. Bulk PCB remediation waste or PCB bulk product waste may be stored at the site for 180 days subject to the conditions specified in 40 CFR 761.65(c)(9).
TSCA 40 CFR 761.79 Decontamination standards	Applicable	Establishes decontamination standards and procedures for removing PCBs which are regulated for disposal from water, organic liquids, non-porous surfaces (including scrap metal from disassembled electrical equipment), concrete, and non-porous surfaces covered with a porous surface such as paint or coating on metal.	Decontamination procedures and standards will be met if material is to be recycled, reused or smelted. Any water discharged to navigable waters will not exceed 13 ug/l , which is recent background PCB levels in stormwater runoff from the site.
TSCA PCB Spill Cleanup Policy 40 CFR 761 Subpart G, §§ 761.120-761.135	To Be Considered	This policy establishes criteria to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater.	The requirements of this policy will be considered, as appropriate, when determining the appropriate method(s) to address PCB spills or leaks (if any) that may occur during implementation of the NTCRA.
Guidance on Remedial Actions for Superfund Sites with PCB Contamination, OSWER Directive No. 9355.4-01, August 1990	To Be Considered	This guidance describes the recommended approach for evaluating and remediating Superfund sites with PCB contamination.	This document was considered, as appropriate, as guidance during the development of the EE/CA, SEE/CA and removal action process.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM

TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 30.105, Exemption for PCB Wastes Regulated Pursuant to Toxic Substance Control Act.	Applicable	Provides that PCB Waste that would be subject to hazardous waste regulation due to the presence of PCBs are exempt from the hazardous waste regulations provided certain conditions are met.	PCB Waste will be handled in accordance with the conditions set out in the TSCA Determination unless otherwise noted in this table.
310 CMR 30.100, including 310 CMR 30.125 (Federal RCRA base program and Universal Waste Rule (except for Cathode Ray Tubes) has been delegated in Massachusetts. Federal standards are identified for information.)	Applicable	Identifies solid wastes as hazardous wastes if the waste exhibits characteristics of ignitability, corrosivity, reactivity or toxicity. TCLP results with mercury concentrations equal to or greater than 0.2 mg/L is characteristically toxic.	Mercury or mercury containing material with TCLP concentrations equal to or greater than 0.2 mg/L will be handled as hazardous waste during demolition and disposal activities.
RCRA – 40 C.F.R. 261.24			
310 CMR 680 Use and Management of Containers RCRA – 264.170, Subpart I, Use and Management of Containers	Applicable if mercury or other hazardous waste is stored in containers before offsite disposal	Regulates condition, compatibility, management, location and design of containers and containment systems of hazardous waste.	Mercury or other hazardous waste may be containerized before offsite transportation. If so, containers will be in good conditions, compatible with the contained waste, closed except when necessary to add or remove waste, and not placed in or near incompatible waste.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM**TABLE 1 – ARARs**

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 30.1044 Universal Waste Rule RCRA Universal Waste Rule: Mercury containing equipment 40 CFR 273.4 and 273.9; Lamps 40 CFR 273.5 and 273.9; Batteries 40 CFR 273.2 and 273.9	Applicable	Streamlined collection requirements for certain wastes.	Mercury-containing equipment, fluorescent lamps and batteries will be handled, collected and contained in accordance with these regulations and disposed of offsite at a licensed facility.
RCRA 40 CFR 264.1100 Containment Buildings Subpart DD	Applicable	Provides standards for containment buildings that store or treat hazardous waste.	Process building(s), if needed, will be constructed and operated in accordance with these regulations to the extent practicable. When processing is completed, the structure will be decontaminated as required. The interior of the existing mill building may also be used for waste processing and will comply with these regulations to the extent practicable.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM

TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Collection and Sampling for 21E cleanup purposes WSC #02-320 Compendium of Quality Assurance & Quality Control Requirements and Performance Standards for Selected Analytical Methods; WSC #07-350 MCP Representativeness Evaluations and Data Usability Assessments, and MassDEP Methods for Determination of Air-Phase Petroleum Hydrocarbons (APH) dated Dec. 2008	To Be Considered	These policies are identified for informational purposes. Should any data collected and sampled during the removal action be used to support MCP response actions, risk characterization and/or site closure under the MCP, these policies should be considered. 310 CMR 40.0017 and 40.0191(2) should also be consulted for the 21E work.	Procedures and criteria for sampling collection and analysis should be considered if the data will be used for the subsequent 21E cleanup.
Clean Water Act, § 402, National Pollutant Discharge Elimination System (NPDES) 40 CFR 122-125, 131	Applicable	These standards govern discharge of water into surface waters. Due to the degraded nature of New Bedford Harbor waters, discharges into the waterway must meet ambient water quality criteria (AWQC) at the discharge point.	The substantive portions of these requirements will be met to the extent practicable considering the urgency of the situation and the scope of the removal action in that collected stormwater and dust suppression water and decontamination water, if discharged to the Harbor waters, will not exceed 13 ug/l, which is recent background PCB levels in site stormwater runoff.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM**TABLE 1 – ARARs**

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Clean Water Act, § 402, NPDES, Prohibitions, 40 CFR 122.4(i)	Applicable	Prohibits new discharges into waters that do not meet applicable water quality criteria unless certain conditions are met.	This regulation will be met to the extent practicable considering the urgency of the situation and the scope of the removal action in that (1) discharge levels will not exceed 13 ug/l, which is recent background PCB levels in site stormwater, and (2) it is preferable to keep this discharge in a class SB waterway rather than an SA waterway which is the discharge area for the New Bedford POTW. The discharge of dust suppression and decontamination water is only temporary. The NTCRA should in the long-term eliminate the problem of PCBs in site stormwater altogether.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM

TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Surface Water Discharge 314 CMR 3.11(4), (5) and (9)(a); 314 CMR 3.19(1), (3)-(7), (10), (12)(a)-(b) and (13) <i>Note: Citation corrected from previous tables</i>	Applicable	This section outlines the requirements for obtaining a NPDES permit in Massachusetts. The waters of New Bedford Harbor adjacent to the Aerovox facility are classified as SB.	The substantive portions of these requirements will be met to the extent practicable considering the urgency of the situation and the scope of the removal action in that collected stormwater, dust suppression water, and decontamination water, if discharged to the Harbor waters, will not exceed 13 ug/l, which is recent background PCB levels in site stormwater runoff. Discharges will be monitored in accordance with the site monitoring plans. The discharge facility will be properly operated and maintained; discharge will be reduced or halted if facility fails to function properly while corrective action is undertaken. The discharge of dust suppression and decontamination water is only temporary. The NTCRA should in the long-term eliminate the problem of PCBs in site stormwater altogether.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM**TABLE 1 – ARARs**

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges, 314 CMR 12.03(8); 12.04(2), (5), (8)-(12); 12.05(1), (6), (12); 12.06(1)-(3).	Relevant and Appropriate	Establishes operation and maintenance standards for treatment works.	Relevant to an onsite water treatment facility if used during the NTCRA. The water treatment facility, although not “treatment works,” will be maintained properly and safely with adequate tools, equipment, parts, personnel, etc. Sampling and analysis will be conducted according to the applicable site plan.
Stormwater Control, 40 CFR 122.26(b)(14)(x) and (c)(ii)(C) and (D)	Applicable	Applies to construction activities that result in the disturbance of greater than five acres of total land area.	Demolition and covering activities will include best management practices to control pollutants in stormwater discharges during construction and will implement erosion and sediment control measures to control pollutants in stormwater discharges after the NTCRA is complete.
National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 61.145	Applicable	Provides regulations for emission of particular air pollutants from specific sources, including standards for demolition of asbestos-containing materials. Based on the results of an asbestos survey conducted for the building, asbestos removal will be necessary and these regulations apply.	Asbestos removal will occur prior to demolition. During demolition additional measures will take place including dust suppression, appropriate wetting, and monitoring to ensure compliance.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM

TABLE 1 – ARARs

Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 7.09 and 7.15 Massachusetts Air Pollution Control Regulations	Applicable	Requires that building demolition activities shall not cause or contribute to a condition of air pollution.	Appropriate measures such as proper asbestos removal, dust suppression measures and stormwater collection will be implemented during building demolition and loading for offsite disposal activities to prevent excessive emissions of particulate matter. A stringent air monitoring program will be conducted throughout the demolition process.
310 CMR 19.061(3) and (6)(b)1.d Special Waste - Asbestos	Applicable	Establishes asbestos as a special waste in Massachusetts. Special waste can be disposed at a solid waste facility that is licensed to accept special waste. Subsection (6) specifies management requirements for asbestos.	Prior to demolition, asbestos will be removed from the building and disposed of at a facility licensed to accept asbestos. Asbestos will be properly wetted, containerized and labeled and managed so as to maintain the integrity of its containers and to prevent emission of asbestos fibers to the ambient air.
TSCA 40 CFR 763, Subpart E, Appendix D Transport and Disposal of Asbestos Waste	Relevant and Appropriate	Established for asbestos containing material (ACM) in schools, this regulation provides standards for transport and disposal of ACM. Requires proper wetting and containerization prior to offsite transportation. Because the facility contains ACM, this regulation is relevant and appropriate to the removal site preparation activity addressing asbestos disposal.	ACM removed from the building will be handled and loaded into transportation vehicles in accordance with the regulation.

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Action-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 6.04 Ambient Air Quality Standards for the Commonwealth of Massachusetts	Applicable	Provides primary and secondary ambient air quality standards including standards for particulate matter and lead.	An air monitoring program will be developed and implemented as part of the NTCRA. Dust suppression controls also will be in place.
MassDEP Recommended Threshold Effect Exposure Limits (TELs) & Allowable Ambient Limits (AALs)	To Be Considered	TEL and AAL values are long-term exposure concentrations for air contaminants.	These values will be considered in the development of an air monitoring plan to be implemented during the removal action.
310 CMR 7.10 MassDEP Noise Regulation	Applicable	Prohibits willful, negligent, or through failure to provide necessary maintenance or take necessary precautions, the unnecessary emission of sounds that may cause noise.	Heavy equipment and machinery will be required during the removal action. All equipment will be properly operated and maintained so as to not emit more noise than a typical demolition project.
MassDEP Division of Air Quality Control Policy – Allowable Sound Emissions, Policy 90-001, dated February 1, 1990	To Be Considered	This policy sets forth criteria to determine if a sound is in violation of the Department's noise regulation which applies to building demolition activities.	This policy will be considered in managing noise during the removal action.

AEROVOX NON-TIME-CRITICAL REMOVAL ACTION – ACTION MEMORANDUM**TABLE 1 – ARARs**

Location-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 701 Facility Location Standards RCRA 40 CFR 264.18(b)	Applicable to process building, if used; Relevant and Appropriate to capped areas	A hazardous waste facility must be designed, constructed, operated and maintained to prevent the washout of any hazardous waste by a 100-year flood.	If used during the NTCRA, the temporary process building if located within the zone A-1, 100-year floodplain portion of the site will be constructed so that the waste can be removed safely away from potential flood waters. As part of the NTCRA a stable, protective cap will be installed that will withstand floodwaters. The existing hurricane barrier will also assist with flood control measures.
Section 106 of the National Historic Preservation Act, 16 U.S.C. 470(f)	Applicable	Requires federal agencies to take into account the effects of their undertakings on historic properties.	The Aerovox facility may be eligible for historical building status; however, widespread PCB contamination within the building will preclude its preservation. EPA will continue to coordinate with the appropriate federal and state historic officers prior to demolition.
Fish and Wildlife Coordination Act, 16 U.S.C. 662(g)	Applicable	Requires consultation with appropriate agencies to protect fish and wildlife when federal actions may alter waterways. Must develop measures to prevent and mitigate potential loss to the maximum extent possible.	Appropriate agencies will be consulted prior to discharges to the Harbor of treated site water to find ways to minimize any adverse effects to fish and wildlife resulting from the discharge.

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TABLE 1 – ARARs

Location-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
Floodplain Management – Executive Order 11988	Applicable	Applicable to work activities conducted in the 100-500 year floodplain and 100 year coastal floodplain (Federal Emergency Agency Flood Insurance Rate Map, Community Panel No. 255216-007B, dated January 5, 1984). The removal action selected must be the best practical acceptable alternative. (Draft updated maps may be found at www.newbedford-ma.gov/Environmental/FloodPlain_2008_North_36x48.pdf)	The NTCRA will remove the contaminated building that is currently sited within Zone B, and will cap the site in a manner to withstand future flooding. A hurricane barrier in the Harbor also exists as a flood control measure.
Coastal Zone Management 16 USC Parts 1452 <u>et. seq.</u> , 301 CMR 21.00	Applicable	Establishes procedures and requirements for the protection of the coastal zone. The entire site is located in a coastal zone management area.	The NTCRA will be consistent with the state approved coastal zone management programs to the maximum extent practicable.
Protection of Waterways 301 CMR 9.00	Applicable	These regulations will be applicable if any portion of the site is within a filled tideland and are designed to promote and protect public interest in tidelands, Great Ponds, and non-tidal rivers and streams.	The site will be inaccessible to the public during the removal action and the subsequent 21E cleanup. At the completion of the 21E cleanup, reasonable accommodations for shoreline public access will be provided to the level of at least what was available prior to the cleanup work.
Protection of wetlands and other natural resource areas 310 CMR 10.00 (see specific sections below)	See specific sections below	Establishes requirements for the protection of wetlands and other natural resource areas. The site is located within the buffer zone of several coastal resource areas.	See particular resource areas listed below and actions to be taken within these areas.

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TABLE 1 – ARARs

Location-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 10.02 Areas Subject to Protection	See specific sections below	Establishes jurisdiction over areas subject to protection from activities likely to alter said areas. Demolition activities along with grading and capping activities will occur in areas within 100 feet (the buffer zone) of certain resource areas and within 25 feet of a riverfront area.	See particular resource areas listed below and actions to be taken within these areas.
310 CMR 10.24(7)(c)6 General Provisions	Applicable	General provisions for remediation activities conducted under state law within coastal resource areas and buffer zones to ensure coastline development is conducted to protect public interests in coastal resources.	Best management practices will be used to minimize adverse impacts during remediation occurring in the buffer zones including dust suppression measures during demolition, collection, and treatment as necessary of stormwater, dust suppression water and decontamination water. Erosion control and covering of stockpiles will be used during demolition, grading and capping work. Temporary structures and access roads will be removed at the completion of the work.
310 CMR 10.32 Salt Marshes	Applicable	Establishes requirements for conducting activities within a salt marsh, within its buffer zone or in a body of water adjacent to a salt marsh when a salt marsh is determined to be significant to the protection of marine fisheries, the prevention of pollution, storm damage prevention or groundwater supply. The site is within 100 feet of a small fringing salt marsh area.	No work will occur in the saltmarsh. Collection and treatment as necessary of stormwater, dust suppression water and decontamination water will be conducted during demolition. Erosion control and covering of stockpiles will be used during demolition, grading and capping work. Temporary structures and access roads will be removed at the completion of the work.

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TABLE 1 – ARARs

Location-Specific ARARs			
Requirement	Status	Synopsis	Action to be Taken
310 CMR 10.58 Riverfront Area	Applicable	Establishes requirements for the protection of private and public water supply; groundwater; provide flood control; prevent storm damage; prevent pollution; protect land containing shellfish; protect wildlife habitat; and to protect the fisheries.	Based on the Massachusetts Mouth of Coastal River Maps, a portion of the site is situated in a Riverfront Area. The shoreline is currently capped and bulkheaded from prior cleanup actions, and there is little to no vegetation along the shoreline. Dust suppression water, decontamination water and stormwater will be collected and treated if above discharge standards. Erosion and, if necessary, sedimentation control will be used during demolition and capping. The site will be graded and properly capped to prevent wash out from flooding. A hurricane barrier is also in place in the lower Harbor to control flooding.

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**AEROVOX NTCRA ACTION MEMO - APPENDIX A
RESPONSIVENESS SUMMARY**

I. Introduction

EPA received 16 comments on its Supplemental EE/CA during the public comment period held June 14 through August 15, 2006 for the Aerovox Site. These include comments from the following:

State Representative Robert Kozera
Local Officials from the Town of Acushnet
Bullard Street Neighborhood Association
9 Property Owners
Acushnet Rubber Company/Precix (abutting commercial property owner)
Buzzards Bay Coalition
AVX Corporation, a potentially responsible party (PRP)

A. Summary of Comments

Almost all comments support EPA's plan to demolish the Aerovox building to alleviate the current threat to human health and the environment posed by the vacant mill facility that is infused throughout with PCBs. However, many commented that the demolition debris should be taken offsite for disposal rather than be disposed in the existing foundation and covered with a protective cap. Some commented that the building foundation and contaminated Site soils should be removed as well. Related comments concern potential air emissions during cleanup activities, stormwater runoff, offsite migration of contaminated groundwater and redevelopment potential.

In addition to the above comments, AVX Corporation, a potentially responsible party (PRP) at the Site, submitted comments concerning the administrative record, the EE/CA, the SEE/CA, and use of a consistency waiver; and recommending a building stabilization approach as the lowest cost alternative and questioning whether the recommended alternative attains ARARs. EPA's responses to AVX's comments are responded to in Section II.C.

All comment letters are attached as Appendix 1 to this Responsiveness Summary. Below are EPA's responses to these comments.

II. Response to Comments

A. General Comments

1. Many commentors agreed with EPA for the need to demolish the Aerovox building, but argued

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that the demolition waste should be disposed off-site rather than onsite because PCBs could migrate offsite and because onsite disposal could negatively impact redevelopment at the Site.

EPA Response:

In response to comments and concerns voiced by community and Site stakeholders, EPA has agreed to pursue a remedy that includes offsite rather than onsite disposal of the demolition waste.

2. A few commentors not only wanted the building demolition waste taken off-site for disposal but also the building foundation. Some asked that all contaminated Site soils be removed as well.

EPA Response:

EPA's primary concern at the Site is addressing the immediate threat of potential fire and subsequent release of contaminants, and neither the foundation nor soils pose a fire risk. In addition, contaminated soils and the foundation will be covered with a protective cap thereby removing any dermal contact risk and minimizing the potential for contaminant migration. Consistent with the TSCA determination, groundwater monitoring will occur on a regular basis.

In addition, immediately after the NTCRA is complete, the Site will be fully characterized pursuant to the Massachusetts c. 21E cleanup program (21E). This 21E cleanup will include further measures to address Site soils wherever concentrations in soil exceed upper concentration limits for certain contaminants and will also address Site groundwater contamination.

3 Many commentors felt that New Alternative #1 would reduce the redevelopment potential of the Site, since the demolition waste would be placed inside the existing building basement. Some also commented that the square footage of the Site available for reuse would be reduced from 450,000 square feet (sf) to 150,000 sf pursuant to New Alternative #1.

EPA Response:

As explained below, EPA disagrees that New Alternative #1 would have interfered with the reuse potential of the Site, but notes that the revised cleanup approach (using offsite disposal) should further increase the Site's redevelopment potential since the Site will be free of demolition waste.

New Alternative #1 would have provided a similar amount of buildable footprint (approximately 155,000 square feet (sf) compared to the existing 175,000 sf), by “flip-flopping” the locations of the building and the parking area. In other words, any new building would be located where the parking lot is currently located, and the new parking area would be located where the main building is currently located.

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EPA notes that some commentors incorrectly used the total square footage of all three floors (approximately 450,000 sf) instead of the building's existing footprint (approximately 175,000 sf) to compare the current and future development potential.

B. Detailed Comments

1. One commentor agreed with EPA that New Alternative #1 (building demolition, onsite disposal of building debris within the basement, and capping) is the alternative that should be implemented.

EPA Response:

EPA agrees that New Alternative #1 would have been a protective approach and would have allowed for ample redevelopment, but as mentioned above, due to comments and concerns voiced by community stakeholders, EPA has agreed to pursue a remedy that includes offsite rather than onsite disposal of the demolition debris.

2. Some commentors objected to the recommended approach in the SEE/CA because they believe it was selected based on it being the least cost alternative.

EPA Response:

EPA disagrees that New Alternative #1 would have been the least costly approach since it would cost less to do nothing and not proactively address the risks posed by the Site. In addition, building stabilization may be a less expensive approach, at least in the short term. However, the ultimate Site cleanup cost under a building stabilization approach could be significantly more than the recommended approach if building maintenance needs and Site security stretch far into the future, the building deteriorates significantly, or a fire erupts at the Site.

3. One commentor questioned the lack of funding from Aerovox, a prior owner and operator, for the cleanup, and, instead, the use of tax dollars to pay for the cleanup.

EPA Response:

The comment incorrectly characterizes the funding approach for the Site. EPA filed a claim against the bankrupt Aerovox estate and recovered approximately \$2.72 million. With ongoing earned interest EPA's bankruptcy settlement proceeds now stand at approximately \$3.13 million. These funds, in combination with the settlement proceeds the City of New Bedford (City) recovered in its bankruptcy claim, are being used to address threats at this site. However, that amount alone is insufficient for Site cleanup, and as a result, EPA, in cooperation with other federal agencies and the Commonwealth of Massachusetts, worked to secure additional funds to

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address this facility without the need for tax dollars. Further, through a forthcoming settlement, another prior owner, AVX, will contribute to the cleanup

4. *One commentor expressed concern that in the future the City may be interested in rezoning the Site from commercial/industrial use to residential use given the abutting residential neighborhood.*

EPA Response

While land use and zoning are local issues beyond EPA's authority in this action, based on EPA's coordination to date with both the City and MassDEP, it is EPA's understanding that the property will NOT be converted to residential use. Land use restrictions required pursuant to the NTCRA and the State 21E cleanup will prevent residential use.

However, should a higher use for this property be desired in the future, further cleanup would be necessary and must be performed in accordance with 21E and with EPA's TSCA program. Land use restrictions would also need to be revised and recorded.

5. *Many commentors urged that the demolition of the building be done safely citing concerns about air emissions and stormwater runoff.*

EPA Response:

EPA agrees with the commentors in this regard, and has developed stringent air and stormwater runoff criteria to ensure that the demolition does not cause the quality of air and stormwater runoff to worsen during the cleanup activities. EPA will ensure that these criteria are adhered to during the performance of the work through an air and stormwater monitoring program. EPA and the U.S. Army Corps of Engineers (COE) will also monitor and oversee the project's implementation to ensure that the project is performed safely. Results of all monitoring efforts will be made available to the public for review as they are finalized.

In addition, EPA will require that certain hazardous wastes that require special handling, such as mercury, asbestos, fluorescent light fixtures, refrigerants, propane tanks and batteries be removed from the building prior to demolition.

Also, see Table 1 of this Action Memorandum for applicable or relevant and appropriate requirements (ARARs) that must be complied with during the cleanup.

6. *One commentor asked about the need for cap venting.*

EPA Response:

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Due to the non-volatile nature of the PCB contamination, EPA does not believe there is a need for cap venting.

7. Some commentors recommended that the sheet metal piling along the eastern shoreline seawall be monitored for effectiveness or replaced to prevent contamination from migrating to the River.

EPA Response:

As part of past removal actions, Aerovox installed sheet pile barriers within the eastern area of its property, capped certain areas, and installed groundwater monitoring wells to measure groundwater elevations. Recent groundwater and surface water investigations conducted for EPA concluded that the sheet pile barriers remains effective at hydraulically isolating the Site's shallow groundwater system from the Acushnet River. During the cleanup, through its oversight authority, EPA will ensure that the cleanup is implemented in a way that keeps the existing groundwater wells operable so that the effectiveness of these sheetpile barriers can continue to be monitored.

In addition, groundwater contamination will be addressed as part of the 21E cleanup that will immediately follow the NTCRA action. Addressing contaminated groundwater will further reduce any chance of contaminant migration from the Aerovox Site to the Acushnet River.

8. Some commentors argued that the proposed minimum cap is insufficient for protectiveness at the Site.

EPA Response:

As stated in the TSCA Determination (Appendix C of this Action Memorandum) the Site cap, along with the existing hydraulic asphalt cement (HAC) cap, functions as a barrier to direct contact exposure to contaminated soils at the Site. The NTCRA cap, which will be asphalt, must meet the requirements described in the Action Memorandum and will cover any portion of the Site where soil or asphalt PCB levels exceed 2 ppm and will be subject to a long-term monitoring and maintenance program. Moreover, the 21E cleanup that directly follows the NTCRA requires that an engineered barrier be placed at the Site wherever soil exceeds State upper concentration limits for certain contaminants. As a result, the MCP process will define the specific type and thickness of the cap to be placed during the 21E cleanup taking into consideration further Site characterization and expected land use. The Site will also be protected through land use controls that will ensure the integrity of the Site caps.

9. Some commentors expressed concerns that the disposal of the demolition debris in the existing

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basement will interfere with reuse of the property, or that a parking lot constructed on top of the capped demolition debris will be prone to settlement and cracking.

EPA Response:

As previously noted, EPA has considered the comments it received and, consistent with those comments, revised its cleanup approach so that demolition debris will be disposed of offsite rather than in the basement. See also response to comments B.1 and B.3.

10. One commentor noted some confusion regarding the nature of PCB risk, believing that the danger was only in cooking and eating fish from the Acushnet River.

EPA Response:

PCBs can pose a risk to human health through a variety of exposure routes, provided the level of PCBs is sufficiently elevated during the exposure. These exposure routes include consumption of PCB-contaminated seafood and dermal (i.e., skin) contact with PCB-contaminated soils and sediments. In addition, when burned (such as in a building fire), PCBs break down into dangerous dioxins and furans which are toxic to humans. Consumption of PCB-contaminated seafood and dermal contact with PCB-contaminated sediments are the primary exposure routes associated with the New Bedford Harbor Site; and dermal contact with PCB-contaminated soil and potential fire are the primary exposure routes associated with the Aerovox Site.

11. One commentor asked whether EPA has any information regarding subsurface assessments of contamination at any abutting properties, or any information "to support the delineation of the Aerovox Site as identical to the Aerovox property boundary".

EPA Response:

EPA does have some information on subsurface contamination, but because this is not a remedial action under CERCLA, but rather a removal action, a full site characterization was not performed. The primary concern of the NTCRA is to address the potential threat of release of contaminants that would result from a building fire as well as dermal contact with contaminated Site soils. Addressing contaminated groundwater is beyond the scope of this NTCRA. As a result, no subsurface assessments of abutting properties were conducted by EPA as part of the NTCRA. The scope of the NTCRA is limited to the Aerovox property boundary. However, as explained in the Action Memorandum, immediately following completion of the NTCRA, a 21E cleanup will occur which will require a full Site characterization and ensuing cleanup to address Site contamination in accordance with State requirements.

12. One commentor asked whether EPA has consulted with the Massachusetts Department of

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Environmental Protection (MassDEP) about the Aerovox site.

EPA Response:

Yes, EPA continues to coordinate and consult very closely with the MassDEP (as well as the City) regarding the Aerovox cleanup. MassDEP will also be performing oversight of the 21E cleanup that will immediately follow the NTCRA cleanup.

13. One commentor asked whether any studies have “been conducted to determine if the sheet-pile barrier or other subsurface conditions may be causing DNAPL (dense non-aqueous phase liquid) to migrate to adjacent properties”.

EPA Response:

As explained in EPA’s response to comment C.7 and C.11 above, specific studies of the type referenced have not been performed by EPA since they are beyond the scope of the NTCRA. The 21E cleanup, immediately following the completion of the NTCRA work, may include such studies.

14. One commentor asked “(i)f contaminants have migrated to adjacent properties...would USEPA consider contamination located on such adjacent properties to be part of the ‘Aerovox site’”.

EPA Response:

As stated in EPA’s response to comment C.11 a complete site characterization that would help address this question has not been performed for this removal action since it is beyond the scope of the NTCRA. However, as explained above, further site characterization is planned as part of the Massachusetts 21E program and the extent of the 21E cleanup will be further defined at that time.

15. One commentor asked if “existing subsurface conditions at the ‘Aerovox Site’ constitute an immediate threat to public health (sic) safety and the environment”.

EPA Response:

As explained in the 2006 SEE/CA, and in EPA’s response to comment C.11 above, the main objective of the NTCRA is to address the imminent risks to human health and the environment posed by the contaminated and deteriorating building, especially in the event of a fire. While the Site subsurface is contaminated, EPA does not consider it to be an immediate threat to public health, safety or the environment.

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16. One commentor asked whether EPA “has evaluated the possibility of immediately taking alternate short-term steps to further secure the Aerovox site”, and inquired as to the status and funding of the fire suppression system.

EPA Response:

Pursuant to the Aerovox bankruptcy settlement, the City is required to take certain measures to secure the Aerovox building; the City has been fulfilling these requirements. More recently, AVX has provided funding to the City to continue Site security as the bankruptcy funding became depleted. EPA coordinates extensively with the City to ensure that these short-term actions are being implemented to secure the Aerovox Site. EPA is confident that the on-going maintenance and security systems in place are adequate until the NTCRA is conducted. It is also worth noting that COE and its contractors are on-site at various times to conduct certain New Bedford Harbor Superfund Site activities as well as Aerovox-related activities. Their presence also contributes to a more secure Site.

EPA has also coordinated with the City and its fire department to ensure that the fire suppression and alarm system are functional, another requirement from the bankruptcy settlement. The City, with funds from its Aerovox bankruptcy settlement, has upgraded the fire alarm system within the building and has developed a fire suppression system that functions within the unheated conditions inside the building. The fire department is responsible for the ongoing testing and maintenance of the system, and its January 2005 “Site Information and Preplan” has been included in the Administrative Record for the Aerovox Site.

17. One commentor asked about flooding issues adjacent to the Aerovox Site and Belleville Avenue and whether this has caused contamination of adjacent properties or structures.

EPA Response:

Belleville Avenue runs in a north/south direction along the western side of the Aerovox facility. Environmental monitoring performed to date in the western portion of the Site exterior to the main building, including sampling of soil, groundwater, air and structures, indicates that this western-most area contains only very low, if any, PCB contamination and therefore is not likely to cause additional PCB contamination during high water events. All soil samples from this area resulted in less than 1 ppm PCBs, and no PCBs were detected in groundwater in this area. Similarly, recent interior samples of the office annex (western-most) portion of the main building abutting Belleville Avenue showed low PCB results. In addition, surface water drainage in this area flows towards the River, since the ground elevation along Belleville Avenue is roughly ten feet higher than that along the eastern edge of the Site abutting the River. As a result, EPA does not believe that any temporary surface water flooding in this western portion of the Site would

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contaminate nearby properties or structures.

18. One commentor raised concerns about the scope of the removal action and questioned whether the information EPA made available in the SEE/CA and its administrative record were sufficient to document “the full nature and extent of contamination” and whether that information has “limited the ‘cleanup’ options to a handful of interim steps”.

EPA Response:

Again, as explained in EPA's response to comment C.11, this is a CERCLA removal action not a remedial action. This means that a full remedial investigation/feasibility study (RI/FS - a complete characterization of the nature and extent of contamination and a full range of alternatives) is not part of the removal action process. EPA believes that the SEE/CA and its administrative record adequately characterizes the nature and extent of contamination that provide the basis for taking the action set out in the Action Memorandum. For example, Section 2 of the 1998 EE/CA describes in detail the sampling results of the building material and equipment investigations along with the soil and groundwater sampling performed at that time. The 2006 ENSR Conceptual Site Model reports results of more recent soil and groundwater monitoring. See also other documents in the administrative record that support the NTCRA such as: The On-Site Containment of PCB Contaminated Soils at Aerovox (Administrative Record number (AR) 248154); Final Aerovox New Bedford Plant Stormwater Study (AR 248155); Building Demolition Alternative Report (AR 248156); Aerovox Pavement Sampling (AR 248162); and Description of the General Deterioration of the Aerovox Building (AR 249905).

EPA disagrees that these Site investigations in any way limited the cleanup options to interim steps. In accordance with EPA's Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA, EPA “should identify and assess a limited number of alternatives appropriate for addressing the removal action objectives”. (OSWER 9360.0-32, 8/93 at page 34.) Demolition of the building and installation of a protective cover meets the objectives of this NTCRA. The SEE/CA, together with the EE/CA, present five different alternatives, all of which meet the objectives and any of which could function as long-term protective actions.

19. One commentor stated that it “appears that USEPA has not demonstrated the proposed response action will make the Aerovox Site safer” and argued that the proposed cleanup could exacerbate releases to the environment and increase costs due to handling of contaminated material several times instead of just once during removal from the Site.

EPA Response:

EPA disagrees and believes the 1998 EE/CA, 2006 SEE/CA and other documents included in the administrative record document the main risks posed by the Site from toxic air emissions in the

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event of a mill building fire, contaminated surface water runoff (from both firefighting and as the building deteriorates) as well as in building material due to trespassers and vandals both outside and inside the building. Demolishing the building removes the threat of fire (which could result in the spread of dioxins and furans over a widespread area). The building demolition process will be closely monitored with rigorous protocols to limit emissions. Dust-suppression water, and, if contaminated above action levels, storm water runoff will be captured and treated before discharge, and air monitoring will be conducted frequently during the cleanup. The state 21E cap together with EPA's TSCA cap will prevent dermal contact with PCB contaminated soils and will be protective in the long-term if properly maintained. These parameters will be included in contractor documents and both EPA and COE will be performing oversight of the project. For these reasons, EPA is confident the proposed cleanup approach mitigates these risks and makes the Site safer.

Also, EPA's revised cleanup plan using offsite instead of onsite disposal will alleviate any concerns about the potential for double-handling of demolition debris.

20. One commentor listed thirteen items that "USEPA appeared during the June 14, 2006 meeting to acknowledge".

EPA Response:

Many of the listed items are incorrect and misrepresent the discussion that occurred during the June public meeting. More specifically, those items are paraphrased below with a response following each item:

The impact of contamination on the deep water table was not studied:

- while the nature and extent of contamination at the Site has not been fully characterized, the impact of contamination on deep groundwater has been evaluated. See the 1998 EE/CA and ENSR, 2006. EPA recommends that the commentor review these documents for information on contamination in deep groundwater. In addition, EPA continues to conduct annual ground water monitoring at the Aerovox Site, including both shallow and deep aquifer wells;

The protective cap would not be impermeable nor permanent:

- the NTCRA cap will cover all areas of the Site where soil or asphalt PCB concentrations are equal to or exceed 2 ppm; the subsequent 21E cleanup will require that an engineered barrier be placed on the Site, including any areas covered by the NTCRA cap, wherever soil exceeds State upper concentration limits for certain contaminants; the MCP process will define the specific type and thickness of the cap to be placed during the 21E cleanup taking into consideration further Site characterization and expected land use. Both will be permanent caps, and provisions for proper

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monitoring and maintenance of the caps have been incorporated into the forthcoming settlement documents. The Site will also be protected through land use controls that will ensure the integrity of the Site caps;

Over time, the protective cap and sheet pile barriers will breakdown:

- EPA's response immediately above and to comment C.6 address the long-term viability of the shoreline sheetpile wall;

Contaminated debris [and asbestos] buried on-site may come into contact with groundwater:

-with the revised cleanup, none of this material will remain on-site;

Doesn't one excursion of applicable standards constitute a health risk?

- PCBs are a type of contaminant that in this case, where there are no longer workers in the building, do not cause acute or short term health risks; rather it is the long term or chronic exposure to PCBs that are the concern during the NTCRA. Thus one excursion of a particular standard does not necessarily indicate that an acute health risk is present. If, however, excursions were to continue such that average or long term exposures continue then concerns about health risk may be warranted. During the NTCRA, the Action Memorandum requires that extensive air monitoring be performed; these results will be tracked and averaged (and be available to the public) over the duration of NTCRA operations so that the chronic nature of any exposures can be evaluated.

Response actions could increase airborne releases to a level of concern:

- this statement is misinterpreted. EPA reiterates its presentation at the meeting that due to the POTENTIAL for air quality concerns during demolition, the Action Memorandum includes strict air quality standards. Through its oversight, EPA along with COE, will ensure that the demolition contractor implements effective engineering controls and complies with the strict air quality standards. In addition, an air monitoring program will be conducted to ensure that the contractor complies with these air quality standards (see also response to comment C.5);

Potential impacts to abutting properties, aside from the fire hazard, were not considered:

- EPA strongly disagrees with this statement. As discussed above, the use of strict air quality standards will ensure that potential airborne contaminants are not released above existing levels, and a surface water collection and management program will be implemented to ensure that runoff does not contaminate abutting properties. Further, EPA and the City have met and continue to meet with abutting businesses, neighborhood groups and other organizations to

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discuss any concerns they may have about the cleanup; and

Redevelopment is the time for permanent cleanup and it will be funded by an unspecified developer and redevelopment needs will only be factored into the cleanup if a developer is involved:

- an “unspecified developer” will NOT pay for the cleanup. Rather, funding secured by EPA will cover the offsite transportation and disposal of demolition waste, and a PRP will fund costs related to the demolition of the building. It should also be noted that a clean utility corridor will also be incorporated into the cleanup to further future redevelopment at the Site.

21. One commentor listed thirteen “unresolved questions” that the public meeting and Site documentation raised.

EPA Response:

Many of the questions listed are responded to elsewhere in this Responsiveness Summary (in response to other similar comments) and those comments and responses are noted. Other questions are paraphrased and responded to below:

Should additional investigations be conducted to discover the full nature and extent of the contamination in order to appropriately evaluate options?

-using existing wells put in place by the prior Site owner during a prior removal action, EPA has continued to monitor groundwater at the Site, as well as sample certain building materials, to assist with the preparation for the Site cleanup. EPA acknowledges that a full characterization of the nature and extent of contamination at the Site has not been conducted as would generally happen for a remedial action. However, this is not a remedial action; rather, it is a removal action. Removal actions have a more focused approach to address more immediate threats of contaminant releases. EPA believes its administrative record shows that this Site has been adequately characterized for the NTCRA to identify Site risks, develop removal objectives and a range of alternatives, and a recommended cleanup plan (see also response to comments C.11 and C.18);

Over time, will buried materials concentrate PCBs and other contaminants?

-concerning groundwater impacts on buried contaminated material, see response to comment B.1check;

How will the breakdown of the cap and other barriers impact Site contamination?

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-concerning break down of the protective cover and other barriers, see response to comments C.7 and C.8;

Will buried contaminated materials impact groundwater?

With the revised cleanup, building demolition materials will no longer be buried;

Regarding air modeling to determine potential impacts to public health and safety from potential air emissions during the proposed actions:

- as part of the adjacent New Bedford Harbor Superfund Site cleanup, air modeling has been performed, including at the Aerovox Site area. EPA can make use of this model specifically for the Aerovox Site should the need arise;

Concerning controls during the removal action to prevent unintentional releases:

-see response to comments C.5 and C.19;

Who is responsible for injuries arising from the Aerovox Site during the response action?

-all contractors working at the Site are required to carry workers' compensation insurance as well as comprehensive general liability and automobile insurance;

What specifications will assure capture of the misting water and/or airborne contaminants?

- the Action Memorandum contains specific, detailed requirements to capture and manage storm water runoff (including water from dust suppression activity) during the cleanup activities (see also response to comments C.5 and C.19);

Regarding protective actions for surrounding residents and properties during the cleanup:

- the Action Memorandum requires stringent safeguards be implemented throughout the performance of the work so that surrounding properties will not require protective actions or relocations. A comprehensive oversight and field monitoring program will be performed by EPA and COE to ensure that the demolition contractor complies with these safeguards. Should any performance standards be exceeded, EPA will immediately order the work stopped or take other action to control the situation until the issue is resolved;

How would the proposed cleanup impact the cost and possibility of a permanent cleanup?

- the revised cleanup approach, along with the ensuing 21E cleanup will be a permanent cleanup

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for the Site and allows for future redevelopment: Building demolition debris will be removed and disposed of off-site, and, as envisioned as part of the 21E cleanup, a clean utility corridor will be constructed;

With regard to compliance with state laws and regulations during the cleanup:

- it is unclear as to which State solid and hazardous waste laws and regulations the commentor is referring in its comment. EPA directs the commentor to Table 1 of the Action Memorandum which sets out all of the federal and state laws that have been identified as applicable or relevant and appropriate (ARARs) to the work. (See also Section VI.B.6 of the Action Memorandum for a discussion of ARARs). Prior to demolition, the items containing hazardous or special waste such as asbestos, mercury containing devices, and fluorescent lights will be removed and properly disposed of offsite in accordance with all state laws. Under the original recommended cleanup approach, the building debris would have been processed, disposed onsite and covered with a TSCA-compliant cap; the Site then would have been controlled by the State 21E program. Under the revised cleanup plan, again all hazardous and special waste will be removed and properly disposed of offsite. In addition, all demolition debris will now be disposed of offsite as well and a further 21E cleanup will directly follow at the Site once the NTCRA is completed;

Did the cost estimate include long-term monitoring if a permanent cleanup is not implemented?

- the revised cleanup, along with the ensuing 21E cleanup will be a permanent cleanup for the Site. The NTCRA action will remove the contaminated building to prevent the threat of fire and subsequent release of contaminants, and will cap the Site to prevent direct contact. The 21E action may require further capping in certain areas of the Site and will also address contaminated groundwater. Long-term operation, maintenance and monitoring of the caps and any measures to address groundwater are included in the cleanup plans and are funded through the forthcoming settlements. In addition, land use restrictions will be recorded to ensure the cleanup remains protective. EPA believes the cost estimates in the SEE/CA allowed a fair comparison between all alternatives under review. As noted above, funding for long-term monitoring will be provided as part of the forthcoming settlements; and

Is it reasonable to assume that a developer will pay for permanent cleanup at some later date?

– yes, EPA believes it is reasonable, depending on economic conditions, that a developer will pay to enhance a federal or state cleanup, depending on the developer's desired use and impacts that use may have on the remediated Site.

22. *One commentor raised the concern that access to abutting facilities would be disrupted during the proposed cleanup, and inquired whether EPA intends to offer any assistance to mitigate impacts to area businesses and residents.*

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EPA Response:

EPA has coordinated and will continue to coordinate with the City and Site abutters to ensure that access to abutting properties is not disrupted during the cleanup action. Some limited access disruption may be necessary for short periods of time, but access for public safety vehicles will not be disrupted during these short periods. In addition, as described in earlier responses, EPA will ensure that the cleanup is done safely and properly to avoid adverse impacts to area residents and workers. (See also response to comments C.5 and C.19).

23. One commentor recognized “that something must be done to respond to the environmental conditions of the Aerovox Site”, but suggested that additional Site evaluations are needed and that emergency response planning such as evacuation and pre-fire plans should be a priority in the meantime.

EPA Response:

EPA appreciates the recognition that the status-quo is unacceptable for the vacant Aerovox Site, but (as described above in response to comments C.11 and C.18) disagrees that additional Site evaluations are necessary before proceeding with the NTCRA. While the Site will be fully characterized as part of the 21E cleanup that will directly follow the NTCRA action, there is no reason to delay the building demolition to eliminate the immediate risk of release of contaminants should a fire occur at the facility.

Furthermore, evacuation and pre-fire plans for the Site have been completed by the City, and EPA will continue to coordinate with the City regarding emergency response planning.

III. Response to AVX Comments

Below are EPA's responses to comments from AVX Corporation (AVX), a potentially responsible party at the Aerovox Site. Because of the broad nature of AVX's comment letter (statements made in Sections I and II of AVX's letter were not clearly identified as comments; Section III appears to contain the actual comments), EPA offers the following preface to this section of responses. To capture all of the issues in all three sections of AVX's letter, Section III.A below summarizes AVX's overall concerns relevant to the NTCRA raised in Sections I and II of its comment letter and EPA's response, and Section III.B responds to the actual comments in Section III of AVX's letter. EPA notes that much of Section II is devoted to background information and conclusions provided by AVX. EPA is not specifically responding to these facts as they do not appear to be comments on the NTCRA; however, this lack of rebuttal does not affirm in any way the veracity of this information or the conclusions provided by AVX, and EPA reserves its right to do so at a later time if necessary.

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A. NTCRA Concerns in Sections I and II of AVX Comment Letter

1. AVX questioned which documents, including guidance documents, constituted the Administrative Record File (ARF), why the ARF did not include an Action Memorandum, and whether the ARF was sufficient for the public to assess and comment on the proposed removal action.

EPA Response:

“The administrative record file, a subset of the site file, is the body of documents EPA uses to form the basis for the selection of a response. It should not be confused with the administrative record, which is not complete until a response action has been selected.” *Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA*, EPA/540-R-93-057, Publication 9360.0-32, August 1993, (NTCRA Guidance) p. 14. This means that EPA compiles documentation of its decision-making up to the time the Action Memorandum is issued. The Action Memorandum and all its attachments are the last document in the ARF and the administrative record (AR) closes at that time. Therefore, because it was not yet issued, the Action Memorandum was not included in the ARF at the time the 2006 SEE/CA was issued for public comment.

EPA directs AVX to the Aerovox Removal Site Administrative Record File Index which clearly describes the full contents of the Aerovox AR. The AR includes all the documents originally included when the 2006 SEE/CA was issued. Additional documents have been added since the 2006 SEE/CA was issued including those which reflect the comments EPA received on the SEE/CA, any additional documents EPA relied on when it revised the recommended alternative based on public comments, further sampling results, and the Action Memorandum, including all of its attachments.

With regard to guidance documents, EPA directs AVX to the AR Index which includes a guidance compendium for the 2006 SEE/CA and the 2004 Aerovox removal, which is incorporated by reference, along with its compendium which includes four guidance documents. EPA notes that additional guidance documents have been included in the guidance compendium. Finally, AVX will find additional guidance documents in the ARARs table in the Action Memorandum.

EPA is confident that with the addition of the Action Memorandum along with all of its attachments and certain new post-SEE/CA documents added to reflect the revised remedy, the AR is complete. EPA believes its actions in establishing the AR along with the additional step of issuing the SEE/CA for additional public comment, holding a public meeting during the comment period, as well as other continuing outreach activities, not only meets its statutory requirements but go beyond those requirements to show a willingness to provide meaningful public

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participation.

2. AVX commented that it is necessary to review more than eight years of documents - from July 1998 (Approval Memorandum) to April 2006 (SEE/CA) in order to provide a meaningful response to EPA's request for comments on the proposed removal action.

EPA Response:

While the Aerovox Site does have a long regulatory history, EPA disagrees that review of over eight years of documents is necessary to provide meaningful comments to the SEE/CA, and notes that the SEE/CA's executive summary outlined the response action and regulatory history of the Site. The ARs for the 1999 AOC and the 2004 Aerovox removal, which are incorporated by reference into the AR for this NTCRA, along with the EE/CA, also outline the history of the Site. The focus of this removal action is to address the highly contaminated vacant facility and address the imminent and substantial endangerment presented. The SEE/CA ARF updated the documentation regarding the deteriorated condition of the building, as well as the risks to human health and the environment. The SEE/CA also provided a range of alternatives and costs. EPA also granted AVX's request to extend the comment period to allow a more thorough review of these documents.

3. AVX commented that the July 1998 Approval Memorandum does not support the removal action objectives set out in the 1998 EE/CA nor the 2006 SEE/CA and questioned the consistency of these documents.

EPA Response:

EPA disagrees with the comment and notes that AVX did not submit comments during the public comment period held for the EE/CA.

The 1998 Approval Memorandum fully supports the removal action objectives set out in the EE/CA and SEE/CA, which are primarily source control objectives. The NTCRA Guidance states that the Approval Memorandum, which is prepared in advance of the Action Memorandum and the actual site work, serves three purposes: 1) secure management approval and funding; 2) document that the situation meets the NCP criteria for taking the NTCRA; and 3) provides specific site information, including current and future site risks if the site conditions change or if no action is taken or delayed (emphasis added). NTCRA guidance at page 6.

The basis for the removal action is grounded in the NCP factors as outlined in the Approval Memorandum: actual/potential exposure to nearby human population and animals (300.415(b)(2)(i)); migration of high levels of hazardous substances, pollutants or contaminants in soil at or near the surface (300.415(b)(2)(iv); the threat of fire or explosion (300.415(b)(2)(vi));

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and other situations posing threats (300.415(b)(2)(viii). Site investigations reveal the presence of PCBs in soil and building materials throughout the Site, often at percent levels, as well as in Site groundwater and in the air. Volatile organic compounds (VOCs) are also found in Site soils and groundwater at elevated levels. Characteristics of the Site are also documented in the Approval Memorandum including its location in a highly developed urban/ industrial area of the City, and the decreasing elevation of the property as it slopes down to the abutting Acushnet River. Not only did the Approval Memorandum note the ingestion and dermal contact risk for workers to PCBs, but also noted the potential for tracking contamination offsite and the potential for fire, specifically stating that should the building become vacant with no security measures, the threat of fire increases.

Since the Approval Memorandum was issued, the scope of the removal action has always been for a source control action. Consistent with the Approval Memorandum, the EE/CA's general goal and objectives were to minimize future potential impacts to human health and the environment caused by PCBs in the building and in Site soils. Specifically, this would be achieved through building demolition and capping of Site soils in a way that would facilitate redevelopment of the Site.

In the intervening years since the Approval Memorandum and EE/CA were issued, the PCB contamination has remained unabated and, in fact, Site conditions have worsened. Although there are no longer workers present, the building has deteriorated and vandalism and trespassing had increased until a better Site security presence was arranged. Moreover, without a daily workforce present, the potential for fire has also increased, with its concomitant potential release of dioxins and furans generated from the fire. The SEE/CA continues the goals and objectives of the EE/CA while reflecting current conditions at the Site. The overall goal is still to minimize impacts to human health and the environment caused by PCBs in the vacant mill and surrounding Site soils. The SEE/CA carries forward the objectives for building demolition given its deteriorating status and heightened potential for fire as well as and for installing a protective cover to prevent direct contact with Site soil. The SEE/CA added an objective to minimize future releases of PCBs via storm water, air and groundwater. The presence of PCBs in groundwater and air were identified in the Approval Memorandum.¹ PCBs in stormwater were identified in the conceptual site model.

B. Comments on the SEE/CA in Section III of AVX Comment Letter

1. AVX commented that the 2006 SEE/CA does not meet its statutory or regulatory requirements under CERCLA for a removal action for the following reasons:

¹ The Approval Memorandum also notes the existence of VOCs in Site soils and groundwater; however, it recognizes that a prior removal action was taken in an effort to address contaminants, including PCBs, migrating to the Acushnet River in groundwater.

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a. AVX commented that the SEE/CA does not satisfy CERCLA §104(a)(1) requirements to define the manner in which the facility constitutes a substantial threat of release of a hazardous substance into the environment.

EPA Response:

EPA disagrees that the SEE/CA does not satisfy CERCLA § 104(a)(1) requirements. AVX points to two exposure pathways identified in the Approval Memorandum (ingestion and dermal inhalation (sic)) and the purported lack of any other basis in the Approval Memorandum or the EE/CA for the SEE/CA's statements a) that PCBs in soil and groundwater pose a potential threat to human health and the environment,² b) that stormwater runoff poses a potential threat to surface water and c) that there is a threat of release of contaminants in the event of a fire at the facility. EPA disagrees that the SEE/CA's recommended action is without a basis or foundation in the Approval Memorandum and the ARF and refers AVX to, among other things, the following items:

EPA's response to AVX comment A.3 which cites the specific factors in the NCP § 300.415(b)(2) that are presented in the Aerovox Approval Memorandum that establish the necessary site specific findings for a removal action at the Aerovox Site under CERCLA § 104(a)(1);

Section IV of the Approval Memorandum (Basis for EE/CA and Non-Time Critical Removal Action) which includes a finding that the potential for tracking of contamination to offsite areas also exists and "Should the building become vacant with no security measures the threat of fire increases.";

The EE/CA which describes Site characteristics including a description of higher elevations on the western edge of the property sloping to lower elevations at the eastern edge of the property along the shoreline of the Acushnet River;

The ARF which presents Site investigations, including groundwater, soil and building sampling results which identifies concentrations of contaminants in groundwater, soil and building material that exceed regulatory standards;

The March 2006 CSM which concludes that increased PCB releases to surface water (and thus to the harbor) are expected as the building continues to deteriorate (ENSR, 2006 at

² EPA notes, however, that groundwater contamination is beyond the scope of this NTCRA and will be addressed through the subsequent 21E action that will be implemented at the completion of the NTCRA.

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p.4-4); and

The April 2006 SEE/CA which points out that in the event of a fire at the vacant mill, the fire suppression water would likely become contaminated with PCBs. This contaminated surface water would then drain into New Bedford Harbor and potentially the abutting properties as well.

AVX's comment implies that CERCLA and the NCP require that the basis for taking a removal action should be the same as or close to that which forms the basis for a remedial action. EPA disagrees and points to the NTCRA Guidance which emphasizes that the purpose of removal authority is to address the worst problems first and achieve prompt risk reduction. The Guidance goes on to describe the streamlined risk evaluation which is "intermediate in scope between the limited risk evaluation undertaken for emergency removal action and the conventional baseline assessment normally conducted for remedial actions." (p. 29). A risk assessment was performed for Site worker exposure scenarios to contamination inside and outside the building. Based on the NTCRA Guidance and the statutory authority for removal actions, EPA did not deem it necessary to complete further risk assessments for the potential pathways of tracking contamination to offsite areas or potential fire exposure pathways. The Approval Memorandum and EE/CA AR describe instances of trespassing onto the Site and into the building (and thereby coming into contact with contaminated surfaces) as well as the location of the building in a densely populated urban area.

At the time the 1998 EE/CA was being written, the working assumption was that the building would be demolished, since only building demolition alternatives were presented. It should be no surprise therefore that the EE/CA did not address the scenarios of building deterioration or mill fire. With the subsequent Aerovox bankruptcy in 2001 and the vacant, unheated status of the building since then, it is reasonable and prudent to consider the threat of releases in such scenarios. To disregard these threats, especially with the knowledge that two other nearby vacant mills have caught fire in recent years, would be an abdication of responsibility.

Although the 2006 SEE/CA does not reference the Aerovox Preplan specifically, the Preplan was included in the AR and EPA was well aware of its contents and conclusions. The Preplan itself captures the risks of the vacant mill, saying that "Due to the hazards present, the use of interior crews would not be advisable except for fires of a very limited size. The physical positioning of the building, its chemical contamination, and its exposures will present serious problems." EPA coordinated with the City and its Fire Department prior to issuance of the SEE/CA, was aware of their concerns, and included the Preplan in the AR to help capture the risks posed by a fire scenario in the public record.

b. AVX commented that the SEE/CA does not comply with the NCP for the following reasons:

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it improperly relies on an unsubstantiated risk evaluation based on incomplete site characterization;

EPA Response:

AVX appears to be troubled by the passage of time between the issuance of the Approval Memorandum and SEE/CA and the intervening change in Site conditions and attempts to portray the NCP and the NTCRA Guidance as requiring a full risk assessment and Site characterization to justify a removal action. EPA refers AVX to its response to AVX comments A.3 and B.1. As stated in those responses, the goals and objectives contained in the SEE/CA remain consistent with the Approval Memorandum and the EE/CA. The Approval Memorandum, the EE/CA, and the ARF all contain sampling results of elevated levels of VOCs in groundwater and soils and PCB-contamination in building materials and building equipment, and in Site soils, surface water runoff, groundwater and air. These documents also noted the population density of the area surrounding the building. The SEE/CA includes additional sampling results that show elevated levels of PCBs in the parking lot asphalt at the Site and marks further deterioration of the building. The Approval Memorandum found the building to be unsafe for workers and trespassers and a significant threat of release of PCBs (and dioxins and furans) in the event of fire and noted the increased threat of fire if the building were to be vacated. The recommended alternative in the EE/CA, which was authorized by the Approval Memorandum, was to demolish the building and cap the Site because of these documented Site conditions. The Site risks remain whether or not workers are in the building. Even after Aerovox relocated, the building was to be demolished given its level of contamination and potential for significant impacts to the surrounding community in the event of fire.

AVX fails to note that the NTCRA Guidance also provides another stated purpose of an Approval Memorandum which is to provide information about threats to public health, welfare, or the environment posed by sites including those from expected changes in the situation if no action is taken or if the action is delayed (NTCRA Guidance, p 6). The SEE/CA is consistent with this NTCRA guidance and the Approval Memorandum in that it reflects the changed conditions of the Site.

it fails to state clear and appropriate risk-based objectives;

EPA Response:

EPA disagrees and notes that the SEE/CA's objectives (Section 2) address the need to abate, prevent minimize, stabilize, mitigate or eliminate the release or threat of release of PCBs from the highly contaminated (and deteriorating) building and from the property. Again, EPA believes AVX is confusing remedial action with removal action. The scope of the removal action could

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range from site stabilization to total site cleanup. “Specific objectives vary with the type of removal” and can be guided by, among other things, applying appropriate federal or state ARARs. (NTCRA Guidance, p. 32)

The goal of this NTCRA is to prevent current and future releases of PCBs and control risks to human health and the environment. Consistent with (i), (iv), (vi) and (vii) factors in 40 CFR 300.425(b)(2), the SEE/CA’s objectives define the scope of the removal action. They are targeted to safely demolish the building in accordance with ARARs, prevent direct contact with contaminated soils (and asphalt) through capping, minimize future releases to surface water, groundwater and air, through demolition and capping, perform these actions in a way to allow future reuse of the Site and assist in establishing land use controls to ensure the integrity of the cap and prevent the use of Site groundwater.

the recommended alternative fails to address properly the only 40 CFR 300.415(b)(2) factors that apply;

EPA Response:

EPA disagrees with AVX’s assertion that only two of the 300.415(b)(2) factors apply in this case. In addition to 40 CFR 300.415(b)(2)(i) and (vi), the two factors that AVX agrees with, the Site has high if not percent levels of PCBs in soils that may migrate (factor iv), the Site could contaminate the Acushnet River estuary, a sensitive ecosystem and part of the Buzzards Bay national estuary of concern, and weather conditions could cause PCBs to be released by causing further building deterioration (factor viii).

With regard to the two factors that AVX recognizes as applicable to the Site (actual or potential exposure to humans, animals or the food chain and threat of fire or explosion), AVX’s comments incorrectly minimize the potential exposure from the Site. Airborne PCBs *have* in fact been detected on the west (Belleville Avenue) side of the property across from an urban residential neighborhood. Similarly, the March 2006 Conceptual Site Model did not account for the possibility of solvent-induced PCB groundwater flux to the Acushnet River, a scenario now considered more plausible since the discovery of extremely high levels of solvents in the sediments abutting the Site in summer 2006.

Further, EPA disagrees that better security and building stabilization/fire code compliance would be an effective long term option to address the threat of fire from this Site. Due to the highly contaminated and deteriorated condition of the building(s) and property, the Site could reasonably be expected to linger in this troubled state in perpetuity given the absence of any other public resources to address it. Given that two other vacant mills have caught fire in the area in recent years, EPA believes a building fire at this Site is an accident waiting to happen. EPA thus believes a permanent rather a temporary remedy is the best approach to address this urgent risk

Aerovox Action Memorandum
Responsiveness Summary

and threat of exposure.

the recommended alternative does not contribute to efficient performance of any long-term remedial action; and

EPA Response:

Refer to EPA's response to AVX comment B.6.

there is no accounting for costs of post-removal site control (PRSC)

EPA Response:

EPA expects that the costs for PRSCs would be similar across all alternatives, so that the alternatives as presented in the SEE/CA can be comparatively evaluated. More importantly, there are provisions in the forthcoming settlements for the responsibility and funding for implementation of PRSCs.

2. *AVX commented that the recommended alternative is not implementable because EPA's calculations for the total volume of demolition waste are low, and as a result the actual amount of waste will exceed the disposal capacity available at the Site. AVX also questioned other EPA calculations for demolition and disposal costs.*

EPA Response:

Although there is inherent uncertainty and difficulty regarding estimating a crushed disposal volume of demolition debris for a project of this scale, especially given the large volume of interior equipment and materials (E&M) left behind when the building was vacated (the volume of E&M is estimated to be significantly more than the volume of building demolition debris) EPA disagrees that the SEE/CA's recommended alternative would not have been implementable. AVX bases its comments on an incorrect building material disposal volume (not including E&M) of 14,771 cy, which as indicated in Table 11-1 of the EE/CA includes the volume of the concrete foundation. As indicated on p.6 of the SEE/CA, "the basement concrete floor slab and side walls...would remain in place." The EE/CA estimated this foundation volume to be 3,690 cy, thus the correct building material volume for this analysis should be approximately 11,100 cy, not the 14,771 cy as used by AVX.

Furthermore, EPA commissioned a room-by-room analysis of the vast amount of E&M that remain inside the building as well as a basement volume measurement to generate as accurate an estimate as possible. This evaluation concluded that, even in a worst case scenario in which void spaces within the disposed debris were assumed to be very conservative, onsite disposal

Aero vox Action Memorandum
Responsiveness Summary

could be accommodated by a slight mounding or crowning of the debris once placed within the basement - something that would be desirable regardless of the volume to promote surface water runoff. With all disposal thus accommodated onsite, it should also be noted that AVX's comments regarding the cost estimate being flawed for not including offsite disposal costs (p.31) are irrelevant.

More importantly, however, given the remedy change to offsite disposal discussed above, the question of whether sufficient onsite disposal volume would be available becomes moot.

Regarding other AVX comments on the SEE/CA's cost estimate, unfortunately AVX provides no detailed information to support its various claims that a) the cost of the recommended alternative should be \$7.45 million not \$7.90 million, b) building demolition costs are underestimated by \$600,000 or c) asbestos removal costs are underestimated by approximately \$200,000 due to an incomplete survey. EPA does note that the asbestos cost estimate was based on a 2006 asbestos survey commissioned by EPA to provide as accurate an estimate as possible. Overall, EPA believes that the cost estimates are consistent across all alternatives and meet the level of accuracy required for the planning and response selection stage.

3. AVX commented that EPA originally endorsed a building stabilization alternative in the 1999 AOC before Aero vox filed for bankruptcy and that such an alternative is still implementable and represents the lowest cost to address the building. AVX also views the recommended alternative as a temporary measure.

EPA Response:

Building stabilization was only envisioned as a temporary approach in the 1999 AOC, until such time as funding from the agreed-upon payment plan was in place to demolish the building. Moreover, the pre-bankruptcy remedial scenario was quite different than after bankruptcy, since Aero vox would have, prior to filing for bankruptcy, provided financing for Site security, building repairs, fire suppression, and alarms. This was obviously not the case post-bankruptcy. Maintaining a vacant building would consume considerable funds over what could be a very long time, if not in perpetuity if no developer were to step forward. The building deterioration would only get worse and require additional funds to repair over time (e.g., roof leaks). Vandalism and trespassing would continue to be ongoing problems. Without additional funds, bankruptcy settlement funds would be insufficient in the long-term to maintain a building stabilization alternative and it would actually be more costly. Demolition is the immediate answer to the threats and risks posed by the building, whereas building stabilization is only a temporary measure.

EPA disagrees that the recommended alternative in the SEE/CA was a temporary measure, as it would have fully achieved the response action objectives.

Aerovox Action Memorandum
Responsiveness Summary

4. AVX commented that the recommended alternative does not attain ARARs.

EPA Response:

As a general response, EPA notes that pursuant to 40 CFR 300.415(j), removal actions shall, to the extent practicable considering the exigencies of the situation, attain ARARs. EPA has made every effort to attain ARARs to the extent practicable given the Site circumstances and the need to address the threats posed by Site conditions. EPA refers to the Section VI.B.6 and Table 1 of the Action Memorandum for a complete discussion of ARARs. Below are EPA's responses to AVX's specific comments on Site ARARs.

In particular:

State hazardous waste regulations require an engineered barrier and post closure care;

EPA Response:

EPA agrees with AVX's comment that the NTCRA capping requirements may be confusing and believes some of that confusion may be attributable to the interaction of CERCLA, TSCA and state 21E capping requirements. The NTCRA as presented in the EE/CA and SEE/CA is protective under CERCLA and TSCA. This doesn't mean, however, that the Aerovox Site, once the NTCRA is completed, would not be subject to further cleanup and capping requirements under the state 21E cleanup program. Pursuant to the 21E program and its associated regulations, soils remaining onsite under a protective cover that exceed Massachusetts Contingency Plan (MCP) upper concentration limits (UCLs) for certain contaminants may require an engineered barrier in addition to the NTCRA's protective cover. The NTCRA will include a protective cover that meets the TSCA determination conditions for capping to prevent dermal contact. The NTCRA also includes long-term groundwater monitoring and maintenance of the cap, including regular sealcoating, as well as the need to implement land use restrictions to insure the NTCRA remains protective. It is still possible, however, that after the NTCRA is completed an engineered barrier under the state 21E program will be required in certain areas. The SEE/CA identified provisions of the MCP and state hazardous waste regulations that recognize that CERCLA actions performed at sites can result in sites being adequately regulated for the purposes of these state regulations. (See response to the comment directly following this one.)

With the subsequent revision of the removal action and the forthcoming settlements, the confusion has cleared. Once the NTCRA work is completed, AVX will commence a 21E evaluation and cleanup of the Site which may include an engineered barrier if required by state regulations. The NTCRA will include a protective cover wherever PCBs in soil exceed 2 ppm; the ensuing 21E cleanup will include an engineered barrier wherever soil exceeds state UCLs.

Aeroxox Action Memorandum
Responsiveness Summary

With regard to post closure care, as stated above, the TSCA determination includes as a condition for protectiveness, a long-term monitoring and maintenance program for the Site caps, a long-term groundwater monitoring program, and land use controls to prevent groundwater use and land use activities that would adversely affect the cleanup. Moreover, the forthcoming settlements assure that these activities will be funded and performed.

The NTCRA does not meet state requirements for adequately regulated sites pursuant to the MCP;

EPA Response:

EPA disagrees that the NTCRA is not adequately regulated pursuant to the MCP, 310 CMR 40.0111. As stated in MassDEP's own fact sheet, *The New MCP: Adequately Regulated Fact Sheet 1, May 2004*, "The provisions limit the applicability of the MCP in cases where response actions are adequately overseen by other authorities." It goes on to state, "DEP included the adequately regulated provisions in the MCP in order to avoid duplication of regulatory procedures and oversight, thus streamlining site cleanup at sites subject to multiple jurisdictions". The fact sheet goes on to specifically identify "Federal Superfund Sites or other removal actions taken in accordance with CERCLA..." as adequately regulated sites. This NTCRA is carried out under the authority of CERCLA §104(a) with oversight by EPA and its representatives. The fact sheet also states that a response action is adequately regulated if it is conducted according to the procedures of one of the listed regulatory authorities, including CERCLA. The NCP contains the procedures that regulate Superfund cleanups. As stated throughout these responses to comments, including III.A.3 and III.B.1.b. this NTCRA meets all the NCP factors and requirements necessary to conduct a removal action.

EPA also refers to MassDEP *The New MCP: Adequately Regulated Fact Sheet 2, May 2004*, which provides further information about adequately regulated provisions specific to response actions conducted under CERCLA, including when DEP deems a CERCLA site to be adequately regulated. Contrary to AVX's comments, EPA has been coordinating with MassDEP for many years at this Site. In fact, in accordance with CERCLA, the NCP and its own fact sheet, MassDEP identified ARARs for the NTCRA. (See MassDEP correspondence dated February 2009 in administrative record).³

The NTCRA does not meet state requirements for adequately regulated sites pursuant to the state hazardous waste regulations;

³ EPA notes that MassDEP also provided a letter identifying ARARs just before the 2006 SEE/CA was issued; however, it was not received in a timely manner to be adequately considered in the SEE/CA. A copy of that letter is included in the administrative record for reference.

Aerovox Action Memorandum
Responsiveness Summary

Pursuant to 310 CMR 30.105 of the state hazardous waste regulations, PCB waste that would be subject to hazardous waste regulations due to the presence of PCBs are exempt from the regulations provided certain conditions are met, including that the waste is regulated pursuant to 40 CFR 761. As evidenced by the TSCA Determination (Appendix C of the Action Memorandum), the NTCRA has been determined, in accordance with 40 CFR 761.61(c) of TSCA, not to pose an unreasonable risk to health or the environment as long as the conditions in the TSCA Determination are followed. EPA has acknowledged in the Action Memorandum that some of the demolition waste may not be included in the exemption provided by 310 CMR 30.105 and it will be handled accordingly to the extent practicable.

EPA does agree to a certain extent with AVX's comment in that Section VI.B.6 of the Action Memorandum notes that certain provisions of the state hazardous waste regulations have been reinserted into the ARARs table. As pointed out by MassDEP in its 2009 ARARs letter, NTCRA activities will address waste that may not be included in the exemption provided by 310 CMR 30.105 such as asbestos, mercury and various universal waste items. These wastes would be governed by those sections of the regulations identified in the ARARs table in the Action Memorandum.

There is insufficient information known about the Site upon which to base a 40 CFR 761.61(c) TSCA determination;

EPA Response:

EPA strongly disagrees with this comment and refers to its response to comment III.B.1.b., among other responses. Removal actions do not require comprehensive site-specific risk assessments prior to taking action nor is that a requirement contained in 40 CFR 761.61(c). The Approval Memorandum, the EE/CA, and the ARF all contain sampling results of elevated levels of PCBs in building materials and building equipment, and in Site soils, surface water runoff, groundwater and air. These documents also noted the population density of the area surrounding the building, the prior presence of workers and frequency of trespassing and vandalism. The SEE/CA includes additional sampling results that show elevated levels of PCBs in the parking lot asphalt at the Site and notes the further deterioration of the building. The TSCA Determination finds that the NTCRA's steps for demolishing the building and capping the Site to prevent dermal contact with PCB contamination will not pose an unreasonable risk to health or the environment as long as the conditions in the Determination are met. EPA also notes that with the revised NTCRA that now includes sending all demolition waste offsite, the conditions in the final TSCA Determination have been revised accordingly.

With regard to the *Guidance on Remedial Action for Superfund Sites with PCB Contamination*, as stated in the ARARs table, EPA identified that the guidance was considered, as appropriate,

Aerovox Action Memorandum
Responsiveness Summary

during the development of the EE/CA, SEE/CA and removal action process. EPA notes that the guidance is written to guide the development of an RI/FS at a remedial site with PCB contamination. Although not a remedial site EPA nevertheless believes the NTCRA is consistent with the guidance. Building demolition and site capping is a permanent remedy for the Site; no further removal or remedial action pursuant to CERCLA is currently envisioned beyond the NTCRA work. As noted in the Action Memorandum and in these comments, there will be further site assessment and cleanup as necessary to meet the state 21E program requirements; however, the NTCRA cleanup is considered protective regardless of any further state cleanup. EPA agrees that the guidance also recites the statutory preference for remedies that include treatment to reduce mobility, toxicity or volume of hazardous waste. While the NTCRA does not include treatment as a component, it complies with the guidance to the extent practicable in that certain waste streams of the demolition debris will be treated/decontaminated to reduce PCB levels where such treatment can be accomplished cost-effectively. PCBs in soil remaining onsite, while already generally immobile, will be rendered even more so through Site capping. More importantly, however, the NTCRA through the building demolition eliminates the release of contaminants in the event of fire.

Onsite disposal of building demolition debris meets the requirements of a solid waste disposal landfill; however, the Site is not a suitable location for a solid waste management facility;

EPA Response:

EPA disagrees that onsite disposal of the building debris would have triggered state solid waste regulations, except for the proposed waste ban regulations as identified in the SEE/CA. The majority of the waste, except asbestos, mercury and universal waste was assumed to be TSCA waste and would be addressed as such. TSCA disposal regulations were included as ARARs in the EE/CA and SEE/CA and conditions governing the Site cleanup were included in the draft TSCA determination. The waste ban provisions (governing disposal of asphalt, brick and concrete) were not promulgated at the time the SEE/CA was issued but were noted and held for further review in the Action Memorandum.

With the revised response action now including offsite disposal of the building debris, this becomes a moot point, leaving only the waste ban provisions for reconsideration. In its ARARs letter, MassDEP noted that these provisions were now promulgated and asked that they be included as an ARAR. The Action Memorandum reflects that EPA believes these provisions govern offsite transportation and disposal activities and therefore is not an ARAR since ARARs apply only to onsite activities. EPA expects that any part of the NTCRA occurring offsite will comply with all laws, including this regulation. EPA understands that coordination with MassDEP would be required for disposal of waste ban material that does not exceed levels requiring disposal at a TSCA or hazardous waste landfill, but still remains contaminated above

Aerovox Action Memorandum
Responsiveness Summary

recycling or reuse levels for compliance with the regulation.

The NTCRA does not comply with Floodplain Executive Order 11988; and

EPA Response:

AVX took issue with EPA's explanation of its ability to comply with the Floodplain Executive Order to the extent practicable. Based on the funding available at the time the SEE/CA was issued and the exigencies of the Site circumstances, EPA's only practicable alternative was to address the threats posed by the building and soils that already existed in the floodplain through demolition and capping. To the extent there was funding available, some material would be taken offsite, but without additional funding, waste would have been left onsite in the floodplain. EPA noted the existence of the hurricane barrier in the Harbor that would afford flood protection as well as other measures we would take to reduce impacts, including decontamination, installing a protective cover that could withstand flooding, minimum grading, and maintaining floodplain vegetation to reduce erosion.

EPA again notes that this comment is now moot with the revision of the NTCRA to include offsite disposal of the building demolition debris.

The protectiveness of air emission standards vary for residential and business abutters.

EPA Response:

AVX commented that a single risk-based standard for airborne PCBs should be used. Based on the substantial amount of monitoring that EPA has performed to date at the Site, use of a risk-based airborne PCB standard would not make sense for the simple reason that airborne PCB levels have at certain times exceeded risk-based levels even without response work underway. EPA's approach is therefore to use these background airborne PCB levels as the controlling standard for the project, i.e., to not allow airborne PCB levels to be greater than currently documented during the demolition of the building.

5. AVX commented that the removal of asbestos and mercury from the building is not a proper response action under CERCLA.

EPA Response:

EPA agrees that CERCLA precludes removals in response to a release or threat of release from products which are part of a structure's building material, result in exposure only within a building, and which haven't migrated or threatened to migrate outside a building. However, as documented in the AR this is clearly not the case at this Site and many pathways for contaminants

Aerovox Action Memorandum
Responsiveness Summary

to escape exist. The building is in great disrepair; vandalism and trespassing occurred regularly until more recent heightened Site security was put in place; doors and windows have frequently been broken and repaired.

Many mercury spills have been documented, some existing near floor drains, thus posing an acute threat of release to the exterior of the building. Vandalism and trespassing also presented a risk of release via tracking mercury and friable asbestos outside the building. Asbestos and PCB-contaminated dust are also released outside the building through broken windows, doors, openings in the roof and floor drains when mixed with flood waters.

All hazardous materials in the building including mercury and asbestos need to be safely removed prior to demolition to avoid risks to human health and the environment during demolition via airborne emissions.

EPA does not view the remainder of this comment regarding liability as being relevant to the request for comments on the 2006 SEE/CA.

6. AVX commented that the SEE/CA's recommended removal action does not meet the requirements for a consistency waiver.

EPA Response:

This removal will require funding above \$2 million and will require more than one year to implement, thereby exceeding the statutory cost and time limits on Fund-financed removal actions established under Section §104(c) of CERCLA and Section 300.415(b)(5) of the NCP. The NTCRA is estimated to cost not more than \$24.1 million (in 2010 dollars) and take approximately 22 months to complete. A statutory waiver is therefore required. Because this action is a mixed funding action and there will be additional cleanup pursuant to the State 21E program, a consistency exemption pursuant to CERCLA § 104(c) is appropriate.

The NTCRA is appropriate. EPA OSWER directive 9360.0-12A, "Final Guidance on Implementation of the "Consistency" Exemption to the Statutory Limits on Removal Actions," June 12, 1989, states that an action is appropriate if the activity is necessary for any *one* of the following reasons:

1. To avoid a foreseeable threat;
2. To prevent further migration of contaminants;
3. To use alternatives to land disposal; or,
4. To comply with the offsite policy.

Aerovox Action Memorandum
Responsiveness Summary

This NTCRA meets criteria one and two identified above: (1) It will permanently avoid the foreseeable threat of fire and subsequent release of PCBs (and the potential breakdown products of dioxins and furans) and other contaminants to the surrounding urban neighborhoods posed by the manufacturing facility and its contents; and (2) It will prevent further migration of contaminants via stormwater to the Acushnet River and exposure to contaminated soils and elevated airborne PCBs due to the contaminated building materials. By addressing the building and capping the Site at this time, the NTCRA will reduce the scope of the 21E cleanup. The 21E action will also address the need for permanent groundwater source control.

The NTCRA is consistent with long-term actions at the Site. Pursuant to the forthcoming settlement with AVX, there will be additional cleanup actions performed pursuant to 21E. Since the highly contaminated and deteriorating building would need to be demolished under a state cleanup action, the proposed NTCRA is consistent in the broadest sense with the ensuing 21E action planned for the Site. Demolition of the building provides AVX with the ability to conduct a full site characterization (e.g., including underneath the building foundation) pursuant to 21E. Once the NTCRA has been completed, AVX, pursuant to the Administrative Consent Order between AVX and MassDEP, will further evaluate the full nature and extent of contamination at the Site not addressed by the NTCRA and implement further cleanup actions to address remaining soil and groundwater contamination. All 21E activities will be conducted under the direction of an LSP, with oversight by MassDEP.

As part of its settlement with AVX, the City will implement post-removal Site controls in the form of a deed restriction to prevent future use of groundwater, required pursuant to TSCA, and an AUL to ensure the integrity of the capped areas pursuant to 21E. Moreover, AVX will fund an escrow account that will finance long-term operation and maintenance of the cap and a groundwater containment system as well as groundwater monitoring activities that are required pursuant to TSCA.

Finally, the response action authorized by this Action Memorandum, along with the 21E cleanup, will result in a complete source control and management of migration remedy for the Aerovox Site, effectively controlling or eliminating any further source of PCBs, VOCs or other contaminants from this facility over the long term to the New Bedford Harbor sediments and waters. These actions are also consistent with EPA's remedial action at the abutting New Bedford Harbor Superfund Site, since it provides long term source control of the Aerovox Site. Potential releases of PCBs to the Harbor in the event of a mill fire (e.g., from fire fighting water runoff and PCB-contaminated soot deposition) are also eliminated.

7. AVX commented that the recommended alternative is not effective and implementable alternative with lowest cost.

EPA Response

Aerovox Action Memorandum
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The building stabilization approach recommended by AVX is not as it contends “the approach endorsed by EPA in the 1999 AOC”. While there was a need for the building to be secured and stabilized until Aerovox’s funding payments were sufficient to pay for the demolition, this was simply a temporary stop-gap measure in consideration of Aerovox’s inability to fully pay for the remedy at the outset. AVX’s comment that the City’s \$250,000 in bankruptcy proceeds could have been used for more comprehensive building stabilization is incorrect, as this amount is barely sufficient to pay for electricity, minor repairs and upgrades to the fire alarm system over a limited period of years whereas such an approach could be needed in perpetuity given the egregious contamination of the facility. In other words, it is unlikely given the cost of cleanup that the property would be redeveloped using private funds. And for EPA to use its bankruptcy proceeds on short term building stabilization measures would have eliminated the ability to use these funds for a permanent building remedy.

Furthermore, EPA disagrees with AVX’s assertion that demolition of the building is “a temporary measure”; building demolition permanently remedies the risks that the building poses while building stabilization, AVX’s preferred approach, does not.

8. AVX recommended that a building stabilization approach be pursued until a long-term solution under the State’s Chapter 21E program could be implemented. AVX commented that this approach would be protective, easy to implement and less expensive than the recommended alternative, which they believed raised significant technical and legal issues.

EPA Response:

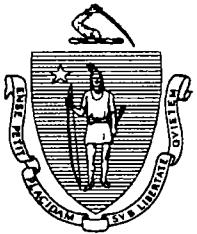
In light of the risks to human health and the environment and the risk of fire at the highly PCB-contaminated and vacant Aerovox facility, EPA disagrees that a building stabilization approach would be the best alternative for this Site. In addition to all the long-term care and costs that would be required to keep the existing building in place, EPA notes that several nearby vacant mills have caught fire in recent years. When burned (such as in a building fire), PCBs can break down and potentially form more toxic compounds such as dioxins and furans.

Again, however, as described throughout this Responsiveness Summary, through forthcoming settlement agreements with AVX as well as with MassDEP and the City, the building will be demolished, demolition debris will be disposed offsite and the Site will be capped. Once this NTCRA work is completed, the Site will be addressed under the State 21E program.

AEROVOX ACTION MEMORANDUM

RESPONSIVENESS SUMMARY

APPENDIX 1
(Comment Letters)



The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

ROBERT M. KOEZERA
REPRESENTATIVE
11TH BRISTOL DISTRICT
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Rep.RobertKoczera@hou.state.ma.us

Superfund Records Center
SITE: Aero vox
BREAK: 2.2
CROSS: 461007

August 21, 2006

Mr. David Dickinson, Project Manager
US EPA - New England
1 Congress Street Suite 1100 (HBO)
Boston, MA 02114-2023

Dear Mr. Dickinson:

I am writing to convey my opposition to the cleanup and reuse option recommended by the Environmental Protection Agency in the 2006 Supplemental Engineering Evaluation and Cost Analysis for the Aerovox site at 740 Belleville Avenue in New Bedford. I support the demolition of the Aerovox building and the removal of demolition debris from the site as well as the removal of contaminated soils from the site. The EPA should not consider containment of contaminants as an acceptable option under any circumstance. Just as our community demanded the removal of harbor contaminants from the site we insist on the removal of building debris and contaminated soil from the Aerovox site as well.

The high level of contamination of the Aerovox building and soil requires the removal of debris and contaminants from the site. To do otherwise is to put the population at risk to carcinogens and re-polluting the Acushnet River.

Sincerely,

Robert M. Koczera
State Representative
Eleventh Bristol District



"Koczera, Robert - Rep.
(HOU)"
<Robert.Koczera@state.ma.u
s>

08/21/2006 04:42 PM

To Group commentsnbh@EPA

cc

bcc

Subject Aerovox site cleanup and reuse proposal

Mr. David Dickinson:

Please accept the attached letter as my comments on the proposed cleanup and reuse of the Aerovox site at 740 Belleville Avenue New Bedford. I am faxing a copy of the attached letter and mailing the letter to



you as well. Aerovox EPA letter.doc

**COMMONWEALTH OF MASSACHUSETTS HOUSE OF
REPRESENTATIVES**

REPRESENTATIVE ROBERT M. KOCZERA

Phone Number: 617-722-2582
Fax Number: 617-722-2879

To: Mr. David Dickinson, (HBo)
617- 918- 0329

From: Rep. Robert M. Koczena

Number of Pages 2 (Including Cover Page)

U.S. Environmental Protection Agency
SITE: Aerovox
R.M.B.#: 2.2
OTR#R: 458685



Alan Coutinho
<acoutinho@acushnettown.m
ec.edu>
08/15/2006 09:01 AM

To Group commentsnbh@EPA
cc
bcc
Subject

Dear Mr. Dickerson,

The Board of Selectmen at their August 14, 2006 meeting discussed the EPA's alternative for the contaminated Aerovox Site. The Board is very concerned about the immediate threat that the Aerovox site poses. While the Board acknowledges the cost associated with remediation of the on site PCB's, they do not feel leaving the demolition waste on site is in anyone's best long term interest. If history has taught us anything in matters such as this it is that the least costly route turns into the most costly route long term. The Board feels the EPA's Alternative #3 will ultimately be the best option for cleaning the site and best for the community.

Alan G. Coutinho
Town Administrator
Town of Acushnet
122 Main Street
Acushnet, MA 02743
(508)998-0299



Commonwealth Records Center
SITE: Aerovox
SUBJECT: 2.2
CHARGE: 458683

THE COMMONWEALTH OF MASSACHUSETTS

ACUSHNET CONSERVATION COMMISSION

TOWN OF ACUSHNET

122 MAIN STREET, ACUSHNET MA 02743
TEL: 508.998.0202 FAX: 508.998.0203

Robert Rocha, Chairman
Ted Cioper, Vice-Chair
Patricia Picard
Marc Brodeur
Carol Chongarides
Joe Botelho

Merilee K. Woodworth, Conservation Agent

Mr. David Dickerson, Project Manager
US EPA – New England
1 Congress St., Suite 1100 (HBO)
Boston, MA 02114-2023

August 15, 2006

Dear Mr. Dickerson,

On behalf of the Acushnet Conservation Commission I am writing to express our concerns regarding the Aerovox Site Clean-up Project. It is the position of the Commission that the clean-up option chosen by the EPA, called New Alternative #1, does not go far enough in removing the hazards that PCB contamination of this site poses to the people and the environment of the surrounding Acushnet /New Bedford area. We join with the Coalition for Buzzards Bay and the Acushnet Board of Selectmen in strongly urging the EPA to reconsider the alternatives for cleaning up this site and removing the health hazards this site presents. Leaving the contaminated soil and debris on this site does nothing to ameliorate the problems of runoff and groundwater infiltration that are possible from this site for many, many years to come. In addition this option would make it nearly impossible to safely and economically redevelop this site. We urge the EPA to consider removing the contaminated materials off-site and out of the New Bedford / Acushnet area. Please consider the health and safety of our residents and the environmental, economic, and recreational value of the Acushnet River and New Bedford Harbor when deciding which option will be used to clean up the Aerovox site.

Thank you for the opportunity to comment on the Clean-up options offered by the EPA.

Sincerely,

Merilee K. Woodworth

Merilee K. Woodworth
Acushnet Conservation Agent



Merilee Woodworth
<mwoodworth@acushnettown
n.mec.edu>
08/15/2006 12:48 PM

To Group commentsnbh@EPA
cc
bcc
Subject Aerovox Site Clean-up comments

Attached please find a letter from the Acushnet Conservation Commission commenting on the clean-up of the Aerovox Site in New Bedford. Thank you for the opportunity to present the opinion of the Commission on this matter.

merilee

Merilee K. Woodworth
Conservation Agent
Town of Acushnet
122 Main Street
Acushnet, MA 02743
Tel (508) 998-0202
Fax (508) 998-0203



ACC ltr to EPA on Aerovox.doc

Environmental Protection Agency
STAFF: Arevox
DATE: 2-2
PHONE: 458 684



Bsna02746@aol.com
08/14/2006 11:19 PM

To: Group commentsnbh@EPA
cc:
bcc:
Subject: Arevox

Dave Dickerson:

An opinion on the Arevox clean up. After hearing of all the problems with the problems with the new Keith Junior High School and the problems at New Bedford High School even after all these years. I feel the EPA should rethink burying the demolition waste on site. It seems that even years later the PCB's still come back to haunt us. Even though the EPA is assuming the land will still be used for commercial/industrial use and you recommend changing the footprint of the land, putting a parking lot over the contaminated demolition material in the cellar, I wonder about settlement of the buried material over time. Will it cause the asphalt to crack and allow rain water to seep into the cellar and begin to force seepage of contaminated material out? I realize we are talking years, but this material will be there forever and parking lot maintenance is never a top priority with anybody. I know this project will be closely monitored by EPA, however if complete removal of the contaminated material is not in the budget and it probably is not, I would like to see the material sealed with cement or at least a rubber bladder of some kind before it is covered with any dirt. Will there be a need for any vent pipes to allow any gas vapors to escape.

I hope that complete removal of the demolition waste is in the budget given the close proximity of the property to the water and for the peace of mind of everyone concerned.

Thank you for keeping the Bullard Street Neighborhood Association informed of the progress of the harbor clean up and the EPA is welcomed at our meetings any time.

Ken Resendes
President
B.S.N.A.

Mr. Philip Bargioni
415 Summer Street
New Bedford MA 02740

June 15th 2006

Subject: Aerovox
SITES: 2.2
BREAK: 2.2
OTHER: 458686

Mr. David Dickerson, Project Manager
US EPA - New England
1 Congress Street, Suite 1100 (HBO)
Boston, MA 02114-2023

E-MAIL commentsnbh@epa.gov

Re: Aerovox Site

Dear Mr. Dickerson,

Thank you very much for your presentation on Wednesday evening 6/14/2006, I found your answers to questions to be direct and informative. Your colleagues including city officials clearly described some of the immediate dangers associated with the site, as well as reviewed a number of different options for cleaning-up this property. It is a great pity that past industrialists were not more caring of our environment, and that we as a community are now stuck with this expensive problem to resolve.

As you are aware New Bedford has a number of sites that have been, or need to be abated of various hazardous products, and residents have become more educated over the years about clean-up options. There is also a level of intolerance when it comes to leaving any toxins in the land that could affect our health, or our ability to develop property in the future. The City has had a very high unemployment rate for a long period of time, which has been exacerbated by contaminated parcels of land such as the Aerovox location stopping industrial development.

The City of New Bedford is currently building a new middle school on an old city dump, and the project costs have increased by at least \$30M to mitigate residents concerns about environmental issues at the new building. At the design stage the city was probably informed that with today's technology it is not a problem to build on an old dump site, but what was not fully explained is that it cost an extraordinary amount of money to build on marginal land. This lack of information disclosed to the City of New Bedford by the building designers, could be an avenue for the city to gain compensation from the designers of the school building in the future.

I have no issues related to the proposed demolition of the existing structures at the Aerovox site, just the thoroughness of the proposed work. The sooner the demolition of the building can start, the safer the local neighborhood will be from this enormous fire hazard.

I am sure you will take all the normal precautions to monitor the air quality during demolition, as well as protect the water resource from any contaminated run-off from the site.

It is normal good practice when demolishing a building in Massachusetts; to not only remove the building above grade, but also the foundations to that structure. After the

foundations have been removed the void or basement to the original structure is then filled with what is normally termed as non organic clean ordinary fill material. The finish grade of where the building was is subsequently brought up to match the surrounding land, being careful not to impose a drainage problem on abutting property owners. This is my understanding of the requirements of the Massachusetts State Building Code, and it is what needs to happen on this site. This is not a dump site but a parcel of land that needs to be restored to its original condition prior to the mill structure on the land.

Many of your proposals state that you would fill the existing basement with bricks from the demolished mill, but this creates an enormous land area where you cannot construct a new building in the future. Brick rubble is not a suitable material to construct a new building on, and would have to be entirely removed to facilitate the construction of even a relatively light single story industrial structure. A filled site with unsuitable material is also a problem for the installation of services such as drains and water lines, which will break if they are not adequately supported by the ground.

A reduced effective area of land that can be built on will lower the value of the land. Land that is not buildable has little value, and will not return any taxation to the residents of the City of New Bedford. A small area of land that can support development might have to be constructed in a more expensive way, because of the long narrow shape of the residual land.

In conclusion, as a resident of the City of New Bedford I would prefer to see a complete removal of contaminated materials from the site, including a complete restoration of the soils at this location. This will remove environmental health issues from the area as well as not limiting future development of the land.

Yours Most Sincerely

Mr. Philip Bargioni



pbargioni@comcast.net

06/15/2006 10:19 AM

To Group commentsnbh@EPA

cc

bcc

Subject Aerovox Site

Mr. David Dickerson,

Please find attached my comments related to the Aerovox site project.

Yours Most Sincerely



Mr. Philip Bargioni Aerovox Site.doc

Superfund Records Center
SME: Aerovox
DATE: 2.2
ST. #: 458687



Rcmsaber711@aol.com
08/15/2006 09:01 AM

To: Group commentsnbh@EPA
cc: catherine.rollins@ci.new-bedford.ma.us,
NBWard1Councilor@aol.com
bcc:
Subject: Aerovox demolition

Dear Mr. Dickerson

Unless I have missed a critical piece of the Aerovox demolition project, where is all of the airborne contaminated material from the building going to go?

All I have heard or read about is the danger of the contaminated material in that building being buried without sufficient feet of cover. How about all of the people who live in the north east of the City and Acushnet, as well as all of the schools including Normandin, Ottiwell, Lincoln, Ashley, St. Joseph's. That section of Ward 1 and Ward 2 are so densely populated. How are we going to be protected from all of the air born contamination.

The air quality is already terribly compromised in that area.

I think this issue should be brought before the New Bedford Board of Health as well.

How can residents of this City protect themselves from breathing the air---short of moving away.

If the contamination issue has been grave around Keith, what do you anticipate it will be throughout the City.

Sincerely,

Rosemary and Charles Saber
Property owners

Superfund Records Center
SITE: Aerovox
BREAK: 2.2
OTHER: 458688



rick english
<fasmaros6797@yahoo.com
>
06/24/2006 08:07 PM

To Group commentsnbh@EPA
cc
bcc
Subject ground contamination will be worse and never cured

THE PROPOSED PLAN? you want to demo the waste on site within the basement and leave it there and cap it. DONT YOU THINK,that it will be safer to have the waste removed from the site and this will help make it a cleaner and safer enviroment for the people ,the acushnet river cleanup ,the wild life ,the fish . but who cares right ..its all about the money to hell with the people!! take the cheapest way out . Think about when it rains .with all that waste there it will saturate the ground with the rain water into the soil that will there for run into the river through the ground water and soil that has all that garbage there. i think it will be safer to have that waste removed..and i will inform my neighbors as well . i live within 100 feet of this hell hole that will be created.. and why should the tax payers pay out of our pockets ..we are not the ones who profited here for years.. maybe aerovox should have to pay for the cleanup..they are the ones who damaged the area and they should be responsible. just like they are the major ones who polluted the river but who cares ? / letb the tax money suck it up ...and to hell with the people and ther future health issues..

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Environmental Protection Agency
EPA-4370-AeroVox
8.2
458689



Sherron Pires
<spiresrt@hotmail.com>
06/23/2006 01:41 PM

To Group commentsnbh@EPA
cc
bcc
Subject aerovox site public comment

I vote for new alternative #1.

Thank you,
Sherron Engel

Don't just search. Find. Check out the new MSN Search!
<http://search.msn.click-url.com/go/onm00200636ave/direct/01/>

Superfund Records Center
SITE: Aerovox
BREAK: 2.2
OTHER: 458690



Karen Vilandry
<kav704@yahoo.com>
07/07/2006 11:06 AM

To: Group commentsnbh@EPA
cc: Scott Alfonse <Scott.Alfonse@ci.new-bedford.ma.us>, Fairhaven Board of Health <boh@fairhaven-ma.gov>, healthschools@aol.com, Mark Howland
bcc:
Subject: Aerovox cleanup

David Dickerson, Project Manager:

I am writing you to request a complete cleanup of the Aerovox site which as you know was responsible for the contamination in the Acushnet River, now, a Superfund site. I have reviewed your Short-Term Cleanup Options and feel that they are grossly inadequate given the degree of highly toxic contamination at that site. As was written in your EPA June 2006 newsletter, page two, "All options *assume* continued commercial/industrial use and therefore apply commercial/industrial cleanup standards. All options *leave* some levels of PCB-contaminated soil or concrete under the new protective cap." Please again review the fact that this site is adjacent to an apartment complex which in my opinion would furnish the City of New Bedford, interest in later rezoning the Aerovox site for the same. When cleaning up such a highly toxic and deadly site, I feel nothing less than the ONLY option to insure COMPLETE safety to all humans is to REMOVE ALL CONTAMINATION COMPLETELY!

I am suggesting the following proposal, entitled, "New Alternative 3# 2006", as follows:

Demolish building

Entire concrete foundation disposed of off-site (such contamination permeates all material)

All demolition waste disposed off-site

All contamination **INCLUDING PCB'S** removed off-site to appropriate landfill or treatment site out of state

New protective cap over entire site if then needed

I understand that you are working within the budgetary framework of this project HOWEVER, ALL resources need to be addressed even to the US President and DC headquarters governing environmental affairs. Please insure that all resources are approached with a strong appeal for funds for complete cleanup! Again, this site is responsible for the contamination into Buzzards Bay one of this area's finest resources!

Thank you for your time and consideration of my proposal!

Sincerely,
Karen A. Vilandry

Do you Yahoo!?
Get on board. You're invited to try the new Yahoo! Mail Beta.

Environmental Records Center
SITE: Aerovox
PERIOD: 2-2
NUMBER: 458691



Bobbyrzde58@aol.com
08/02/2006 07:29 PM

To: Group commentsnbh@EPA
cc
bcc
Subject: Aerovox building

Thanks for giving me this opportunity:

My opinion as far as the options presented to demolish and clean up the contaminated old facility is:

Regardless of cost effectiveness, they should undertake this job making sure they're taking all precautions to avoid the spread of any contaminated material. As simple as it sounds, this is what should be done. The surrounding area of the old site is very populated and the public is well aware of its toxic agents such as PCPs, asbestos among others. By using the resources at your disposal, please make sure this job will be done in the most professional and safe manner.

Thanks



Joan Akin
<joan.akin@verizon.net>
08/07/2006 01:06 PM

To Group commentsnbh@EPA
cc
bcc
Subject Aerovox Superfund Site

Aerovox
2.2
458692

To Whom It Concerns:

I've lived in the Aerovox 'neighborhood' since 1975. I am also very near the Acushnet River 'hot spot.'

I have been lead to believe that the PCBs in the river were not extremely dangerous because they were 'cold,' and the danger was in cooking and eating fish from the river. I did strongly caution my kids not to play down there on the riverbank, but you know kids ...

Until I got your mailing I never realized that my family was in jeopardy of inhaling 'cooked & thus very dangerous' PCBs if the old mill ever caught fire. Shame on those who knew and didn't tell until now. I suppose it's better late than never.

You have asked lay people for input concerning a serious matter; many of us do not feel qualified or knowledgeable enough about the issue of PCB contamination to respond. That does not imply that people don't care what you do to solve the problem. We are putting our trust into your hands, thinking you at the Environmental Protection Agency, have the necessary knowledge to make a correct choice. Please do the right thing.

Please please please don't go with lowest cost as the final deciding factor. The contaminant will rear its ugly head again if you do something with only cost in mind. The subsequent repairs and/or do-it-over-correctly will be way more costly in the long run. (Think Big Dig.)

Please treat the problem as if YOUR child, or a loved one's child lived in the densely populated neighborhood.

We who live here want, of course, the safest and most permanent option. This may or may not be the most expensive alternative, but it probably isn't the least costly alternative either! (Although somehow I suspect the most costly is also the most thorough answer.)

Again, please do it right the first time so no one has to do it over.

Sincerely,

Joan M. Akin
43 Jean St.
Acushnet, MA 02743

Superfund Records Center
SITE: Aerovox
SUBAK: 7.2
OTHR: 458693



Karen or Dennis
<brrdrains@verizon.net>
08/08/2006 09:39 AM

To Group commentsnbh@EPA
cc
bcc
Subject Aerovox site

In light of the recent discovery at the Keith Junior High School site of PCB's and the protective cap being compromised and the corrupt officials involved in the cleanup, I would like to see the removal and off-site disposal of the entire concrete foundation.

The cost should be considered last after the cost of human life and the health conditions of the people in the surrounding area.

If I had faith in the system and trust in contractors and the government to do the right thing by the people, Alternative 1 could be considered, however, how do I know that it would be done correctly, that someone won't look the other way in order to save money or for out of pure laziness breach our safety.

I have no faith in a protective cap the only way to properly clean this up is to remove it from the site!

106 Main St.
Acushnet, MA



D N Dumont
<dndumont@hotmail.com>
08/14/2006 01:50 PM

To Group commentsnbh@EPA
cc
bcc
Subject NB Areovox

Aerovox

2.2

458694

August 14, 2006

EPA New England

ATTN; David Dickerson (HBO)

Hello Mr. Dickerson,

The following are my comments regarding the cleanup up of the Aerovox plant located on Belleville Avenue in New Bedford, Massachusetts.

I prefer the " 1998 EE/CA Alternative # 3 for \$ 18 million. As a resident of this neignbiorhood, we have lived with this contaminated plant for decades and it is now time to " put it away".

Any option used to cleanup this property must included;

- A. New sheet metal pilings abutting the Acushnet River to replace the aging ones in place.
- B. Any cap over the property should be a minimum of 3 feet thick.

Thank You,

D N Dumont

Check the weather nationwide with MSN Search: Try it now!

SHEPARD S. JOHNSON, JR.*
JAMES W. MARSH

*ALSO ADMITTED IN VT

**SHEPARD S. JOHNSON, JR.
& ASSOCIATES, P.C.**

Attorneys-at-Law

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www.shepjlaw.com

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VIA FACSIMILE (617) 918-0329 &
FIRST-CLASS MAIL

August 15, 2006

RECEIVED

8-21-06

DM

Superior Mail Services Center
DATE: Aerovox
BREAK: 2-2
OTHER: 458681

Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
One Congress Street, Suite 1100 (HBO)
Boston, MA 02114-2023

RE: Aerovox, 740 Belleville Avenue, New Bedford, MA

Dear Mr. Dickerson:

The United States Environmental Protection Agency, New England ("USEPA") held an informational meeting on June 14, 2006 to raise awareness of current site dangers, proposed cleanup options and explain the potential to coordinate demolition with redevelopment at the above-referenced property (the "Aerovox Site"). We understand that, at this time, no such redevelopment is proposed. USEPA undertook an *Engineering Evaluation and Cost Analysis* in 1998 and, in 2006 prepared a *Supplemental Engineering Evaluation and Cost Analysis* (hereinafter collectively "EE/CA"). USEPA is seeking public comment on the five (5) cleanup options presented in the EE/CA for the Aerovox Site. These comments are timely delivered on or before August 15, 2006, the published, extended public comment period deadline.

This office represents Acflastnet Rubber Company Inc., d/b/a PRECIX in connection with this matter. Our client currently operates a manufacturing facility located at 744 Belleville Avenue, New Bedford, Massachusetts, immediately north of the Aerovox Site. Documents prepared for the USEPA by contractors and information published by USEPA confirm that extremely high levels of polychlorinated biphenols ("PCBs") are found throughout the walls, floors and interior of the building and in the soil and groundwater at the Aerovox Site.

USEPA's June 2006 notice entitled *Making the Vacant Aerovox Site Safe* acknowledges that a threat to the neighborhood currently exists and indicates that the "vacant Aerovox building needs to be demolished to keep neighborhood safe". The specific language used in said USEPA notice implies that dangerous environmental conditions are present at the so-called Aerovox Site.

Record documents maintained by USEPA and the City of New Bedford (the "City") do not refer to impacts from the so-called Aerovox Site on immediately abutting properties, north,

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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
Page 2

west or south. Given that contamination does not respect property lines, what information does USEPA have to support the delineation of the Aerovox Site as identical to the Aerovox property boundary? Have USEPA or its contractors undertaken any subsurface assessment of properties located to the north, south or west of the Aerovox Site? Does USEPA or any of its contractors have information to support the proposition that contamination is currently limited to the property now or formerly owned by Aerovox?

The EE/CA and other public information we reviewed do not refer to communications between USEPA and/or the City and the Commonwealth of Massachusetts Department of Environmental Protection (DEP), nor refer to potentially applicable state laws and regulations. DEP personnel are knowledgeable and could be an important source of valuable commentary on proposed actions. Has DEP been consulted with respect to the proposed actions and, if records of such communications are available to the public kindly provide us copies of the same.

The Existing Threat

A document entitled *Aerovox Facility-Conceptual Site Model*, dated March 2006, prepared by ENSR Corporation, reported that an evaluation was performed to "assess the ongoing potential for site-related PCBs to be transported to the adjacent harbor". The report states that "the mass of PCBs in soils beneath the [Aerovox] site was estimated at over 100,000 kg", and that "a large mass of PCBs is also expected to be contained within the [Aerovox] building's structure and contents". Said report identifies four (4) pathways for potential transport of PCBs from the Aerovox Site to "the Harbor": stormwater drainage, groundwater discharge, migration of separate phase oil (DNAPL) and airborne transport. The executive summary of the report states as follows:

"DNAPL [dense non-aqueous phase liquid] migration and airborne transport were not considered to be significant transport mechanisms at present, but could increase in potential with deterioration of the building's roof and outer shell and paved areas (for airborne transport) and with deterioration of the sheet-pile barrier that currently exists between the site and the Harbor [DNAPL migration]."

The foregoing statement implies that DNAPL is present on the Aerovox Site and that migration of DNAPL into the harbor is being prevented by the sheet-pile barrier.

- Has any work been conducted to determine if the sheet-pile barrier or other subsurface conditions may be causing DNAPL to migrate to adjacent properties?



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
Page 3

- If contaminants have migrated to adjacent properties via any of the transport pathways identified, would USEPA consider contamination located on such adjacent properties to be part of the "Aerovox Site"?
- Do existing subsurface conditions at the "Aerovox Site" constitute an immediate threat to public health safety and the environment?

The June 2006 USEPA notice concerning the Aerovox Site identifies an "immediate threat of air emissions due to fire and contaminated run-off to the Harbor" and indicates that "trespassers entering the building illegally are also at risk from contacts from these hazardous substances and can tract the contamination outside the building when leaving". In response, USEPA proposes to demolish the building and put a "temporary protective cap" in place.

- Has USEPA evaluated the possibility of immediately taking alternate short-term steps to further secure the Aerovox Site?
- Has USEPA evaluated the possibility of attaining the objectives of placing a temporary protective cap through alternatives other than demolishing the building?

We understand from the comments of New Bedford Fire Chief Ledger at the June 14, 2006 meeting that the Fire Department is preparing a "pre-fire plan", but that such a plan was not complete at that time. We also understand from his comments that an "evacuation plan" for area occupants is not yet complete.

- Is USEPA provided funding for this work by the Fire Department or is the City of New Bedford funding this effort?
- Has any testing been undertaken to demonstrate that the fire suppression system currently at the premises is still operable? When was the system tested? Who conducted the testing?
- Are all the alarms currently operable? Who is responsible for maintaining the system?
- If site security is an issue, why is the gate at the site sometimes open and not locked?



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
Page 4

PRECIX is interested in learning more about any "pre-fire plan" and/or "evacuation plan" that may exist. Is that information available at this time and if so, where?

Area residents at the June 14, 2006 meeting reported that flooding has occurred in or about the area adjacent to the Aerovox Site, including water reportedly backing up onto Belleville Street and adjacent properties.

- What is being done to prevent this occurring in the future?
- Have any samples been taken to determine if current contamination at the Aerovox Site has impacted utility connectors, sewer lines or area properties?
- Will the proposed actions address these issues?

Removal Action Scope

The EE/CA claims to be "a study of the site's contamination and cleanup options". However, the information presented falls short of documenting the full nature and extent of contamination and has limited the "cleanup" options to a handful of interim steps. The information presented to the public does not include specific details of any proposed site or contractor controls when the building is razed and appears to provide incomplete information regarding present projected costs. It further appears that USEPA has not demonstrated the proposed response action will make the Aerovox Site safer. The proposed temporary measures could actually exacerbate both short term and long term releases to the environment and could increase the overall costs to remove contamination and permanently secure the Aerovox Site by proposing that the contaminated material be handled several times, rather than one time during removal from the premises. Insufficient information is provided to justify the chosen alternative as cost-effective, when numerous assumptions made in reaching that conclusion remain unquantified.

USEPA appeared during the June 14, 2006 meeting to acknowledge the following:

- No study of the impact of contamination on the deep water table was conducted;
- The so-called "protective cap" would not be impermeable nor permanent;



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
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- Over time, the “protective cap” and sheet pile barriers will breakdown and neither are permanent solutions;
- Contaminated debris planned for burial at the Aerovox Site may come in contact with groundwater;
- Asbestos located with the building at the Aerovox Site may be disposed of on site;
- Expected dust during removal actions will require water misting as a mitigation technique;
- Windows at premises surrounding the Aerovox Site may be open during warm seasons;
- “one excursion of applicable standards does not constitute an acute health risk”;
- Response actions “could bump [airborne releases] to a level of concern”;
- Demolition could easily take 12 months (or more);
- Potential impacts to abutters properties, with the exception of the fire hazard, were not considered;
- Redevelopment will be the time for permanent cleanup to occur, and an unspecified developer would pay for the cleanup; and
- Needs of site redevelopment would only be factored into the demolition and cap plans if a developer were involved during the demolition phase.



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
Page 6

The issues that were raised at the public meeting and the documents prepared to date in connection with the Aerovox Site raise many unresolved questions, including without limitation, the following:

- Should additional investigations be conducted to discover the full nature and extent of the contamination in order to appropriately evaluate options?
- Over time, will buried materials concentrate PCBs and other contaminants?
- How will the contamination be impacted when the non-permanent cap and other barriers currently at the Aerovox Site begin to break down?
- Will buried contaminated materials impact groundwater?
- Has USEPA modeled air dispersion patterns for airflows to determine potential impacts to public health and safety in the area from airborne transport during the proposed actions?
- What controls of site activities during the removal action will prevent unintentional releases into the atmosphere and/or to the subsurface?
- Who is responsible for any injuries arising from the Aerovox Site during the response action?
- What specifications will assure capture of the misting water and/or airborne contaminants?
- Are protective actions for surrounding properties or relocation of populations necessary during the time removal actions are occurring? Have such costs been considered?
- How would the proposed response actions impact the cost and possibility of a "permanent cleanup"?



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
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- The proposed response action appears to bypass Massachusetts' laws and regulations that prohibit on-site disposal of solid and hazardous waste; on what basis?
- Did the cost estimate include permanent, post-response action monitoring that would be required if a permanent cleanup is not immediately implemented?
- Is it reasonable to assume that a developer will pay for permanent cleanup at some later date?

Business Interruptions to PRECIX

A number of logistical questions arise in connection with the proposed response actions. It is inconceivable that the proposed activities could occur without significant impacts to PRECIX and other abutters. Access for PRECIX's vendors, customers and contractors and parking near the front entrance of the business will be disrupted. It appears that the current entrance and parking facilities will be compromised. Vendors, visitors and customers will be inconvenienced. PRECIX maintains a parking area on the westerly side of Belleville Avenue. Persons required to park there and cross Belleville Avenue already face a significant safety hazard due to speeding traffic; this will become a larger problem.

Does the City or USEPA intend to offer any assistance to mitigate the foreseeable impacts to area businesses and/or residents? Such impacts or related costs were not identified in the public documents, the EE/CA or discussed at the public hearing.

Conclusion

We appreciate the recognition that something must be done to respond to the environmental conditions at the Aerovox Site. Before taking such actions, however, a complete understanding of the nature and extent of the contamination and the natural and other transport mechanisms impacting movement of the contaminates should be undertaken. Such studies appear not to be complete at this time; studies to date are limited to impacts to the "harbor". The record does not include discussion of the current potential impacts on abutters, nor does it appropriately and reliably identify how area populations will be protected from releases that will inevitably occur during the proposed actions. We suggest that while such further evaluations proceed, emergency response planning such as evacuation and pre-fire plans should be a priority.

It appears that the proposed response actions do not include consideration of all reasonably foreseeable costs, including without limitation, post-burial monitoring. Assuming that the proposed actions are in fact temporary and not permanent, burial of contaminated



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Dave Dickerson, Project Manager
U.S. Environmental Protection Agency-New England
August 15, 2006
Page 8

demolition debris would increase the long-term costs by requiring the contaminated material to be handled multiple times. It seems questionable that moving the contaminated materials multiple times will cost less than doing so one time. To assume that a future developer will pay to remove of the buried contamination at some future time also appears to be unsubstantiated.

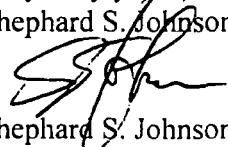
Beyond the economic analysis, numerous questions remain about the standard-of-care to be required of site contractors and about the likelihood of related impacts to area populations. Each time the contaminated materials are handled, there is an opportunity for releases to the environment and for impacts to occur.

It would certainly be preferable by PRECIX to remove all of the contaminated material from the Aerovox Site and find a permanent off-site disposal location for such materials.

Kindly consider our numerous questions raised above to be formal requests for answers and any applicable documents and related information.

Thank you for the opportunity to provide these comments. We look forward to receiving at our New Bedford office a written response to our inquiries.

Very truly yours,
Shephard S. Johnson, Jr. & Associates, P.C.


Shephard S. Johnson, Jr.

SSJ/zca

cc: Acushnet Rubber Company Inc.



THE COALITION FOR BUZZARDS BAY

Nashawena Mills
620 Belleville Avenue
New Bedford, MA 02745
www.sav buzzardsbay.org

tel: (508)999-6363
fax: (508)984-7913

Mr. David Dickerson
Project Manager
US EPA – New England
1 Congress Street, Suite 1100 (HBO)
Boston, MA 02114-2023

July 14, 2006

Demolition Requests Online
SITE: Aerovox
BREAK: 2.2
OTHER: 458,682

RE: Supplemental Engineering Evaluation and Cost Analysis for the Aerovox Site in New Bedford, Massachusetts

Dear Mr. Dickerson,

Please accept the following as The Coalition for Buzzards Bay's ("The Coalition's") comments on the US Environmental Protection Agency's ("US EPA's") proposed demolition and containment of the PCB contaminated Aerovox site on the Acushnet River in New Bedford, Massachusetts. The Coalition is a nonprofit membership organization dedicated to the restoration and protection of Buzzards Bay and its more than 30 harbors and coves, including New Bedford Harbor and the Acushnet River. We represent more than 4,700 individuals, families, organizations, and businesses in Southeastern Massachusetts.

Contamination Status of the Aerovox Site

The site under consideration is a highly contaminated eleven acre industrial zoned parcel abutting the Acushnet River, and located directly between two active manufacturing facilities employing hundreds of workers daily. The site is also directly across the street from a densely populated residential neighborhood. The 450,000 square foot building situated on this site served as a manufacturing facility for electrical capacitors and transformers from c. 1940 to c. 1977 and as a result is saturated with high levels of polychlorinated biphenyls ("PCBs"), a probable carcinogen. PCBs have been identified at hazardous levels throughout the walls, floor, foundation, as well as throughout the soils, groundwater, air, and parking lot. In fact, this site is widely considered one of the primary sources of the historic PCB contamination to New Bedford Harbor, a superfund site subject to a separate lengthy and expensive clean up.

The Coalition recognizes and agrees with the US EPA that this "facility presents an imminent and substantial threat to the environment and must be addressed as quickly as possible." (Supplemental Engineering Evaluation and Cost Analysis April 2006, page 10) In addition to the major fire risk the vacant facility currently poses, the site itself continues to leach PCBs into the Acushnet River through groundwater and stormwater. PCBs do not readily breakdown in the water. Instead, they bind to organic matter and persist for very long periods of time. PCBs can be taken up by small marine

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Waterkeeper Alliance Member

life which when consumed by larger predators, multiplies their toxicity by the thousands. It is a disturbing notion that despite the extensive and costly dredge project ongoing in the Acushnet River and New Bedford Harbor to remove the PCB contaminated sediment, the source actually remains unremediated and continues to contaminate the river.

Inadequacy of US EPA's Preferred Alternative

The US EPA's overall removal action objective is to "minimize impacts to human health and the environment caused by the presence of high levels of PCBs in the vacated mill building and surrounding site soils." (Supplemental Engineering Evaluation and Cost Analysis April 2006, page 4). The Coalition commends the efforts this objective seeks to achieve and argues that the Acushnet River estuary and the communities who rely and recreate on this resource deserve nothing less.

Surprisingly, however, the US EPA has chosen the least environmentally protective alternative to meet this objective. New Alternative #1, the US EPA's preferred choice, includes demolishing the building, and leaving the waste, regardless of toxicity level, on site within the foundation of the former building and placing an undefined protective cap over the entire site. In short, this alternative does nothing to promote real redevelopment opportunities and in fact leaves in place extremely high level of PCB contamination. While this alternative reduces the risk to human health and the environment from fire, it cannot be legitimately argued that this meets the stated objective of "minimizing" impacts due to the "presence" of PCBs. Furthermore, the Coalition fails to see the logic in the long term containment of PCBs in a flood plain, making it more likely that the contamination will migrate off site during a severe weather event. The Coalition requests that the US EPA reevaluate their proposed alternatives to choose a more meaningful and appropriate solution to meet the removal action objective.

Limited Site Redevelopment Opportunities Under the Preferred Alternative

The Coalition fully supports the US EPA's and City of New Bedford's intention to partner in order to insure redevelopment of this site. However, the US EPA's preferred alternative fails to go far enough in facilitating multiple redevelopment opportunities. New Alternative #1 fills the facility's foundation with contaminated demolition waste which would prohibit future building construction on some 450,000 square feet, a majority, of the site. Only 150,000 square feet of the site, the current contaminated parking lot area, would be available for development. At a time when the liability, risk and costs associated with acquiring a contaminated property are prohibitive for most redevelopers, every effort must be made on behalf of the US EPA to prepare the site for as many redevelopment opportunities as possible.

At a minimum the US EPA must remove all contaminated demolition waste from the site in order to create the greatest number of redevelopment opportunities for the entire property. If New Alternative #1 is ultimately chosen, a significant risk remains that the

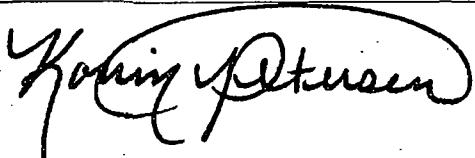
site will be left vacant in the long term. This is an unacceptable outcome to a community whose environment is littered with contaminated vacant lots. In other words, a highly contaminated Aerovox lot would not be an anomaly for the City of New Bedford, but rather the unfortunate status quo and more must be done to reverse this trend. The City's environment and its surrounding community deserve more than the minimum from the US EPA.

The Coalition for Buzzards Bay's Recommendation

Of all the alternatives presented by the US EPA for public comment, the Coalition argues that Alternative #3 most properly meets the removal action objective. This alternative orders the removal of most of the toxic material, including the foundation, thus substantially reducing the amount of PCBs on the property, reducing environmental risks, and opening up many more redevelopment opportunities. The Coalition is aware that this is the most expensive alternative but argues that it is the smartest investment. Failing to properly remediate the site now will cost the City, the environment, and the greater community far more in the future.

Again, we thank you for this opportunity to comment and are eager to move forward with the stabilization of the Aerovox site.

Sincerely,



Korrin N. Petersen, Esq.
Advocacy Director



Korrin Petersen
<Petersen@savebuzzardsba
y.org>
07/14/2006 03:30 PM

To Group commentsnbh@EPA
cc
bcc
Subject David Dickerson (HBO)

Please find attached The Coalition for Buzzards Bay's comments on EPA's proposed alternative for the Aerovox site in New Bedford, Massachusetts.
Thank you for the opportunity to comment.

Sincerely,

Korrin Petersen

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Aerovox July 14.pdf



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August 15, 2006
11478-130

SDMS DocID **458680**

BY E-MAIL (comments.nbh@epa.gov) & U.S. FIRST CLASS MAIL

Mr. David J. Dickerson
Project Manager
U.S. Environmental Protection Agency - New England
One Congress Street
Suite 1100 (HBO)
Boston, Massachusetts 02114-2023

**Re: April 2006 Supplemental Engineering Evaluation and Cost Analysis
Former Aero vox Facility, New Bedford, Massachusetts**

Dear Mr. Dickerson:

This letter provides the comments of AVX Corporation ("AVX") on the April 2006 *Supplemental Engineering Evaluation and Cost Analysis* (the "Supplemental EE/CA" or "SEE/CA") with respect to the facility at 740 Belleville Avenue, New Bedford, Massachusetts (the "Facility" or "Site") previously owned and operated by Aero vox, Inc. ("Aero vox"). On June 7 and 11, 2006, EPA published notice of a public meeting and the beginning of a 30-day public comment period on June 14, 2006. EPA has asked for public comment on the five non-time critical removal action alternatives presented in the Supplemental EE/CA. The SEE/CA also includes EPA's specific request for comment on a proposed (draft) finding by the Regional Administrator, entitled "TSCA 761.61(c) Determination," included as Attachment 3 to the Supplemental EE/CA. (AVX's comments on the draft determination can be found in Section III.E.2. below.)

The public comment period was subsequently extended to August 15, 2006. These comments, therefore, are timely submitted. Please note that AVX has had the specialized technical assistance of URS Corporation ("URS"), including the expertise of a Massachusetts Licensed Site Professional ("LSP"), in the preparation of these comments. (Please refer to the attached *curricula vitae* for information on the qualifications of members of the technical team.) Please also note that by submission of these comments, AVX does not acknowledge or accept any liability with respect to the proposed response actions but fully reserves its rights with respect to the letter regarding "Confirmation of Potential Liability; Demand and Notice of Decision Not to Use Special Notice Procedures" sent by EPA on May 31, 2006, and received

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by AVX on June 2, 2006. AVX will respond to that demand on or before the agreed-upon date of August 31, 2006.

Removal actions are authorized by statute, CERCLA §§ 104 and 106(a); the National Contingency Plan (the “NCP”)¹, in particular 40 CFR 300.415; and guidance.² Based on this authority,

EPA has categorized removal actions in three ways: emergency, time-critical, and non-time-critical, based on the type of situation, the urgency and threat of the release or potential release, and the subsequent time frame in which the action must be initiated. Emergency and time-critical removal actions respond to releases requiring action within 6 months; non-time-critical removal actions

¹ CERCLA and the NCP define a removal action as “the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release.” CERCLA § 101(23); 40 CFR 300.5.

² The following guidance documents have been consulted in the preparation of these comments:

- (1) *Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent-Setting Issues* (OSWER Directive No. 9360.0-19, March 3, 1989) (hereinafter “Non-NPL Removal Action Guidance”);
- (2) *Final Guidance on Implementation of the “Consistency” Exemption to the Statutory Limits on Removal Actions* (OSWER Directive No. 9360.0-12A, June 12, 1989) (hereinafter “Consistency Exemption Guidance”);
- (3) *Superfund Removal Procedures Action Memorandum Guidance* (OSWER Directive No. 9360.3-01, September 1990) (hereinafter “Action Memorandum Guidance”);
- (4) *Final Guidance on Administrative Records for Selecting CERCLA Response Actions* (OSWER Directive No. 9833-3A-1, December 3, 1990) (hereinafter “Administrative Record Guidance”);
- (5) *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA* (OSWER Directive No. 9360.0-32, August 1993) (hereinafter “NTCRA Guidance”);
- (6) *Response Actions at Sites with Contamination Inside Building* (OSWER Directive No. 9360.3-12, August 12, 1993) (hereinafter “Contamination Inside Building Guidance”);
- (7) *Conducting Non-Time-Critical Removal Actions Under CERCLA* (OSWER Fact Sheet 9360.0-32FS, December 1993) (hereinafter “NTCRA Fact Sheet”);
- (8) *Superfund Removal Procedures, Response Management: Removal Action Start-Up to Close-Out* (OSWER Directive No. 9360.344, September 1996); (hereinafter “Removal Action Procedures Guidance”); and
- (9) *Use of Non-Time Critical Removal Authority in Superfund Response Actions* (memorandum from Stephen Luftig and Barry Breen to Regional Program and Legal Division Directors, February 14, 2000) (hereinafter “NTCRA Removal Authority Memorandum”).



respond to releases requiring action that can start later than 6 months after the determination that a response is necessary.³

In the present instance, we deal with a response action under CERCLA § 104 belonging to the third of these categories, i.e., a non-time-critical removal action ("NTCRA"). The above-cited authorities call for the following multi-stepped process in the performance of any NTCRA:

1. Discovery or notification;
2. Site assessment;
3. EE/CA Approval Memorandum;
4. Perform EE/CA;
5. Solicit, receive and review public comment on EE/CA;
6. Action Memorandum (select alternative, and obtain NTCRA approval and, if needed, statutory waivers);
7. Implement NTCRA;
8. Removal site closeout; and
9. Post-removal site control.⁴

EPA guidance requires that removal alternatives be developed and evaluated against three criteria: (1) effectiveness; (2) implementability; and (3) cost. CERCLA § 104(a)(2) and 300 CFR 300.415(d) further require that an EE/CA consider how well a proposed removal action will contribute to the efficient performance of any anticipated long-term remedial action.⁵

A primary reason for the above carefully-delineated process is to enable public involvement, a statutory and regulatory requirement.⁶ Public involvement has two components: community relations; and the creation and maintenance of an administrative

³ NTCRA Guidance at 3-4.

⁴ *Id.* at 5 (Exhibit 1).

⁵ The requirement for a removal action to contribute to the efficient performance of any anticipated long-term remedial action is one of two explicit requirements in 40 CFR 300.415(b)(5) that applies when the lead agency - EPA in the present instance - seeks a waiver of the \$2,000,000/12-month NTCRA limits. This is discussed more fully in Section III.G. below.

⁶ See CERCLA § 113(k), 40 CFR 300.415(n) & 300.820. In the present context, EPA New England asserts that it "considers community involvement an integral part of the cleanup process." SEE/CA at 16.



record file (“AR file”).⁷ An evaluation of compliance with each of the above procedural requirements for any NTCRA, and the sufficiency of the prerequisite EE/CA, therefore, necessarily involves attention to (1) AR file requirements, and (2) the specific facts of the site at issue, including past investigatory, enforcement and related actions. Accordingly, these comments begin by describing in Section I the status of the AR file, and providing relevant factual background in Section II, before articulating AVX’s comments on the Supplemental EE/CA in Section III.

I. ADMINISTRATIVE RECORD FILE.

CERCLA § 113(k)(1) mandates the creation of an administrative record to serve as the basis for the selection of a response action. The regulations “establishing procedures for the appropriate participation of interested persons in the development of the administrative record on which [EPA] will base the selection of removal actions and on which judicial review of removal actions will be based,” are found in Subpart I of the NCP, 40 CFR 300.800 to 300.825.⁸

The NCP articulates at 40 CFR 300.800(a) the general requirement for “[t]he lead agency [to] establish an administrative record that contains the documents that form the basis for the selection of a response action. The lead agency shall compile and maintain the administrative record in accordance with this subpart.” Guidance states this simply: “[T]he administrative record must contain all documents used by the Agency in making its decision to undertake a removal action.”⁹

On June 14, 2006, AVX received three CDs from EPA in response to a request for a copy of the AR file for the proposed response action. Collectively, the CDs contained 50 files, among them 47 documents and three indices.¹⁰ The indices are entitled: (A) *Index (Updated September 22, 1999)*; (B) *Removal Action Administrative Record File and Index, July 2004*; and (C) *Aerovox Removal Site Administrative Record File, Supplemental Engineering Evaluation / Cost Analysis (EE/CA), April 2006, Index, Released: June 2006*. They list 22, 5, and 19 documents, respectively.¹¹

⁷ See NTCRA Guidance at 12-14.

⁸ As required by CERCLA § 113(k)(2)(A).

⁹ Action Memorandum Guidance at 3-251.

¹⁰ The indices are the same as those posted on the web for the public at large. See http://yosemite.epa.gov/r1/npl_pad.nsf/51dc4f173ceef51d85256adf004c7ec8/7e8432e074d476d5852571710049eb24!OpenDocument.

¹¹ The sum of these is 46. One of the three CDs included a May 8, 1998 letter from Blasland, Bouck & Lee to EPA, Region 1, regarding comments on a soil sampling plan. It appears that this document (AR #248127) should have been included on index “A.”



Review of the above-referenced documents raises two questions. The first involves uncertainty regarding what constitutes the AR file for the proposed response action. The second involves the AR file's lack of reference to applicable guidance.

With respect to the first question, the titles of the three indices reasonably lead to the conclusion that index "C" is the index for the SEE/CA's AR file. Among other reasons, it is so labeled. Further, index "A" appears to encompass events associated with the administrative order on consent executed by Aerovox and EPA in 1999, and index "B," which includes in its title the words "administrative record file," presumably lists the documents related to the time-critical removal action implemented in 2004. The SEE/CA's executive summary indicates that the documents on index "A" have been incorporated into the AR file for the SEE/CA,¹² but nothing is said in that context as to the documents on index "B." At the same time, it is reasonable to infer that EPA believes all of these documents constitute the AR file for the presently proposed removal action. After all, EPA provided these documents in response to AVX's request for the documents in the AR file for the proposed response action.

In addition to the above uncertainty as to which documents constitute the AR file, another factor points to its lack of comprehensiveness. Specifically, since June 14, 2006, AVX has received from EPA or independently located a number of documents that unquestionably qualify as documents that serve as the basis for "the selection of a response action."¹³ Further, AVX is awaiting additional documents from EPA in response to other requests, several of which, no doubt, will similarly qualify.¹⁴ If AVX is unable to determine what is and is not in the AR file (or what should be), having had the benefit of EPA's cooperation, how is it possible for the public at large to be assured that they are able to competently assess and comment on the proposed removal action?

Turning to the second concern regarding the AR file, we note that indices "A" and "B" comply with the NCP's requirement for the AR file to include applicable guidance.¹⁵

¹² SEE/CA at ii.

¹³ CERCLA § 113(k)(1). *See* Exhibit A, attached hereto, which includes 27 entries with respect to documents that AVX has so received or located. The last entry encompasses in excess of 50 documents, received late on Friday, August 11, 2006, two business days before the close of the public comment period.

¹⁴ Among the requested documents that have direct bearing on the SEE/CA is the Preliminary Assessment / Site Investigation ("PA/SI") conducted on February 18, 2004, according to the March 29, 2004 Action Memorandum.

¹⁵ The NCP, at 40 CFR 300.805(a)(2), states that an administrative record file for the selection of a response action typically contains, among other things, "Guidance documents, technical literature, and site-specific policy memoranda that may form a basis for the selection of the response action. Such documents may include guidance on conducting remedial investigations and feasibility studies, guidance on determining applicable or relevant and appropriate requirements, guidance on risk/exposure assessments, engineering handbooks, articles from technical journals, memoranda on the application of a specific regulation to a site, and memoranda on off-site disposal capacity." This is supported by guidance: "Guidance documents, or portions of guidance documents, that are



Unfortunately, however, each index only refers to one guidance: "B" refers to the Action Memorandum Guidance, and "C" lists the NTCRA Guidance. As demonstrated in the below comments, other guidance is also pertinent, and EPA's apparent failure to use such guidance in preparation of the SEE/CA suggests a shortcoming in the basis for the proposed removal action.

II. BACKGROUND.

From 1978 to 2001, when it relocated to another manufacturing facility in New Bedford, Aerovox manufactured electrical capacitors at the Site.¹⁶ In 1981, Versar, Inc., under contract with EPA, conducted an inspection at the Site for the presence of polychlorinated biphenyls ("PCBs"). Based on this early inspection, EPA determined that PCBs were present in the soils at the Site, in various locations in the manufacturing facility at the Site, and in the air in that building. In May 1982, EPA and Aerovox entered into an administrative order pursuant to Section 106 of CERCLA (the "1982 Order"). Among other things, the 1982 Order required Aerovox to: (i) conduct an investigation of certain areas of the Site; (ii) assess the relative costs of alternative remedial actions; (iii) recommend a responsive course of action to EPA; and (iv) implement such course of action, subject to EPA approval. Pursuant to the 1982 Order, Aerovox recommended the installation of a cap over certain contaminated soils and a steel sheet pile cutoff wall to serve as a vertical barrier to groundwater due to the fact that its investigation revealed that PCBs were present in soil and in shallow groundwater at the Site. Aerovox's recommended course of action was approved by EPA, which concluded at that time that there may have been "an imminent and substantial endangerment within the meaning of Section 106 of CERCLA."¹⁷

In 1984, EPA and Aerovox entered into a Supplemental CERCLA Consent Order pursuant to Section 106 of CERCLA (the "1984 Supplemental Order"), in which EPA specifically acknowledged that it had inspected and approved Aerovox's completed work under the 1982 Order.¹⁸ Pursuant to the 1984 Supplemental Order, Aerovox agreed to implement a Monitoring and Maintenance Program for the cap and to take such maintenance measures as were reasonably necessary to maintain the cap and the cutoff wall to prevent releases of

considered or relied on in selecting a response action should be included in the administrative record file for that response action." Administrative Record Guidance at 37.

¹⁶ In the New Bedford Harbor PCB litigation, Aerovox was also held to be legally responsible for the operations of its immediate predecessor, Belleville Industries, Inc. sometimes referred to as Aerovox Industries, Inc. ("Belleville"), between 1973 and 1978. *See In re Acushnet River & New Bedford Harbor*, 712 F. Supp. 1010, 1013 (D. Mass. 1989). It is undisputed that Belleville used PCBs in its capacitor manufacturing.

¹⁷ 1982 Order at 2.

¹⁸ 1984 Supplemental Order at 2.



PCBs.¹⁹ In accordance with the Monitoring and Maintenance Program, Aerovox further agreed to perform semi-annual monitoring at the Site from June 1986 until June 2014, which included both the taking and reporting of water level readings and the performance and submission of inspection reports to ensure the integrity of the cap. The Monitoring and Maintenance Program further required that unsatisfactory conditions be promptly remediated.²⁰

In May 1997, EPA conducted an inspection of the Site for compliance with the Toxic Substances Control Act ("TSCA"), which revealed the presence of PCBs within the interior of the manufacturing facility and in uncapped soils outside of the building, allegedly caused by the manufacture of electrical capacitors and transformers at the Site.²¹ EPA demanded that Aerovox pay for the cleanup of the Site, and in July 1998 an Approval Memorandum (discussed in detail below) was issued for the performance of an EE/CA at the Site. In August 1998, Blasland, Bouck & Lee, Inc. ("BBL"), a consultant hired by Aerovox, completed the 1998 EE/CA (also discussed in detail below), which estimated the then cost of cleanup of the Site, pursuant to the recommended alternative, would be approximately \$8.3 million.

With only the July 1998 Approval Memorandum in the AR file to authorize the present consideration of a NTCRA at the Site, meaningful response to EPA's request for comments requires review of more than eight years of documents since publication of the 1998 Approval Memorandum, as well as attention to developments involving Aerovox and the Site, including, in particular, events related to a 1999 Administrative Order on Consent with EPA (the "1999 AOC"), the abandonment of the manufacturing facility, Aerovox's relocation to a new facility in New Bedford, the filing of a petition for bankruptcy shortly thereafter, the settlement of claims against the bankrupt estate by EPA, the Commonwealth and the City of New Bedford (the "City"), and the disposition of the ownership of the Site at the conclusion of the bankruptcy. Comments on the SEE/CA, therefore, require an analysis of certain documents, including the July 1998 Approval Memorandum and the 1998 EE/CA, as well as consideration of the above-enumerated events.

A. July 1998 Approval Memorandum.

The July 1998 Approval Memorandum, prepared on July 7, 1998 and approved on July 15, 1998, authorized the preparation of an EE/CA. The purpose of the EE/CA was to

¹⁹ Based on monitoring reports submitted by Aerovox for the period September 1993 to March 2000, it appears that Aerovox performed only one repair to the cap during that 6½-year period (between the September 1993 and March 1994 inspections), despite the fact that it routinely noted problems with the asphalt cap in virtually all of the reports. The fact that a subsequent removal action by EPA in 2004 also included cap repair confirms that Aerovox's previous maintenance of the cap was inadequate. Aerovox thus did not meet its obligations under the 1984 Supplemental Order.

²⁰ EPA Proof of Claim at ¶ 7.

²¹ SEE/CA at ii.



“evaluate cleanup alternatives for source control measures at the Site.”²² Using the data obtained in 1997 and 1998 by BBL, the Approval Memorandum determined that PCBs were present in various media.²³ Though the endangerment determination in the Approval Memorandum states that PCBs generally “may pose a potential threat to human health or ecological health,”²⁴ the only exposure pathways it documents involve ingestion and dermal inhalation of PCBs by on-site workers in the then still-operating manufacturing facility.²⁵ Despite this, the scope of the EE/CA is defined far more broadly, encompassing risks other than to on-site workers. In particular, the Approval Memorandum states that the EE/CA “will consider alternatives which meet the following removal action objectives:

- (i) Prevent, to the extent practicable, direct contact with and ingestion of soil/dust/debris/structures within the building and in the soils beneath the footprint of the buildings and under the paved parking areas;
- (ii) Prevent, to the extent practicable, the potential for water to infiltrate through the soils;
- (iii) Control, to the extent practicable, surface water run-off to minimize erosion;
- (iv) Prevent, to the extent practicable, the release of pollutants or contaminants at levels that would represent an unacceptable human health exposure to a Site worker or trespasser; and
- (v) Remove soil/dust/debris/structures at levels that could result in an unacceptable ecological impact.”²⁶

While the risk assessment and endangerment determination create a foundation for objectives (i) and (iv) from the above list, there is nothing in the Approval Memorandum in support of objectives (ii), (iii) and (v).

In defining the EE/CA’s scope, the 1998 Approval Memorandum cites five of the nine representative removal action alternatives enumerated in § 300.415(e) of the NCP for evaluation. These include: fencing and security; drainage controls; capping of contaminated

²² Approval Memorandum at 1 and 6.

²³ *Id.* at 3-4.

²⁴ *Id.* at 5.

²⁵ “The [] conditions for a removal are met at this Site. The building occupants have actual or potential exposure. The potential non-cancer risk for workers exceeds the hazard index of 1 while the cancer risk ranges from 10^{-3} – 10^{-4} .” *Id.* The Approval Memorandum also contains a single sentence regarding threats from potential future fires. It notes, “[s]hould the building become vacant with no security measures the threat of fire increases.” Not one of the removal action objectives, however, relate to the threat of fire.

²⁶ *Id.* at 6.



soils; excavation and removal of highly contaminated soils; and containment, treatment or disposal of hazardous materials. None of these five alternatives, however, was developed or evaluated in the 1998 EE/CA. The Approval Memorandum contemplated the following schedule: final Administrative Order on Consent for the Site signed by September 1998; Action Memorandum for the selected removal alternative approved by November 1998; and NTCRA commenced by December 2000, and completed by December 2003. As it turned out, however, the 1999 AOC was not based on CERCLA, so no Action Memorandum was ever prepared and the timetable adopted by the 1999 AOC was dramatically different.

B. 1998 EE/CA.

In August 1998, BBL completed an EE/CA on behalf of Aerovox, the purpose of which was to identify the objectives for a removal action at the Site, and to analyze the effectiveness, implementability, and cost of removal action alternatives that satisfied such objectives. The three alternatives considered in the 1998 EE/CA all involved building demolition and capping of the Site,²⁷ and provided for a long-term remedy with a stated objective of minimizing potential future impacts to human health and the environment caused by the presence of PCBs in the manufacturing building materials and equipment, as well as in site soil.²⁸ The 1998 EE/CA concluded on the one hand that any risk from groundwater had been adequately addressed by the activities implemented pursuant to the 1982 Order,²⁹ and on the other hand that "PCBs in soils represent the only constituents of interest in environmental media at the facility."³⁰ The 1998 EE/CA explained that a PCB removal action was appropriate to mitigate potential exposure and migration pathways because concentrations of PCBs considerably exceed standards in a number of soil sampling locations "both beneath the building and the parking lot."³¹

Although final closure under M.G.L. c. 21E ("Chapter 21E") and the Massachusetts Contingency Plan ("MCP") was not contemplated at that time, the 1998 EE/CA's evaluation of applicable or relevant and appropriate requirements ("ARARs") explicitly notes that the cap would be an engineered barrier,³² thereby complying with the more stringent of the

²⁷ Aerovox press releases in the AR file document that demolition and relocation was the removal action Aerovox preferred for economic as well as environmental reasons.

²⁸ 1998 EE/CA at 4-1.

²⁹ *Id.* at 2-15. The 1998 EE/CA specifically notes that a September 21, 1984 letter from EPA stated that the activities were completed in compliance with the 1982 Order. *Id.* at 2-16.

³⁰ Risk from building materials was not defined. One is left with the inference that there was a risk because levels exceeded TSCA thresholds. *See* 1998 EE/CA at 2-16.

³¹ *Id.*

³² Section 310 CMR 40.0996(4)(c) of the MCP defines an "engineered barrier" as "a permanent cap with or without a liner that is designed, constructed and maintained in accordance with scientific and engineering



Massachusetts Hazardous Waste Management Closure and Post-Closure Care requirements at 310 CMR 30.633 and the TSCA requirements at 40 CFR 761.61(a)(7), as well as the MCP's requirements for a Class A-4 Response Action Outcome.³³ The recommended alternative included off-site disposal of all building materials with concentrations of PCBs greater than 50 parts per million, burying the remainder of materials inside the manufacturing facility foundation, and capping the entire Site with an engineered barrier.

A public comment period on the 1998 EE/CA, summarized and initiated by publication of a Proposed Plan, began on October 8, 1998 and ended on November 7, 1998. No public comments were received.³⁴ The Proposed Plan focused attention on the building as the source of all contamination, and indicated that a removal action was necessary to address two major pathways of potential exposure: direct contact with impacted surfaces by workers or site visitors; and migration of PCBs off-site by tracking and weathering.³⁵ The Proposed Plan made no specific mention of impacts to groundwater or of potential threat posed by fire. Nor did it refer to PCBs in soil, the basis upon which the 1998 EE/CA recommended the appropriateness of a removal action.³⁶

The AR file does not include an Action Memorandum authorizing any NTCRA.

standards to achieve a level of no significant risk for any foreseeable period of time. An engineered barrier:

1. shall prevent direct contact with contaminated media; 2. shall control any vapors or dust emanating from contaminated media; 3. shall prevent erosion and any infiltration of precipitation or run-off that could jeopardize the integrity of the barrier or result in the potential mobilization and migration of contaminants; 4. shall be comprised of materials that are resistant to degradation; 5. shall be consistent with the technical standards of RCRA Subpart N, 40 CFR 264.300, 310 CMR 30.600 or equivalent standards; 6. shall include a defining layer that visually identifies the beginning of the barrier; 7. shall be appropriately monitored and maintained to ensure the long-term integrity and performance of the barrier. Plans for the monitoring and maintenance of the barrier shall be submitted to the Department and shall document that one or more financial assurance mechanism(s) have been established and adequately provide for future monitoring, maintenance and any necessary replacement of the barrier; and 8. shall not include an existing building, structure or cover material unless it is designed and constructed to serve as an engineered barrier pursuant to the requirements of 310 CMR 40.0996(4)." *See also Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup, Guidance on the Use, Design, Construction, and Monitoring of Engineered Barriers, Public Comment Draft, November 2002.*

³³ *Id.* at 3-2, and Table 14a ("Potential Action-Specific ARARs") at 6. *See also* Section III.E.4., *infra*.

³⁴ SEE/CA at ii.

³⁵ Proposed Plan at 1. Ironically, the conditions that created the risks that led in 1998 to the decision to demolish the building – ongoing manufacturing facility with on-site workers and visitors – were no longer present following Aerovox's abandonment of the Site on April 2, 2001. Nonetheless, site security measures since that point do not appear to have eliminated such conditions.

³⁶ *See* notes 30 and 31, *supra*, and accompanying text.



C. 1999 AOC and Subsequent Aerovox Bankruptcy.

In September 1999, EPA executed the 1999 AOC with Aerovox (which became effective on December 2, 1999) in connection with the cleanup of the Site, pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973.³⁷ Under the 1999 AOC, Aerovox agreed to pay for and conduct the cleanup of the Site over an extended period of time under EPA supervision. Among other things, the 1999 AOC required that Aerovox: (i) deposit funds, in specified installments, into a trust fund called the Aerovox Facility Fund (the “Fund”); (ii) begin demolition of the manufacturing facility and the installation of an asphalt cap at the Site when the Fund reached \$4.8 million, or 60% of the total estimated cost; and (iii) construct, and relocate to, another manufacturing facility located in New Bedford (by 16 months from the effective date of the order, or April 2, 2001). Completion of demolition of the manufacturing facility and cap installation was required by November 1, 2011.³⁸

Pursuant to the 1999 AOC, Aerovox relocated to its new manufacturing facility by April 2, 2001 (but left behind a substantial amount of contaminated equipment and machinery, as well as a considerable amount of combustible material),³⁹ but made just one \$750,000

³⁷ The 1999 AOC was entered pursuant to RCRA, not CERCLA. The 1999 AOC was to have implemented the preferred alternative as a RCRA action to be completed by November 2011. Apparently, the decision to proceed under RCRA was part of a concerted effort to assist Aerovox, and to help the City keep one of its major employers, by choosing a statutory regime that did not require the payment of government oversight costs. There were additional benefits accruing as a result of the change from CERCLA to RCRA authority. Specifically, the following could be avoided: (1) need for an action memorandum and special regional review procedures because the proposed removal action involved a business relocation (Non-NPL Removal Action Guidance at 7); (2) Headquarters’ concurrence because the removal action involved releases from products that are part of a structure (Contamination Inside Building Guidance at 3-4); and (3) Headquarters consultation requirement when a NTCRA could cost in excess of \$6 million (NTCRA Removal Authority Memorandum at 2).

³⁸ In addition, the 1999 AOC included certain monitoring and reporting requirements, and provided for stipulated penalties for violations of the provisions of the 1999 AOC. *See* 1999 AOC. Specifically, paragraph 91 of the 1999 AOC provided per day penalties (subject to the notice requirements of paragraph 92) for: (a) failure to decontaminate any equipment relocated from the Facility to the new facility in compliance with TSCA (\$2,000 per day); (b) failure to complete the relocation of all manufacturing and business operations by 16 months after the effective date of the 1999 AOC (various penalties based on length of time in violation); (c) failure to close the Facility, provide security and fire protection, and/or maintain the Facility (\$1,000 per day); (d) failure to commence the demolition of the Facility and installation of an asphalt cap on schedule (\$1,500 per day); (e) failure to perform the demolition and cap work in accordance with the work plan specified by the 1999 AOC (\$1,000 per day); (f) failure to submit timely or complete reports required by the 1999 AOC (\$750 per day); (g) failure to submit timely or correct deposits into the Fund (\$1,500 per day); (h) failure to reimburse the Fund for inappropriate disbursements (\$1,000 per day); and (i) failure to complete the demolition and cap work and submit a notice of completion to EPA on schedule (\$1,500 per day).

³⁹ Apparently, Aerovox had given some indication that it was responsible for the equipment that had been left behind. One of the documents included on a CD containing 53 PDFs which AVX received from EPA on August 11, 2006 is an October 23, 2001 letter from D. Lopes, Aerovox’s AOC Project Coordinator, to K. Tisa, EPA’s Coordinator under the 1999 AOC, regarding “facility shutdown report.” The penultimate paragraph of the two-



payment to the Fund. Aerovox requested an extension with respect to its next payment of \$200,000 due on December 31, 2000. On or about February 9, 2001, EPA and Aerovox entered into an amendment, which altered the payment schedule such that Aerovox's payment, adjusted to \$225,000, would be due on June 30, 2001. Before the new payment deadline, however, Aerovox filed a voluntary petition for Chapter 11 bankruptcy on June 6, 2001 in the United States Bankruptcy Court for the District of Massachusetts, styled *In re New Bedford Capacitor, Inc. (f/k/a Aerovox, Inc.)* (Case No. 01-14680-JNF). As a result, Aerovox never implemented the response actions required by the 1999 AOC. In addition, based on the AR file, it appears that the last time Aerovox complied with its post-closure monitoring obligations was 2002.

On or about November 15, 2001, EPA filed a proof of claim in the Aerovox bankruptcy to protect its rights with respect to the obligations of Aerovox, asserting that Aerovox was required to cleanup and perform operation and maintenance measures with respect to the PCBs and other hazardous substances disposed of in and around the Site, pursuant to CERCLA, the 1984 Supplemental Order⁴⁰ and the 1999 AOC. On or about November 30, 2002, EPA filed an *Application of the United States for Reimbursement of Administrative Expenses* (the "Administrative Application") for recovery of response costs EPA expected to incur in cleaning up and performing operation and maintenance measures with respect to PCBs and other hazardous substances disposed of in and around the Site. An administrative expense is entitled to priority payment and must be necessary for the preservation of the bankrupt estate. The Administrative Application enumerated the \$8.3 million estimated cost under the 1999 AOC and certain other items EPA considered administrative expenses, including expenses associated with repairing the roof of the Facility (estimated to be \$1 million); removal of chemical drums at the Site (estimated to be \$48,000); repairing a cracked asphalt cap (estimated to be \$3,000); and (4) maintenance of a fire suppression and security system (estimated to be \$23,000 per year).⁴¹ In addition, the Administrative Application explained that the cost of decontamination and disposal of machinery and equipment left behind at the Site – Aerovox having agreed to relocate all of its

page letter states: "It is Aerovox's intention to sell the equipment that is located in the facility at 740 Belleville Ave. Aerovox personnel and others will enter the facility for the purpose of cleaning, testing, crating and rigging that equipment." This statement may also explain why, during a July 10, 2006 conference call between EPA and AVX representatives, EPA counsel Eve Vaudo indicated that she had been "surprised" by the amount of equipment and material Aerovox had left behind. Further, David Dickerson's notes (one of the 53 PDFs referenced immediately above) from a June 30, 2005 meeting reference a "machine RFP" with proceeds possibly going to a City bankruptcy account, and suggest at least some of this equipment was or might ultimately be sold.

⁴⁰ Under the 1984 Supplemental Order, Aerovox agreed to implement a monitoring and maintenance program for the cap and to take such maintenance measures as were necessary to maintain the cap and the cutoff wall so as to prevent releases of PCBs.

⁴¹ As it turns out, removal of the chemical drums and repair of the cracked cap were not completed until the 2004 removal action described below. See note 49, *infra*, however, for further discussion of cap repair.



manufacturing and business operations to another facility⁴² – would cost an additional \$2-3 million.⁴³

On or about August 11, 2003, Aerovox, EPA, the Commonwealth and the City, among others, entered into a settlement agreement with respect to the costs for the cleanup of the Site. The settlement was approved by the court on September 30, 2003. EPA settled all its claims against Aerovox with respect to the Site in exchange for: (1) payment of the \$750,000 placed in the Fund by Aerovox prior to its bankruptcy, plus interest and any appreciation; (2) allowance of EPA's administrative expense claim on a priority basis in the amount of \$200,000; and (3) allowance of an unsecured claim in the amount of \$8,235,000 (reduced by the amount by which the Fund exceeded \$830,000). By the conclusion of the bankruptcy, EPA received \$200,000 in agreed administrative expenses, \$967,273.52 from the Fund, and \$1,556,111.80 from distributions on its unsecured claim, for a total of \$2,723,385.32.⁴⁴ The settlement provided that funds EPA received from the bankruptcy were to be used solely to conduct or finance response actions at the Site. The settlement gave EPA and the Massachusetts Department of Environmental Protection ("MassDEP") immediate and complete access to the Site for purposes of sampling and conducting response actions.

In addition, the City was designated as first responder to the Site for any problems while Aerovox continued to own the Site. The City received \$250,000 on its administrative claim for the purpose of maintaining the fire suppression system at the Site and performing other property maintenance and security measures at the Site. The City was also given unlimited site access.

D. 1999 Administrative Consent Order with Commonwealth.

An Administrative Consent Order between MassDEP and Aerovox in connection with the Site became effective on February 3, 2000 (the "2000 ACO").⁴⁵ The 2000 ACO was

⁴² 1999 AOC at ¶ 40.

⁴³ Administrative Application at ¶¶ 17-18.

⁴⁴ Another result of the settlement with Aerovox was that, after a certain holding period, the Site became the property of the City and/or the New Bedford Redevelopment Authority (the "NBRA"). The current owner of 740 Belleville Avenue is 740 Belleville Avenue LLC, which was organized as a limited liability company for the purpose of facilitating the transfer of the property to a brownfields developer. *See* 740 Belleville Avenue LLC Certificate of Organization. The current managers of 740 Belleville Avenue LLC are the City and the NBRA. Under the Settlement Agreement, the proceeds, if any, from a sale of the Site to a developer or other entity will be apportioned among EPA, the Commonwealth and the City in proportion to their unreimbursed expenses incurred in connection with the cleanup of the Site. As a result, the governmental entities stand to obtain additional funds from any cleanup performed at the Site, particularly if it enhances the value of the property. Any such funds would further defray the governments' costs.

⁴⁵ The 2000 ACO notes that, in the 1998 EE/CA, Aerovox "concluded that the appropriate response action for source control at the Site was to demolish the [facility] and cap the impacted soil while leaving the building



intended to complement a Consent Order entered into between Aerovox and the Massachusetts Department of Environmental Quality Engineering (“DEQE”) (now MassDEP), effective June 3, 1982 (the “1982 DEQE Order”).⁴⁶ The 2000 ACO required that Aerovox: (i) continue to conduct the post-closure monitoring program put into place by the 1982 DEQE Order, which consisted of twice-yearly monitoring of groundwater levels and the underlying aquifer, as well as periodic inspections of the cap at the Site, until July 2012; (ii) submit post-closure monitoring reports to MassDEP two weeks after the field inspections and water level readings required by the 1982 DEQE Order; (iii) submit the Demolition and Cap Work Plan and Maintenance Work Plan required by the 1999 AOC to the MassDEP, postmarked by no later than December 31, 2009; (iv) notify MassDEP, within the applicable timeframe, after becoming aware of any 2- or 72-hour notification condition arising from releases that occurred prior to February 3, 2000, pursuant to 310 CMR 40.0311, 40.0312, 40.0313 and 40.0314 or other applicable provisions; (v) conduct an Immediate Response Action (“IRA”) pursuant to 310 CMR 40.0410 and file an IRA completion statement, after providing the notification required in (iv) above; (vi) notify MassDEP, within the applicable timeframe, of any 2- or 72-hour, or 120-day notification condition, after becoming aware of any releases occurring after February 3, 2000, where the respondent is a person required to notify MassDEP pursuant to 310 CMR 40.0331; and (vii) comply with the applicable requirements of Chapter 21E and the MCP for any releases occurring after February 3, 2000. The 2000 ACO provided for stipulated penalties of \$100 per day for violations by Aerovox of any time deadline or requirement set forth therein.

E. 2004 Action Memorandum.

In March 2004, nearly six years after the Approval Memorandum, the 1998 EE/CA and publication of the Proposed Plan, and three years after Aerovox filed for bankruptcy, EPA issued an Action Memorandum to initiate a Time-Critical Removal Action (“TCRA”) at the Site. The purpose of the TCRA was to remove drums abandoned at the Site and to repair the asphalt cap installed by Aerovox pursuant to the 1982 Order (which Aerovox was required to

slab in place. EPA agreed that the actions in the EE/CA, along with a long-term groundwater monitoring program, are an appropriate non-time critical removal action for source control consistent with the NCP.” See Section V of the 2000 ACO at ¶ 9.

⁴⁶ 2000 ACO at ¶ 3 (Section II). The 1982 DEQE Order substantially tracked the requirements of the 1982 Order with EPA. Among other things, the 1982 DEQE Order required Aerovox to: (i) implement a sampling and analysis program at the Site; (ii) submit an evaluation of alternative responses based on the results of such sampling and analysis program (including an engineering analysis of each course of action evaluated; estimated costs and schedule for completion for each course of action evaluated; post-cleanup monitoring and maintenance measures for each course of action evaluated; and measures for provision of recorded notice to subsequent owners and operators of any measures taken for long-term containment of PCBs at the Site, and any related maintenance or monitoring required); (iii) recommend a responsive course of action to MassDEP; and (iv) implement such course of action, subject to MassDEP approval.



monitor and maintain until June 2014). In the Action Memorandum, EPA took the position that cracks in the asphalt cap caused by vegetation had to be repaired and “[h]azardous substances present in drums and containers in the abandoned facility, if not addressed by implementing the response actions selected in this Action Memorandum, [would] continue to pose a threat to human health and the environment.”⁴⁷ Without implementing the TCRA, EPA found there may be an imminent and substantial endangerment to public health, welfare, or the environment.⁴⁸

F. 2004 Time-Critical Removal Action.

From March to December 2004, EPA implemented the TCRA to remove waste drums and cylinders and to remove vegetation from and seal cracks in the existing asphalt cap.⁴⁹ Risks cited as the basis for the TCRA related to the fact that the release of wastes from drums had the potential to enter groundwater and surface water, and the deteriorating cap had the potential to expose the underlying impacted soils, which could then migrate via air or surface runoff. In connection with the 2004 TCRA, EPA expended just under \$500,000 in response costs.

III. SUPPLEMENTAL EE/CA.

The SEE/CA was published in April, 2006. Its opening sentence explicitly states that it supplements the 1998 EE/CA. The SEE/CA is alternately modest, referencing the many reasons that it is closely connected with the 1998 EE/CA as well as the Approval Memorandum, the only authorizing document in the multi-stepped process delineated in the introductory section above; and bold, stepping into new terrain, something that might be expected given the passage of time and the number and consequence of the events and developments during the intervening years, many of which are described in Section II of these comments.

⁴⁷ Action Memorandum at 1. The Action Memorandum was prepared on March 29, 2004 and approved on April 4, 2004. Approximately six months later, on September 20, 2004, Action Memorandum Addendum #1, seeking authorization for a \$90,000 increase of funds to continue the TCRA, was prepared and four days later approved. The additional funds were to be used “to dispose of the remaining drums, place a pavement cap over the PCB contaminated soil area, restrict access to the property and demobilization.” Action Memorandum Addendum #1 at 2.

⁴⁸ *Id.* at 8.

⁴⁹ The AR file does not document completion of the cap repair activities required under the TCRA. The June 22, 2004 *Pollution Report #2*, written while TCRA activities were in process, states, “The Army Corps is currently utilizing the site as an access point for the New Bedford Harbor dredging project. When their activities are complete, the capped area will be addressed appropriately.” More than six months later, however, in the January 4, 2005 *Pollution Report #3*, annotated as the “Final” such report, the same account is repeated verbatim.



From its modest aspect, the SEE/CA states among other things that “site risks remain consistent with those presented in the 1998 EE/CA,” that “[t]he goals and objectives of the NTCRA remain essentially unchanged,” and that its purpose is limited (update cost estimates, evaluate two new removal alternatives, and allow additional public comment).⁵⁰ From its bold aspect, the SEE/CA reframes earlier statements regarding site risks so that groundwater, stormwater, air emissions, trespassing and vandalism, and potential fire take priority over previously-identified risks. One of the new removal alternatives places all waste, including TSCA waste, into the building foundation and caps the Site, not with an engineered barrier, but with twelve inches of vegetated soil. In addition, the objectives for the [S]EE/CA have expanded in number from two to five (with modifications to the original two), and include coordinating the NTCRA with site redevelopment, and with the City becoming the lead agency through a cooperative agreement. Further, some additional cost items have been added to the estimates for all the removal alternatives to “reflect the current status of the Aerovox site.”⁵¹

The first question raised by this inherent conflict between the SEE/CA’s dual aspects concerns whether the SEE/CA is consistent with the 1998 Approval Memorandum, the only document available to “explain[] the basis for the decision to employ a non-time-critical removal action.”⁵² The other and more complex question that is raised involves discerning if the SEE/CA determines whether “any hazardous substance is released or there is a substantial threat of such a release into the environment . . . which may present an imminent and substantial endangerment to the public health or welfare,”⁵³ and whether the proposed removal action is appropriate to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release.⁵⁴ The below comments address these questions, among other things.

A. SEE/CA Does Not Satisfy CERCLA § 104(a)(1) Requirement to Define Manner in Which Facility Constitutes a Substantial Threat of Release of a Hazardous Substance Into the Environment.

To implement a removal action, CERCLA § 104(a)(1) requires, first, a determination by the President of a release or threat of release of a hazardous substance into the environment which may present an imminent and substantial endangerment to the public health or welfare, and, second, the actions taken in response to the release or threat of release be consistent with

⁵⁰ SEE/CA at ii.

⁵¹ *Id.* at iii. The SEE/CA, however, makes no mention of the two items deleted from the estimates, specifically “Engineering, Administrative, and Legal Fees (10%),” and the present worth of 30 years of post-removal site control costs.

⁵² NTCRA Removal Authority Memorandum at 6.

⁵³ CERCLA § 104(a)(1).

⁵⁴ 40 CFR 300.415(b)(1).



the NCP. Following discovery or notification, and initial assessment, the approval memorandum and the EE/CA have specific roles in determining the appropriateness of a removal action. As the NTCRA Guidance explains, “[t]he EE/CA Approval Memorandum should . . . focus on providing sufficient information that [] a threat or potential threat could exist, while the EE/CA will provide the information for EPA to determine that such a threat or potential threat actually exists.”⁵⁵ In other words, to accomplish its goals of specifying the objectives of a removal action and analyzing the various removal alternatives, an EE/CA must rest on the foundation laid by the prerequisite approval memorandum with respect to the identification of a threat or potential threat.⁵⁶

In the present context, and as previously discussed, the only exposure pathways the Approval Memorandum documented involved ingestion and dermal inhalation of PCBs by on-site workers in the then still-operating manufacturing facility. Also as previously discussed, the 1998 EE/CA identified risks other than to on-site workers; and, after considering the risks identified by the Approval Memorandum, concluded that PCBs in soils represented the only constituents of interest in environmental media at the Facility.⁵⁷ In its treatment of risk, the SEE/CA, a supplement to the 1998 EE/CA, begins by referring to Section 2 of the 1998 EE/CA in order to incorporate the earlier document’s discussion of the threat of release.⁵⁸ It then summarizes the results from the most recent site investigations, which new information, the SEE/CA states, “confirms that site risks remain consistent with those presented in the 1998 EE/CA, with PCBs in soil and groundwater posing a potential threat to human health and the environment.”⁵⁹

In claiming consistency with the risks presented in the 1998 EE/CA, the SEE/CA speaks from its modest aspect as a supplement; in stating that risk is present in groundwater, however, the SEE/CA speaks from its bold aspect, and without basis in the 1998 EE/CA. The AR file does not support the present existence of a threat of release to groundwater or surface water from the building. The 1998 EE/CA itself concluded that the groundwater release pathway had already been addressed by activities undertaken under the 1982 Order. ENSR’s March 2006 *Conceptual Site Model* (the “2006 CSM”) provides mass flux estimates for the contribution of PCBs from the Site to the river through the groundwater and surface water pathways, and indicates relatively low mass flux per year. In addition, the PCB mass fluxes presented in the 2006 CSM for the Site are, in all likelihood, overstated. For the groundwater

⁵⁵ NTCRA Guidance at 6.

⁵⁶ *Id.* at 22.

⁵⁷ See Sections II.A. & II.B., *supra*.

⁵⁸ SEE/CA at 2. Section 2 of the 1998 EE/CA summarizes the results and presents a streamlined risk evaluation that “provides justification for the removal action.” 1998 EE/CA at 2-14.

⁵⁹ *Id.*



flux, the 2006 CSM utilized PCB concentrations an order of magnitude higher than what is typically present, assumed an hydraulic conductivity that is conservative and not site specific, and failed to factor in the groundwater cutoff wall that is effectively reducing the migration of PCBs to the river through the shallow groundwater flow system. The 2006 CSM indicates that groundwater measurements taken between 1993 and 2002 "... demonstrated that the shallow system remained isolated from the harbor, even during the high tide periods."⁶⁰

Similarly, the surface water flux presented in the 2006 CSM utilized maximum, not typical, PCB concentrations and assumed storm flow based on visual observations, not on actual measurements. EPA's stormwater monitoring in 2004-05 showed that PCB concentrations released through the Site's drainage system are lower than reported in 1994, which indicates that the migration of contaminants in stormwater is decreasing, rather than presenting an imminent and substantial threat.⁶¹ At the June 14, 2006 public meeting in New Bedford, speakers representing regulating agencies clearly expressed the view that the Site was at one time, but is no longer, a significant source of PCBs to the river. Without adequate characterization of these pathways and an evaluation of the flux based on actual existing conditions and site-specific measured physical parameters, information that ordinarily would be collected as part of a comprehensive site assessment under the MCP, there is no basis for assertions of a substantial threat of release via groundwater or surface water.

The SEE/CA continues to diverge from the 1998 EE/CA (and the Approval Memorandum before it), by focusing on the threat of release in the event of a fire where the only foundation for it is the Approval Memorandum's terse recognition that "[s]hould the building become vacant with no security measures the threat of fire increases."⁶² This observation did not merit consideration in the 1998 EE/CA, which made no reference at all to the existence of a threat of release due to fire. The June 2006 public notice, *Making the Vacant Aerovox Site Safe*, amplified the focus on the threat from fire by stating that the proposed NTCRA "is intended to remove the immediate threat of air emissions due to fire and contaminated run-off to the harbor." The threat of a release to air and surface water, however, is predicated on building deterioration and fire, both of which can be prevented and mitigated without demolition.⁶³

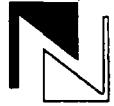
To be consistent with the NCP, the SEE/CA is required to rest on the foundation of the eight-year old Approval Memorandum. It is cast as a non-time-critical removal action, but its emphasis on the need for more immediate action that would be more typical of an emergency

⁶⁰ 2006 CSM at 5-3.

⁶¹ *Id.* at 4-2, 4-3 and Appendix E.

⁶² Approval Memorandum at 5.

⁶³ See Section III.D., *infra*, for further discussion on this subject.



or time-critical removal action. In seeking to be free of the Approval Memorandum's identification of ingestion and dermal inhalation of PCBs by on-site workers in the then still-operating manufacturing facility as the only exposure pathway, the SEE/CA has found its argument in the threat of fire. The SEE/CA, claiming to be modest, yet acting fundamentally from its bold aspect, does not substantiate its assertions with respect to the threat of fire. The fact is that the SEE/CA does not point to, incorporate, acknowledge, or in any way reference, the New Bedford Fire Department Aerovox Preplan, the statement of a qualified expert in the area of fire and the threats it poses, and the only document in the AR file that could potentially provide a credible foundation for defining the manner in which the Facility constitutes a substantial threat of release of a hazardous substance into the environment.

B. SEE/CA Does Not Comply with the NCP.

The NCP at 40 CFR 300.415 sets out specific requirements governing the selection, scope and implementation of removal actions undertaken pursuant to CERCLA. While the Approval Memorandum contemplated and documented implementation of a removal action consistent with the NCP, the SEE/CA has strayed far from what was contemplated in 1998, rendering it questionable whether the requirements can be met. The following subsections review the recommended alternative in light of its compliance with the NCP and the NTCRA Guidance, as well as other guidance.

1. SEE/CA improperly relies on an unsubstantiated risk evaluation based on incomplete site characterization.

Section 300.415(a) of the NCP requires that a removal site evaluation and a review of current site conditions be completed to determine if a removal action is appropriate. The NTCRA Guidance elaborates on the type of information that should be reviewed and/or developed, including site background information, previous removal actions, the source nature and extent of contamination, the quality of the data and a streamlined risk evaluation.⁶⁴ Each of these site characterization requirements were discussed originally in the Approval Memorandum, and to some extent in the 1998 EE/CA. Conditions at the Site, however, have changed materially since 1998, and what is known about the nature and extent of contamination and the risks posed by the Site changed incrementally between the Approval Memorandum and the 1998 EE/CA, and changed geometrically between the 1998 EE/CA and the SEE/CA.

By reference to the 2006 CSM, there is an attempt to portray achievement of a complete site characterization. The data, however, relative to the recommended alternative, is limited. The 2006 CSM evaluated only the potential for site-related PCBs to be transported via four different migration pathways – air, groundwater, DNAPL and stormwater – to the harbor.

⁶⁴ NTCRA Guidance at 24-30.



The 2006 CSM did not evaluate trespasser exposure pathways, and the potential for adjacent businesses and residences to be impacted. Yet, these exposures are the very reasons given in the SEE/CA for the appropriateness of the recommended alternative.⁶⁵ The only other recent site characterization information in the AR file consists of two brief e-mails of a paragraph each from Jacobs Engineering, dated March 29 and April 5, 2006, information forwarded at a point in time when the SEE/CA was substantially if not completely drafted.

A troubling ramification of the eight-year gap between the Approval Memorandum and the SEE/CA is the changing basis for the risk evaluation. According to the NTCRA Guidance, “[t]he potential for exposure indicates the likelihood of meeting the NCP criteria for taking a removal action, which in turn justifies the need for conducting the EE/CA.”⁶⁶ The Approval Memorandum justified undertaking preparation of an EE/CA on the basis of the potential for plant worker exposure to PCBs via ingestion and dermal inhalation.⁶⁷ The 1998 EE/CA reframed the potential for exposure in terms of contact with impacted soil and building materials.⁶⁸ The SEE/CA, however, though it refers back to the 1998 EE/CA’s risk evaluation, adds risk components for trespassers and the threat of fire. These risks are neither clearly stated nor discussed qualitatively or quantitatively in the SEE/CA. As such, there is no basis for the SEE/CA’s site characterization and risk evaluation to “. . . help EPA decide whether to take a cleanup action at the site, what exposures need to be addressed by the action, and in some cases define appropriate cleanup levels.”⁶⁹

2. SEE/CA fails to state clear and appropriate risk-based objectives.

The NTCRA Guidance states that “[i]dentifying the scope, goals, and objectives for a removal action is a critical step in the EE/CA and in the conduct of non-time-critical removal actions.”⁷⁰ In so stating, this guidance underscores an EE/CA’s role in providing the information for EPA to determine that the threat or potential threat identified in the approval memorandum actually exists,⁷¹ and that removal alternatives considered in the EE/CA offer actions that will abate, prevent, minimize, stabilize, mitigate, or eliminate the identified release or threat of release. The appropriateness of the alternatives considered is tied to the appropriateness of an EE/CA’s objectives. The SEE/CA, the most recent development in an evolving site characterization, lacking a risk evaluation based on 2006 site conditions rather

⁶⁵ SEE/CA at 2-3.

⁶⁶ NTCRA Guidance at 22.

⁶⁷ See note 25, *supra*, and accompanying text.

⁶⁸ See notes 28-31, *supra*, and accompanying text.

⁶⁹ *Id.* at 29.

⁷⁰ NTCRA Guidance at 31.

⁷¹ See note 55, *supra*, and accompanying text.

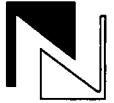


than those in 1998, however, fails to state clear and appropriate risk-based objectives. In developing removal action objectives, 40 CFR 300.415(b)(2) requires consideration of the following eight factors "in determining the appropriateness of a removal action" pursuant to the NCP:

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;
- (ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;
- (iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- (iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;
- (v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;
- (vi) Threat of fire or explosion;
- (vii) The availability of other appropriate federal or state response mechanisms to respond to the release; and
- (viii) Other situations or factors that may pose threats to public health or welfare of the United States or the environment."

Between the Approval Memorandum, the 1998 EE/CA, the 2004 TCRA Action Memorandum and the SEE/CA, EPA has variously and inconsistently incorporated or eliminated one or more of the above factors as applicable to the proposed removal action. The Approval Memorandum stated that factors (i), (iv) (vi) and (viii) served as conditions requiring a removal action. Based on present conditions, however, it appears that only factors (i) and (vi) from the above list apply. Accordingly, for the recommended alternative to be appropriate under the NCP, its objectives must be framed in terms of taking action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or the threat of release that results in either the actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or the threat of fire or explosion. Removal objectives such as facilitating site redevelopment or assisting in the implementation of institutional controls are not related to these factors and are included inappropriately in the SEE/CA.

The stated overall goal of the recommended alternative is to minimize impacts to human health and the environment caused by the presence of high levels of PCBs in the building and surrounding soils. The presence of PCBs in building materials and soils, however, does not constitute exposure or threat of fire; there must be a complete exposure pathway and identified receptors. The current human health risk (direct contact exposure pathway) and the threat of



fire can be mitigated or minimized appropriately for the short term (long enough to complete a comprehensive and final remedial action under the Chapter 21E requirements) by building stabilization and adequate security.⁷² The recommended alternative does nothing to minimize impacts caused by surrounding soils since there is no complete exposure pathway to directly contact surrounding soils, and there is no longer a substantial contribution of contaminants from surrounding soils to other media (a conclusion made in the 1998 EE/CA and supported in other documents in the AR file). In fact, there is a credible argument that, by placing into the subsurface environment "high levels of PCBs in the building," the recommended alternative will increase, rather than minimize, the potential impacts from the subsurface to the environment. Each of the SEE/CA's five objectives are discussed below.

a. The SEE/CA's first objective, a carryover from the 1998 EE/CA, with some modification, is to safely demolish the building in a cost effective and ARAR-compliant manner before excessive building deterioration. Demolishing the building is a removal action alternative, not a risk-based response objective. Cost effectiveness and ARAR compliance are criteria by which to evaluate removal action alternatives. The introduction of timeliness (conducting the removal before excessive building deterioration) should be part of defining the scope of the response action, not its objective.

b. The second objective, also a carryover from the 1998 EE/CA, is to prevent direct contact with soils greater than 2 ppm of PCBs. The Site is paved and fenced; hence, a complete exposure pathway to soils impacted with PCBs does not exist. All that is required to prevent direct contact is maintenance of these controls. One of the objectives of the 2004 TCRA was to repair and seal cracks in the pavement, and the AR file does not contain any documentation which supports the assertion that the pavement has deteriorated since 2004 to the point where humans could be exposed to PCBs in soil. Furthermore, the MCP Method 1 soil standard for PCBs is not an appropriate risk-based goal for the Site, since a proper Method 3 risk characterization that evaluates site-specific exposure conditions would likely yield a much higher concentration.⁷³

⁷² The SEE/CA fails to explain why obvious alternatives were determined not to be feasible. *See* Action Memorandum Guidance at 3-267.

⁷³ The SEE/CA suggests that direct contact with pavement also should be prevented. Applying MCP Method 1 soil criteria to asphalt is inappropriate, however, as the exposure assumptions applicable to soil are not relevant to asphalt pavement. This appears to have been understood in that this paved area has been utilized for harbor sediment dewatering operations, allowing human exposure to the pavement during such work. A comparable standard in TSCA for the pavement would be the self-implementing provisions in low-occupancy areas. This standard would allow up to 25 ppm of PCBs in place, or up to 50 ppm if the fence is maintained, or up to 100 ppm if the pavement is capped. *See* 40 CFR 761.61(a).



c. The third objective, newly-included, is to minimize future releases to surface water, groundwater and air. The documents in the AR file do not support that the recommended alternative will minimize such releases. To the contrary, burying additional source material and then placing a permeable cap over them would potentially increase the amount of stormwater in contact with the PCB materials, and the amount of PCBs in contact with groundwater. Air emissions are currently only measurable in the vicinity of harbor sediments immediately adjacent to the Site, and the building is not a present source of air emissions. It appears this objective was added to address the concern that a "major incident" fire potentially could cause releases to these media. Yet, minimizing the threat of fire can be accomplished without building demolition.

d. The fourth objective, also added in the SEE/CA, is to coordinate the removal action with future site commercial or industrial redevelopment. This is not an appropriate CERCLA response objective to address a release of hazardous substance or minimize impacts on human health or mitigate a potential imminent and substantial endangerment. Furthermore, the recommended alternative has the potential to constrain future redevelopment by limiting building options on one-half of the property, and providing no mechanism to ensure that the action is coupled with a redevelopment plan. The goals associated with providing significant funding to the City to jumpstart the project would be undermined if the removal action is not coupled with the redevelopment, yet it seems highly unlikely that a development plan, let alone an interested developer, will be on board within the timeframe proposed for the action.⁷⁴ Such an objective, viewed independently of the requirements under CERCLA and the NCP, can be met only when a redevelopment plan exists, has funding, and is about to be implemented. The likelihood of such a plan being brought forth is constrained until MCP-based comprehensive response actions are defined. Stabilizing the building, ensuring implementation of existing control and security mechanisms, and proceeding under the Chapter 21E program to achieve the long-term remedial action would be a more effective route to facilitating redevelopment.

⁷⁴ The City's August 11, 2003 settlement with Aerovox required Aerovox to retain title to the Site until the earlier of two years from the date of the Settlement Agreement or entry of a final bankruptcy decree (but in no event earlier than December 31, 2003) (the "Holding Period"). The stated purpose of the Holding Period was to give the City an opportunity to arrange for the orderly transfer of the Site to a developer. In fact, documents recently produced by EPA indicate that the City had hoped that it would never take title to the Site. *See* October 29, 2003 letter from EPA to the New Bedford City Solicitor ("City representatives have stated that the City does not wish to take title or transfer title to a redevelopment authority; however, it recognizes the risk that no third party developer will be secured during the Holding Period and acknowledges that as a practical matter, the City will have no choice but to take title in order to facilitate the ultimate redevelopment of the [Site]."). As it turns out, however, the City took title to the Site through a limited liability company in January 2005. Now, more than three years after the settlement, there is no indication that the City is any closer to locating a developer capable of and willing to redevelop the Site.



e. The fifth objective, the last of the new objectives, is to assist the state in establishing institutional controls in the form of deed restrictions. The assistance proposed in the SEE/CA to satisfy this objective is to refer the Site to the Chapter 21E program, under which an activity and use limitation ("AUL") would be required. The recommended alternative, however, would not assist in developing institutional controls. The proposed approach – constructing a cap that does not meet MCP requirements at an inadequately characterized site, both with regard to the nature and extent of impacts and risk characterization – ensures that additional, perhaps extensive, work will be required before the use of an AUL could be considered.

3. Recommended alternative fails to address properly the only 40 CFR 300.415(b)(2) factors that apply.

As stated above, only 40 CFR 300.415(b)(2)(i) and (vi) have any bearing on an evaluation of the removal action alternatives, i.e., (i) the actual or potential exposure to nearby human populations, animals, or food chain from hazardous substances or pollutants or contaminants; and (vi) the threat of fire or explosion.

With respect to 40 CFR 300.415(b)(2)(i), the only complete exposure pathway that exists under current conditions is the potential for trespassers and vandals inside the building to experience direct contact with PCB-impacted building materials. This could be addressed effectively with better security. There is no current complete exposure pathway to hazardous substances via air (monitoring results show only the harbor sediments contribute to detectable levels in air), groundwater (GW-3, not a potable drinking water source) or soil (all impacted soil at the Site is covered by the building or paved). PCBs identified in pavement do not appear to represent a significant direct contact risk-based on EPA's 2004 pavement sampling program.⁷⁵ Concentrations of PCBs at all but one sample location were below 25 ppm, the risk-based low-occupancy criterion applicable to self-implementing cleanups conducted in accordance with 40 CFR 761.61(a).⁷⁶

According to the 2006 CSM, which represents the most current assessment of Site conditions and was completed for the purpose of synthesizing all available data, the Site does not contribute, under current conditions, significant quantities of hazardous substances through groundwater or stormwater to surface water or sediment. Furthermore, the 2006 CSM estimates of contaminant flux were calculated using the highly conservative approach of assuming that the highest concentrations of constituents of concern are representative of

⁷⁵ See June 25, 2004 memorandum, *Aerovox Pavement Sampling*, from D. Granz to J. Brown.

⁷⁶ This appears to have been understood in that the same parking area was used to stage sediment dewatering activities being conducted as part of the New Bedford Harbor sediment cleanup, which included regular worker access through and in the areas where PCBs in pavement have been identified.



conditions site-wide, and as a result appear to be overstated. Prior response actions (HAC cap and sheet pile wall) already addressed these pathways and are still functioning as intended, as affirmed in other documents in the AR file.⁷⁷

While true that potential future exposure is directly linked to the threat of fire, consistent with 40 CFR 300.415(b)(2)(vi), the threat of fire could be addressed by bringing the building into compliance with state fire codes for abandoned or dangerous buildings, 527 CMR 10.13 and 780 CMR 121, rather than demolishing the building.⁷⁸ For example, actions consistent with those required under 780 CMR 121.7 might include some combination of the following:

- Removal of all hazardous materials from the building until such time as the building is secured or reoccupied unless storage is lawfully permitted and the building is equipped with an automatic sprinkler system which is maintained and fully functional, in accordance with 780 CMR 121.7(1) & (3);
- Removal of all combustible materials unless the building is equipped with an automatic sprinkler system which is maintained and fully functional, in accordance with 780 CMR 121.7(1) & (3); combustible materials shall include any fixture not permanently attached;
- Removal of all materials determined by the head of the fire department or local building inspector to be hazardous in case of fire, in accordance with 780 CMR 121.7(1);⁷⁹ and/or
- All floors accessible from grade should be secured either by securing all window and door openings, providing 24-hour watchman services or providing a monitored intruder alarm system at the perimeter of all floors accessible from grade, in accordance with 780 CMR 121.7(2).

These steps would allow adequate and appropriate control and safeguards until a long-term response action and, if available, concurrent redevelopment, could be implemented.

⁷⁷ See discussion in Section III.A., *supra*.

⁷⁸ These regulations likely would have been ARARs had the 1998 EE/CA or SEE/CA considered removal action alternatives other than those involving building demolition.

⁷⁹ For the most part, this was completed as part of the 2004 TCRA. However, vials of mercury, mercury switches and thermostats were inexplicably left in the building.



4. Recommended alternative does not contribute to efficient performance of any long-term remedial action.

In accordance with 40 CFR 300.415(b)(5), (d) and (g), and Section 2.5 of the NTCRA Guidance, the lead agency must consider how the proposed removal action will contribute to the efficient performance of any anticipated long-term remedial action. The SEE/CA does not define or quantify the scope of future activities that will be required to bridge the post-NTCRA gap, i.e., the activities and associated costs that will be necessary to achieve a “permanent solution” under Chapter 21E and the MCP. The SEE/CA states that a more impermeable cap “will likely be required,” and that long-term maintenance of the cap and long-term groundwater monitoring would “also likely be required as part of final site closure.”⁸⁰ It is reasonably certain that such additional assessment, characterization, and maintenance and monitoring activities will be required, and the associated costs will be significant. Without entering the MCP process, any assertion that the short-term recommended alternative supports a final remedy, i.e., a permanent solution, is at best speculative.

Additionally, the 2006 CSM identifies the potential for DNAPL and groundwater impacts around and beneath the building at depth. These impacts are unknown without further investigation, which will be required for any long-term remedial action. The 2006 CSM concludes, somewhat speculatively, that

The historical release of separate phase PCB oil within the building and the surrounding area likely resulted in residual contamination of the soils beneath the site (pockets of oil filling in portions of the interstitial pore space between soil grains) as well as the potential for pools of oil residing above zones of lower permeability material. As the density of the PCB mixtures used at the site was greater than that of water (PCBs are classified as a dense non-aqueous phase liquid or DNAPL), PCB oils that historically drained through the soil could have continued a downward migration below the water table, potentially pooling above bedrock or the zone of low permeability peat identified beneath the site (confining layer in Figure 1-4) and moving laterally along the rock or peat layer.⁸¹

Thus, implementation of the recommended alternative will complicate, and potentially inhibit, addressing such impacts if they are confirmed and require remediation.

The NCP at 300.415(g) states that “If the lead agency determines that the removal action will not fully address the threat posed by the release and the release may require

⁸⁰ SEE/CA at 11.

⁸¹ 2006 CSM at 1-2.



remedial action, the lead agency shall ensure an orderly transition from removal to remedial response activities." The recommended alternative, however, leaves the transition to long-term remedial measures contingent upon the City's identification of a developer and the prospect of site redevelopment. This transition is not defined in terms of the steps to be undertaken to conclude response actions under CERCLA, and immediately thereafter initiate response actions under Chapter 21E.⁸²

5. No accounting for costs of post-removal site control ("PRSC").

The NTCRA Guidance states that "If the [On-Scene Coordinator/Remedial Project Manager ("OSC/RPM")] believes that PRSC may be necessary, the OSC/RPM should obtain a commitment from the State or local government or PRP to perform and fund necessary PRSC actions prior to initiating a response. Such commitments could be part of a settlement document with a PRP or take the form of a letter agreement or Memorandum of Understanding with State or local governments."⁸³ The AR file does not include documentation of an agreement with the Commonwealth or the City with regard to PRSC costs, including quantifiable long-term monitoring and maintenance of the cap and other institutional controls that will be required as part of the long-term MCP remedy. Such costs are likely to be considerable and should be taken into account in considering the recommended alternative, based on both cost and the ability of the short-term action to support the long-term remedy. Though the goal of coordinating the action with site redevelopment is to be affirmed, the absence of a formal agreement or mechanism to address specifically known PRSCs could undermine the ability to achieve a long-term remedy. In addition, the public should not be asked to comment favorably on a proposed NTCRA without in-place assurances of an agreement, whether a cooperative agreement or equivalent, that will ensure the implementation of PRSCs for the entire period they are required.

Finally, the fact that the SEE/CA fails to include PRSC costs in its estimates for the five removal alternatives, a change from the 1998 EE/CA, underscores the reasonableness of the above concerns.

C. Recommended Alternative Is Not Implementable.

The SEE/CA has incorrectly calculated the total volume of the demolition waste that will be generated by implementing the recommended alternative. According to the SEE/CA, the building footprint provides approximately 28,000 cubic yards (cy) of available disposal

⁸² Such a scenario, apparently, is exactly what is envisioned. The sixth enumerated paragraph in the draft TSCA 761.61(c) Determination (SEE/CA Attachment 3) states: "Once the removal is completed, the site shall be transferred to the Massachusetts 21E program and a final closure plan shall be implemented in accordance with chapter 21E and the federal TSCA program."

⁸³ NTCRA Guidance at 8. *See also* Removal Action Procedures Guidance at 55.



volume below grade. The SEE/CA assumes a 1.5 bulking factor on the demolished structure to account for void spaces within the demolition waste.⁸⁴ Given the total building material volume of 14,771 cy presented in the EE/CA and used again in the SEE/CA, the building structure volume with the bulking factor applied is 22,156 cy. The SEE/CA, then, includes an additional 7,140 cy of miscellaneous equipment and appurtenances, presented as a “crushed volume” for which no bulking factor is applied, for a total of 29,296 cy. Assuming all volumes presented in the SEE/CA are appropriate, approximately 1,296 cy of demolition debris will not fit in the foundation hole.

Furthermore, URS believes two assumptions made in the SEE/CA calculation are not appropriate, potentially resulting in a significantly greater volume of material exceeding the available disposal volume:

- Based on comparable projects, URS believes a bulking factor of 1.75 is more appropriate;⁸⁵ and
- The manner in which the additional 7,140 cy volume was calculated is flawed. Volume calculation backup information provided by EPA⁸⁶ indicates that somewhat arbitrary compaction ratios were applied to the inventory of material in question, e.g., a vanity with sink will have a “crush reduction” of 75% of its original volume, etc. Furthermore, because it is assumed this material will all be compacted, no bulking factor is applied.

URS has calculated a total above-ground demolition volume of 21,416 cy (in-place measurement, including the additional 7,140 cy). Given the arbitrary nature of the assumed “crush reduction” of the additional 7,140 cy of material, URS believes a bulking factor should be applied to that material, as well as to the in-place measured building material volume. The resulting total volume of the demolished building structure and the additional 7,140 cy, with a 1.75 bulking factor applied to both, is 37,478 cy. As a result, approximately 9,478 cy of

⁸⁴ A “bulking factor” is derived by dividing volume after excavation/demolition by volume before excavation/demolition. In preparing an estimate, a bulking factor is used in volume calculations to account for the fact that void spaces within disturbed/processed material result in greater volumes. The primary variable in demolition bulking factors is the type of material being demolished and the overall homogeneity of the material.

⁸⁵ Based on ample field experience, Brian Laurin, a principal with URS’ subsidiary demolition company, Aman Environmental Construction, Inc., regards a bulking factor of 75% for demolition debris to be a reasonable number. Mr. Laurin has opined that hard demolition debris, such as concrete and brick, is similar in nature to natural rock, and he has referenced mining industry standards with respect to rock bulking factors. These standards indicate expansion percentages of 75% to 90% for hard, solid rock/rock-like materials. Mr. Laurin further states that there is a high degree of void space for soft debris, such as wood and drywall, which is less cohesive than concrete/brick and by its very nature becomes easily separated and splintered.

⁸⁶ See inventory and volume calculation spreadsheets prepared by the Army Corps of Engineers, April-May 2005; copies of which were forwarded to URS by EPA Region I via e-mails of June 28, 2006.



demolition material will require off-site disposal, significantly increasing the cost of the recommended alternative.

The SEE/CA asserts that the recommended alternative is implementable because demolition of buildings and installation of protective caps or covers over contaminated sites are well-established technologies that have been used at many sites nationwide.⁸⁷ Given that the proposed NTCRA cannot be completed as proposed, i.e., the material proposed for on-site landfilling physically will not fit in the proposed disposal location, the removal action cannot be considered implementable.

D. Recommended Alternative Is Not Effective and Implementable Alternative with Lowest Cost.

A building stabilization alternative that includes an appropriate combination of (1) removal of flammable materials, (2) installation and maintenance of an effective sprinkler system, (3) adequate securing of building openings, (4) improvements to site security fencing and alarm systems, and (5) roof repair would address the imminent fire hazard and the potential for human exposure in the short term. This was the approach endorsed by EPA in the 1999 AOC, and it remains a valid approach.

A review of documents in the AR file⁸⁸ indicates that as early as 1998 all parties recognized the need to maintain and repair the building, and maintain security and a functioning fire suppression system as significant factors to allow building demolition to be deferred to as late as 2011. This responsibility rested on Aerovox at the time of the 1999 AOC. Following Aerovox's move from the Facility in April 2001, responsibility for the structure remained with Aerovox. In June 2001, Aerovox filed for bankruptcy, after which time the City and EPA continued evaluation and monitoring of the Site. Even when Aerovox was the owner, EPA had authority to enforce Aerovox's obligations in this area and had access to the Site in order to conduct any necessary response actions.⁸⁹ In February 2005, the responsibility transferred to the new owner, i.e., an LLC whose two managers are the City and the New Bedford Redevelopment Authority. Further, when the LLC later took title, it had \$250,000 available from the bankruptcy to maintain the building.

⁸⁷ SEE/CA at 8.

⁸⁸ December 1997 *Preliminary Building Cleanup Alternatives Evaluation* (AR #248132); BBL's April 1998 *Building Demolition Alternative Report* (AR #248156); May 6, 1998 EPA letter (from Regional Administrator John DeVillars) to Aerovox regarding "Remediation Plans for Aerovox Site" (AR #248129); 1998 EPA Community Relations Plan (AR #248126); the 1998 EE/CA (AR #248124); October 1998 EPA notice of comment period on the 1998 EE/CA (AR #248121).

⁸⁹ See May 20, 2004 letter from EPA counsel to Aerovox counsel, confirming EPA's right of access to the Aerovox Facility.



While some maintenance and repairs were made by EPA and the City since 2001, primarily installation of a new security system and sprinkler repairs, it is apparent that these measures were insufficient to maintain the building condition and minimize the threat of a major fire incident. In fact, the building has never been secured in accordance with the December 19, 2000 State Fire Marshal Advisory on *Abandoned or Dangerous Building Regulations*, 780 CMR 121 and 527 CMR 10.13. In addition to security provisions, this advisory recommends that in the absence of a fully automatic, functional, and maintained sprinkler system, all combustible materials should be removed from the building.

As a result of the above actions not being implemented by EPA or the City, any fire at the Facility is expected to become a "major incident" according to the New Bedford Fire Department Aerovox Preplan, primarily due to the large combustible fire load, inadequate fire suppression system, and the chemical hazards associated with the Facility. As a result, the 2006 CSM, the SEE/CA, the April 2006 Jacobs Engineering building deterioration e-mail, and the June 2006 EPA flyer, *Making the Vacant Aerovox Site Safe*, all refer to a deteriorating building condition, leading to the inclusion of this increased fire and chemical release hazard as an added response action objective to justify implementation of the proposed NTCRA in the near term, rather than waiting until 2011 as originally planned.

In summary, the following conclusions can be drawn about the building and its present condition:

- The building is still structurally stable;
- The roof could have been repaired in 2003; and there is no evidence that such repairs could not be made at the present time;
- Had Aerovox's obligations under the 1999 AOC been enforced during the time Aerovox owned the property, building deterioration would not have reached its present condition;
- During the period from September 30, 2003, the date of court approval of the bankruptcy settlement, to the present, EPA and the City had the legal authority and the funds to take steps necessary to prevent further deterioration of the building, including maintaining security, fire suppression and alarm systems, inspecting and maintaining and/or repairing the building, and disconnecting utilities to a greater extent than was done; and
- The imminent nature of the threat posed by a building fire (and consequently the main reason for the proposed NTCRA) could have been avoided had those responsible for the building from 1998 to the present taken certain readily-available steps.

URS has estimated that to secure and stabilize the building and property in its current state to allow for the building demolition to be planned for no later than 2011, rather than



2007, additional security measures and hazardous and combustible materials removal can be implemented for considerably less than the recommended alternative. The majority of this cost is for the removal and disposal of combustible and hazardous materials inside the building, a step that is necessary in the absence of a fully functioning sprinkler and alarm system. This stabilization will effectively eliminate the imminent nature of the threat of fire and provide sufficient site control, thus restoring a window of time within which to conduct a more comprehensive and concurrent evaluation of options associated with building demolition, site redevelopment, and final site closure under the MCP.

In addition, there are a number of estimating and calculation errors in the SEE/CA which cast doubt on whether a proper evaluation of the alternatives has been made, including: (1) the cost of the recommended alternative is calculated to be \$7.9 million; it should be \$7.45 million; (2) building demolition costs are underestimated by approximately \$600,000, according to an independent cost evaluation conducted by qualified environmental demolition experts; (3) the SEE/CA's recommended alternative assumes no off-site disposal of waste; however, an estimated \$1.9 million in off-site disposal costs are probable based on waste volume calculation errors; (4) the TSCA waste disposal cost of \$194 per ton for the 7,140 cy of additional debris is low by approximately \$1 million, primarily based on the flawed assumption of one ton per cubic yard for this material;⁹⁰ and (5) asbestos removal costs are based on an incomplete survey; costs to abate and dispose of asbestos are likely underestimated by 20%, or approximately \$200,000.

It is also important to note that the SEE/CA represents a major shift in both the determination of effectiveness and implementability. The recommended alternative is a temporary measure. The SEE/CA states that "EPA has not quantified whether additional hazardous waste are present at the site; however, the measures proposed will protect human health and the environment on the short-term. Long-term protection will be addressed under the state Chapter 21E program."⁹¹ If the proposed action is implemented, extensive work will be required to achieve long-term protection under the MCP, including full characterization of the nature and extent of potential impacts, source control, modifications to the cap, institutional controls and long-term monitoring and maintenance. Because the recommended alternative represents a temporary action, tied to coordination with redevelopment, a stated objective, it is not the lowest cost, effective and implementable option at this time.

In conclusion, the objectives of the 1998 EE/CA did not include threat of imminent and substantial endangerment from fire. They were modified in the SEE/CA to include building

⁹⁰ Based on review of the inventory of this material, the weight per cubic yard is likely half that assumed which will drive transportation costs up significantly and result in a per ton disposal cost of approximately \$336 per ton. The result is an underestimate of this cost by approximately \$1 million.

⁹¹ SEE/CA at 11.



demolition “which occurs in a timely manner prior to excessive building deterioration or a potential mill fire occurring.” It seems clear that, in the short term, the determination that the Site presents a threat to public health, welfare or the environment, including threat of fire, could be mitigated through building stabilization (remove fuel, maintain a fully functional fire suppression system, site security) at a substantially lower cost than the proposed NTCRA.

E. Recommended Alternative – Considering Urgencies of Situation and Scope of Proposed Removal Action – Does Not Attain ARARs.

Both the NCP at 40 CFR 300.415(j), and the corresponding section of the NTCRA Guidance⁹² require that removal actions “to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws” and further require that “[i]n determining whether compliance with ARARs is practicable, the lead agency may consider appropriate factors, including: (1) The urgency of the situation; and (2) The scope of the removal action to be conducted.”

The reported urgency of the situation and the scope of the action have varied over the eight years between the Approval Memorandum and the SEE/CA, rendering the above-stated factors virtually irrelevant to the determination of what is practicable. The commitment to attain ARARs has changed, and the determination of which ARARs are applicable is inconsistent as between the 1998 EE/CA and the 2006 SEE/CA. Most notable is the inconsistency in the two documents regarding the MCP’s requirements with respect to the use of an engineered barrier. The 1998 EE/CA explicitly asserts that such requirements will be met; in contrast, the SEE/CA asserts that since the Site is being addressed under TSCA, a minimal and permeable soil cap under TSCA is adequate, and the MCP is not applicable.⁹³ This becomes even more puzzling when the recommended alternative specifically indicates that the action is temporary and that the long-term remedial response will be accomplished through the MCP. Although the 1998 EE/CA planned to conduct the action as a risk-based cleanup pursuant to 40 CFR 761.61(c), as the SEE/CA does, the 1998 EE/CA clearly also intended to comply with Massachusetts Hazardous Waste Closure Requirements (310 CMR 30.633, 30.660-30.669), as discussed below in Section III.E.1.

The 1998 EE/CA identified 34 ARARs and the SEE/CA identifies an additional 16 ARARs either not included in the 1998 EE/CA or “that apply to changed site conditions and to conditions that were unknown at the time the original EE/CA was issued.”⁹⁴ The SEE/CA further states that “[f]or removal actions, EPA’s policy is that actions will meet ARARs to the

⁹² See § 2.6 at 37, and Exhibit 8.

⁹³ SEE/CA at 10.

⁹⁴ *Id.*



maximum extent practicable, considering the exigencies of the situation. As determined in this document the Aerovox facility presents an imminent and substantial threat to the environment and must be addressed as quickly as possible; therefore, these ARARs will be complied with to the extent practicable given the need to address the risks posed by this site.”⁹⁵ In a major shift from 1998, the SEE/CA inexplicably determines that the Massachusetts Hazardous Waste regulations identified in the 1998 EE/CA as an ARAR do not apply as the Site is adequately regulated under TSCA, while retaining several other state ARARs from the 1998 EE/CA and adding yet others.⁹⁶ The treatment of specific ARARs is discussed further in the following sections.

1. M.G.L. c. 21E and 310 CMR 40.0000 (Massachusetts Contingency Plan).

The recommended alternative as presented in the SEE/CA is a temporary measure, and does not comply with the requirements of Chapter 21E and the MCP for a response action and subsequent Response Action Outcome (“RAO”). Although the 1998 EE/CA planned to conduct the action as a risk-based cleanup pursuant to 40 CFR 761.61(c), as the SEE/CA does, it took a different approach and stated a clear intention to comply with Massachusetts Hazardous Waste Closure Requirements at 310 CMR 30.633 and 30.660-30.669. As stated in the 1998 EE/CA:

[T]he Commonwealth has noted that the remedy calls for leaving material behind which exceeds the State’s upper concentration limit of 100 ppm PCBs in soil. As a result, the Massachusetts Contingency Plan, Class A-4 Response Action Outcome requires an engineered barrier as cover for those soils. An engineered barrier in accordance with the Massachusetts Hazardous Waste Management Closure Requirements, identified in ARARs Table 14a, will be part of the removal action.⁹⁷

⁹⁵ *Id.* The SEE/CA’s effort to attach the highest priority to the proposed NTCRA does not harmonize, however, with the fact that in the well-established hierarchy of removal actions, a non-time-critical removal action is situated at the least urgent end of the spectrum. *See* note 3, *supra*, and accompanying text. The Removal Action Procedures Guidance recognizes a correlation between the category into which a removal action fits and the time and consideration given to ARARs’ determinations for a removal action: “The extent to which OSCs identify and attain ARARs depends on whether the removal action is an emergency, time-critical, or non-time-critical action.” . . . “During non-time-critical removal actions, sufficient time should be available for OSCs to ensure that ARARs determinations are based upon a reasonable understanding of site characteristics. In particular, preparing the EE/CA should allow OSCs to fully consider ARARs in the development of response actions.” Removal Action Procedures Guidance at 50.

⁹⁶ *See* note 113, *infra*, and accompanying text.

⁹⁷ 1998 EE/CA at 3-2.



Given the stated objective of the SEE/CA to address long-term protection under the Chapter 21E program, the recommended alternative cannot be adequately regulated by TSCA when TSCA falls short of the Chapter 21E requirements in the critical area of cap construction. This departure from the 1998 EE/CA will result in the Site being non-compliant with the very regulations governing the long-term solution the moment the recommended alternative's temporary action is completed and jurisdiction is turned over to the Commonwealth's laws and regulations.⁹⁸

Massachusetts regulations consider CERCLA sites "adequately regulated for the purposes of compliance with the MCP," provided that the requirements of 310 CMR 40.0111 are met. The Site, however, would be classified as a disposal site if uncontrolled oil or hazardous material was present at the Site after the implementation of the recommended alternative. This is a possibility given the fact that, as stated in the SEE/CA, "EPA has not quantified whether any additional hazardous waste are present at the site; however, the measures proposed will protect human health and the environment in the short-term. Long-term protection will be addressed under state c. 21E program."⁹⁹ Those requirements to determine whether sites are adequately regulated are specifically:

- The Department concurs with the ROD and/or other EPA decisions for remedial actions at such site in accordance with 40 CFR 300.515(e); or
- If the Department requests that EPA change or expand the EPA-selected remedial action, EPA agrees to integrate the Department's proposed changes or expansions into the planned CERCLA remedial action in accordance with 40 CFR 300.515(f); or
- If the Department does not concur with the ROD and/or other EPA decisions for remedial actions at such site, the EPA-selected remedial action is thereafter modified so as to integrate the Department's proposed changes or expansions into the planned CERCLA remedial work in accordance with CERCLA § 121(f)(2); or
- If the Department reviewed the ROD and/or other EPA decision for remedial actions at such site and has no comment with respect thereto.

There is nothing in the AR file indicating that the Commonwealth has been involved in any aspect of the review of state ARARs.¹⁰⁰ There is no documentation in the AR file or in

⁹⁸ See note 82, *supra*, and accompanying text.

⁹⁹ SEE/CA at 11.

¹⁰⁰ Indeed, other than MassDEP staff names appearing among the names of individuals copied on various correspondence, the only reference in the AR file with respect to the Commonwealth's involvement is the following statement on page 11 of the SEE/CA: "DEP has given its preliminary concurrence to the recommended approach herein, and will review the EE/CA further during the upcoming comment period."



MassDEP's files which provides the basis for the adequately regulated determination. The Aerovox facility is not a CERCLA site, will not be subject to a CERCLA remedial action, and EPA will not prepare a ROD for the Site. There is no provision in the MCP that deems a site adequately regulated based on a TSCA risk-based cleanup response action. Notably, the 1998 EE/CA refers to the fact that the Commonwealth specifically provided input, in contrast to the present situation, on this question:

[T]he Commonwealth has noted that the remedy calls for leaving material behind which exceeds the State's upper concentration limit of 100 ppm PCBs in soil. As a result, the Massachusetts Contingency Plan, Class A-4 Response Action Outcome requires an engineered barrier as cover for those soils. An engineered barrier in accordance with the Massachusetts Hazardous Waste Management Closure Requirements, identified in ARARs Table 14a, will be part of the removal action.¹⁰¹

The recommended alternative allows upper concentration limits of PCBs to remain in the ground and does not provide for an engineered barrier.¹⁰² The cap proposed in the 1998 EE/CA came closer to satisfying the engineered barrier requirements, and, as previously stated, an MCP-compliant cap was a specific requirement of the 1998 EE/CA. The 1998 EE/CA's recommended alternative would have supported a Class A-4 RAO, while the temporary and not well-defined cover system in the current recommended alternative cannot. The MCP requirement for an engineered barrier was and remains applicable to the Site. Further, the failure to provide such a measure as part of the presently-proposed NTCRA is inconsistent with prior response actions at the Site, including 1982-84 activities which placed a HAC pavement cap to minimize infiltration into the subsurface soil where PCBs were present, and the 2004 TCRA, which repaired the HAC cap to prevent potential direct contact with subsurface PCBs.

Additionally, despite the SEE/CA's stated objective to assist with institutional controls,¹⁰³ the recommended alternative alone will not facilitate implementation of an AUL. Completion of the MCP process and demonstration of the risk-based need for an AUL are important prerequisites. Assuming an AUL is necessary, the mechanism for recording an AUL lies within the MCP regulations. It appears that the SEE/CA understands this when it states: "To protect the long term integrity of the new cover and prevent the use of site groundwater, institutional controls (e.g., deed restrictions) are part of the post-removal site

¹⁰¹ 1998 EE/CA at 3-2.

¹⁰² "Upper Concentration Limits in soil and groundwater," according to the MCP, "are concentrations of oil and/or hazardous material which, if exceeded under [certain conditions], indicate the potential for significant risk of harm to public welfare and the environment under future conditions." 310 CMR 40.0996(1).

¹⁰³ SEE/CA at 4.



controls. EPA will assist the state and City to establish these institutional controls through the state's hazardous waste site cleanup program (M.G.L. c.21E).¹⁰⁴ Yet, the SEE/CA insists that the MCP is not applicable.

Regarding the utilization of the MCP as a chemical-specific ARAR establishing cleanup goals, the 1998 EE/CA referenced the MCP Method 1 standards as chemical specific ARARs, and the SEE/CA utilizes the Method 1 PCB soil standard in planning what areas of the Site should be capped. However, the MCP Method 1 standards are not the most appropriate for the proposed NTCRA. In particular, they cannot be applied to pavement. The Method 1 standard for PCBs of 2 ppm is based on an antiquated and undocumented sludge study dating back to the early 1980s. In response to a request to MassDEP for how the 2 ppm standard was derived, MassDEP responded with the following: "Unfortunately we can't provide you with a reference as to how that value was derived. According to MassDEP's Office of Research and Standards, it was based on a risk analysis performed in the early 1980's. What assumptions were used in arriving at that value are undocumented."¹⁰⁵ More appropriate for the proposed NTCRA would be to complete a site-specific Method III risk characterization based on actual data from the Site and actual potential exposure points and pathways. Alternatively, because the Site is being addressed through the risk-based provisions of TSCA, the standard applied to pavement would allow up to 25 ppm of PCBs in place, or up to 50 ppm if the fence is maintained, or up to 100 ppm if the pavement is capped.

2. Draft TSCA risk-based determination.

The SEE/CA includes as Attachment 3, a proposed (draft) finding by the Regional Administrator, entitled "TSCA 761.61(c) Determination." The comments in this section constitute AVX's response to EPA's specific request for comment on the draft determination under 40 CFR 761.61(c).

The draft risk-based TSCA determination concludes that the recommended alternative does not pose an unreasonable risk of injury to health or the environment as long as the following conditions are met:

1. Engineering controls for dust suppression as described in the SEE/CA shall be used during demolition, processing and covering activities and air quality is monitored to ensure air emission levels meet risk-based air standards.
2. Engineering controls for the collection and management of surface water runoff shall be used during the demolition, processing and covering activities to ensure that

¹⁰⁴ *Id.* at 14-15.

¹⁰⁵ E-mail to URS from "Regulations, BWSC (DEP)," July, 26, 2006 @ 5:32 PM.



the PCB concentration in any such runoff from the Site complies with site-specific standards.

3. To ensure compliance with items #1 and #2 above, demolition waste processing activities shall be performed in an enclosed environment, and any stockpiles of demolition waste shall be securely covered until such stockpiles are disposed.
4. EPA shall assist the state and City to establish institutional controls that prohibit any use or contact with groundwater and which prohibit land use activities that would adversely affect the site cover.
5. The site cover shall function as a barrier to direct contact exposure to contaminated site soils, and the site cover and steel sheet pile cutoff wall shall be monitored and maintained. The site cover shall be as protective as possible within the available funding, but shall at a minimum consist of twelve inches of vegetated soil.
6. Once the removal is completed, the site shall be transferred to the Massachusetts 21E program and a final closure plan shall be implemented in accordance with chapter 21E and the federal TSCA program.
7. Any development or activity on the Site shall be designed, implemented, and maintained in a manner to prevent any release or exposure to any material contaminated with PCBs above identified risk levels, and shall be consistent with the final closure plan referred to in #6.

It is questionable, however, given that a comprehensive site-specific risk assessment has not been performed to date, whether the risk associated with the proposed action can be quantified at this time. The SEE/CA states that "EPA has not quantified whether any additional hazardous waste are present at the Site; however, the measures proposed will protect human health and the environment in the short-term."¹⁰⁶ This conclusion, which relies on the 1998 EE/CA and is the basis for the draft determination, does not appear to consider the fact that the removal action proposed in 1998 is dramatically different from the currently-proposed action. The 1998 EE/CA proposed removal and off-site disposal of all TSCA waste, followed by construction of a low-permeability cap across the entire Site. In contrast, the SEE/CA proposes placing all waste, including a significant volume of TSCA waste, in the subsurface, and then permits placing a high-permeability cap over the Site.

The draft determination is inconsistent with a potential action-specific ARAR included in the 1998 EE/CA, *Guidance on Remedial Action for Superfund Sites with PCB Contamination*.¹⁰⁷ As stated in the executive summary of this guidance document, actions should "utilize permanent solutions" to the maximum extent practicable. The guidance further

¹⁰⁶ SEE/CA at 11.

¹⁰⁷ OSWER Directive No. 9355.4-01.



states "In addition, there is a preference for remedies that employ treatment that permanently and significantly reduces the mobility, toxicity, or volume of hazardous substances as a principal element." The proposed action does not represent a permanent solution, does not reduce the volume of hazardous substances and, with implementation of the high permeability soil cap, may actually increase the potential for mobility of hazardous substances.

Finally, as described below in Section III.G., the draft determination's findings (4 and 6) that institutional controls and final site closure can be readily implemented is mistaken.

3. 310 CMR 16.00, Massachusetts solid waste regulations.

The recommended alternative proposes to demolish the building, and to cover the entire Site with a clean protective cover. All demolition waste is disposed on-site. The proposed demolition materials have a solid waste component regulated under 310 CMR 16.00.¹⁰⁸

Though the proposed disposal of the building demolition materials meets the requirements of a solid waste disposal landfill under 310 CMR 16.02, for the following reasons, the Site cannot be determined to be suitable for a solid waste management landfill facility:

- The maximum high groundwater table is within four feet of the ground surface in areas where waste deposition is to occur or, where a liner is designed to the satisfaction of the Department, within four feet of the bottom of the lower-most liner.
- The outermost limits of waste deposition of leachate containment structures would be within a resource area protected by the Wetlands Protection Act, M.G.L. c. 131, § 40, including 100-year floodplain.
- Any area of waste deposition or the leachate containment structures would be less than 400 feet to a lake or 200 feet to a River Front Area as defined in 310 CMR 10.00, that is not a drinking water supply.
- Waste deposition on the Site would result in a threat of an adverse impact to groundwater through discharge of leachate, unless it is demonstrated to the satisfaction of the Department that a groundwater protection system will be incorporated to prevent such a threat.¹⁰⁹

¹⁰⁸ The demolition materials also have a hazardous waste component regulated under 310 CMR 30.000, and described in the immediately following section of these comments.

¹⁰⁹ See 310 CMR 16.40(3)(a)12-14 & 16.



Additionally, the proposed landfilling of all demolition materials is contrary to 310 CMR 19.017, newly-effective as of July 2006, which prohibits the disposal of waste, including asphalt pavement, brick, concrete, metal, and wood, in a solid waste disposal facility.¹¹⁰ The SEE/CA listed 310 CMR 19.017 as an ARAR "to be considered," stating that "EPA anticipates that the majority if not all of these materials will be contaminated with PCBs. As such, the waste stream will be controlled by TSCA. However, to the extent these materials are separated during demolition activities, those that qualify as solid waste will be recycled to the extent practicable."¹¹¹ In fact, the 1998 EE/CA estimated that only 3,889 cy (26%) of the total building material volume of 14,771 cy would require off-site disposal at a TSCA landfill.¹¹² Furthermore, none of the brick building structure was identified as requiring disposal at a TSCA landfill.

4. 310 CMR 30.000, Massachusetts hazardous waste regulations.

The SEE/CA states that "[b]ecause this removal action is based on the 40 CFR 761.61(c) TSCA risk-based determination, the Massachusetts Hazardous Waste regulations identified in the 1998 EE/CA do not apply. Pursuant to 310 CMR 30.105, because the site is adequately regulated by TSCA, Massachusetts Hazardous Waste regulations do not apply."¹¹³

In general terms, the Massachusetts hazardous waste regulations do defer to the TSCA regulations as they relate to the management of PCB waste as a hazardous waste, exempting PCB waste from the state hazardous waste regulations, provided they are being actively managed under TSCA and the wastes are solely hazardous because of PCBs.¹¹⁴ Specifically, the requirements for exempting PCBs from hazardous waste regulation in 310 CMR 30.105(1) are:

PCB waste, as defined in 40 CFR 761.3, consisting of dielectric fluid or electrical equipment containing dielectric fluid that would be subject to hazardous waste regulation due to the presence of PCBs are exempt from 310 CMR 30.000 provided: (a) the waste is regulated pursuant to 40 CFR 761, as in effect on July 1, 2002; (b) the waste does not meet the description of any

¹¹⁰ One document in the AR file, a May 6, 1998 letter from the then EPA - New England Regional Administrator to Aerovox's President and CEO, appears to have acknowledged this. The letter set out five principles to govern preparation of a demolition work plan, one of which was "[w]ood floors that contain PCBs at concentrations above agreed-upon levels will be removed from the building and transported offsite for disposal at a TSCA landfill."

¹¹¹ SEE/CA at 13.

¹¹² 1998 EE/CA, Attachment 11, Tables 11-1 and 11-2.

¹¹³ *Id.* at 11, and Table 2 at 1.

¹¹⁴ See 310 CMR 30.105.



listing (see, *e.g.*, 310 CMR 30.131 describing MA01 and MA02); and (c) the waste is hazardous solely because it exhibits the Toxicity Characteristic (D018 - D043 only).

In the present situation, 310 CMR 30.105(1)(b) is not satisfied because the impacted building materials and the soil beneath the building meet the description of a listed waste, MA02 waste, which contains PCBs in concentrations equal to or greater than 50 parts per million. The documents in the AR file do not include any toxicity characteristic data, so it is not possible to determine whether 310 CMR 30.105(1)(c) would be satisfied. Regardless, the recommended alternative does not qualify for the exemption under 310 CMR 30.105.

The SEE/CA uses the term "adequately regulated" in an effort to render inapplicable the hazardous waste regulations at 310 CMR 30.000. The term "adequately regulated" was nowhere to be found in these regulations until approximately nine months ago, and presently is found only at 310 CMR 30.1100. This new provision is not referenced in the SEE/CA, or in the ARARs tables, and, therefore, is presently not under consideration. In any event, this provision is invoked only where MassDEP has determined that the wastes and activities at issue are "insignificant as a potential hazard to public health, safety, welfare or the environment, or the handling, treatment, storing, use, processing, or disposal of which is *adequately regulated* by another governmental agency, consistent with regulations promulgated under the federal Resource Conservation and Recovery Act as administered by EPA."¹¹⁵ Thus, rather than providing the government a way to avoid the hazardous waste regulations, 310 CMR 30.1100 simply provides a mechanism for a generator to seek a waiver of certain provisions "that are more stringent than the minimum federal requirements promulgated under RCRA."¹¹⁶ The SEE/CA, therefore, cannot rule out the applicability of 310 CMR 30.000 to the proposed NTCRA. Nor has it demonstrated that it would not be practicable to meet this ARAR.

5. Proposed cap does not comply with post closure care requirements of 310 CMR 30.633 and 40 CFR 761.61(a)(7).

The SEE/CA states:

The 1998 EE/CA recommended alternative included a low permeability cap over the entire 11-acre site. For cost estimating, the 1998 EE/CA assumed that a hydraulic asphalt concrete (HAC) cap, similar to that placed in the mid-1980s . . . would be used. This Supplemental EE/CA clarifies that its recommended approach also requires a clean protective cover over the site to

¹¹⁵ 310 CMR 30.1100 (*emphasis added*).

¹¹⁶ 310 CMR 30.1102.



address PCB contaminated waste. This protective cover would at a minimum meet the conditions of the TSCA determination pursuant to 40 CFR 761.61(c) for the activities within the scope of this NTCRA (see Attachment 3).¹¹⁷

The change in the type of cap from an engineered barrier to twelve inches of vegetated soil moves the proposed removal action from unquestioned compliance with the ARAR to direct non-compliance. The 1998 EE/CA was explicitly clear on this subject, stating, “[t]he closure and post-closure care requirements of CMR 30.633 [and the requirements of 40 CFR 761.61(a)(7), whichever are more stringent for the type of cap to be designed/installed] will be implemented to meet these requirements, as appropriate for the type of cap to be constructed.”¹¹⁸ Furthermore, though the SEE/CA anticipates construction of a cap that consists of one foot of vegetated soil, it carries the costs associated with constructing the cap proposed in the 1998 EE/CA.

**6. Recommended alternative does not comply with 40 CFR 6.302(b)
(Floodplain Management Executive Order 11988 (App. A to Part 6)).**

The eastern portion of the Site is located within Zone A-1 of the National Flood Insurance Program (100-year flood plain); the remainder of the property is located within Zone B (between the limits of 100 and 500-year flood plain). Executive Order 11988 requires evaluating alternatives to avoid effects and incompatible development in the flood plains and minimizing the potential harm to flood plains if the only practicable alternative requires siting an action in a flood plain. The SEE/CA states, “[t]he only practical alternative to address this facility, based on available funding and the exigencies of site circumstances is to demolish the building which was built in the flood plains. EPA will dispose of demolition waste offsite to the extent practicable but expects that without an additional source of non-EPA funding, waste will be left onsite in the flood plain.”¹¹⁹ In fact, what the SEE/CA proposes to do is demolish a structurally sound building, bury all demolition waste, including TSCA-regulated waste, in the flood plain and then cover the waste with one foot of vegetated soil. The exigencies of site circumstances are related to building deterioration caused by neglect.

7. Risk-based standards should be used to monitor all air emissions.

Section 7.e. of the SEE/CA proposes a less stringent standard for monitoring potential exposure from air emissions to employees and site workers of two abutting industrial facilities than is proposed for residential abutters. This approach is impractical and likely to cause significant concern to adjacent employers and workers. The application of occupational

¹¹⁷ SEE/CA at 11.

¹¹⁸ 1998 EE/CA, Table 14a at 6.

¹¹⁹ SEE/CA at 12.



standards to potential hazards that are unrelated to the work place is inappropriate. In accordance with 310 CMR 6.04, and as proposed in Table 14a of the 1998 EE/CA, an air monitoring plan should be developed and a single risk-based standard should be applied.

F. CERCLA § 104(a)(3)(B) Precludes Removal Action In Response to a Release or Threat of Release From Products Which Are Part of, and Result in Exposure Within a Building.

Costs incurred in the removal of any asbestos and mercury from within the structure of the manufacturing facility and/or in equipment at the Site do not constitute proper response costs.¹²⁰ Section 104(a)(3) of CERCLA specifically precludes a removal or remedial action “in response to a release or threat of release . . . (B) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures.”¹²¹ Indeed, with respect to asbestos, courts have repeatedly held that its removal is not covered by CERCLA. *See, e.g., G.J. Leasing Co. v. Union Elec. Co.*, 54 F.3d 379, 385 (7th Cir. 1995) (“[T]he release of asbestos inside a building, with no leak outside . . . is not governed by CERCLA.”); *Dayton Indep. School District v. U.S. Mineral Prods. Co.*, 906 F.2d 1059, 1066 (5th Cir. 1990) (“Based upon the language of the statute, its legislative history, and the relevant case law, we hold that Congress did not contemplate recovery under this statute of the costs incurred to effect asbestos removal from buildings.”); *First United Methodist Church of Hyattsville v. United States Gypsum Co.*, 882 F.2d 862, 869 (4th Cir. 1989) (“To extend CERCLA’s strict liability scheme to all past and present owners of buildings containing asbestos . . . would be to shift literally billions of dollars of removal cost liability based on nothing more than an improvident interpretation of a statute that Congress never intended to apply in this context.”).

Here, there is no question that any asbestos or mercury at the Site during the period that AVX’s predecessor owned the Site was contained in the structure of the manufacturing facility and/or equipment located inside the facility, and did not present a release or threat of release into the environment.¹²² As a result, AVX is not liable for any costs incurred in

¹²⁰ For purposes of these technical comments, AVX discusses the application of CERCLA § 104(a)(3)(B) and the useful product doctrine as specifically applied to asbestos and mercury abatement costs, without waiver of further argument as to the overall effect of the 1973 sale of the Site to Aerovox on AVX’s liability when it responds to EPA’s demand.

¹²¹ The manufacturing facility at the Site was defined in the 1999 AOC as a “manufacturing building.” *See* 1999 AOC at ¶ 9. A manufacturing building fits within the definition of a “business structure.”

¹²² *See* 1998 EE/CA at § 5.3 (Work Activity 3) (explaining that an asbestos survey would be undertaken to determine whether building materials contained asbestos).



connection with the removal of asbestos and/or mercury from the manufacturing facility or equipment in advance of the demolition of the building.¹²³

Likewise, the sale of the Site to Aerovox did not render AVX liable, at a minimum, for any release or threatened release of asbestos and/or mercury that occurred at the Site post-sale, including any release or threat of release brought about by the demolition of the manufacturing facility. That is, while the transfer of property for purposes of disposing of hazardous wastes can result in CERCLA liability, the sale of a useful product to a purchaser for its originally intended purpose does not. *See Yellow Freight Sys., Inc. v. ACF Industries, Inc.*, 909 F. Supp. 1290, 1298 (E.D. Mo. 1995). (“[A] sale does not constitute an arrangement for disposal unless the seller is primarily motivated to dispose of hazardous substances through the sale.”). Here, any asbestos and mercury at the Site were part of the manufacturing facility and/or working equipment when the Site was transferred to Aerovox. By the sale to Aerovox, AVX intended to and did transfer a useful manufacturing facility, which was used as such for nearly 30 years following transfer, and working equipment, which also was used for years in Aerovox’s operations, in exchange for the fair market value of the property. Under these circumstances, the useful product doctrine dictates that AVX cannot be held liable for costs incurred in removing any asbestos or mercury at the Site. *See, e.g., G.J. Leasing*, 54 F.3d at 384 (holding that sale of a building that happened to contain asbestos insulation is not disposal of a hazardous substance); *Florida Power & Light Co. v. Allis Chalmers Corp.*, 893 F.2d 1313, 1319 (11th Cir. 1990) (holding that manufacturers of transformers that contained PCB-contaminated mineral oil were not liable because they sold a useful and valuable product which the buyer used for an extensive length of time); *Dayton*, 906 F.2d at 1065 (holding that “there is no possible reasonable interpretation of the term ‘disposal’ that could encompass the commercial sale of asbestos-containing useful building products”); *Yellow Freight*, 909 F. Supp. at 1298-99 (sale of property was sale of useful product because the buildings at issue were in suitable condition for continued use).

In sum, costs incurred in the removal of asbestos and/or mercury from the Site are not proper response costs for two reasons: (1) removal of such substances is not authorized by CERCLA because there was no pre-sale release or threat of release into the environment; and (2) transfer of the Site to Aerovox constituted a sale of a useful product, not a disposal of hazardous waste.

¹²³ In Action Memorandum Addendum #1, dated September 20, 2004, EPA represented there were *no* “nationally significant or precedent-setting issues associated with this Site.” Applicable guidance in this area, however, instructs that the removal of asbestos from within a building may present nationally significant and precedent-setting issues, which require EPA to follow certain protocols that, to date, have not been followed. *See* Non-NPL Removal Action Guidance at 3, 4; Contamination Inside Building Guidance at 3 (responses to indoor releases “have the potential of being nationally significant or precedent-setting because response to indoor contamination is not the primary focus of CERCLA, and because it may be difficult to show that a release or threat of release from indoor contamination poses a threat to public health or welfare or the environment.”).



G. EPA Is Not Entitled to Invoke the CERCLA § 104(c)(1) Statutory Exemption.

CERCLA § 104(c)(1) prohibits fund-financed removal action obligations if they cost more than \$2,000,000 or take more than 12 months from the date of initial response absent special circumstances. The SEE/CA seeks to justify exceeding both limits by invoking the so-called consistency exemption to the statutory limits on removal actions, which applies when “continued response action is otherwise appropriate and consistent with the remedial action to be taken.”¹²⁴ CERCLA § 104(a)(2) and 300 CFR 300.415(d) further require that an EE/CA consider how well a proposed removal action will contribute to the efficient performance of any anticipated long-term remedial action. The requirement for a removal action to contribute to the efficient performance of any anticipated long-term remedial action is one of two explicit requirements in 40 CFR 300.415(b)(5) that applies when the lead agency – EPA in the present instance – seeks a waiver of the \$2,000,000/12-month NTCRA limits. The recommended alternative is not appropriate and consistent with the remedial action to be taken, i.e., site closure under Chapter 21E and the MCP, including institutional controls implemented under those authorities, and, therefore, is not eligible for a statutory exemption when removal action costs will so far exceed the statutory limit.

Early guidance on implementation of the consistency exemption was provided in 1989 in the Consistency Exemption Guidance:

The “consistency” exemption in CERCLA 104(c) supports the new provision in CERCLA 104(a)(2) requiring removal actions to “contribute to the efficient performance of any long-term remedial action” (see OSWER Directive 9360.0-13). Together, the new CERCLA 104(a) provision and the “consistency” exemption in 104(c) are intended to promote and enhance efficiency and continuity in the Superfund program as a whole.

The 104(a) provision does this by ensuring that the removal program attempts to anticipate remedial action that will be needed and avoids taking response actions that *will impede the remedial action or result in wasteful restarts*. The “consistency” exemption promotes efficiency by allowing removals to exceed the statutory limits for time and cost when to do so *will result in lower overall cleanup cost* as well as enhanced protection of public health and the environment.¹²⁵

¹²⁴ CERCLA § 104(c)(1).

¹²⁵ *Id.* at 2-3 (emphasis added).



Under the Consistency Exemption Guidance, “only reasonable increases will be granted. Generally, this means not more than \$1-2 million above the statutory limit.”¹²⁶ Moreover, the exemption is to be primarily used at NPL sites and only rarely at non-NPL sites and then only after Headquarters involvement which takes into account specific factors.¹²⁷

Further guidance on determining consistency is provided in the Action Memorandum Guidance which lays out the most obvious question: “What is the long-term cleanup plan for the site?”¹²⁸ For non-NPL sites at which there is no Record of Decision and where remedial plans are unknown, EPA should “state that the proposed action will not impede future responses based upon available information.”¹²⁹ Further guidance is that “at a minimum, the removal does not foreclose the remedial action.”¹³⁰

The decision to proceed in the face of the statutory limits is so significant that the NTCRA Removal Authority Memorandum requires that when a NTCRA could cost more than \$6 million, “the Region must consult with the Director of OERR [Office of Emergency and Remedial Response] prior to signing the EE/CA Approval Memorandum (or its equivalent). This consultation requirement applies both to fund-lead actions and those actions to be performed by PRPs.”¹³¹

The only explicit use of the term “consistent” in the section on consistency occurs when the SEE/CA states that the proposed removal action is consistent with the cleanup of the New Bedford Harbor Superfund Site cleanup.¹³² This is not the appropriate question, as the test for consistency is measured by the long-term remedy for the site at issue, which is the Aerovox facility, a non-NPL site. The two sites clearly cannot be considered to be one and the same. Section 8 of the SEE/CA contains a brief reference to the use of institutional controls to be established by the state and the City, with EPA’s assistance, under Chapter 21E to protect “the long term integrity of the new cover and prevent the use of site groundwater.”¹³³ Elsewhere in

¹²⁶ *Id.* at 4.

¹²⁷ The specific factors are: “(a) the magnitude of the contamination and the threat to human health and the environment; (b) the status of negotiations with potentially responsible parties; (c) the opportunity for widespread technology transfer; and (d) whether the site is likely to be proposed for the NPL.” Consistency Exemption Guidance at 4-5. It is hard to see how any of these factors could justify the exemption here.

¹²⁸ Action Memorandum Guidance at 3-269.

¹²⁹ *Id.*

¹³⁰ *Id.* at 3-281.

¹³¹ NTCRA Removal Authority Memorandum at 6-7. There is no evidence in the record that this consultation occurred prior to the execution of the July 1998 Approval Memorandum.

¹³² SEE/CA at 15.

¹³³ *Id.* at 18.



the SEE/CA, EPA acknowledges that site characterization is incomplete and that long-term protection will be addressed under the state Chapter 21E program and will likely require long-term operation and maintenance of the cap and long-term monitoring of groundwater.¹³⁴ Finally, the SEE/CA seems to suggest that the City's potential involvement as both the lead agency implementing the removal action and as the coordinator of cleanup and future reuse/redevelopment of the Site is germane to the consistency exemption.¹³⁵ But, even if the cleanup did facilitate reuse and redevelopment, that does not equal long-term remedial action consistency.

The SEE/CA's cursory references to the future remedy for the Site underscores the failure to understand what the requirements of the MCP mean for this Site. To the extent one can look ahead, the proposed removal action is not consistent with a long-term MCP-compliant remedy, given the non-compliant nature of the cap among other things, as discussed above, particularly in Section III.E.1. But, in fact, it is difficult to predict what the long-term remedy for the Site would be, given the current data gaps. Although the 2006 CSM attempts to identify sources, release mechanisms, migration pathways and exposure, the documents in the AR file do not adequately define the source, nature and extent of contamination, nor do they provide a risk assessment, i.e., they do not meet the MCP's Phase II Comprehensive Site Assessment requirements. Data gaps include: no evaluation of NAPL condition and NAPL transport; insufficient data points to confirm what is happening at and in bedrock surface (shallow bedrock ridge underlies building, slopes to north and south); no TCLP or bench scale data to evaluate whether soil, building and contents to be placed in building foundation upon implementation of the recommended alternative would be a continuing source to groundwater; no temporal data upon which to discern trends; and insufficient information on sediments and sediment transport in storm sewers and box culverts.

At a minimum, the cap component of the proposed removal action will have to be replaced before institutional controls can be imposed and the answers to the data gaps outlined above may show more fundamental conflicts between MCP requirements and building demolition and burial on-site. Under these circumstances, this is a case where the proposed removal action, far from being consistent with a long-term remedy, "*will impede the remedial action*," "*result in wasteful restarts*," and will result in higher, not lower, cleanup costs. The legal argument presented merely hints at how disruptive the recommended alternative might be to future site development. Under these circumstances, the consistency exemption cannot be invoked, particularly when the costs will so far exceed the statutory limit. This is not a NPL site like the Harbor, and EPA has manifested no intention of making it one. This is a site that everyone agrees will be remediated under state law, and EPA should not take action that will make it more expensive and difficult to do. The significance of MCP compliance to the stated

¹³⁴ *Id.* at 11.

¹³⁵ *Id.* at iii and 3.



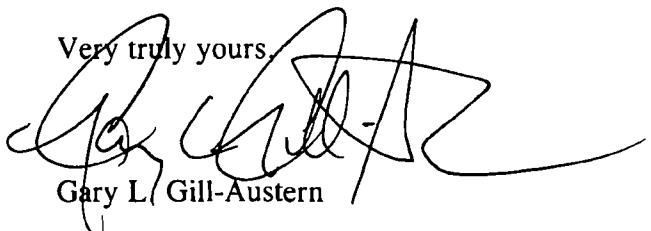
goal of facilitating site reuse and the efficient combination of cleanup and redevelopment are factors strongly militating against an extensive and invasive removal action as opposed to site stabilization because, consistent with the NCP at 40 CFR 300.415(b)(2)(vii), the availability of other appropriate state response mechanisms to respond to the release must be considered in deciding whether the proposed NTCRA is appropriate.

IV. CONCLUSION.

In conclusion, AVX urges reconsideration of the recommended alternative, implementation of which raises significant technical and legal issues, as outlined above. On the other hand, a building stabilization alternative would be effective and protective of human health and the environment, would minimize the threat of release, would maintain adequate control of the Site until a long-term solution under Chapter 21E is in place, would be readily implementable in a short period of time, and would be considerably less expensive than the recommended alternative.

Thank you for the opportunity to submit these comments.

Very truly yours,


Gary L. Gill-Austern

Attachments

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EXHIBIT A

**TO COMMENTS OF AVX CORPORATION ON
APRIL 2006 SUPPLEMENTAL EE/CA
FORMER AEROVOX FACILITY, NEW BEDFORD, MASSACHUSETTS**

DOCUMENTS PROVIDED BY EPA OR INDEPENDENTLY LOCATED AFTER RECEIPT ON JUNE 14, 2006 OF THREE CDs CONTAINING 47 DOCUMENTS & THREE INDICES			
#	date	description	date received or located
1	4/12/06	Jacobs Engineering write up re Aerovox volume calculations	6/26/06
2	5/9/06	Special Account Regional Report – summary of Aerovox special site fund	6/26/06
3	6/28/06	D. Dickerson email 3:07 PM providing corrections to SEE/CA, Attachment 2, notes	6/28/06
4	5/26/05	2 pages, "Total Estimated Crushed Volume" (D. Dickerson email @ 4:05 PM)	6/28/06
5	4/14/05	17 pages, "Inventory Calculation, Floor 1" (D. Dickerson email @ 4:07 PM)	6/28/06
6	undated	1 page, 2 nd floor inventory calculations (D. Dickerson email @ 4:09 PM)	6/28/06
7	5/11/05	1 page, 3 rd floor inventory calculations (D. Dickerson email @ 4:08 PM)	6/28/06
8	5/4/05	5 pages, "Inventory Calculations, Exterior" (D. Dickerson email @ 4:28 PM)	6/28/06
9	6/30/06	D. Dickerson email to W. Humphries 10:04 AM, additional corrections to SEE/CA, Attach 2, notes	6/30/06
10	6/06	Asbestos Survey, Corps, Jacobs & Sevenson [CD]	7/7/06
11	4/22/03	Roof Inspection Report, DCAM	7/11/06
12	~12/05	Preliminary Structural Assessment for Aerovox Building Demolition, prepared by Corps' structural engineer, John Kedzierski. Inspection on 11/21/05; EPA rec'd report 1/9/06.	7/11/06
13	6/27/02	EPA/MADEP site visit photos 00007-00074	7/19/06
14	7/31/02	MADEP site visit photos 0001-0137	7/19/06
15	7/31/02	EPA site visit photos 2509-2684	7/17/06

**DOCUMENTS PROVIDED BY EPA OR INDEPENDENTLY LOCATED
AFTER RECEIPT ON JUNE 14, 2006 OF THREE CDs CONTAINING 47 DOCUMENTS & THREE INDICES**

#	date	description	date received or located
16	1/25/06 & 4/25/06	EPA's cost breakdown for Aerovox payroll costs through 4/25/06 and non-payroll costs through 1/25/06.	7/25/06
17	--	Notice: Aerovox Site Public Comment Period Extended	7/27/06
18	4/27/04	Press Release: EPA to Remove Hazardous Waste from Former Aerovox Facility in New Bedford [found on web]	8/3/06
19	9/20/04	Request for a Ceiling Increase of Funds to Continue the Removal Action at the Aerovox Incorporated Site, Action Memorandum Addendum #1 [found on web]	8/3/06
20	5/17/82	Consent Order	8/4/06
21	1984	Supplemental Consent Order [without signature page & without attachment "Long-Term Monitoring and Maintenance Program"]	8/4/06
22	8/2/06	Revised Aerovox [Past] Cost Summary	8/9/06
23	11/29/99	ACO between Commonwealth & Aerovox [partial & pre-execution]	8/9/06
24	1984	2-page "Post Closure Monitoring and Maintenance Program for the Aerovox Property, New Bedford, MA"	8/9/06
25	2/3/00	ACO between Commonwealth & Aerovox [complete & executed]	8/10/06
26	3/3/82	Consent Agreement and Order between Commonwealth & Aerovox	8/10/06
27	various	53 PDFs [on CD], in several instances containing multiple documents, encompassing period 1982 to present, with respect generally to: Aerovox compliance with various administrative orders with EPA and Commonwealth; Aerovox bankruptcy; permits issued to Aerovox by EPA; and Aerovox financial status.	8/11/06

1553920.1



David P. Ellis

Operations Manager

Overview

As the Operations Manager, Mr. Ellis provides project management services for a broad range of asbestos, lead-based paint and industrial hygiene projects. He is responsible for inspecting work areas, maintaining daily logs, collecting and analyzing air and bulk asbestos samples, and preparing project documentation reports. His experience has encompassed over 200 individual asbestos and lead-based paint inspection and abatement projects ranging from short-term emergency projects to multi-million dollar high-rise building demolitions and abatement projects at complex industrial facilities.

Areas of Expertise

Industrial Hygiene
Asbestos Management Services
Lead Paint Management

Years of Experience

With URS: 2 Years
With Other Firms: 38 Years

Education

A.S. in Human Resources, 1980,
Massasoit Community College

Project Specific Experience

Project Manager

Project Manager for industrial hygiene term contract for Raytheon Company at numerous facilities throughout New England. Responsible for overseeing and staffing all planned industrial hygiene and hazardous materials projects as well as managing an emergency program.

Project Manager

Project Manager for a comprehensive asbestos survey prior to a gut renovation of a one-million-square-foot retail facility in Methuen, Massachusetts. Responsible for designing abatement specifications and overseeing and managing project.

Project Manager

Project Manager for comprehensive asbestos survey and specification development of Bldg. 18 on Massachusetts Institute of Technology's (MIT) campus. Responsible for overseeing the survey and design of abatement specifications prior to renovation of this building.

Project Manager

Project Manager for large-scale asbestos abatement of Macy's Department Store in Boston. Responsible for overseeing a multi-floor, complex asbestos abatement project while ensuring no interruption with regular store hours.

Project Manager

Project Manager for numerous asbestos surveys and abatement projects at Gordon College and Gordon-Cornwell Theological School in Wenham, Massachusetts. Responsible for overseeing numerous projects simultaneously.

Project Manager

Project Manager for a comprehensive asbestos survey for a confidential client. This project involved a property transfer for the Prudential Towers in Boston, three high-rise residential buildings.



Project Manager

Project Inspector for a United States Postal Service term contract for projects in over 300 facilities in the New England region. The term contract included survey, design and compliance monitoring activities involving asbestos, lead, indoor air quality, industrial hygiene services and preliminary site assessments.

Industrial Hygiene Technician

Industrial Hygiene Technician for Lead Paint Management Program for Boston Housing Authority. Responsible for assisting in the development of protocol, advising BHA staff of regulatory compliance issues, training, and overseeing consultant and contractor bidding and selection process for investigations and abatement activities.

Project Monitor

Project Monitor, Resident Engineer/Inspector for a multi-phased abatement project for Massachusetts Port Authority, Logan Airport Central Heating Plant. Provided on-site monitoring during a multi-phased abatement project in a functioning heating plant.

Engineer/Inspector

Responsibilities included acting as the Port Authority's Resident Engineer/Inspector, evaluating on-site conditions, reviewing contractor work plans and change orders, monitoring and documenting the abatement contractor's work, collecting and analyzing air samples on site for abatement and final clearance. Also coordinated activities with plant personnel and other trades to reduce interference with plant operation, evaluated the re insulation of abated systems, and maintained records of abatement and insulation quantities.

Asbestos Inspector

Asbestos Inspector for ongoing asbestos and lead-based paint management projects at Phillips Exeter Academy. Projects include periodic inspections and construction management and air monitoring services during asbestos and lead abatement.

Asbestos Project Monitor

Asbestos Project Monitor for the State of Maine Asbestos Management Program. Provided monitoring for a state school during the removal of steam room insulation in an occupied building. Performed daily monitoring of the site, maintained documentation of on-site activities, and conducted final air clearance sampling at completion of the abatement.

Asbestos Project Specialist

Asbestos Project Specialist for projects at the F.D.R. Veterans Affairs Medical Center, Montrose, NY. Performed on-site monitoring for this hospital during various abatement projects. Worked closely with the client's engineering department and industrial hygienist in coordinating the contractor's schedule and interfacing with other trades to minimize disruption to the hospital. Responsibilities included air monitoring,



conducting visual inspections, performing final air sampling, and maintaining project documentation.

Asbestos Project Specialist

Asbestos Project Specialist providing on-site monitoring and construction coordination for a four-month asbestos abatement project at International Paper, Jay, Maine. The project involved abatement of a functional pipe bridge containing various steam and chemical lines. The project required unique engineering and industrial hygiene considerations to enable full production at the plant to be maintained. Unusual conditions included high temperature, elevated work area, risk of chemical spills and high-pressure steam leaks. Responsibilities encompassed air monitoring, visual inspections, final clearance air sampling, preparing change orders, and providing overall coordination of the project between International Paper representatives and the abatement contractor.

Asbestos Project Monitor

Asbestos Project Monitor for abatement projects at the Veterans Affairs Medical Center, Bedford, MA. Performed on-site monitoring for this hospital during various phases of abatement. Worked closely with the VA Engineering Department to coordinate contractors' schedules and prevent disruption of facility services. Prepared change orders for the scope of work, performed daily air sampling at the site, maintained project documentation of on-site activities, and performed final clearance air sampling at several locations in this large complex.

Industrial Hygienist

Industrial Hygienist for various projects for New England Telephone, MA, VT, NH, RI. Performed site assessments, surveys, project monitoring, risk assessments and asbestos abatement design for approximately 35 buildings throughout New England. Project oversight included state and federal regulatory compliance, project specifications, and final report preparation.

Industrial Hygiene Technician

Industrial Hygiene Technician for asbestos removal at the Travelers Building, Boston, MA. Participated in the entire asbestos removal phase in preparation for implosion demolition of this 19-story building in downtown Boston. Responsibilities included air monitoring throughout the removal phase, visual inspections, performing final air clearances, preparing daily logs, and assisting with the final report. Also provided on-site emergency response for this project.

Specialized Training

Airborne Asbestos Sampling and Evaluation Techniques, NIOSH 582 Equivalency Course, Balsam Environmental Consultants, Inc., 1991
Asbestos Inspector/Management Planner, Institute for Environmental Education
Supervisors: Annual Refresher Training, Institute for Environmental Education



Certified Asbestos Project Monitor, Inspector, Management Planner,
Project Designer and Consultant
Certified Air Sampling Professional based on the State of Connecticut
Criteria
Massachusetts Lead Inspector Course
OSHA 40-Hour Supervisor Course

Chronology

1994 – Present; Operations Manager, URS Corporation
1989-1994: Senior Field Technician with Balsam Environmental
Consultants, Inc.
1987-1989: Project Monitor, Management Planner, Designer, Inspector
with Barnes and Jarnis, Inc.
1980-1987: Production Machinist Technician with Metal Bellows
Corporation
1976-1980: Technician with Foxboro Company
1972-1976: Technician with W. T. Grant Company
1970-1971: Technician with Knox Incorporated
1966-1970: Electronic Technician with the United States Coast Guard

Contact Information

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david_ellis@urscorp.com



John D. Farmer

Director of Remediation Services

Areas of Expertise

Project Estimating and Bid
Proposal Development
Decontamination Activities
(OSHA, RCRA, TSCA, API)
Oilfield Production and Refinery
Closure Activities
Industrial and Manufacturing
Decontamination and Dismantling
Services
Waste evaluation, Classification and
Waste stream profiling
Waste Minimization and
Alternative Technologies
Permitting, Governmental and
Regulatory Agency Interface
Transportation and Disposal
Services
Development of Project Related
Work Plans (Asbestos, Decon,
Demolition, SWPPP, HSP)

Education

Bakersfield College: A.S.,
Environment & Botany

Registration/Certification

40 Hour Hazardous Waste
Operations Training, 1989
8 Hour HAZWOPER Refresher,
2004
4 Hour OSHA
Excavation/Trenching Course,
2002
4 Hour OSHA Confined Space
Entry Course, 2002
Hazardous Materials
Transportation Course, 2003
40 Hour Lead Related Construction
Supervisor and Project Monitoring,
1998
8 Hour OSHA Hazardous Site
Supervisor, 2003

Overview

Mr. Farmer, as Director of Remediation Services for Aman Environmental Construction, Inc. has 20 years of experience in the environmental remediation and demolition services. His responsibilities consist of division coordination, proposal development and technical writing, proposal and project estimating, subcontractor coordination, overall project management, contracting, waste characterization, TSDF profiling and related customer service and agency interfacing.

Other project experience includes health and safety development and implementation, chemical evaluation and lab packing, decontamination activities, tank and pipeline cleaning, drum work, underground storage tanks (UST) removals, shoring system design and installation, mass excavation, transportation and disposal, recycling of concrete and asphalt, backfill and compaction and resurfacing.

A selection of projects that Mr. Farmer has participated in various project management and coordination duties for your review:

Project Specific Experience

Boeing PacifiCenter Phase 1B Project, Long Beach, California

In-house environmental manager for the Abatement and Demolition of the former Boeing C1 facility located in Long Beach, California. The site was formerly used in the manufacturing and assembly of the Boeing 717 commercial airliner. The project has consisted of asbestos abatement of several million square feet of asbestos containing siding and other ACM materials, removal of universal waste associated with approximately 50 building locations and over 3 million square feet of space, decontamination of various chemical processing areas, and the complete above grade and below grade demolition of the site structures, slabs and foundations. Underground utilities servicing the former plant will be removed and mass grading of the site will be conducted. An estimated 300,000 tons of concrete will be recycled into a crushed aggregate base material to be used for backfill as well as other future site developments. Supplemental work included the excavation of TPH, Metals, VOC and PCB impacted soils and subsequent backfill and compaction.

Aboveground Tank Cleaning Services, Port of Redwood City

Coordinated the waste classification of tank bottom sediments stored in two aboveground storage tanks at the former Gibson Oil and Refinery facility located in Redwood City, California. The work included the removal of approximately 6,000 barrels of heavy paraffinic oily waste bottoms that had been consolidated from the cleaning of other ASTs located at the facility. The removal activities involved the use of a fluidizing technology that allowed for the liquefaction of the dehydrated tank bottom sediments to be removed via a vacuum system and

transported by vacuum trucks to a State permitted recycling/disposal facility. The work was completed under the auspices of the Department of Toxic Control Substance oversight and approved Work Plan.

Remediation of MGP Site, Southern California Edison, Santa Barbara, California

Project Manager for the excavation SVOC and PNA impacted soils from a former Southern California Edison, Manufactured Gas Plant (MGP) facility located in downtown Santa Barbara, California. Excavation activities were conducted for the installation of a vapor extraction system, including underground conveyance piping and manifolds as well as enhancement of the existing electrical distribution system servicing the Santa Barbara Historical Museum. Trenching activities were conducted during off hours (nights and weekend) due to the high profile area and museum visitors. Impacted soils were excavated mechanically and by-hand depending on the proximate of the excavation to the museum structure. Approximately 1,500 tons were placed in roll-off bins and/or end-dumps for offsite transportation and recycling. Excavation trenches were continually shored to perform the work. Respiratory protection was necessary as well as the implementation of confined-space protocols. Continuous air monitoring was established during the excavation and loading activities.

Demolition/Bioremediation Services, RDB Developers

AECI conducted the DOG permitted abandonment of the five McMillian Oil Wells with an average depth of 8,000 feet, tank cleaning activities, demolition of oil production equipment, including pump jacks, conveyance piping, aboveground storage tank facility and the excavation and onsite bio-remediation of petroleum hydrocarbon impacted soils. AECI then excavated approximately 15,000 tons of petroleum hydrocarbon affected soil that exceeded cleanup screening levels observed by the California Regional Water Quality Control Board. 700 tons of the affected soil was shipped offsite for thermal treatment. Upon completion of the excavation activities, AECI initiated the bio-remediation of impacted soils within a constructed treatment cell. As analytical testing confirmed achieving cleanup goals, the treated soil was stockpiled adjacent to the excavation areas to be used for backfill soil. Backfill and compaction of the areas was performed to allow for future construction.

Decontamination/Demolition Service, Akzo-Nobel, Vernon, California

Contracted to perform the decontamination and decommissioning of the former Akzo-Nobel "Filtrol" processing facility located in Vernon, California. The Filtrol facility was established to manufacture clay absorbents and fluid cracking catalyst for the petroleum refining industry. Other manufacturing processes were established at the facility, which were addressed during the decommissioning and demolition (D&D) of this site. The D&D services included the decontamination of 123 aboveground storage tanks and associated conveyance piping systems; radiological (NORM) decontamination of various building structures and process equipment in addition to containerization and the coordination of

radiological impacted materials for off-site transportation and disposal. Once the facility was free of NORM contamination, AMAN coordinated the complete demolition of all structures at the site. This encompassed demolishing 7.1 acres of process and warehouse building structures, 80' foot high storage silos, massive underground vaults and hardscape surfacing in which 40,000 tons of concrete/asphalt were recycled on-site. Also coordinated the excavation and characterization of petroleum hydrocarbon, heavy metal, and pesticide-impacted soils associated with various other past operations. Waste streams were classified and transported off-site to a State permitted disposal/recycling facilities for proper disposal. AMAN coordinated the packaging and transportation of 222,625 cubic feet of NORM impacted debris as part of the NORM decontamination. Approximately 25,623 cubic yards of TPH impacted soil and 17,700 cubic yards of heavy metals and pesticide soils required off-site disposal. Excavations were backfilled with clean imported soil and the site was completely graded and capped with base for future industrial use. A "No Further Action" letter was recently received from the City of Vernon for this project.

Aboveground Tank Cleaning Services, Pacific Gas and Electric

Coordinated the waste classification of tank bottom sediments stored in ten aboveground storage tanks at the PGE, Hunter's Point facility located in San Francisco, California. The work included the removal of an estimated 8,000 barrels of Bunker C Fuel Oil tank bottom sediments. The removal activities involved the use of a fluidizing technology that allowed for the phase separation of oil and rainwater. The oil was transported offsite to a State permitted recycling facility and the water was reintroduced for continued cleaning. Upon completion of the AST cleaning activities, the water was filtered and discharged under a batch discharge permit, thus minimizing offsite transportation and disposal volumes.

Excavation and Removal/Disposal of UXO and Clean Site Closure, Aerojet Company, Chino Hills, CA:

Project activities included: Sweeping and removal of detected buried exploded and unexploded ordnance. As detections were made, buried objects are exposed, inspected and, if deemed safe, transported for recycling or detonation. Excavation consisted of 225,000 cubic yards of ordnance-contaminated soil with screening operations commencing at an average 3,000 tons per day. Developed HSP protocols and implemented dust control measures and monitoring. Constructed erosion control measures to contain any release to the surrounding environment to include down drains and geomembrane fabrics and surface coverage via hydroseeding. Ferrous and non-ferrous fragments were cleaned, classified, decontaminated and recycled of as scrap metal. Confirmatory sampling was completed that allowed for backfill and grading.



ConocoPhillips, Santa Maria, California

Provide excavation of 33,000 cubic yard and offsite transportation and disposal of crude oil impacted soils from former oilfield sump locations. Work also included mass grading of the existing site to generate the appropriate fill material to reduce import cost and necessary dust control and storm water measures.

TiTech Industries, Pomona, California

Site Manager contracted with the URS Corporation to facilitate the removal of hazardous materials abandoned at the former titanium foundry facility, located in Pomona, California. The previous operators of the facility abandoned the site as well as all process fluids and chemicals used in the titanium foundry processes. Cleanup of the facility of all hazardous materials was mandated by the U.S. Environmental Protection Agency, Emergency Response Section, Region 9. AMAN developed a Waste Removal Work Plan for review by EPA representatives and once approved, AMAN mobilized to the facility to initiate hazardous materials characterization (HazCat) and coordinate waste materials and off-site disposal.

Facility decontamination involved waste profiling, removal and disposal of acidic and caustic solutions from aboveground storage tanks and vessels, handling and disposal of waste foundry sands and other casting media, packaging and disposal of laboratory chemicals and other chemical solutions and containers, hydro-blasting of ASTs and vessels, hydro-blasting of concrete slabs and containment areas and the certified destruction of cleaned process equipment (i.e. tanks, vessels, bins, piping). AMAN coordinated all off-site disposal to EPA approved disposal facilities.

Long Beach Unified School District, Long Beach, California

Initially, URS Corporation was called in by the Long Beach Unified School District to evaluate and oversee issues which arose from the onsite primary contractor unearthing contaminated soils and withholding information, thus halting the modernization project without any notification. URS took control of the project on behalf of LBUSD. AMAN was then asked to be involved in coordinating the removal and transportation of 26 roll-off containers of impacted soils from Avalon High School on Catalina Island to the Waste Management, Kettlemen Hills, California disposal facility.

Waste characterization, Coast Guard and oceanic transport, and mainland coordination were required. With the Prime Contractor now dismissed from the project, AMAN then took over the responsibility of completing the modernization project for LBUSD. This included trenching of 800 lineal feet of lead and SVOC impacted soils, containerization of soils in roll-off bins, off-island barging and delivery of an additional 30 roll-off bins for disposal and subsequent backfilling of trenches with 6,000 psi concrete. AMAN coordinated the installation of electrical conduit banks, transformer vaults, transformers and switchgear. All excavation and



transferring of roll-off containers had to be accomplished during weekend hours, while school was not in session. Necessary health and safety protocols were implemented due to the nature of the contaminates and to ensure the protection of the public and students. Upon completion of the electrical infrastructure, AMAN proceeded to excavate and dispose of off-island of an additional 1,200 tons of impacted soil from the campus. All area were backfilled with clean imported material and resurfaced with concrete and asphalt.

New construction activities included the forming and placement of handicap ramps, replacement of sidewalks and planter areas, emergency exit staircases, resurfacing of playground areas and covering impacted dirt areas with concrete or asphalt until a determination could be made as to future remediation activities at the site.

Professional Societies/Affiliates

Hazardous Waste Association of California
Association of Hazardous Waste Professionals
National Environmental Management Association
Professional Environmental Marketing Association

Contact Information

URS Resources, LLC
Aman Environmental Construction Inc.
614 East Edna Place
Covina, CA 91723
Tel: 626.967.4287
Fax: 626.332.1877
John_farmer@urscorp.com

Jeffrey S. Hansen, P.H.*Monitored Natural Attenuation***Overview**

Mr. Hansen is a Professional Hydrologist with more than 15 years of experience in environmental science and engineering, 10 of which have been with URS Corporation. Mr. Hansen has a wide breadth of experience on environmental projects including site characterization, feasibility studies, brownfields redevelopment, remedial design, and litigation support. He has worked on projects throughout North America and is respected by the U.S. Environmental Protection Agency and State Regulatory Agencies for his technical abilities.

Areas of Expertise

- Site Characterization
- Feasibility Studies
- Remedial Strategies
- Hydrogeology
- Hydrogeochemistry
- Brownfields Redevelopment
- Indoor Air Quality Assessment

Years of Experience

- With URS: 5 Years
- With Other Firms: 5 Years

Education

- B.S., Hydrology, University of New Hampshire, 1986
- Post Graduate – Water Resources Engineering, University of New Hampshire, 1986 – 1988
- Continuing Education – National Groundwater Association:
Groundwater Modeling using USGS Modular Finite Difference Groundwater Flow Model (MODFLOW), Las Vegas, Nevada, 1990; and Geochemical Modeling of Groundwater, San Jose, California, 1994

Registration/Certification

- Professional Hydrologist-
Groundwater - (#1126) American
Institute of Hydrology

Project Specific Experience**Senior Hydrogeologist**

For the former Burlington Manufactured Gas Plant Site located in Burlington, North Carolina. Performed a technical review of an existing site investigation performed by others and developed a conceptual site model in order to identify data gaps needed to bring the site to closure. Developed a work plan to complete site characterization and obtain data to evaluate the feasibility of implementing a permeable reactive barrier at the site to control migration of coal tar and dissolved MGP constituents from the site under an EPRI research grant. Provided technical direction for staff involved in implementing the work scope to ensure a high quality, technically accurate database for remedial decision-making at the site. Phase II investigations have validated URS' conceptual model. Mr. Hansen is currently authoring the Phase II Site Investigation Report for this site.

Senior Hydrogeologist

For the former KeySpan Energy Manufactured Gas Plant in New Hampshire. URS designed the Phase II investigation and has completed a catch basin survey; a geophysical survey of alleged USTs; and soil (surface and subsurface), sediment, and soil gas sampling. An innovative program combining laser-induced fluorescence (to locate MGP residuals in the subsurface) and cone penetrometry testing (to locate the surface of an impervious layer) is scheduled to begin this spring. URS will then locate and install additional monitoring wells and conduct an extensive groundwater sampling program. The site investigation is complicated by development pressures on the adjacent riverfront property.

Senior Hydrogeologist

For the former Appleton Manufactured Gas Plant Site located in Appleton, Wisconsin. Performed a technical review of an existing remedial investigation performed by others and developed a conceptual site model in order to identify data gaps needed to bring the site to closure. Developed a work plan to complete site characterization and obtain data to evaluate the feasibility of implementing a permeable reactive barrier at the site to control the migration of coal tar and dissolved MGP constituents to the Fox River under an EPRI research



grant. Provided technical direction for staff involved in implementing the work scope to ensure a high quality, technically accurate database for remedial decision-making at the site. Phase II investigations completed at the site have validated URS' conceptual model.

Senior Hydrogeologist

For the characterization of environmental conditions at a former phenol manufacturing plant located in Kentucky. Initially aided the original consulting firm for this project in the interpretation of hydrogeologic data and analytical data for environmental samples to assess the sources, nature and extent of impacts at this 474-acre site. Constituents of concern at this facility include chlorinated benzenes, polychlorinated dibenz-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs). Based upon results of the site characterization report, primary sources of chlorinated benzenes and PCDD/PCDF were identified at the site. Based upon this information, identified response actions and prepared work plans to address the primary sources of impact. The response actions included installing a soil vapor extraction system to reduce concentrations of chlorinated benzenes in soil located in the primary source areas, removing PCDD/PCDF source material for off-site disposal, and consolidation and capping of impacted soil containing low levels of PCDD/PCDF. The soil vapor extraction system has recovered more than 180,000 pounds of chlorinated benzene and is considered by the State of Kentucky Department of Waste Management to be one of the most successful remediation sites in the state. Assisted the design engineer in developing design parameters and approaches to implement the response actions. Completed an assessment of the biotreatability of chlorobenzene in site groundwater and participated in the design of a biologically enhanced groundwater circulation well to reduce concentrations of chlorinated benzenes in groundwater.

Project Hydrogeologist

For the investigation of a 50-acre paper mill sludge landfill in Jay, Maine. This comprehensive investigation included oversight of the installation of monitoring wells, conducting hydraulic testing and borehole geophysics, and quarterly monitoring of over 75 leachate, surface water, and groundwater monitoring locations. A landfill gas assessment was performed as part of the site investigation which included assessing the composition, migration, and fate of landfill gases from the landfill and identifying potential hazards associated with the migration of landfill gas. A water balance analysis was also conducted as part of the investigation and included measuring water balance parameters (e.g., precipitation, evapotranspiration, runoff and leachate collection rates) to estimate leachate discharge to groundwater. Compiled and interpreted data collected during the site investigation in a comprehensive report. Utilized graphical geochemical tools to differentiate landfill-related impacts to groundwater from other sources (i.e., road deicing salt).



Project Hydrogeologist

For a site stabilization investigation conducted to develop groundwater stabilization measures at a Resource Conservation and Recovery Act (RCRA) hazardous materials Treatment, Storage, and Disposal (TSD) Facility located in Braintree, Massachusetts. The investigation included conducting a 72-hour pumping test in a tidally-influenced bedrock groundwater system. Mr. Hansen was responsible for interpreting the data and using hydraulic parameters calculated from the data to determine the appropriate number of extraction wells and estimate the zone of influence of the proposed extraction system to demonstrate groundwater stabilization. Mr. Hansen developed and implemented a performance monitoring program with EPA approval, to document the performance of the groundwater stabilization measure.

Project Hydrogeologist

For the Bennington, Vermont Superfund Landfill Site, Mr. Hansen worked with the design team for this project to develop a groundwater flow model for the site using the USGS Modular Finite Difference Groundwater Flow Model (MODFLOW). The model was used to identify the optimal length of a groundwater interceptor trench to be installed on the upgradient side of the landfill and to predict the effectiveness of the proposed landfill cap and groundwater interceptor trench in lowering groundwater levels below the base of the landfill. Using the groundwater model, URS was able to save the client approximately \$750,000 by reducing the length of the interceptor trench proposed by the original engineering firm by approximately 300 feet.

Project Hydrogeologist

For the Union Chemical Superfund Site located in South Hope, Maine. Mr. Hansen worked with the design team to develop a predictive groundwater flow model to identify a cost effective system for dewatering impacted soils to allow for treatment using a soil vapor extraction system. Mr. Hansen prepared the modeling report for submission to the U.S. EPA.

Professional Societies/Affiliates

American Institute of Hydrology
National Groundwater Association

Specialized Training

OSHA 40 Hour HAZWOPER Training (1986)
8-hour OSHA 29 CFR 1910 Supervisors and Annual Refresher Training (1988)
Red Cross Standard First Aid (2000)
Red Cross CPR (2001)
Red Cross Prevention of Disease Transmission (2001)

Publications

Taylor, K.R., J.S. Hansen, and D.W. Andrews, 1994. "The Potential Use of Pulp and Paper Mill Sludge in Landfill Closure". Proceedings of the



Conference on Practical Applications of Soil Barrier Technology. Maine Chapter of the American Society of Civil Engineers. February 1994.

Chronology

URS, Project Hydrogeologist, Hallowell, Maine 1991 to present
Roy F. Weston, Inc., Associate Scientist, Concord, New Hampshire, 1986 to 1991

Contact Information

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Fax: 207.879.7685
jeffrey_hansen@urscorp.com

William Humphries

Senior Scientist

Overview

Mr. Humphries is currently employed with URS as a Senior Scientist and project manager. Responsibilities include project management of complex investigation and remediation projects, PCB characterization and cleanup performance of property transfer and underground storage tank closure assessments, environmental permitting, hydrogeologic investigations, and aquifer testing.

Areas of Expertise

Project Management
Phase I & Phase II Assessments
PCB Characterization & Cleanup
(40 CFR 761)
Environmental Permitting

Years of Experience

With URS: 7 Years
With Other Firms: 8 Years

Education

B.S. - Environmental Studies, University of Vermont, Burlington, Vermont, 1989
Post Graduate - Hazardous and Solid Waste Engineering, University of Maine, 1993.
Post Graduate - Topics in Ground Water Contamination, University of Maine, 1995

Registration/Certification

Senior Scientist and Project Manager

Project Specific Experience

Project Manager

For the investigation and remediation of a 220-acre former paperboard mill in accordance with the Connecticut Property Transfer Act. The site includes an active paperboard mill, remnants of a former paperboard mill and an 11-acre landfill. Site-wide impacts have been identified associated with current and former power production, releases of oil, and the extensive placement of highly variable polluted fill containing elevated concentrations of metals, PAHs, TPH and PCBs. PCB impacted soil and demolition debris meeting the definition of PCB Remediation Waste was identified in the old mill area. Characterization of soil and other porous media was conducted in accordance with Chapter 761 Subpart N. To expedite this time sensitive activity a meeting was held with the EPA Region 1PCB Coordinator. EPA approved the Self-Implementing Disposal and Cleanup plan consisting of a combination of off-site disposal, on-site capping and implementation of management controls for continued use of an electrical sub-station, which was completed in 2003. Other on-going non-PCB corrective actions include calculating site specific dilution attenuation factors, calculating upper 95% confidence intervals to demonstrate compliance in areas of widespread polluted fill, and performing a 7Q10 analysis to avoid groundwater remediation. Use of alternative approaches has saved approximately \$800,000.

Task Manager

For demolition and disposal of a PCB impacted building at a Pennsylvania Paper Mill. Numerous porous surfaces throughout the building were impacted with PCBs. PCB concentrations were determined by equating



surface and bulk concentrations in accordance with 1998 amendments and a cost effective Performance Based Cleanup of selected areas was completed concurrent with building demolition.

Task Manager

For developing the approach and estimated cost to conduct additional characterization and cleanup of PCB impacted infrastructure, soil and LNAPL at six bulk marine oil storage terminals located in Connecticut. Existing data were assessed and a strategy for achieving regulatory compliance at these significantly impacted facilities was prepared in support of a liability transfer scheduled to close in June 2006. Remedial activities are expected to begin during the fall of 2006 and will likely include both Self-Implementing Disposal and Cleanup [(761.61(a)] and Risk-Based Disposal [i.e., EPA negotiated per 761.61(c)].

Project Manager

Of a former military research and development (R&D) site located approximately 450 feet from three inactive (but not abandoned) municipal water supply wells. The site was impacted with tetrachloroethene (PCE) when equipment designed to dispense a polyurethane material for use in rapid repair of bomb-damaged runways failed, and unpolymerized material was released to surface soils. Subsequent subsurface investigations indicated that VOCs, primarily PCE, were present in groundwater and soils in two former test areas. Following source soil removal extensive investigation, including groundwater modeling, was conducted. Good site characterization and groundwater modeling were used to support natural attenuation as remedial action, and a Response Action Outcome has been prepared for submittal to the DEP.

Former Project manager

Of an enhanced bioremediation project at a petroleum-impacted site in Farmington, Maine. Indigenous petroleum degrading micro-organisms were augmented through construction of an in-situ bioreactor which optimized delivery of oxygen and nutrients. This innovative and cost-effective remedial approach achieved the DEP required cleanup action goal in less than two years and at a significant savings over other appropriate remediation options considered.

Mr. Humphries has experience on a variety of sites in the selection and implementation of monitoring and remedial technologies including soil/gas surveys, vapor extraction systems, and free-phase petroleum recovery systems. Work on a 1993 project included the implementation of a multi-staged soil and ground water remediation system at a grossly contaminated petroleum distribution facility. Vapor extraction was coupled with a free phase petroleum recovery system consisting of a product recovery trench and recovery well. Will assisted in the installation, operation and maintenance of a two-pump system which established a cone of depression and collected free product using a pneumatic product recovery system. Contaminated ground water was



treated by activated carbon and monitored with a portable gas chromatograph prior to discharge.

Team Member

For a 1998 statewide MTBE study conducted for the Maine DEP. Over 1,000 private water supply wells and 200 public water supplies in Maine were sampled for this comprehensive study.

Work on a 1994 investigation and remediation project included characterization of surficial and bedrock geology, and passive recovery of free phase petroleum at a marine oil terminal in Maine following a catastrophic release of #2 fuel oil. Through good initial site characterization and regulatory negotiation, site cleanup goals were downgraded and active remediation was not required.

Mr. Humphries has experience performing short and long term aquifer tests using vibrating wire pressure transducers and a Geokon Micro-10 datalogger. Work on a 1994 five-day aquifer test at a Maine leaking underground storage tank site included packer testing and a step drawdown test. Comprehensive data analysis following the aquifer test included ground water modeling with AQTESOLV and TWODAN. The ground water modeling indicated particle pathlines and capture zones from the recovery wells at a variety of pumping rates.

Professional Societies/Affiliates

National Ground Water Association
Geological Society of Maine

Specialized Training

40-hour OSHA 20 CFR 1910 Certification Training
8-hour Refresher Training
First Aid (Red Cross)
CPR (Red Cross)
UST Closure, PLM Enterprises
Property Transfer Liabilities - EssTek

Chronology

URS, Senior Scientist/Project Manager, 1999-Present
Dames & Moore, Project Scientist, 1995-1999
J.B. Plunkett Associates, Environmental Scientist, 1991-1995

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Brian Laurin*Vice President***Overview**

Mr. Laurin, as Vice President of Aman Environmental Construction, Inc. has 11 years of experience in the environmental remediation and demolition field. His responsibilities consist of multiple division coordination, proposal development and technical writing, proposal and project estimating, subcontractor coordination, overall division management, contracting, waste characterization, TSDF profiling and related customer service and agency interfacing. He has experience in implementing cost controls, permitting, government and regulatory interface, health and safety plan preparation, critical path scheduling, estimating, and bid proposal development. Mr. Laurin assists in the project management and estimating in both the demolition and environmental fields. He has capabilities to run on-site activities ranging from building demolition, large-scale excavation, disposal and infill projects, and other various aspects of general contracting. A selection of projects and associated responsibilities include:

A selection of projects that Mr. Laurin has participated in various project management and coordination duties for your review:

Project Specific Experience**Boeing PacifiCenter Phase 1B Project, Long Beach, California**

Project Manager for the Abatement and Demolition of the former Boeing C1 facility located in Long Beach, California. The site was formerly used in the manufacturing and assembly of the Boeing 717 commercial airliner. The project consisted of asbestos abatement of several million square feet of asbestos containing siding and other ACM materials, removal of universal waste associated with approximately 50 building locations and over 3 million square feet of space, decontamination of various chemical processing areas, and the complete above grade and below grade demolition of the structures, slabs and foundations. Underground utilities servicing the former plant will be removed and mass grading of the site will be conducted. An estimated 300,000 tons of concrete will be recycled into a crushed aggregate base material to be used for backfill as well as other future site developments.

Boeing PacifiCenter Phase 2 Project, Long Beach, California

Project Manager for the Abatement and Demolition of the former Boeing C1 facility located in Long Beach, California. The site was formerly used in the manufacturing and assembly of the Boeing 717 commercial airliner. The project consisted of asbestos abatement of 1-million square feet of asbestos containing siding and other ACM materials, removal of universal waste associated with approximately 20 building locations and over 800,000 square feet of space, decontamination of various chemical processing areas, and the complete above grade and below grade demolition of the structures, slabs and foundations. Underground utilities

Areas of Expertise

Project Estimating and Bid
Proposal Development
Decontamination Activities
(OSHA, RCRA, TSCA, API)
Oilfield Production and Refinery
Closure Activities
Industrial and Manufacturing
Decontamination and Dismantling
Services
Waste evaluation, Classification and
Waste stream profiling
Waste Minimization and
Alternative Technologies
Permitting, Governmental and
Regulatory Agency Interface
Transportation and Disposal
Services
Development of Project Related
Work Plans (Asbestos, Decon,
Demolition, SWPPP, HSP)

Education

University California at Riverside,
B.S., Environmental Engineering,
1994

Registration/Certification

40 Hour Hazardous Waste
Operations Training, 1994
8 Hour HAZWOPER Refresher,
2004
4 Hour OSHA
Excavation/Trenching Course,
2002
4 Hour OSHA Confined Space
Entry Course, 2002
Hazardous Materials
Transportation Course, 2003
40 Hour Lead Related Construction
Supervisor and Project Monitoring,
1998
8 Hour OSHA Hazardous Site
Supervisor, 2003

servicing the former plant will be removed and mass grading of the site will be conducted. An estimated 50,000 tons of concrete will be recycled into a crushed aggregate base material to be used for backfill as well as other future site developments.

Boeing PacifiCenter Phase 3 Project Long Beach, California

Project Manager for the Abatement and Demolition of the former Boeing C1 facility located in Long Beach, California. The site was formerly used in the manufacturing and assembly of the Boeing 717 commercial airliner. The project consisted of asbestos abatement of several million square feet of asbestos containing siding and other ACM materials, removal of universal waste associated with approximately 10 building locations and over 200,000 square feet of space, decontamination of various processing areas, complete above grade and below grade demolition of the structures, slabs and foundations, and the excavation of petroleum impacted soils. Underground utilities servicing the former plant will be removed and mass grading of the site will be conducted. An estimated 10,000 tons of concrete will be recycled into a crushed aggregate base material to be used for backfill as well as other future site developments.

LAC+USC Medical Center Replacement Project, Los Angeles, California

Project Manager for the Site Preparation Package of the future \$550-million LAC+USC Medical Center Replacement Hospital. The project consisted of the demolition of four multi-level concrete buildings encompassing over 550,000 square feet, plus the demolition of two multi-level parking structures. In addition, two City of Los Angeles streets around the existing hospital were demolished, and two other streets were demolished, realigned, and replaced to configure with the new hospital construction. All concrete and asphalt, totaling 110,000 tons, was crushed to CalTrans specifications and removed from the site. The 27-acre site was mass graded and approximately 250,000 cubic yards of soil was exported off-site. In order to facilitate grading activities, 340 lineal feet of shoring was installed. New utilities were constructed as part of the project, including several new sanitary sewer, storm drain, water, and gas lines. A new 600 foot mechanical utility corridor, consisting of new chilled water, steam, and condensate lines was also installed to keep the existing hospital operational during the course of demolition and future hospital construction activities. Additionally, an MTA Bus Turnaround area, various retaining walls, and other site improvements were constructed around the site to keep the hospital operational at all times. To complete the project, select areas at the site were irrigated and landscaped, and a full Storm Water Pollution Prevention Plan was implemented.

Akzo Nobel - Filtrol "Poppies" Project Vernon, California

Estimator and Assistant Project Manager for the complete decommissioning and demolition of the former Filtrol FCC Catalyst production facility. The D&D services included the decontamination of 123 aboveground process and storage tanks and all associated conveyance piping systems; radiological (NORM) decontamination of various building

structures and process equipment in addition to containerization and coordination of radiologically impacted materials for off-site transportation and disposal. Once the facility was free of known NORM contamination, the entire site was abated of all asbestos and demolished. This encompassed raising 7.1 acres of process and warehouse building structures, five 90' high reinforced concrete storage silos, massive underground vaults, and all hardscape surfacing. Over 40,000 tons of concrete and asphalt was recycled on-site. Upon removal of all structures and hardscape, the site was excavated to remove all contaminated soil to comply with regulatory clean-up levels. Approximately 3,500 tons of radiologically and chemically impacted mixed waste soil; approximately 20,000 tons of Non-RCRA heavy metal, DDT, PCB, and solvent impacted soil; and over 31,000 tons of Non-Hazardous hydrocarbon impacted soil was excavated, transported, and disposed of off-site. To complete the project, all excavations were backfilled and the entire site was mass graded to comply with the site Storm Water Pollution Prevention Plan.

General Dynamics Kearny Mesa, San Diego, California

On-site Project Manager responsible for the coordination to complete the closure of an existing 234-acre aerospace facility. Demolition encompassed 35 buildings and structures, over 2.1 million square feet of space, consisting of two 6-story concrete buildings and several steel frame and concrete buildings. In addition, all concrete slabs, below grade foundations, basements, underground utilities, asphalt paving, and landscaping were removed from the entire facility. All demolition voids were backfilled with on-site soils and over 60,000 cubic yards of clean soil imported to the site. Over 15,500 tons of ferrous material and 1.1 million pounds of non-ferrous materials were salvaged. Additionally, all concrete and asphalt removals were crushed on-site to create over 185,000 tons of reusable base material. The environmental scope of work and responsibilities included asbestos abatement; heavy metal and hydrocarbon decontamination of various structures; removal, handling, and disposal of all regulated wastes including PCB ballasts, mercury vapor lamps, elemental mercury, and CFCs; removal of five underground storage tanks; and the excavation, handling, and disposal of over 11,200 tons of hydrocarbon impacted soil. To complete the project, the entire site was mass graded to provide storm water control and to the keep the site in compliance with its storm water pollution prevention plan.

San Diego Gas & Electric, Station B San Diego, California

Project Manager responsible for the coordination of the complete decommissioning and interior demolition of a combustible hydrocarbon electric generating power plant which at one time provided electricity to downtown San Diego. The facility consisted of over 175,000 square feet of electric generating equipment, which included four large turbine generators, three boilers, seven superheaters, fuel oil lines and equipment, switchgear, and all other associated equipment and piping. Over 5,200 tons of ferrous metal materials were demolished and recycled through the coordination and use of manual labor alone. Associated demolition



activities included the demolition of approximately 1,000 lineal feet of reinforced concrete interior walls, slurry backfill of pits and tunnels underneath the adjacent city street, and the construction and installation of a safety barrier system around and over voids created by the demolition activities. Additional responsibilities included coordination with the asbestos abatement subcontractor; removal and disposal of all regulated wastes such as PCB containing ballasts, mercury vapor lamps, sodium vapor lamps, and elemental mercury; cleaning of all facility sumps and trenches; removal, handling, profiling, and disposing of hazardous wastes such as PCB containing oil, PCB impacted soils/sludges, heavy metal impacted soils/sludges, and heavy metal impacted decon water. Further responsibilities included the coordination and on time completion of the removal of loose and flaking lead based paint from all interior surfaces of the facility to meet the project deadline.

Staples Center, LA Arena Company, Los Angeles, California

Site Superintendent responsible for the demolition and clearing of over 25 buildings and associated lots. The contract included the removal of all asbestos containing materials, regulated building materials, above grade and below grade demolition of the buildings, clearing and removal of all site improvements, and rough grading each lot. Additionally, the contract included the removal of three City of Los Angeles streets within the project vicinity. Extensive interface and coordination with subcontractors, the City of Los Angeles, local utility companies, and Staples Center building contractors was required to facilitate the demolition of the buildings within a compressed time frame.

**International Light Metals, Lockheed Martin Corporation
Torrance, California**

Assistant Project Manager responsible for the complete demolition and land clearing of over 160,000 tons of concrete foundations, pits, and tunnels associated with this facility. The contract included the demolition and removal of all foundations, utility removal, coordination with the removal and disposal of hazardous soils, backfill and compaction of all voids, import and compaction of over 100,000 cubic yards of import material, mass grading of the site in preparation for a new retail mall development. Site consisted of over 65 acres of demolition and grading.

Carrier IDC Facilities Demo, City of Industry, California

Project Manager responsible for the demolition and removal of four buildings with a combined square footage of over 150,000 square feet. Demolition activities included all below grade concrete and utilities, removal of associated five acre parking lot, and the removal and disposal of all regulated building wastes, such as PCB containing ballasts, mercury vapor lamps, and elemental mercury. Additionally, this contract included the complete demolition of an existing fire sprinkler system within a 250,000 square foot existing warehouse.



Professional Societies/Affiliates

Hazardous Waste Association of California
Association of Hazardous Waste Professionals
National Environmental Management Association
Professional Environmental Marketing Association

Contact Information

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Douglas R. Lawson, Ph.D., CIH

Associate

Overview

Dr. Lawson has over twenty-five years experience providing occupational health and safety, and environmental management services to industry and government. He has developed and implemented a variety of safety and health programs on such subjects as compliance auditing, hazard communication, respiratory protection, dermatitis and occupational injury and illness issues. Additional experience includes monitoring airborne contaminant exposures; evaluating exposure to physical stresses including noise, radiation, and heat stress; managing health and safety programs and instituting engineering controls for airborne contaminants and noise. In addition to his industrial hygiene experience, Dr. Lawson holds a Master's Degree in Education and previously taught at the high school level for three years. Over his career, Dr. Lawson has conducted nearly 500 OSHA compliance audits in a wide variety of manufacturing facilities throughout the United States.

Areas of Expertise

- Industrial Hygiene
- Compliance Audits
- Indoor Air Quality Surveys
- Mold Investigations
- Asbestos Management Services
- Litigation Support

Years of Experience

With URS: 20 Years
With Other Firms: 13 Years

Education

Ph.D. in Industrial Hygiene, 1973, University of Oklahoma
Master of Science in Industrial Hygiene, 1972, University of Oklahoma
Master of Education, 1971, University of Lowell
Bachelor of Arts in Zoology, 1968, University of Massachusetts

Registration/Certification

Certified Industrial Hygienist, (Comprehensive Practice, 1978), No. 1698

Project Specific Experience

Project Manager

Project Manager for compliance and permitting program at a Textron automotive parts manufacturing facility in New Hampshire. Provided compliance assistance for air emission evaluation and permitting, Hazcom Program preparation, contingency planning, personal protective equipment procedures, NPDES evaluation, and a variety of other OSHA and large quantity generator requirement programs.

Safety Program Development

Developed a written health and safety program manual, operations and maintenance program, indoor air quality program and hazard communication program for UNUM, a Maine-based insurance company of nearly 4,000 employees. This health and safety program was unique in that the employees were primarily office workers exposed to a different array of hazards than those found in manufacturing environments. Programs included a variety of training programs required by various OSHA regulations.

Training Module Development

Developed an eight-hour training module for architects, project managers and real estate managers to evaluate asbestos, lead-based paint and other hazardous materials issues associated with USPS buildings and work through the survey, abatement design and removal process consistent with USPS policy and federal and state regulations. This course was accepted as a standard USPS course for offering throughout the country.

Project Manager

Project Manager for an indoor air quality investigation for Ruggles Center, a new 10-story office building located in downtown Boston. Conducted air and material sampling of sprayed-on fireproofing after workers in the



building complained of upper-respiratory and eye irritation, and determined that the material was releasing fibers into the building air stream. Managed an evaluation of the building to determine both airborne fiber levels and surface dust contaminants. Developed subsequent cleaning protocol for the building and a procedure for determining that it was suitable for occupancy.

Program Manager

Program Manager and lead auditor for health and safety audits of multiple plant sites for Duchossois Industries. Developed an audit protocol which included both program elements as well as specific regulatory items. Baseline audits were conducted at sites throughout the U.S. and Mexico. In the spring of 2002, follow-up audits were conducted to assess the progress being made by site personnel of issues identified during the baseline audit. Reports prepared following the baseline audits discussed both positive program activities as well as regulatory deficiencies. Plants have the ability to call on URS for advice and support on an ongoing basis as they implement program changes.

OSHA Compliance Auditor

Conducted a baseline OSHA compliance audit and subsequent program development for Presstek, Inc. in Hudson, New Hampshire. The audit included a complete facility walk-through, a review of written health and safety programs and assessment of long-term process expansion and development. The audit report included recommendations for long-term management of the OSHA compliance program. Oversaw staff in a day-to-day management role of health and safety programs for this facility. This role included the development of health and safety programs including training for hazard communication, lock-out/tag-out, respirator use, fork truck operation.

Certified Industrial Hygienist

CIH for mold investigation and sampling for a large telecommunications company. After surveying the building, concluded that the facility had a water incursion that caused mold growth. Remediation of the mold was necessary, and upon completion of the project, conducted a complete building survey and additional testing for mold confirm that airborne mold levels were within acceptable ranges.

Litigation Support

Provided litigation support for a large property management company in a lawsuit regarding an abandoned building. The building had a leaking roof resulting in mold growth. Conducted mold sampling using the Anderson N-6 and Zefon Air-O-Cell sampling techniques to collect air and bulk mold samples.

Certified Industrial Hygienist

Certified Industrial Hygienist for an indoor air quality evaluation and remediation program for a large national retailer. Conducted extensive air and bulk material sampling of structural fireproofing in a 500,000 square foot warehouse facility to determine the extent of mold growth on

surfaces and to evaluate airborne levels of spores. This project required rapid response and turnaround so that remediation could be completed and the facility returned to service within four weeks.

Certified Industrial Hygienist

Certified Industrial Hygienist for a General Services Administration (GSA) contract in Bangor, Maine to perform indoor air quality testing to identify an odor observed by personnel in the Social Security office area. Conducted air quality and ventilation measurements in the office area and long term monitoring on the air intake for the air handling unit serving the Social Security area. Sampling was conducted over two one-week periods to evaluate organic vapors and combustion products which might be generated by a boiler in an adjacent building.

Certified Industrial Hygienist

CIH for a law firm negotiating a real estate transaction. Performed a complete investigation and indoor air quality survey and found that mold was growing on a supporting wall on the side of the business next door to the company. Performed both air and surface mold sampling.

Certified Industrial Hygienist

CIH for mold investigation at a large New England resort. Determined background levels of bio-aerosols and surface contamination. Prior to undertaking remediation efforts, collected air samples at representative locations in contaminated and non-contaminated building areas as well as outdoors for comparison purposes. Surface wipe samples were collected to identify the extent of mold growth and material contamination.

Lead Auditor

Lead Auditor for health and safety audits (verification visits) on approximately 40 Invensys manufacturing facilities in the U.S., Mexico and Canada. Invensys implemented an aggressive EH&S program which involved self-audits of all facilities worldwide. Based on the perceived status of their plants, a score was developed for each aspect of program development and implementation. Action plans were developed to address deficiencies. Based on these self audit scores, certain sites were selected for site audits, called verification visits by a senior health and safety professional. During these verification visits, programs were reviewed to validate the sites self-audit and to evaluate the site's programs on a more detailed level. Additional action plans were recommended as required.

Health and Safety Auditor

For two years, Dr. Lawson conducted health and safety audits at packaging plants and paper mills operated by Riverwood International. The audit program included the development of a deficiency report while on site so that a review of action items could take place during the closing conference. Completion dates were also established at that time. Plants submitted the results of their activities for review and a determination as to whether an action item could be closed.



Health and Safety Auditor

As part of a divestiture, Dr. Lawson conducted health and safety audits at four (4) polymer manufacturing plants owned by BP Amoco. Audits were extensive and generally required approximately one week on site for each plant. Programs and records were reviewed in detail as well as an extensive review of manufacturing processes and operations. Reports discussed programs that were functioning well and those where improvement was necessary. Each report included extensive supporting documentation. A review of toxicology data for products was also conducted as part of each audit.

Project Manager

Project Manager for OSHA compliance and air monitoring program at the Sturm Ruger weapons manufacturing plant in New Hampshire. Conducted an OSHA inspection with the in-house compliance officer; managed a local exhaust ventilation survey; evaluated carbon monoxide production, and recommended modifications to the ventilation system.

Project Manager

Project Manager for OSHA compliance audit of two pharmaceutical manufacturing plants in Nebraska. The audit included a physical audit of both properties, review of written programs, review of training documentation, review of air and noise monitoring programs, and recommendations for an appropriate course of action.

Task Manager

Task Manager for occupational safety and health compliance audits of eight manufacturing and office facilities as part of a compliance audit of an Italian company, Nuovo Pignone Corporation, following its acquisition by the General Electric Company. The audited facilities included over seventeen million square feet of building space consisting of a variety of manufacturing processes and office occupancies.

Project Manager

Project Manager for an occupational safety and health compliance audit of GE's Transformer Division facilities in Pittsfield, Massachusetts. Although generally unused for manufacturing functions at the time, a variety of issues had to be addressed with regard to their impact on ongoing maintenance and facility decommissioning activities. The second phase of this project involved rewriting and updating of the facility's occupational health and safety policy and program manual.

Principal-in-Charge

Principal-In-Charge for development of a written health and safety program manual, operations and maintenance program, indoor air quality program and hazard communication program for UNUM, a Maine-based insurance company of nearly 4,000 employees. This health and safety program was unique in that the employees were primarily office workers exposed to a different array of hazards than those found in manufacturing environments.



Professional Societies/Affiliates

American Industrial Hygiene Association
American Board of Industrial Hygiene
American Society of Safety Engineers
National Asbestos Council (NAC)
New Hampshire Safety Council
Massachusetts Safety Council

Specialized Training

AHERA Inspector
AHERA Management Planner
AHERA Designer

Chronology

URS Corporation, Associate, 2/86 to Present
Normandeau Associates, Manager, Occupational Safety and Health Services, 3/85 to 2/86
General Electric Company, Manager, Environmental Systems, 4/78 to 3/85
U.S. Occupational Safety and Health Administration, Senior Industrial Hygienist, 8/75 to 3/78
Western Electric Company, Manager, Environmental Services, 7/73 to 8/75

Contact Information

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Tel: 603-893-0616
Fax: 603-893-6240
douglas_lawson@urscorp.com



Katherine H. McDonald

Staff Geologist

Project Specific Experience

Site Investigation and Remediation

Field Supervisor, Elizabeth Mine Superfund Site, Strafford, VT: Responsibilities include managing onsite subcontractors and field staff, overseeing investigation activities such as bedrock and overburden boring and monitoring well installation, slug testing, soil, sediment, surface water and groundwater sampling. Additional responsibilities include: workplan preparation, laboratory management data evaluation, data analysis, and remedial investigation (RI) report preparation. Extensive experience with soil boring installation, overburden geology field identification, and coordination of subcontractors and other staff.

Field Supervisor, Ely Mine Superfund Site, Vershire, VT: Responsibilities include managing onsite subcontractors and field staff, overseeing investigation activities such as bedrock and overburden boring and monitoring well installation, slug testing, soil, sediment, surface water and groundwater sampling. Additional responsibilities include: workplan preparation, laboratory management data evaluation, data analysis, and remedial investigation (RI) report preparation.

Field Geologist, Parker Landfill Superfund Site, Lyndon, VT: Responsibilities include managing onsite subcontractors and field staff, overseeing investigation activities such as overburden boring and monitoring well installation, slug testing, and groundwater sampling. Extensive experience with soil borings and soil identification.

Field Geologist, Maine Department of Transportation I-295 Connector Project, Portland, Maine: Responsibilities include overseeing field component of geotechnical boring program including vane shear testing, undisturbed tube sample collection, overburden geology logging, and laboratory sample collection for a complex sampling program.

Field Geologist, Environmental Site Assessments and Due Diligence, Various Locations: Performed field evaluation for many (25) due diligence property assessments. These projects typically include evaluation of commercial properties for environmental liabilities pertaining to American Society of Testing Material Standards. Additional responsibilities include report writing, contact with local officials, and follow-up sampling activities.

Previous Experience, W.R. Grace Superfund Sites in Acton and Woburn, MA: Experience with Solinst® well installation and sampling, passive-diffusive bag groundwater and river influent sampling, bedrock coring and in-situ aquifer permeability test analysis, field evaluation of ground water flow regimes in several VOC contaminant site scenarios,

Areas of Expertise

Bedrock and shallow overburden boring, soil sampling, and monitoring well installation.

Groundwater sampling using mechanical and air-drive pumps and passive-diffusive bag systems.

Years of Experience

With URS: 5 Years

With Other Firms: 1 Year

Education

B.S./Geology/2000/Bates College/Lewiston, ME



analysis of packer test data to determine aquifer characteristics. Previously responsible for operation and maintenance of two Massachusetts regulated treatment facilities: an aerator stack for the removal of VOCs, and an oil/water separator for the removal of petroleum hydrocarbons. Additional experience with the Massachusetts Contingency Plan code (MCP) requirements for hazardous waste sites.

Data Management

Experience using GISKey to manage environmental data. Responsibilities include: collection and compilation of data, entry into database, query data to generate project outputs, and provide appropriate information for project management.

Professional Societies/Affiliates

Association of Women Geoscientists
Geological Society of Maine

Specialized Training

40-hour OSHA 20 CFR 1910 Certification Training
8-hour Refresher Training
8-hour Site Supervisor Training
First Aid (Red Cross)
CPR (Red Cross)

Publications

Ongley, Lois K., M.A. Armienta, K. Hegeman, A. Lathrop, H. Mango, W. Miller, and S. Pickelner, 2001. Arsenic Removal from Contaminated Water by the Soyatal Formation, Zimapán Mining District, Mexico-a potential low-cost low-tech remediation system, *Geochemistry: Exploration, Environment, Analysis*.

Contact Information

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Thomas Plante, P.E.

Senior Environmental Engineer

Overview

Mr. Plante is a Senior Environmental Engineer with experience in civil and environmental engineering projects including solid and hazardous waste landfills, hazardous waste site investigations and remedial design, MGP site investigation and remediation, drainage projects, sewerage facilities, I&I, and CSO abatement projects for government, industrial, utility, and municipal clients. Responsible for engineering and project management including client and regulator interaction, site characterizations, detailed design of remediation and infrastructure projects, construction administration and startup, solid and hazardous waste site services including permitting, site characterization, remedial design engineering and construction. Mr. Plante has developed and implemented closure approaches for former MGP sites in New York, New Jersey, New Hampshire, and Maine. Mr. Plante has been involved in the construction of numerous civil and environmental remediation projects in varying roles from resident inspector, design engineer, field engineer, quality assurance representative, to project manager, and construction manager and is able to apply a detailed understanding of construction means and methods to the initial planning and design of projects.

Areas of Expertise

Civil & Environmental Engineering
Hazardous Waste
MGP Site Investigation

Years of Experience

18 Years

Education

M.S., Environmental Engineering,
University of Massachusetts at
Amherst, 1990

B.S., Civil Engineering, University
of New Hampshire, 1987

Registration/Certification

Registered Professional Engineer:
Maine, New Hampshire, and
Rhode Island

Certified Title 5 Septic System
Inspector - Massachusetts

Project Specific Experience

Project Engineer

Project Engineer for the design and construction oversight of remedial actions for the management of PAH and PCB contaminated soils at a paper mill in Sprague, Connecticut. Design included the onsite management and containment of soils with direct-contact and/or groundwater impact risks. Design included engineered controls in several areas as well as the excavation and off-site disposal of PCB-impacted soils.

Project Engineer/Manager

Project Engineer/Manager for the design and preparation of bid documents and a cost estimate for Release Abatement Measures at residential areas with fuel oil contaminated fill. Designed gravity groundwater depression drains, an oil/water separator, and in-situ lining and replacement of storm drains which were allowing fuel oil infiltration. Prepared permit applications and presented design to the Town Conservation Commission and citizens groups. Functioned as Resident Site Engineer during construction and startup of the drains and oil/water separator.

Project Engineer

Project Engineer for the design and preparation of bid documents and a cost estimate for excavation and dredging for salt marsh restoration in an abandoned fill area being conducted as part of the Boston, Massachusetts Central Artery/Third Harbor Tunnel Project.

Project Engineer/Task Manager

Project Engineer/Task Manager for the operation and maintenance of a groundwater recovery and treatment system (filtration and GAC) and separate phase product recovery systems at a former aerospace manufacturing site in Massachusetts. Activities include operation of the system, monthly reporting, periodic well cleanings/maintenance and management of remediation-derived wastes.

Project manager

Project Manager for design of an 80-acre soil cap for remediation of a dioxin-contaminated site in Kentucky. Design challenges included minimizing soil quantities in constructing a soil cap on an extremely flat site, managing stormwater during construction on the site and an adjacent borrow area, and closure of existing impacted sedimentation ponds.

Project Manager

Project Manager for the design of the closure of a 2.5-acre flyash lagoon by portland cement solidification at an active oil-fired electric power generation facility in Maine. Design elements included a detailed grading plan, soil cover and vegetation suitable for a coastal environment and infrequent tidal inundation, and stormwater management.

Project Engineer

Project Engineer for the post closure monitoring of a Superfund Landfill in Winthrop, Maine. Managed the post-closure monitoring activities including slope stability monitoring, methane migration evaluation, landfill cap and roadway condition assessment, maintenance of monitoring well network, and evaluation of wetlands impacts.

Resident Engineer

Resident Engineer for the closure construction of the Berwick Sewer District Sludge Disposal Area. Construction consisted of a sludge regarding, installation of a composite cover system, and installation of various site drainage structures. Performed the contract administration, submittals and testing results review, daily construction observation, preparation of weekly progress reports, and preparation of the construction certification report.

Project Engineer

Project Engineer for development of a database management system for ten years of site monitoring data for a Superfund Landfill in Winthrop, Maine. Prepared feasibility studies, work plans and cost estimates for various remedial investigations, including vapor extraction in a landfill, groundwater seep mitigation, and several source control activities. Provided engineering support in the development of an Alternate Concentration Limit Demonstration for establishing groundwater action/cleanup criteria at the landfill.

Project Engineer

Project Engineer for metal hydroxide sludge storage area at a Connecticut metal plating facility. Responsible for managing and reporting a quarterly



groundwater and surfacewater monitoring program as well as conducting site investigation and design activities for the development of a RCRA facility closure plan for the facility's waste hydroxide sludge by-product storage area. The closure design included on-site solidification/stabilization and development on RCRA-capped on-site landfill.

Project Manager

Project Manager for the design and construction services for the closure of an unlined municipal landfill in Boscawen, New Hampshire. Developed and implemented a unique closure approach combining two separate landfills located across Town into one site. Developed a funding approach including Federal and State grants and local contributions resulting in \$1.8 million in savings to the Town. The Town/project received an EPA Environmental Merit Award in 1999 for the unique project approach and timely remediation of an abandoned leather waste dump site.

Project Manager and Lead Design Engineer

Project Manager and Lead Design Engineer for the evaluation of remedial alternatives, remedial design, and construction administration for the remediation of oil and tar impacts to a drainage ravine at a former manufactured gas plant in Manchester, NH. The scope of work included pre-design field investigation to delineate MGP-related impacts, forensic analysis of product samples to verify their probable source and relationship to the MGP processes, evaluation of remedial alternatives including no action, excavation and off-site treatment, in-situ solidification/stabilization, and in-situ chemical oxidation. Based on the feasibility study, a remedial design was prepared for dig-and haul. Significant design considerations include construction adjacent to a major waterway, temporary shoring and bracing for excavation stability and groundwater cutoff, construction water treatment, and a tight schedule due to on-going site re-development construction. This project also involved close coordination with the site developer's design engineer to ensure that the remedial construction was compatible with and coincident with site development construction. Mr. Plante managed the construction oversight and administration for URS. Construction was completed in the Summer of 2005.

Related project at this site resulting from a Phase II Site Investigation include: the evaluation and conceptual design of a coal tar (DNAPL) and gas oil (LNAPL) product migration barrier and product recovery system at the former MGP site; investigation and evaluation of stone box culvert lining alternatives for vapor mitigation, and a DNAPL product recovery pilot test.

Project Manager

Project Manager for the remediation of a former MGP site in New Jersey. The unique hydrogeologic features of the site allowed URS to develop an innovative approach to site closure. The remedy includes a slurry wall

surrounding the site keyed into a low permeability unit. This wall contains the majority of NAPL impacts at the site. With upward vertical gradients through the low permeability unit at the site, the wall also includes passive activated carbon overflow treatment gates for treatment of groundwater leaving the site. Outside the wall, a combination of natural attenuation and residual NAPL treatment is proposed. This project also included NAPL recoverability testing in source areas of the site. Down gradient of the site, and ecological risk assessment, including sediment toxicity evaluations, is being performed to evaluate ecological impacts on a river habitat.

Project Manager/Technical Lead

Project Manager/Technical Lead for bench-scale treatability testing to develop reagent mix designs for in-situ solidification at 5 former MGP sites in New Jersey. This research was sponsored by the Electric Power Research Institute (EPRI). The main objective of the project, in addition to evaluating the specific sites, was to further develop and expand the use of this technology for former MGP sites with varying levels of oil, tar, BTEX, PAH, metals, and cyanide impacts, and to develop an appropriate technical approach to demonstrating the technology's effectiveness. Based on the success of the first phase of the project, URS was contracted by the utility to further develop the approach on one site and evaluate various leaching test protocols and their applicability to solidification.

Project Engineer

Project Engineer responsible for the development of feasibility studies and remedial investigations for former manufactured gas plant sites in New York State. Investigations were completed and remedial action concept plans were developed for former NYSEG plants in Mechanicville and Owego, New York. Chemicals of primary concern at these sites were semi-volatile organic compounds, polychlorinated biphenyls (PCBs), and cyanide.

Project Manager

Project Manager & Field Engineer for a fast-track source removal remedial action of gas holder contents (tar and oil impacted soil and debris) and surrounding impacted soils in Biddeford, Maine. The site is currently used as low income residential apartments. The cleanup was conducted by Central Maine Power Company under the state's Voluntary Remedial Action Program. Mr. Plante managed the site investigation, prepared the remedial action work plan which included a visual cleanup standard, and performed field design services as the remediation progressed. The entire project, from site investigation through completion of the removal of 9,000 tons of contaminated soil, was implemented in 3 months. Unique site features included working in close proximity to granite block building foundations, extremely limited working area, aggressive project schedule to meet site redevelopment financing deadlines, and performing the detailed design as the construction progressed.



Project Manager

Project Manager for development and implementation of closure strategies for two former Central Maine Power Company MGP sites in Maine. One site involved excavation and removal of surficial tar impacts and restoration for future use as a City park. The second site is currently being evaluated for the use of in-situ solidification to address site NAPL impacts and allow for future site development. Mr. Plante is currently managing the treatability study phase of the solidification project.

Project Manager/Design Engineer

Project Manager/Design Engineer for the design of the closure of a 2.5-acre flyash lagoon using in-situ portland cement solidification at an active oil-fired electric power generation facility in Maine. Design elements included developing a solidification design and specification based on bench-scale treatability testing, developing the solidification implementation QA/QC requirements, preparing a detailed grading plan, designing a soil cover and vegetation suitable for a coastal environment and infrequent tidal inundation, and stormwater management. Provided field engineering on behalf of the owner during pilot and full-scale implementation to optimize the mix design and mixing procedures and managing construction dewatering and treatment.

Professional Societies/Affiliates

American Society of Civil Engineers
New England Water Environment Association (1988 -2005)

Publications

Plante, T.R., and Koster, R.A., "Fast-Track Gas Holder Remediation: A Case History in Residential Redevelopment", presented at the Gas Technology Institute Natural Gas Technologies II Conference, Phoenix, AZ, February 8-11, 2004.

Switzenbaum, M.S., Plante, T.R., and Woodworth, B.K., "Filamentous Bulking in Massachusetts: Extent of the Problem and Case Studies", Water, Science, and Technology, Vol. 25, No. 4-5 pp. 265-271, 1992.

Switzenbaum, M.S., Plante, T.R., and Woodworth, B.K., "Activated Sludge Bulking Handbook", prepared for the Commonwealth of Massachusetts Department of Environmental Protection Division of Water Pollution Control, May 1990.

"Designing Flexibility into a Sewer Siphon", paper presented at NEWEA Collection Systems Specialty Conference, Westford, Massachusetts, September 2000.

Plante, T.R., "Multi-Source Funded Landfill Closings", Public Works Journal, May 2000.



Plante, T.R., Coleman, A., Max, W., Veprek, C., and Wittman, W.
"Solidification/ Stabilization Bench-Scale Testing of Coal Tar Impacted
Soils", presented at the Gas Technology Institute Natural Gas
Technologies Conference, Orlando, FL, February 2005.

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thomas_plante@urscorp.com



James P. Sheridan

President

Areas of Expertise

Demolition and Construction Management

Education

University of California, Berkeley,
B.S. degree
(Agriculture/Economics)

Registration/Certification

State of California License No.:
735936

State of Arizona License No.:
154566

State of New Mexico License No.:
84697

State of Oregon License No.:
149506

State of Utah License No.:
5082614-5501

Overview

Mr. Sheridan has over 30 years experience working in the demolition and construction management fields. He has been responsible for the successful completion of over 1,200 projects ranging from simple concrete slab removals to the demolition of complete facilities, bridges and wharfs. Mr. Sheridan joined the newly incorporated Cleveland Wrecking Company as President and Principal-in-Charge in 1997. In this capacity,

Mr. Sheridan is able to direct one of the nation's oldest and largest demolition companies.

Project Specific Experience

- Generating Station Demolition, Jacksonville, FL: Complete Facility Closure and remediation of contaminated soils.
- Demolition of Plutonium Processing Plant, Miamisburg, OH: Building Decontamination of Low Rad substances and Demolition of Contaminated Structures.
- B-6 Site Demolition, Burbank, CA: Demolition of slabs and foundations.
- Midwest Generation Powerton Plant, Pekin, Ill: Demolition of scrubber unit at the plant.
- Veterans Administration Hospital, Long Beach, CA: Seismic retrofit of structures.
- Naval Weapons Bolsa Chica Bunkers, Bolsa Chica, CA: (R) 18,000 yards of concrete from former ammunition bunkers.
- Port of Long Beach Demolition, Long Beach, CA: Demolition of port buildings and pier removal resulting in over 300,000 tons of material crushed and reused on site.
- Facility Demolition, Northridge, CA: Demolition of a 6-story missile launch facility once operated by Hughes aircraft. Over 14,000 tons of material was crushed and reused onsite.
- High-rise Removal, Los Angeles, CA: Demolition and abatement of a 12-story structure located at the famed Hollywood and Highland intersection in Los Angeles, California.
- Medical Center Demolition, Los Angeles, CA: Demolition and abatement of the LAC-USC medical center.

- Multiple Building Removals, Los Angeles, CA: Demolition of over 40 structures on highly pedestrian populated areas to make way for the new Staples Sports Center located in Los Angeles, CA.
- Tyler Mall Expansion, Riverside, CA: Demolition of entire Mall Roof to allow for the addition of a second floor. Stores remained operational during normal business hours.
- Westminster Mall Expansion, Westminster, CA: Complete demolition of existing Food Court and Mall Commons Area. Stores remained operational during normal business hours.
- Demolition of Terminal, LAX, CA: Demolition of entire ticketing building and satellite building. Excavation of connecting tunnel.
- Orange Crush 5/57/22 Freeway Interchange, Orange, CA: Demolition of 10 bridges and miscellaneous structures. Approximately 63,000 cy of concrete was handled during this project.
- Anaheim Stadium, Anaheim, CA: Removal of the Jumbo Tron and Scoreboard because of damage which occurred after the 1994 earthquake.
- Kaiser Steel California Speedway, CA: Demolition of all concrete structure to 3-ft below new grade. Approximately 130,000 cy of concrete was handled for this project.
- Port of Los Angeles, CA: Demolition of 2,500 linear feet of concrete and wood wharf and piers. Demolition of 300,000 square ft warehouse buildings.
- Silo Demolition, San Gabriel Mountains, CA: Demolition of 4 Nike Missel Silos for the Army Corps of Engineers.
- LA River Replacement, CA: Removal of a 400-ft long warren truss railroad bridge spanning the LA River.
- Hyperion Treatment Plant, C-117 Project, Playa Del Rey, CA: Demolition of all existing aeration and settling basins. Approximately 67,000 cy of concrete was handled during this project.
- Vernon Tower Project, CA: Demolition of 6-story warehouse and office complex with an overall footprint of 400,000 square feet resulting in 200,000 tons of crushed concrete.



Chronology

1997 – present, Cleveland Wrecking Company, Covina, California,
President
1992 – 1997, Penhall Company, Anaheim, California, Senior Project
Manager
1977 – 1992, Power Breaking, Inc., Anaheim, California,
Owner / President
1971 – 1977, Penhall Company, Anaheim, California,
Estimator / Foreman

Contact Information

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Marilyn Wade, P.E., LSP

Senior Project Manager

Overview

Ms. Wade is a registered Professional Engineer and Licensed Site Professional with a degree in Civil and Environmental Engineering. She has an extensive background in management of multi disciplinary projects, including hazardous waste site investigation and remediation, storage tank management, and solid waste management. With more than twenty-two years of experience, including six with the EPA, she has provided both technical expertise and project management for numerous environmental projects in the northeast.

To date, she has conducted or contributed to numerous MCP and federally-dictated response actions at a variety of disposal sites. She has provided comprehensive management of various projects that combine elements of hydrogeologic analysis, sediment, surface water and solid waste analysis, public health and environmental impact analysis, risk based corrective action, wetlands restoration, community relations, and technical enforcement. Ms. Wade provides essential contributions to high profile projects, including, for example:

Project Specific Experience

Licensed Site Professional

Licensed Site Professional of Record for PCB impacted industrial site. Project involves comprehensive investigation of soil, sediment and groundwater impacts from co-disposed solvent and PCB wastes, release abatement measures to address impacts, including non-aqueous phase liquids, and reporting and liaison to state and federal regulators to ensure compliance with the MCP, and federal regulations. Responsibilities also include preparation of Phase II through Phase IV submittals and preparation of technical specifications, extensive permitting, and contractor procurement and construction oversight.

Licensed Site Professional

Licensed Site Professional of Record for industrial site with historic petroleum and hazardous waste impacts and multiple Potentially Responsible Parties. Project involves investigation of sediment, soil and groundwater contamination and contaminant impacts on adjacent wetlands and surface water bodies. Responsibilities include coordinating with and reporting to regulators, providing field investigation and data evaluation, negotiating access and ensuring compliance with MCP, and completing Response Action Outcomes.

Licensed Site Professional

Licensed Site Professional of Record for marina property impacted with metals and PAHs. Project involves comprehensive investigation of soil, sediment and groundwater impacts, release abatement measures to address impacts, and reporting, permitting and liaison to state and federal regulators to ensure compliance with the MCP, and federal regulations. Responsibilities also include project management for a concurrent remedial

Areas of Expertise

Waste Site Investigation and Remediation
National and Massachusetts Contingency Plans
Superfund Program and Process Regulatory Compliance
DOD Installation Restoration and Base Closure
UST Management and Compliance and Leaking UST Response

Years of Experience

With URS: 10 Years
With Other Firms: 15 Years

Education

Bachelor of Science in Civil and Environmental Engineering, 1981, Clarkson University, Potsdam, New York

Registration/Certification

Licensed Professional Engineer, Maine, #5798
Licensed Site Professional, Massachusetts, #4513
U.S. EPA Master Remedial Project Manager Certification



and maintenance dredging effort involving preparation of technical specifications, extensive permitting, contractor procurement and construction oversight.

Licensed Site Professional

Licensed Site Professional for multiple urban sites undergoing redevelopment. Projects involve real estate transaction assessments, IRA's, RAMS or comprehensive response actions to address surface and subsurface impact from urban fill or undocumented historic releases.

Senior Project Manager

Senior Project Manager for remedial design and remedial action at a Superfund site in New Bedford, Massachusetts. Project involves removal of PCB contamination in wetland soils, soil treatment, disposal, and wetland restoration. Responsibilities include development of design specifications and drawings, preparation of remedial action implementation plan, development of a comprehensive post closure operation and maintenance plan and analysis of compliance with applicable federal and state regulations. Responsibilities include serving as the supervising contractor and engineer of record, obtaining design approval, performing contractor procurement and fulfilling related construction management duties.

Project Manager

Project Manager for a variety of tank removals and replacements, including tank work at a major department store and a large-scale hospital. Projects involve tank removal, product disposal, fuel conversions, environmental sampling, LSP services and reporting.

Project Manager

Project Manager for a programmatic assessment of ASTs and USTs at multiple Massachusetts facilities for the Army National Guard. Project includes inspection tank testing and repair, and tank regulatory compliance assessment.

Environmental Auditor

Environmental auditor for community college in Massachusetts. Project involved comprehensive audit of two community college campuses for compliance with environmental, health and safety requirements. Responsibilities included reviewing client documentation, inspecting facilities including laboratories and physical plant and maintenance areas, advising facility staff on required improvements to their environmental management practices, and reporting.

Project Manager

Project Manager for technical oversight of a military base closure in Maine, providing technical recommendations and document review encompassing the fields of wetland mitigation, risk assessment, geology, hydrogeology, engineering and radioactive and hazardous waste remediation. Project involved the closure of a 9000 acre base, with remediation evaluated for over 30 individual sites grouped into over 13 separate operable units.



Remedial Project Manager

Remedial Project Manager for high visibility Superfund site in Woburn, Massachusetts. Project involved an area contaminated by over a century of industrial use that was subsequently commercially developed. Contaminants included metals (arsenic, chromium and lead), and petroleum based volatiles (BTEX). Soils and groundwater contamination required implementation of a remediation plan at a cost of over \$30 million. Responsibilities included negotiation and implementation of enforcement documents (consent decree and administrative orders), implementation of pre-design studies and remedial designs, and removal actions.

Remedial Project Manager

Remedial Project Manager for many additional Superfund sites in New England, providing both technical direction and enforcement support. Enforcement related duties included negotiating with potentially responsible parties, providing the technical basis of administrative and court actions, and monitoring regulatory compliance.

District Engineer

As district engineer for major oil company managed all retail facilities within district that encompassed New York, Vermont and western Massachusetts. Project involved providing engineering support during market withdrawal, including evaluation of facilities for real estate transfer. Duties included testing of over 500 petroleum underground storage tanks (USTs), tank repair and removal, UST spill response, investigation and remediation, and equipment and structural evaluations.

Professional Societies/Affiliates

Member, LSP Association

Member, Chi Epsilon Civil Engineering Honorary

Recipient, USEPA Bronze Medal for Commendable Service, 1989

Specialized Training

29 CFR 1910.120 OSHA 40-Hour Health & Safety Training, 1984

29 CFR 1910.120 OSHA Annual 8-Hour Refresher, 1985-1996

Chronology

URS Corporation, Senior Project Engineer, 1996 to Present

Brown and Root Environmental, Inc., Project Manager, 1991 to 1996

EPA, Remedial Project Manager, 1984 to 1990

Exxon Corporation, District Engineer and Underground Storage Tank Specialist, 1981 to 1984

Contact Information

URS Corporation

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Salem, NH 03079

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marilyn_wade@urscorp.com

AEROVOX NTCRA - APPENDIX B

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1**

COMMUNITY INVOLVEMENT PLAN

**Aerovox Non-Time Critical Removal Action
740 Belleville Avenue
New Bedford, MA 02745**

December 2009

A. Overview of the Community Involvement Plan

This community involvement plan (CIP) describes and explains EPA's strategies to address the needs and concerns of community stakeholders affected by the Non-Time Critical Removal Action (NTCRA) at the Aerovox Site in New Bedford, Massachusetts. The NTCRA consists of demolition of the existing mill buildings, offsite disposal of the demolition debris and backfilling and capping of the Site. This CIP is designed to involve affected residents, abutters, and local citizen groups regarding the NTCRA activities at the Site. Informed stakeholder involvement is integral to the successful performance of the NTCRA. This CIP will also include participation by the City of New Bedford (the City) which will be performing the transportation and disposal of demolition debris, and AVX Corporation, the potentially responsible party (PRP) that will be performing the demolition and capping work at the Site.

The U.S. EPA New England office has primary responsibility for implementing the CIP; however, participation and involvement by City representatives and citizen groups are essential resources for the success of this CIP because they have the ability to help keep the broader surrounding communities informed. They may have additional knowledge of the Aerovox facility and/or hold visible positions of responsibility in the City, and can be considered other key points of contact.

This CIP briefly outlines the physical description and ownership history of the Aerovox Site, but its main purpose is to provide a description of the activities that are planned, some of which are already underway, to address the specific concerns and issues that apply to the community affected by the Site.

B. Site Description and Recent History

The vacant Aerovox plant located at 740 Belleville Avenue in New Bedford, MA, consists of an approximately 450,000 square foot former manufacturing facility located on approximately 10.3 acres of industrial-zoned land abutting the Acushnet River. From c. 1940 to c. 1978, PCBs were used at the facility in the manufacture of electrical capacitors. As a result of this manufacturing history, soil and groundwater at the Site as well as the mill facility itself are heavily contaminated with PCBs. The soil and groundwater are also contaminated with VOCs, most notably trichloroethylene and chlorobenzene.

In 1997, EPA conducted an inspection of the building and performed building and soil sampling, with Aerovox, Inc. (Aerovox), a prior owner of the Site, performing follow-up sampling. High levels of PCBs were identified throughout the interior of the building and in Site soils. Subsequent sampling found PCBs and VOCs in groundwater and PCBs mixed into the asphalt parking lot. In July 1998, EPA issued an Approval Memorandum to initiate the NTCRA process by having Aerovox perform an Engineering Evaluation/Cost Analysis (EE/CA) for the implementation of a NTCRA for the Site. The EE/CA was prepared by Aerovox's contractor and issued in 1998. The EE/CA and its

administrative record were made available for public comment in 1998, but no comments were received.

Aerovox entered into a RCRA Section 7003 Administrative Order on Consent with EPA in late 1999 in which Aerovox was required to, among other things, demolish the building and cap the entire Site. Interim measures were taken to protect workers in the building. However, the building was vacated in 2001 when operations were relocated to an alternative site in New Bedford. Aerovox subsequently filed for bankruptcy in June 2001 and the primary response actions required by the RCRA consent order were never implemented.

Since 2001, the facility has deteriorated and been subject to flooding, trespassing and vandalism. EPA performed a Time-Critical Removal Action in 2004 to remove drums and containers abandoned at the Site when Aerovox relocated and to perform general repair of the cap installed by Aerovox. From 2004 to 2008, EPA performed further sampling at the Site and found PCBs mixed into the asphalt parking lot, the continued presence of PCBs in groundwater, stormwater runoff and in building materials and elevated levels of airborne PCBs at the eastern end of the Site. A January 2005 Site Information and Preplan prepared by the New Bedford Fire Department describes the fire hazards posed by the manufacturing building, includes a fire plan as to how the Fire Department should respond to a fire at the building, and describes the existing fire suppression equipment in the building.

In April 2006, EPA issued a Supplemental EE/CA (SEE/CA) for public comment to update the costs of the NTCRA and to reflect Site activities and conditions since the 1998 EE/CA was issued, including the continuing deterioration of the facility and the significant potential for a fire. The SEE/CA also identified two new alternatives. Sixteen comments were received. See Aerovox Action Memorandum, Appendix A, Responsiveness Summary, for EPA responses to those comments.

For a comprehensive and detailed description of Site ownership, past Site activities, inspections and removal actions, please see Section II of the Aerovox Action Memorandum.

In the next section, a brief description of the community's concerns are provided and the steps taken thus far to include the community in the cleanup process.

C. Community Concerns and Involvement

When the EE/CA was issued for public comment in 1998, although no written comments were received, the immediate concerns involved protecting the workers at the Aerovox facility through interim safety measures, and the potential loss of business and employment at the Aerovox facility. Interim safety measures were taken to protect workers, and the City worked with Aerovox to relocate the company to the New Bedford Industrial Park.

EPA held a public information meeting in 2006 when the SEE/CA was issued for public comment. The meeting was well attended, including abutting residential and industrial property owners, as well as representatives from local neighborhood associations, the general public and the City. The main concerns raised at that meeting involved onsite disposal of contaminated building debris and air emissions during demolition activities. Industrial abutters also voiced concern regarding the potential for adverse impacts to their business and customers.

D. Community Relations Activities and Timing

Neighborhood Meetings

Every three to four months, or more often as requested, representatives from EPA, MassDEP and the City attend meetings with the two neighborhood associations closest to the Aerovox Site to provide the latest updates. These two groups are the Bullard Street Neighborhood Association and the Brooklawn Neighborhood Association. These neighborhood meetings are typically held once a month, are open to the public and cover a wide range of concerns of the nearby community. The Bullard Street Neighborhood Association meets the third Thursday evening of every month at the St. Anthony's Church on Nye Street in New Bedford. The Brooklawn Neighborhood Association meets the first Tuesday evening each month in the Brooklawn Senior Center in New Bedford. It is the intention that by attending these smaller public forums, information can reach a concerned group of citizens that may not necessarily attend the larger informational sessions hosted by EPA that are now held once a month at the New Bedford Public Library (see immediately below). These periodic neighborhood meetings will continue as needed, with participation from the City and AVX as appropriate.

Monthly EPA-Hosted Informational Sessions

On the last Thursday evening of each month, excluding holidays, EPA will continue to host an informational session at the New Bedford Public Library on Williams Street in New Bedford. These EPA-hosted meetings are used to provide informal or formal updates on the harbor cleanup as well as the Aerovox Site, and allow for public questions to drive the discussion as a way to provide the latest updates and information to the public. These updates include descriptions of activities completed, near and long-term plans, timelines for completion of activities, responses to significant community concerns and questions, next steps, public meeting announcements, and agency contacts with telephone numbers.

These meetings are open to all, handicap accessible, and translation services are provided for both Spanish and Portuguese given the prevalence of both languages in the New Bedford community. Advertisements for these meetings are posted in the *New Bedford Standard Times*, as well as the main Latino and Portuguese newspapers for New Bedford; *OJornal, El Latino Expresso* and *OJornal Brasileiro*. An e-mail list has been established for anyone who has ever attended one of these meetings and has requested to be put on our mailing list. Approximately two weeks before these monthly meetings an e-mail reminder is sent to this mailing list. EPA will continue to take the lead at these meetings, with assistance from the City, AVX and MassDEP as appropriate.

Press Releases

As the NTCRA reaches significant milestones (e.g., settlement finalization, start of work) EPA will issue press releases to the southern Massachusetts media outlets, including daily and periodical newspapers, radio and local television stations. EPA has and will continue to respond to questions from and provide information to reporters from the *Standard Times* and other local newspapers writing stories on activities at the Aerovox Site.

Door to Door

To ensure that anyone who is not on an e-mail list but living in close proximity to the Site will have access to all the information, EPA has and, time permitting, will continue to go door to door in the surrounding neighborhoods to pass out informational flyers and meeting notices.

Fact Sheets

In 2006 and 2008, EPA produced fact sheets on activities underway at the Aerovox Site. This frequency will likely be increased as the Site becomes more active through 2010. These updates are posted to EPA's Site-specific website (www.epa.gov/ne/nbh) as well as mailed out to the several hundred residents abutting the Aerovox Site. A mailing list of all affected community members has been developed for the purposes of sending newsletters, notifications, and other information to residents throughout the NTCRA process. This mailing list includes names and addresses of all residents immediately affected by the Aerovox Site, state, federal, and local agency project personnel, media contacts, and environmental and other community groups.

School Outreach

One of the concerns of nearby residents is the close proximity of certain schools to the Aerovox Site. There is concern regarding potential air quality issues, as well as whether or not the schools have a clearly defined evacuation plan should it become necessary. Meetings have occurred between public and private school officials, City officials and EPA to ensure that the school principals are aware of the potential need to evacuate in the event of a fire and take necessary steps to make sure a plan is in place. The City and EPA have identified the location and contact information for the schools and childcare and nursing facilities that are located within 3 miles of the Aerovox Site.

EPA has met more regularly with the Principal of the St Joseph – St Therese Elementary School located on Kearsarge Street in New Bedford which is the school closest to the Aerovox Site. There is a monthly school informational mailing packet that goes home to all parents, which EPA will make use of as a mechanism to distribute Site updates throughout the NTCRA.

Twitter.com

EPA New England will be using the Aerovox NTCRA as one of the first test projects that will be utilizing new social media web tools. Twitter, specifically, will act as one mechanism to report out daily and potentially hourly removal activities. Twitter allows

for short, frequent messages to be sent to anyone who signs up online through twitter.com to receive the updates. These messages can be retrieved online or by mobile phone, and are extremely accessible to anyone wishing to receive that information. Frequent messages will be necessary as concerns may increase once demolition begins. Twitter messages cannot exceed 140 characters in length at one time, but can be sent as often as there is information to report. As one example, the Boston Police Department has been extremely effective in utilizing Twitter to report road closures, safety messages, and any other information that is allowed for public distribution but might not otherwise be very accessible. For the NTCRA, EPA will aim to report items removed, brief sample results, progress day to day, possibly hourly, and all of this information will be reported out as it becomes available to EPA. An Aerovox Twitter ID will be created and EPA will facilitate the messaging to anyone in the public that signs up to receive updates.

Office Hours

During active onsite demolition activities, in collaboration with the City and MassDEP, EPA expects to hold regular “office hours” wherein concerned stakeholders can stop in and talk to EPA staff in person. The location of these office hours will likely be at EPA’s nearby Sawyer Street facility. The exact time and place for these office hours will be advertised in advance.

Web

EPA expects to continue to use the New Bedford Harbor Site-specific web site (www.epa.gov/ne/nbh) which has a tab for the Aerovox Site on the front page, to post relevant information about the Aerovox NTCRA. This could include air and stormwater monitoring results, fact sheets, construction updates, etc.

Administrative Record

The Administrative Record for the NTCRA is a legal requirement. It is an indexed collection of pertinent materials including, among others, sampling and analysis reports, engineering evaluations, public comments and EPA’s responses, agency decision documents and fact sheets. The Aerovox Administrative Record can be found in three locations: the New Bedford Main Library at 613 Pleasant Street, EPA’s regional records center at 5 Post Office Square in Boston, and on the internet at www.epa.gov/ne/nbh.

Public Comment Period and Public Notice

As part of the forthcoming settlement for the Aerovox Site, EPA is required to solicit public comment on one aspect of the settlement: the compromise of “past costs” which was incorporated into the settlement in order to advance the Site cleanup. More specific information on this particular issue will be made available to the public at the appropriate time through public notice(s) and press release(s).

**VACANT AEROVOX PLANT
NON-TIME CRITICAL REMOVAL ACTION
FINAL TSCA 40 C.F.R. § 761.61(c) DETERMINATION
ACTION MEMORANDUM - APPENDIX C**

Consistent with 40 C.F.R. § 761.61(c) of the Toxic Substances Control Act (TSCA), a draft TSCA determination was issued for public comment as part of the April 2006 Supplemental Engineering Evaluation/Cost Analysis proposal for a Non-Time Critical Removal Action (NTCRA) at the vacant Aerovox plant in New Bedford, Massachusetts (Site). One comment was received specifically on the draft TSCA determination critical of a removal action that was not a final cleanup; and many comments were received that supported building demolition but did not support on-site disposal. As a result, after considering all comments received, EPA has issued an Action Memorandum that includes building demolition and off-site disposal of all demolition debris, including material regulated under 40 C.F.R. § 761. The Action Memorandum incorporates a Responsiveness Summary that responds more fully to these comments.

I have reviewed the Administrative Record for the PCB-contaminated Site and the Action Memorandum for the NTCRA. As required by § 761.61(c) of TSCA, I have determined that the NTCRA, as presented in the Action Memorandum, does not pose an unreasonable risk of injury to health or the environment as long as the following conditions are met:

1. Engineering controls described in the Action Memorandum for dust suppression shall be used during demolition, processing and capping activities, and air quality shall be monitored until backfilling is complete to ensure that air emission levels meet the air quality performance standards in the Action Memorandum.
2. Engineering controls described in the Action Memorandum for the collection and management of surface water runoff, dust suppression water and decontamination water shall be used during demolition, processing and capping activities to ensure that the PCB concentration in any surface water runoff, dust suppression water and decontamination water from the Site complies with the performance standards in the Action Memorandum before discharge.
3. To ensure compliance with items 1 and 2 of this determination, demolition waste processing activities shall be performed either in an enclosed environment or with sufficient engineering controls and air monitoring to ensure that air emission levels do not exceed the performance standards in the Action Memorandum. Further, stockpiles of demolition waste shall be situated on the asphalt parking lot or elsewhere as approved by EPA, and shall be securely covered until such stockpiles are loaded for off-site disposal. Hay bales or other erosion control devices and oil booms, as necessary, shall be placed around all stockpiles.

4. Once the NTCRA has been fully implemented, the Site shall be transferred to the Massachusetts 21E program to achieve a final cleanup. Such cleanup shall maintain at a minimum the conditions of this determination.

5. The cap described in the Action Memorandum, along with the existing hydraulic asphalt cement ("HAC") cap, shall function as a barrier to direct contact exposure to contaminated soils at the Site. During performance of the cleanup under the Massachusetts 21E program, response actions involving on-site sampling, excavations or the construction of remedial components which penetrate any of the capped areas shall be conducted in a manner protective of health, safety, public welfare, and the environment, and in accordance with the health and safety provisions of the Massachusetts Contingency Plan.¹ At the completion of the cleanup under the Massachusetts 21E program, any disturbed areas will be restored to meet, at a minimum, the capping requirements described in the Action Memorandum.

6. Upon the approval by the Massachusetts Department of Environmental Protection (MassDEP) of a Response Action Outcome (RAO) Statement or Remedy Operation Status (ROS) submittal pursuant to the Massachusetts 21E program, the cap described in the Action Memorandum, the HAC cap and any additional area capped pursuant to the Massachusetts 21E program (together, the "site cover") and the containment barrier shall be monitored and maintained as follows:

- a. semi-annual site cover and containment barrier inspection (with results recorded concurrently in writing) for the first two years, annually thereafter;
- b. annual site cover maintenance, or more frequently as necessary; and
- c. seal coating every six years, or more frequently as necessary.

With respect to the portion of the site cover that may be covered with soil and plants as part of a shoreline greenway (the "riparian cover"), once construction of the greenway has been completed, the above maintenance requirements shall be replaced with the following:

- (i) semi-annual inspection (with results recorded concurrently in writing) for the first two years, annually thereafter; and
- (ii) annual maintenance, or more frequently as necessary, to ensure that damage to the riparian cover is repaired and that lost vegetation is replanted.

7. On an annual basis, an inspection and maintenance report with respect to the activities enumerated in item 6 of this determination will be prepared and submitted to EPA. This obligation may be satisfied by submission of an equivalent report prepared in accordance with the requirements of the Massachusetts 21E program, provided that the frequency of such report is not less than annual.

8. Groundwater shall be monitored annually as described in the Action Memorandum until a Phase II Comprehensive Site Assessment is initiated by the filing of

¹ 310 CMR 40.0018(1) and 310 CMR 40.0810(9).

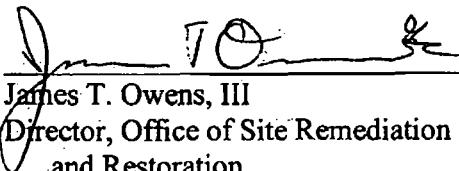
a Tier Classification submittal under the Massachusetts 21E program and then every 5 years following the approval by MassDEP of a RAO Statement or ROS submittal pursuant to the Massachusetts 21E program, or more frequently as necessary. Following the approval by MassDEP of a RAO Statement or ROS submittal, groundwater monitoring wells shall be located in accordance with the response actions implemented pursuant to the Massachusetts 21E program.

9. Every ten years following completion of the cleanup undertaken pursuant to the Massachusetts 21E program, the groundwater monitoring wells utilized in the monitoring program implemented in accordance with item 8 of this determination shall be redeveloped.

10. Institutional controls shall be implemented to prohibit any use or contact with groundwater and to prohibit land use activities that would adversely affect the site cover or the containment barrier.

11. Every fifth year, the annual inspection and maintenance report submitted to EPA, in addition to summarizing the annual inspection and maintenance activities performed for the site cover and the containment barrier (and, if applicable, the shoreline greenway), shall also summarize the groundwater sampling results.

12. Any change in the use of the Site shall be designed, implemented and maintained, in a manner that maintains the conditions of this determination and the Massachusetts 21E program, to prevent exposure to any soil or groundwater contaminated with PCBs and any release of PCBs to the environment.



James T. Owens, III
Director, Office of Site Remediation
and Restoration
EPA New England

12/24/09
Date

Appendix B

Scope of Work

APPENDIX B

SCOPE OF WORK

**Non-Time Critical Removal Action Under CERCLA § 104,
Vacant Aerovox Plant, 740 Belleville Avenue, New Bedford, MA;
Transition to Response Actions Under Mass. Chapter 21E, RTN 4-0601.**

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I. Introduction.

This Scope of Work (SOW) addresses the Work required of Respondent pursuant to an Administrative Settlement Agreement and Order on Consent for a Non-Time Critical Removal Action (AOC) to achieve a controlled demolition of the PCB-contaminated vacant Aerovox mill in New Bedford, Massachusetts (Site). Upon completion of the Work, there will be an efficient transition to complete the cleanup of the Site by means of response actions conducted in accordance with an Administrative Consent Order (ACO) with the Massachusetts Department of Environmental Protection (MassDEP), pursuant to Chapter 21E of the Massachusetts General Laws (21E) and the regulations promulgated thereunder, the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, and under the direction of a Massachusetts Licensed Site Professional (LSP).

Given the very close proximity of residential and industrial abutters, this SOW establishes Work-specific air quality, air monitoring, dust control, stormwater quality and water runoff collection performance standards. Failure to attain these Work-specific performance standards shall be cause for cessation of Work and implementation of corrective measures in accordance with an approved air monitoring corrective action plan or stormwater pollution prevention plan.

Section II. of this SOW sets out the requirements for the overall Work Schedule and Project Plans. Section III. of this SOW is organized to reflect the anticipated sequence of major Work elements necessary to complete the non-time critical removal action (NTCRA) and transition to the 21E program. For clarification, the required submittals listed in the major Work elements in Section III. are referred to herein as "Construction Submittals." These are submittals required in addition to and not in place of the broader-based Project Plans required in Section II.B. Project Plans and Construction Submittals shall be provided to EPA in accordance with the approved Work Schedule and Construction Submittal Register required in Section II.A. below.

All submittals required by this SOW shall be submitted to EPA for review and approval in accordance with Section VIII. of the AOC.

II. Work Schedule and Project Plans.

- A. Work Schedule.** Within 45 days of the Effective Date of the AOC, Respondent shall submit an overall Work Schedule for the Work required in the AOC, the Action Memorandum and this SOW. At a minimum, this Schedule shall list the start and end date for each major Work element listed below in Section III.

Construction Submittal Register. Within 45 days of the Effective Date of the AOC, Respondent shall also complete the Construction Submittal Register (Attachment 1) by filling in the "due date" for each submittal. The due date for each Construction Submittal shall be 60 days prior to Respondent's proposed Work Schedule start date for the major Work element for which each Construction Submittal applies.

Respondent may include with the Construction Submittal Register a proposal to combine one or more of the Construction Submittals described below in Section III. of this SOW, which proposal will be subject to EPA's review and approval. Notwithstanding the foregoing, EPA pre-approves a proposal that combines: (1) for the Work's initial phase, the *Site Management and Security Plan* and the *Utility Decommissioning Plan*; (2) for the Work's demolition phase, the *Hazardous Material Removal and Disposal Plan*, the *Building Demolition Plan*, and the *Debris Processing and Loading Plan*; and (3) for the Work's post-demolition phase, the *Basement Backfill Plan* and the *Subsurface Filling Plan*, provided that the non-redundant portions of each of the Construction Submittals are addressed independently in separate sections.

B. Project Plans. Within 45 days of the Effective Date of the AOC, Respondent shall submit the following Project Plans:

1. **Health and Safety Plan (HSP)**

a. The objective of the Site-specific *HSP* is to establish procedures designed to protect health, safety, public welfare and the environment during implementation of the Work. The *HSP* shall include both a *Site Safety Plan (SSP)* to protect personnel on the Site implementing the Work, and an *Emergency Response Plan (ERP)* to protect the public and the environment. The *HSP* will identify the name of the site safety officer responsible for implementing the *HSP*. The measures in the *HSP* shall be developed and implemented to ensure compliance with all applicable state and federal occupational health and safety regulations. The *HSP* shall be routinely reviewed and updated as conditions at the Site warrant or at the request of EPA. The *HSP* shall be prepared in accordance with the following documents:

- EPA's Standards Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992); and
- Hazardous Waste Operations and Emergency Response Standard (Department of Labor, Occupational Safety and Health Administration, (OSHA) 29 CFR Part 1910.120).

b. The objective of the *ERP* is to minimize hazards to human health or the environment from fires, or unplanned releases of hazardous constituents. This plan shall describe the actions personnel must take in response to fires or unplanned releases at the Site, arrangements with local, state and federal emergency responders to coordinate emergency services, identification of the roles and responsibilities of the emergency coordinator and alternates, supply and maintenance of on-site emergency equipment, and stop work and emergency evacuation planning. The *ERP* will include a hazard communications plan and names and contact information for planned notifications in the event of an emergency.

2. **Field Sampling Plan (FSP)**

The overall objective of the *FSP* is to describe in detail the requirements of the Site assessment and monitoring programs. The *FSP* shall be Site-specific and include the following sections:

- a. **Site Background**: This section shall include a brief description of the Site and the Work being undertaken pursuant to the AOC and SOW, and to the extent relevant, to response actions conducted under the MCP. This section shall also include an overview of historic data that relates to the SOW's monitoring requirements.
- b. **Sampling Objectives**: This section shall describe the specific data quality objectives and intended uses of the data.
- c. **Sampling Location and Frequency**: This section shall use tables and figures, as well as narrative text as necessary, to identify the anticipated sampling locations and sample frequency for the assessment and monitoring programs, as outlined in Sections II.B.5. and II.B.6. below. The numbers of field blanks, trip blanks and duplicates for both media (stormwater and air) shall also be identified.
- d. **Sample Designation**: This section shall establish a sample numbering system for the assessment and monitoring program.
- e. **Sampling Equipment and Procedures**: This section shall clearly describe the sampling equipment and procedures to be used. Step by step instructions for each type of sampling shall be included, referencing the equipment, material type (e.g., stainless steel) and decontamination procedures. This section shall ensure that sampling data collection activities yield representative samples and usable data consistent with the MassDEP Compendium of Analytical Methods (CAM) and presumptive certainty guidelines.
- f. **Sample Handling and Analysis**: This section shall include a table that identifies sample preservation methods, types of sampling containers, shipping requirements, holding times and the CAM analytical methods to be used by the lab(s).
- g. **Real-time monitoring equipment**: This section shall describe the instrumentation and procedures for the calibration and use of portable monitoring equipment to be used in the field.

3. **Quality Assurance Project Plan (QAPP)**

The overall goal of the *QAPP* shall be to describe the laboratory(s), analytical methods, and quality assurance and quality controls (QA/QC) to be used to achieve the data quality objectives identified above and to ensure that the data collected is scientifically valid and defensible and of a level of precision and accuracy commensurate with its intended use. The *QAPP* sampling and analysis procedures shall be consistent with the MassDEP CAM

and guidelines for presumptive certainty, and the *QAPP* may incorporate the MassDEP CAM by referencing specific sections of it rather than repeat descriptions of analytical and QA/QC methods. Sampling and analyses performed as part of the Work shall comply with the *QAPP*.

Split Sampling. The *QAPP* shall allow for notifying EPA, at a minimum, three days before field sampling or monitoring activities commence. The *QAPP* shall also allow split, replicate, or duplicate samples to be taken by EPA (or its representatives). At the request of EPA, Respondent shall provide these samples in appropriately pre-cleaned containers to the government representatives. Identical procedures shall be used to collect Respondent's and the parallel split samples unless otherwise specified by EPA.

4. ARARs Implementation Plan

Respondent shall develop and implement a plan to address how Respondent shall comply to the extent practicable with the ARARs for the Work included in EPA's Action Memorandum.

5. Stormwater Management and Monitoring Plan (SWMMP)

- a. Respondent shall prepare and implement a *SWMMP* that includes management and monitoring of stormwater. This plan shall describe in detail how compliance with all requirements of this Section II.B.5. will be achieved. The *SWMMP* approved by EPA shall be in effect continuously until completion of the Work described in Section III.H.
- b. Performance Standards. PCB concentrations in stormwater runoff shall not exceed the maximum PCB level of 13 ug/l as measured at any one of the stormwater discharge outfalls SW-2, -9, -10, -11, or -13 (as listed in Reference 1 – Aerovox Facility Conceptual Site Model, ENSR, 2006). The point of compliance for collected non-compliant stormwater runoff shall be the end of the discharge pipe if direct discharge to the Acushnet River is selected. Collected, non-compliant stormwater runoff may also be discharged to the City of New Bedford (City) sewer on Belleville Avenue, provided that the maximum PCB concentration is less than or equal to 5 ug/l and Respondent has secured and fully complies with a discharge permit from the City, including the required monitoring frequency.
- c. The means and methods utilized by Respondent to prevent contaminant migration in stormwater during the Work, as detailed in the *SWMMP*, will be designed to meet the stormwater performance standards (see Section II.B.5.b. above). The *SWMMP* shall include provisions for an active stormwater collection program to be installed prior to implementation of the Work described in Section III.D. Best management practices (BMPs) shall be employed during the Work to minimize the potential for PCB contamination of stormwater (see Section II.B.5.f. below).

- d. The *SWMMP* shall provide that if during the Work stormwater runoff at any of the outfalls SW-2, -9, -10, -11 or -13 exceeds 13 ug/l PCBs, based on either Respondent's or EPA's monitoring data, Respondent shall stop Work and immediately implement the stormwater management program as outlined in the *SWMMP*. Work shall resume only with EPA's prior approval.
- e. Once a stormwater PCB level exceeding 13 ug/l has been documented, Respondent shall continue operating the stormwater management program implemented in accordance with Section II.B.5.c. for all noncompliant outfalls until compliance is documented and EPA approves discontinuing the active stormwater collection program. Compliance at the outfalls shall be documented by achieving the 13 ug/l discharge standard during a significant rain event (>0.25 inches) or during a lesser rain event with EPA's prior approval.
- f. The BMPs discussed in Section II.B.5.c. above shall include, but are not limited, to:
 - placement of hay bales or similar erosion control devices and oil booms around all catch basins, stockpiles, and debris processing areas;
 - strategic placement of debris processing facilities to minimize travel distance to and from the building unless such processing is performed inside the existing building; and
 - whenever possible, avoiding processed debris stockpiling by loading the transportation and disposal (T&D) vehicles directly from the debris processing area.

6. **Air Quality Management and Monitoring Plan (AQMP)**

- a. Respondent shall prepare an *AQMP*. The means and methods utilized by Respondent to perform the Work shall be designed and implemented in a manner that minimizes airborne PCBs and particulates to the maximum degree practicable. The *AQMP* shall detail the means and methods to be used to maintain airborne PCB levels at the performance standards enumerated in Section II.B.6.c. below. The *AQMP* approved by EPA shall be in effect continuously until completion of the Work described in Section III.F.

The *AQMP* shall include a description of how Respondent will:

- establish a minimum of 4 perimeter air monitoring locations;
- define air monitoring parameters and detection limits and the process for modifying parameters with EPA approval. Air monitoring parameters shall include particulates (PM₁₀), PCBs, asbestos, mercury, lead and silica;
- define air monitoring frequency based on site activity and the process for modifying frequency with EPA approval;
- establish background levels; and

- calculate a running average of the airborne PCB levels monitored at each air monitoring location during performance of the Work. This station-specific average shall be submitted to EPA within three days of Respondent's receipt of the laboratory data.
- b. Aroclor versus PCB Homolog Analysis. To be consistent with previous airborne PCB sampling at the Site, EPA prefers that the total homolog approach be used to determine the concentration of total PCBs in air. However, if Respondent can demonstrate, through performance of a comparative analysis study showing the results of paired homolog versus Aroclor data, that airborne Aroclor data are equivalent to total homolog data at the Site, EPA will consider use of the Aroclor approach as an alternative. Respondent must first propose, and EPA approve, the method for the comparative analysis prior to its implementation.
- c. Performance Standards. Respondent shall use BMPs to comply at all times during performance of the Work with the air quality performance standards. On the Site's northern, southern and eastern boundaries, the point of compliance for air quality performance standards shall be the Site boundary. The point of compliance on the western boundary shall be on the western side of Belleville Avenue, due west of the Aerovox property. At no time during the performance of the Work shall levels exceed the following standards:
 - Airborne particulates (PM₁₀): not to exceed 100 ug/m³ (10 hour TWA).
 - Airborne PCBs:
 - at northern, southern and eastern points of compliance: not to exceed 10 ug/m³.
 - at western point of compliance: station-specific average not to exceed 0.25 ug/m³.
 - Airborne asbestos: not to exceed 0.1 fiber/cc.
 - Airborne silica: not to exceed 25 ug/m³.
 - Airborne mercury (inorganic): not to exceed 50 ug/m³.
 - Lead: not to exceed 50 ug/m³.

In the event of an exceedance, based on either Respondent's or EPA's data, Respondent shall immediately stop Work and submit a proposed corrective action plan. Work shall resume only with EPA's approval and upon implementation of the corrective action plan.

III. Work Elements and Related Requirements with Construction Submittals.

A. Site Management and Security.

1. At least 60 days before Site mobilization, Respondent shall submit a *Site Management and Security Plan*. The *SMSP* shall describe how Respondent shall manage the project to complete the Work required at the Site.
2. Specific objectives and provisions of the *SMSP* shall include identification of the overall layout of on-site work zones and project structures, including but not limited to:
 - exclusion zones, contaminant reduction zones, and clean areas for on-site activities;
 - area for project office trailers and associated utilities;
 - area(s) for debris processing structure(s) (see Section III.E.);
 - area(s) for processed debris stockpiling (see Section III.E.);
 - areas for stormwater management infrastructure (see Section II.B.5.);
 - area(s) for off-site disposal vehicle loading, decontamination, and weighing; and
 - proposed traffic patterns and traffic control.
3. Submittal of a project organizational structure including Respondent's consultants, contractors, subcontractors and laboratories. The structure shall indicate the management and chain of command for the Work, as well as key points of contact and contact information.
4. Beginning with Site mobilization, the perimeter security fence around the Site shall be maintained at all times until the Work is completed. Appropriate health and safety procedures and soil management procedures will be employed in the event subsurface drilling or digging is required to support the fencing.
5. Beginning with Site mobilization and continuing until completion of the Work described in Section III.F., a security guard shall be present on Site at all times when the removal action contractor's project manager or designee is not at the Site.
6. Standard hours of operation shall not be greater than 11 hours per day (7:00 a.m. to 6:00 p.m.), Monday through Friday, and 9 hours (8:00 a.m. to 5:00 p.m.) on Saturdays, except that work that involves use of the transload T&D facility in Worcester shall not be performed on Saturdays, nor on any other day the transload T&D facility is not operating provided that the City's T&D contractor gives Respondent notice of the facility's closing not less than five (5) business days before such date (except, in the case of emergency, the City's T&D contractor will make its best effort to notify Respondent as soon as possible). No work shall occur on Sundays or on a federal- or state-recognized holiday. Work outside these standard hours may occur only with EPA's prior authorization.

7. Vehicle access for abutting businesses and vehicles along the alley on the north side of the building (Graham Street) and on Hadley Street to the south shall be maintained to the maximum extent practicable. Access for emergency response vehicles will be maintained throughout the Work. Temporary access restriction for businesses to the north and south, where required, will only be implemented after prior notification to and coordination with EPA and the business operators, and the amount and duration of the restrictions will be minimized and communicated. No Work shall be allowed in Belleville Avenue, except as needed for utility decommissioning.
8. Prior to the start of building demolition, Respondent shall close off the Belleville Avenue sidewalk area of the Site with temporary fencing and erect “Sidewalk Closed” signs on the northern and southern boundaries of this sidewalk. Any damage to the Belleville Avenue sidewalk caused by Respondent shall be repaired by Respondent. Respondent shall notify and coordinate with the City’s Department of Public Infrastructure not less than 14 days prior to the sidewalk closing.
9. Respondent shall coordinate as necessary with the Site abutters to the north and south, including providing these abutters with at least 7 calendar day advance written notice, with a copy to EPA, when utility decommissioning and building dismantling activities will begin. EPA shall provide Respondent with points of contact information for these abutters.
10. Should access to Site areas covered with hydraulic asphalt concrete (HAC) be required for utility decommissioning or for any other activity, Respondent shall implement measures to protect the HAC cap and to minimize any potential damage to the HAC cap. Respondent shall immediately repair any damage caused by the Work, and address the release or threat of release of contamination from such damage, if any. Such repairs will be done in accordance with Section III.H. See Attachment 2 for map of HAC cap areas.
11. Respondent shall implement measures to protect the sheet pile wall and to minimize any potential damage to it. Respondent shall immediately repair any damage to the sheet pile wall caused by the Work, and address the release or threat of release of contamination from such damage, if any.
12. **Construction Submittal:** Respondent shall submit a *Site Management and Security Plan*. This plan shall describe how Respondent will comply with all of the specific requirements of this Section III.A. The plan shall also include a pre-construction conditions report, and photographic log of existing sidewalks and adjacent building foundations.

B. Utility Decommissioning.

1. Except as noted immediately below, on-Site utilities including, but not necessarily limited to, gas, oil, electric, water, sanitary sewer, telephone, and communications, must be properly and safely decommissioned prior to the start of demolition activities. All

utility connections shall be terminated at the Site boundary rather than within the Site interior to the maximum extent practicable. See Reference 2 for utility location survey. Respondent shall coordinate and secure any required approvals from all appropriate utility companies and City departments as necessary prior to terminating any utility. Where implementation of the Work can be accomplished more effectively by utilizing a portion of the existing utilities, EPA may approve partial decommissioning prior to the Work, with final decommissioning after the Work is complete.

Respondent shall coordinate with Titleist prior to decommissioning the Aerovox electrical service to ensure that Titleist's electrical service remains uninterrupted.

To the extent necessary to implement the *ERP*, and to maintain the abutters' use of it, Respondent shall maintain the existing "Community Main" and all active fire hydrants on and adjacent to the Site that are in an operable, working condition. See Reference 2. The Community Main and associated fire hydrants that are currently in an operable, working condition shall be left in an operable, working condition at completion of the Work, except that where necessary to implement the Work, Respondent may decommission specific hydrants or sections of the Community Main, with EPA's prior authorization.

2. Should Work in Belleville Avenue be required during utility decommissioning, Respondent shall coordinate with the City's Department of Public Infrastructure, comply with all local requirements and ensure that at least one traffic lane is open at all times. Any necessary police presence shall be the responsibility of Respondent.
3. Respondent shall strive to avoid utility service disruptions to abutters. For any planned, unavoidable utility shutdowns that could affect abutters, Respondent shall coordinate with EPA, the City's Department of Public Infrastructure and the abutters at least 7 calendar days prior to the shutdown. Should Respondent inadvertently disrupt any utility service to any abutter, it shall be Respondent's responsibility to immediately repair such damage and restore service at Respondent's cost.
4. **Construction Submittal:** Respondent shall submit a *Utility Decommissioning Plan*. This plan shall describe in detail how Site utilities shall be safely decommissioned prior to the start of demolition activity, and how all specific requirements of this Section III.B. shall be met.

C. Performance Standards.

Air and water quality performance standards shall be complied with at all times during performance of the Work. The performance standards for stormwater runoff are detailed in Section II.B.5. The performance standards for air quality are detailed in Section II.B.6. The performance standards for dust suppression water and T&D vehicle decontamination water are detailed in Section III.E.4.

- D. **Hazardous and Regulated Material Removal and Disposal.** This Section III.D. describes all T&D requirements with respect to all Aerovox Waste Material.
1. Prior to the start of demolition activity, Respondent shall supplement and verify the June 2006 EPA survey ([Reference 3](#)) by performing a full pre-demolition survey of Asbestos-Containing Materials (ACM) as defined by 40 CFR Part 61, Subpart M and 310 CMR 7.00. The survey shall identify ACM inside and outside the building, including the suspended steam line across Hadley Street. The survey will assess whether the ACM is also TSCA-regulated PCB waste, and identify whether the material can be managed during demolition rather than removed in the pre-demolition stage. Based on the results of the survey, Respondent will prepare and implement an *ACM Management Plan*, prepared by a state-licensed asbestos specialist, that will provide for removal, segregation and off-site disposal in accordance with applicable federal and state regulations and policies or, as appropriate to achieve efficient off-site disposal, waivers of applicable authority in accordance with MassDEP Bureau of Waste Prevention policies.
 2. Prior to the start of demolition activity, Respondent shall hire a state-licensed asbestos abatement specialist to certify that ACM has been removed and properly managed in accordance with the *ACM Management Plan*.
 3. A Preliminary Assessment/Site Investigation (PA/SI) report regarding mercury at the Site was issued in 2007. See [Reference 4](#). Spilled mercury and mercury-containing devices were removed from the building and disposed off-site by EPA in 2007 and 2008.

Prior to the start of demolition activity, Respondent shall perform a visual inspection of all areas where mercury levels above 400 ng/m³ were reported in the PA/SI, or where EPA performed cleanup of mercury spills in 2007 and 2008. These PA/SI and spill cleanup areas are indicated in [Attachment 3](#). Any spilled mercury, mercury-containing equipment or mercury-containing material identified in these areas shall be disposed off-site by Respondent in compliance with state and federal regulations and all relevant state and federal policies. In the areas that have wood flooring, subflooring or other adjacent porous material where EPA or Respondent completed mercury removals, Respondent shall evaluate through TCLP testing whether the wood flooring, subflooring or other adjacent porous material is potentially characteristic hazardous waste, and shall segregate any material so identified in stockpiles separate from other debris to allow for further waste characterization and off-site disposal.
 4. Prior to the start of demolition activity, all fluorescent light tubes and ballasts shall be removed, containerized and disposed or recycled off-site in compliance with state and federal regulations and all relevant state and federal policies.

5. Prior to the start of demolition activity, all other controlled, regulated or universal wastes such as, but not limited to, batteries, computer monitors, refrigerants, gas cylinders, fire extinguishers, air conditioning units, electric motors containing PCB oils, electrical transformers containing PCB oils, solvents, oils (including any PCB oils remaining in facility piping) and fuels shall be removed and disposed off-site in compliance with state and federal regulations and all relevant state and federal policies.
6. Prior to the start of demolition activity, all dense areas of pigeon guano and other biological wastes shall be removed and disposed off-site in compliance with state and federal regulations and all relevant state and federal policies.
7. **Construction Submittal:** Respondent shall submit a *Hazardous Material Removal and Disposal Plan*. This plan shall describe how Respondent will comply with Section III.D., including compliance with all applicable state and federal regulations and all relevant state and federal policies.

E. Material Removal, Demolition, Debris Processing and Loading for Off-Site Disposal.

1. Except as noted herein, and in accordance with federal and state regulations and all relevant state and federal policies, all buildings, structures, utility poles and cables, equipment, material and debris on the Site and in the building (except the Aerovox Waste Materials removed and disposed prior to building demolition in accordance with Section III.D.) shall be demolished, processed as necessary, and loaded on to transport vehicles (provided by the City's T&D contractor) for off-site disposal. For the purposes of this SOW, all of this material and equipment is considered TSCA regulated material, and will be disposed (by the City's T&D contractor), with certain exceptions noted in Sections III.E.12. and III.E.13. below, as TSCA waste. Notwithstanding the foregoing, all waste material whose T&D is governed by this Section III.E. shall be considered "City Waste Material," regardless of whether, in the course of demolition, it is characterized as TSCA or non-TSCA debris or waste.

The basement/first floor concrete floor slab and concrete walls (the building foundation) shall remain in place, except as noted below in Section III.F.2.

Demolition activities may not begin until EPA provides written confirmation that Respondent has successfully implemented and completed the Work described in the approved *Hazardous Material Removal and Disposal Plan*.

2. Respondent shall obtain a demolition permit from the City prior to implementing the Work described in this Section III.E.
3. Demolition, processing and loading shall be performed safely and in a controlled manner to maintain compliance with this SOW, especially with regard to dust generation, and air and water quality performance standards.

4. Performance Standard. Dust suppression water collected in accordance with Section III.E.5., and T&D vehicle decontamination water collected in accordance with Section III.E.8., unless recycled and reused on-site, shall be discharged by Respondent to the Acushnet River or the City sewer on Belleville Avenue, provided that the maximum PCB concentration is less than or equal to 13 ug/l (ppb) and 5 ug/l (ppb) respectively. The collected dust suppression and truck decontamination water shall be treated by Respondent as necessary to comply with these standards. Respondent shall secure and fully comply with a discharge permit from the City for this discharge, including the required monitoring frequency.

The point of compliance for collected dust suppression water and truck decontamination water shall be prior to discharge to the Acushnet River or the City sewer on Belleville Avenue.

5. Dust suppression activities shall be implemented by Respondent at all times during demolition, processing and loading activities as needed to maintain the air quality performance standards listed above in Sections II.B.6. and III.C. Any violation of any such air quality standard shall be cause for cessation of Work and implementation of corrective actions to mitigate the airborne release before continuing. Corrective actions shall be proposed, and upon EPA approval, fully implemented. Restart after such a stop-work shall only commence following EPA approval.
- a. At a minimum, dust suppression activities shall include application of dust suppression water from the water misting equipment, supplemented as necessary from other sources, in sufficient quantities to achieve compliance with the Work-specific air quality performance standards. Other dust suppression methods may also be applied as necessary to achieve compliance with the Work-specific air quality performance standards, including, but not limited to: application of foam to building materials prior to demolition, especially in heavily contaminated areas of the building such as the pump and impregnation rooms, and use of mist cannons along the Site's northern and western perimeter to aid in minimizing fugitive dust emissions.
 - b. All dust suppression water run off exterior to the building footprint will be collected, treated if necessary, and discharged by Respondent to the Acushnet River or the City sewer on Belleville Avenue to the extent necessary to remain in compliance with Section III.E.4.
 - c. Prior to implementation of dust suppression activities, runoff control measures will be implemented by Respondent to prevent off-site migration of dust suppression water. Such runoff control measures may be part of or in addition to the stormwater control measures provided in the *SWMMP*.
6. All demolition debris, including all remaining interior and exterior equipment and materials not handled in accordance with Section III.D. shall be processed by Respondent as necessary to meet T&D requirements. All such processing operations including

crushing, cutting, shredding, grinding, compacting, and sorting, for all waste streams shall be accomplished at locations and with sufficient controls to minimize the release of dust and airborne PCBs. Demolition debris processing that is performed outside of an enclosed building space shall be accompanied by location-specific downwind air monitoring for airborne particulates (PM₁₀). The location, scope and corrective action for the processing location air monitoring will be defined initially in the *AQMP*, and modified as necessary in the demolition phase submittals.

The minimum and maximum vehicle weight and other T&D-related requirements will be specified through discussions between Respondent, the City and its T&D contractor, in a timely fashion to meet the schedule needs of the *Debris Processing and Loading Plan* (see Sections III.E.8. and III.E.14.b. below).

7. All stockpiles will be covered by Respondent, except unfinished stockpiles shall be covered to the maximum extent possible with only the working face of the stockpile left uncovered. At the end of the workday, any unfinished stockpiles shall be completely covered.

All stockpiles shall be situated on the asphalt parking lot or elsewhere as approved by EPA. In accordance with Section II.B.5.f., hay bales or other erosion control devices and oil booms as necessary shall be placed around all stockpiles.

During weekends and overnight, the open face(s) of the building demolition shall be managed to ensure compliance with air quality performance standards, and to minimize potential impacts to stormwater, until the next work day.

8. All processed demolition debris shall be loaded by Respondent on to vehicles provided by the T&D contractor in such a way as to maximize transportation efficiency and minimize T&D costs. Loaded vehicles shall be washed and decontaminated by Respondent on-site as necessary to remove all Work-related dust and debris prior to leaving the Site. Wash water from the vehicle decontamination process shall be collected, treated as necessary, and discharged to the City sewer in compliance with the sewer pretreatment standard of 5 ug/l total PCBs.
9. Respondent shall coordinate with the T&D contractor to allow for the siting of a truck scale (provided by others) within the vicinity of the vehicle decontamination area.
10. Existing Site groundwater monitoring wells shall be preserved or replaced if damaged to the extent such wells are needed to complete site assessment activities under the MCP. Access to the wells shall be preserved to allow groundwater monitoring to occur. Monitoring wells needed to complete site assessment activities under the MCP must be left in an operable, working condition at completion of the Work.
11. Respondent shall coordinate with the Acushnet Company (Titleist) regarding the safe removal of the suspended steam line and associated appurtenances between the Site and

Titleist. Said steam line shall then be processed and loaded for off-site disposal pursuant to this Section III.E. after proper removal of ACM.

12. Based on previous building sampling, certain demolition debris may not require disposal at a TSCA facility. Such debris may include, but not necessarily be limited to, steel beams, steel shelving, wood columns, wood beams, copper pipe (except that from the pump and impregnation rooms), office paper, and granite window sills. In addition, the office furniture, paper, and other interior materials from the office annex area are likely to be non-TSCA.

Respondent shall process the potentially non-TSCA debris in such a way that minimizes the potential for cross-contamination from the processing equipment, including decontamination of the loading bucket when moving from TSCA to non-TSCA material. Respondent shall create separate stockpiles, or directly load separate T&D vehicles, for the potentially non-TSCA waste, and for any other non-TSCA debris as discussed with the T&D contractor. Such stockpiles shall be segregated by material type to avoid cross-contamination, and be covered with tarps to further avoid cross-contamination from dust.

Non-TSCA debris may also include:

- Specific non-porous materials identified by Respondent that are eligible for non-TSCA disposal or may be eligible after proper surface cleaning, provided EPA approves in advance the management of such material as non-TSCA, shall be recycled or disposed at a licensed construction and demolition debris disposal facility.
- Bulk quantities of brick that are eligible for non-TSCA disposal, provided EPA approves in advance the management of such material as non-TSCA, shall be disposed at a licensed construction and demolition debris disposal facility.

13. Based on previous building sampling, the following Site structures can be disposed as non-TSCA waste, and shall therefore be the first structures to demolished by Respondent, processed as necessary and loaded on to T&D vehicles. This non-TSCA demolition, processing and loading shall be fully completed before any TSCA demolition begins. Any required processing of this non-TSCA material shall be performed in such a way as to minimize cross-contamination with TSCA material. Any stockpiling of this non-TSCA material shall be separate from other Work-related debris. The non-TSCA structures identified to date, which shall be demolished, processed and loaded prior to demolition of other structures, are:
 - the one-story office annex building (western-most portion of building);
 - the guard shack and flagpole at the corner of Hadley St. and Belleville Ave., and
 - the pump house in the south-central portion of the parking lot (Respondent must first remove all interior motors, pumps and other appurtenances).

Furthermore, the steel and wood beams from the office annex area shall be stockpiled by Respondent separately from all other Work-related debris.

Note that certain floor tiles and roofing material in the office annex may contain asbestos and require removal in accordance with Section III.D.1. and 2. prior to demolition.

The demolition of the office annex shall be performed such that the abutting western wall of the two-story, sawtooth roof building section shall remain intact and structurally sound. All doorways and other openings in this western wall of the two-story building section that become exterior openings upon the removal of the office annex shall be fully boarded or cement-blocked in order to prevent the escape of dust during subsequent demolition activities. Once the office annex is demolished, the annex's basement shall be backfilled, and a fence screen along the western wall shall be erected.

14. **Construction Submittals:** Respondent shall submit the following Plans:

- a. *Building Demolition Plan.* This plan shall describe the overall approach and means and methods to be employed to safely and in a controlled manner demolish the building and all structures on the Site. All demolition-related components such as removal of interior and exterior materials, building demolition sequence, demolition and demisting equipment to be used, collection and management of dust suppression and truck decontamination water, as well as all other requirements of this section, shall be described.
- b. *Debris Processing and Loading Plan.* This plan shall describe the means and methods for processing all demolition debris, for loading this debris on to T&D vehicles, and for decontaminating the loaded vehicles before leaving the Site. This plan shall include the location and type of any temporary structures used for debris processing in accordance with Section III.E.6., and describe if and how the existing building will be used for debris processing and loading. It shall also identify the location of temporary stockpiles of processed debris, the location of the T&D vehicle loading and decontamination area, a description of how the vehicle decontamination area will be constructed, and the area reserved for a truck scale in accordance with Section III.E.9. above.

F. Basement Backfilling.

1. Respondent shall place clean backfill into the basement hole created by the building demolition. This backfill shall meet or exceed the S-1 chemical criteria of the MCP at 310 CMR 40.0975, and be structurally suitable for supporting, at a minimum, parking lot loads. This backfill shall also meet the Massachusetts Highway Department's specifications for Gravel Borrow (M1.03.0), Type A, modified as follows:

Gravel Borrow shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings, and deleterious material. Gradation requirements for gravel shall be determined by AASHTO T 11 and T 27 and shall perform to the following:

Sieve Designation	Percent Passing
12.5 mm	50 - 85
4.75 mm	0 - 75
300 um	8 - 28
75 um	0 - 10

Maximum size of stone in gravel shall be 150 mm in the largest dimension. The use of Processed Glass Aggregate meeting the requirements of M2.01.8 may be homogeneously blended with the processed gravel up to an addition rate of 10% by mass. The resulting blend will meet the physical requirements specified above.

Respondent may propose alternate structural fill material that differs from the Gravel Borrow standard described above, and utilize this alternate material with prior approval from EPA, provided that this alternate material meets or exceeds the S-1 chemical criteria of the MCP at 310 CMR 40.0975 and is suitable for supporting parking lot loads.

Respondent shall fully implement the compaction requirements of the *Basement Backfill Plan* prepared in accordance with Section III.F.3.

The clean fill shall be graded and contoured as necessary to provide positive site drainage. Drainage shall be designed to avoid adverse impacts on abutters and on the Harbor.

2. Respondent may, at its election, propose in a Work submittal to cut or otherwise remove sections of the concrete foundation wall where it extends above the abutting ground elevation to reduce the amount of backfill required and provide for an even final ground surface. If this concrete removal is approved and implemented, aggressive dust suppression measures must be implemented during the concrete removal operation to maintain compliance with the Work-specific air quality performance standards. Any removed sections of concrete wall shall be disposed within the basement footprint and not processed and loaded for off-site disposal.

Respondent may, with EPA approval, coordinate backfilling of the foundation with site assessment activities under the MCP to allow the option for assessment prior to backfilling; however, such backfilling shall occur within 12 months of completion of the building demolition.

3. **Construction Submittal:** Respondent shall submit a *Basement Backfill Plan*. This plan shall provide the source(s) of the backfill material, documentation that it meets or exceeds the referenced S-1 criteria as well as the Gravel Borrow criteria. This plan shall also address any proposed cutting of above-grade concrete wall sections, and any associated dust suppression measures. In addition, this plan shall include (1) a certification from a licensed civil or geotechnical engineer that the proposed backfill is

suitable, at a minimum, for supporting parking lot loads; and (2) the compaction requirements that such certification is based upon.

G. Filling of Subsurface Features.

1. Subsurface abandoned sanitary sewer pipes, tanks, chambers or sumps, or other similar subsurface features shall be completely filled with flowable fill to prevent stormwater or groundwater infiltration into such subsurface features. With EPA approval, Respondent may choose to leave unfilled catch basins, storm drains and similar utility related subsurface features where such structures are necessary to maintain post-demolition stormwater controls or, in coordination with the City, where appropriate and advantageous to support future Site reuse consistent with the intentions of the City.
2. **Construction Submittal:** Respondent shall submit a *Subsurface Filling Plan*. This plan shall identify all subsurface catch basins, storm drains, sewer pipes, tanks, chambers or sumps, or other similar subsurface features that are to be left unfilled and those to be filled as well as the type of flowable fill to be used, equipment and overall means and methods to be employed.

H. Placement of Cap.

Except as provided in Section III.F.2. (second paragraph), once Site buildings and structures have been demolished and subsurface features filled, Respondent shall:

1. Cover the backfilled building footprint with an asphalt cap within 12 months of completing the building demolition;
2. Repair cracks, depressions, holes or other damage to the existing HAC cap. Based on field inspections of such repairs or additional repairs, EPA will either approve the repairs in writing or require Respondent to perform additional repairs. EPA will provide field markings if additional repairs are required. When repairing the HAC cap, material similar to the existing HAC material shall be used; and
3. Cover any other portion of the Site where soil or asphalt PCB levels exceed 2 ppm (at surface or depth) with an asphalt cap that includes, at a minimum, the following:
 - Placement of a visual barrier layer (e.g., warning tape, orange snow fence) on existing (or reconditioned) grade;
 - Placement of a 2-inch thick asphalt binder coarse; and
 - Placement of a 1-inch thick asphalt wearing coarse.

In areas where the existing ground conditions are unsuitable to support a new asphalt cap, the existing ground surface will be reconditioned or engineered as appropriate to support such a cap.

Notwithstanding the foregoing requirements in this Section III.H., for the portions of Hadley and Graham Streets that are part of the Site, the existing asphalt surface shall suffice in lieu of the above asphalt cap requirements, provided that an EPA-approved representative sampling program demonstrates that the PCB levels in these existing surfaces are below 2 ppm.

4. All capped areas in this Sections III.H. shall be maintained in accordance with an EPA-approved monitoring and maintenance plan until a 21E-based monitoring and maintenance program, consistent with the TSCA Determination (included in Appendix A to the AOC), is in place. Respondent shall submit such plan within 30 days of completing the field portion of the activities required by this Section III.H.
5. **Construction Submittal:** Respondent shall submit a *Grading, Capping and Drainage Plan*. This plan shall provide:
 - the proposed specifications for asphalt cap installation and HAC cap repair;
 - the proposed sequencing, equipment and means and methods to install the asphalt cap and to repair the HAC cap; and
 - the proposed surface drainage and stormwater management design.

I. Groundwater Monitoring.

1. Beginning in 2010, Respondent shall perform groundwater monitoring on an annual basis in accordance with the current EPA groundwater monitoring strategy during performance of the Work under this SOW and until Phase II Comprehensive Site Assessment activities are initiated under the 21E program.
2. Upon completion of the 21E response actions, a long-term operation and maintenance program for groundwater, consistent with the TSCA Determination (included in Appendix A to the AOC), will be implemented.

J. Project Oversight.

1. Respondent shall attend an on-Site pre-construction walk through with EPA and its representatives prior to Site mobilization.
2. Respondent shall attend weekly construction meetings with EPA and its representatives and provide Work-related information requested by EPA at these meetings.
3. In addition to the weekly construction meetings, Respondent shall attend other meetings requested by EPA involving air monitoring, stormwater, project safety or T&D coordination.
4. Respondent shall allow EPA and its representatives to observe all aspects of the Work.

5. Respondent shall attend a pre-Final Report inspection with EPA and its representatives to identify unresolved issues that need to be addressed prior to submittal of the draft Final Report.
6. Representatives of MassDEP and the City are welcome to participate in any of the activities described in this Section III.J.

K. Final Report.

1. Respondent shall prepare and submit a Final Report in accordance with Paragraph 69 of the AOC.
2. Included within the Final Report Respondent shall submit an as-built survey showing the condition of the Site at completion of Work, including, but not necessarily limited to, the following:
 - a topographical survey showing final as-built surface grades throughout the perimeter and interior of the Site;
 - the location of the building foundation left in place;
 - the locations of the HAC cap and all sheet pile walls;
 - the locations of all other asphalt capped areas installed pursuant to Section III.H.3. above;
 - the locations of all groundwater wells, including the vertical elevation of all top-of-casings;
 - the location of all operating subsurface features left in place such as catch basins, storm drains and similar utility related subsurface features retained to provide post-demolition stormwater management;
 - the locations of all live “Community Mains” and associated fire hydrants in or adjacent to the Site (see Reference 2 for existing location for such water mains); and
 - any other significant Site features including, but not limited to, drainage swales, fencing left in place, abutting streets and alleys, sidewalks, street trees.

L. Post-Removal Site Control.

1. Upon completion of the Work, response actions at the Site will be implemented and completed in compliance with the MCP in coordination with the MassDEP and under the direction of an LSP.
2. The monitoring and maintenance programs prepared in accordance with Sections III.H. and III.I. of this SOW will be implemented.
3. Upon the completion of the 21E response actions, Respondent shall implement or cause to be implemented, pursuant to the agreement between Respondent and the City, deed

restrictions and an Activity and Use Limitation, in order to regulate the future use of the Site, including the groundwater thereunder, each of which will include terms consistent with the TSCA Determination (included in Appendix A to the AOC).

M. Attachments.

1. Construction Submittal Register.
2. 2006 SEE/CA Figure 3 – Area covered with HAC cap.
3. Figures displaying areas of mercury spills where EPA-commissioned cleanups occurred in 2007 and 2008.

N. References.

1. ENSR, 2006. Aerovox Facility – Conceptual Site Model.
2. Utility Location Survey and Records Search, Jacobs Engineering (8/13/07).
3. Aerovox Asbestos and Lead-Based Paint Survey (June 2006).
4. Preliminary Assessment/Site Investigation Report for the Aerovox Site (November 2007).

SCOPE OF WORK – AEROVOX FACILITY – NTCRA

Attachment 1

Construction Submittal Register

Project Submittal	SOW §	SOW Deadline	Due Date (Respondent to complete)
Project Plans			
1. Health & Safety Plan (including Emergency Response Plan)	II.B.1.	45 days from AOC Effective Date	
2. Field Sampling Plan	II.B.2.	45 days from AOC Effective Date	
3. Quality Assurance Project Plan	II.B.3.	45 days from AOC Effective Date	
4. ARARS Implementation Plan	II.B.4.	45 days from AOC Effective Date	
5. Stormwater Management and Monitoring Plan	II.B.5.	45 days from AOC Effective Date	
6. Air Quality Management and Monitoring Plan	II.B.6.	45 days from AOC Effective Date	
Construction Plans			
1. Site Management and Security Plan	III.A.12.	60 days prior to Work Schedule start date for Work element III.A.	
2. Utility Decommissioning Plan	III.B.4.	60 days prior to Work Schedule start date for Work element III.B.	
3. Hazardous Material Removal & Disposal Plan	III.D.7.	60 days prior to Work Schedule start date for Work element III.D.	
4. Building Demolition Plan	III.E.14.a.	60 days prior to Work Schedule start date for Work element III.E.	
5. Debris Processing and Loading Plan	III.E.14.b.	60 days prior to Work Schedule start date for Work element III.E.	
6. Basement Backfill Plan	III.F.3.	60 days prior to Work Schedule start date for Work element III.F.	
7. Subsurface Filling Plan	III.G.2.	60 days prior to Work Schedule start date for Work element III.G.	
8. Grading, Capping and Drainage Plan	III.H.5.	60 days prior to Work Schedule start date for Work element III.H.	

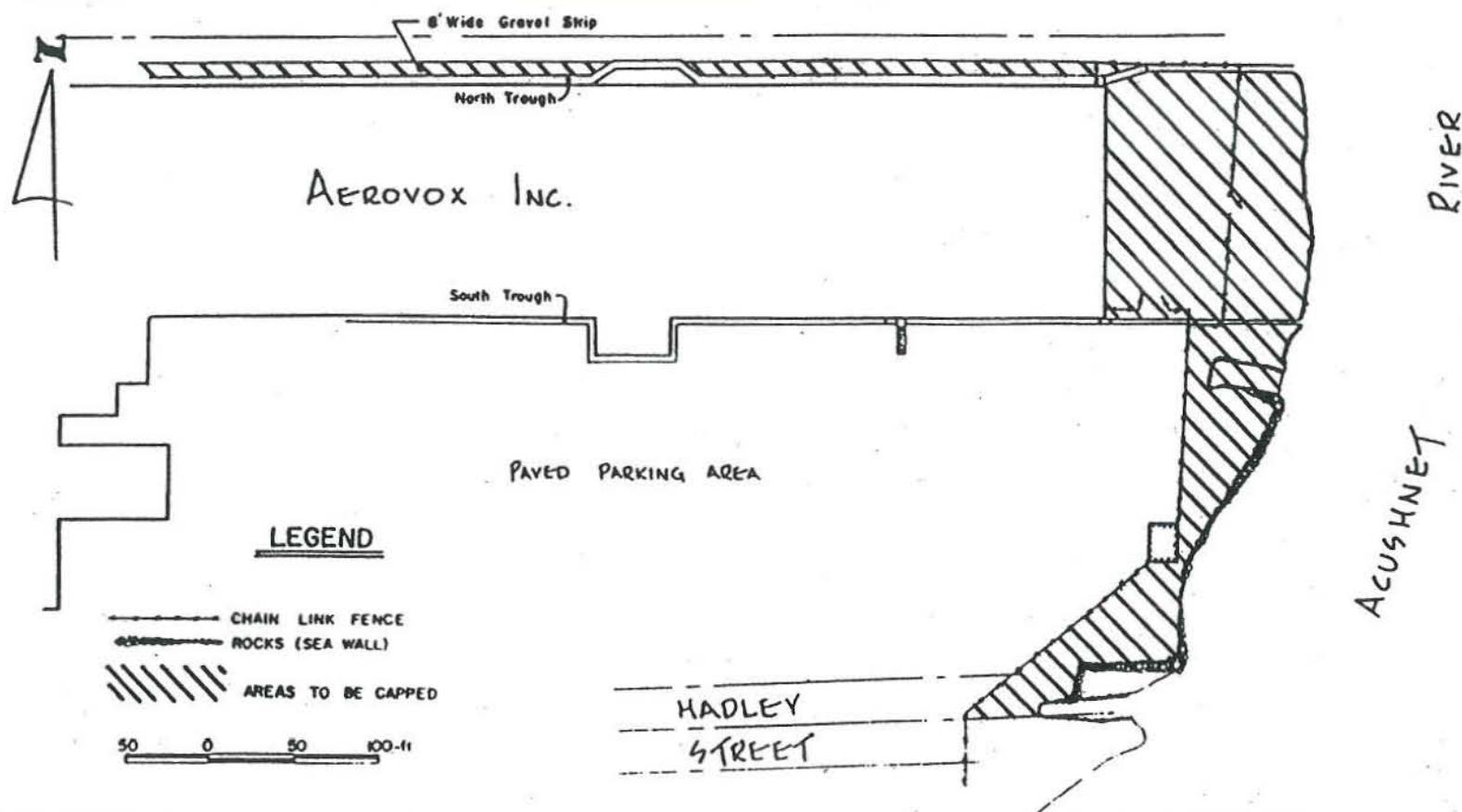
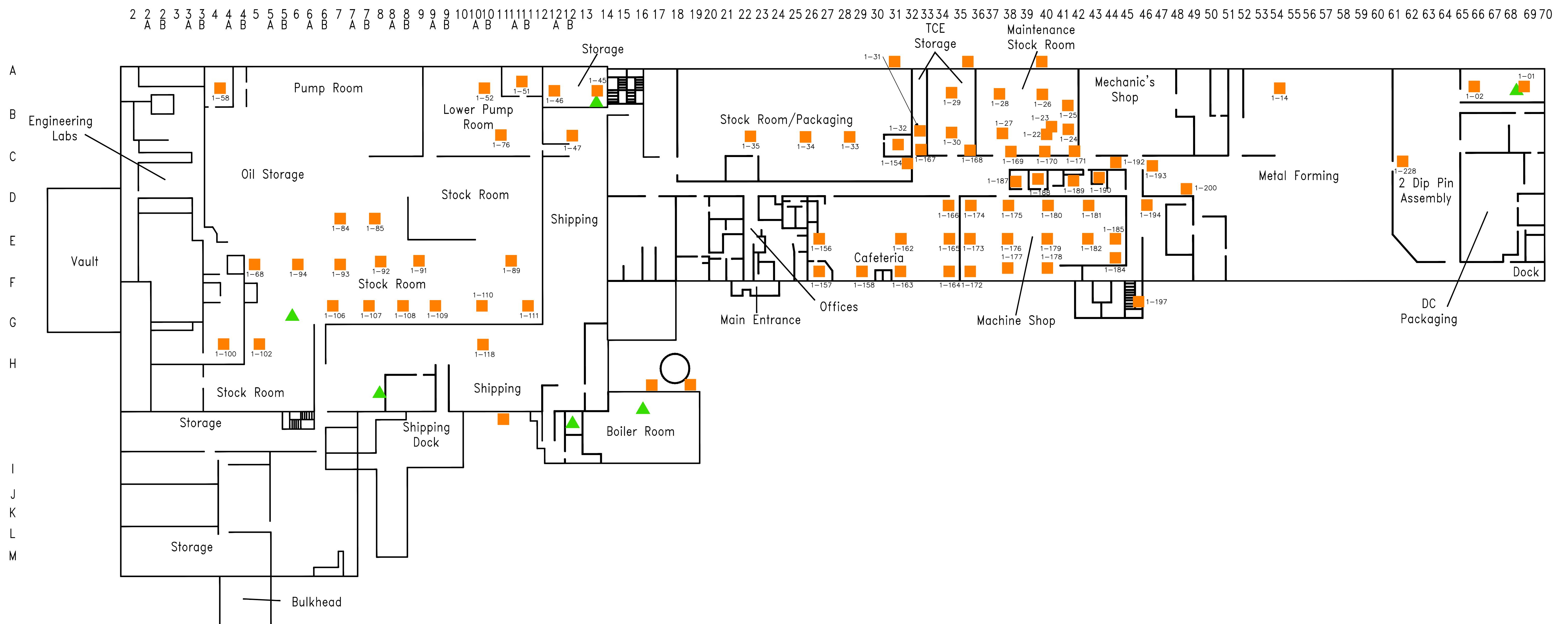


Figure 3 - Area of the Aerovox site covered with the hydraulic asphalt concrete (HAC) cap

Source: Gushue and Cummings, 1985

Vacant Aerovox Plant Supplemental EE/CA, April 2006



LEGEND

- 1-197 Mercury Screening Location ID Number

 Mercury Screening Value > 400 nanograms/cubic meter (ng/m³)

 USACE Mercury Spill/Waste cleanup location

Notes

1. Reference is made to the following sources:
 - A. General Locations of Collected Mercury Device Plans, Jacobs Engineering dated April 2008.
 - B. Mercury Screening Location Plans, Weston Solutions, dated August 2008.

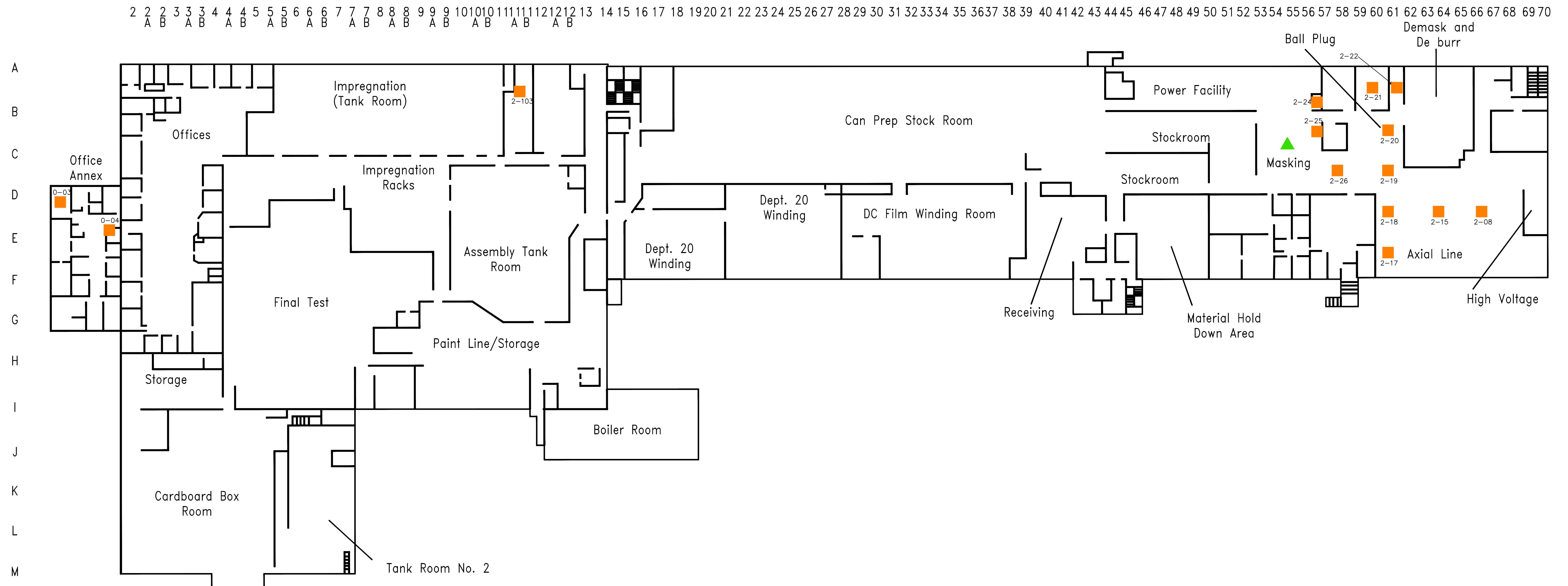


URS Corporation
5 Industrial Way
Salem, NH 03079-2830
Tel: 603.893.0616
Fax: 603.893.6240
www.urscorp.com

DWG TITLE:
First Floor and Exterior Building
Aerovox
740 Belleville Avenue
New Bedford, MA

Sheet 1 of 3
Attachment #:

3



LEGEND

2-17 Mercury Screening Location ID Number

■ Mercury Screening Value \geq 400 nanograms/cubic meter (ng/m^3)

USACE Mercury Spill/Waste cleanup location

Note

- Notes

 1. Reference is made to the following sources:
 - A. General Locations of Collected Mercury Device Plans, Jacobs Engineering dated April 2008.
 - B. Mercury Screening Location Plans, Weston Solutions, dated August 2008.



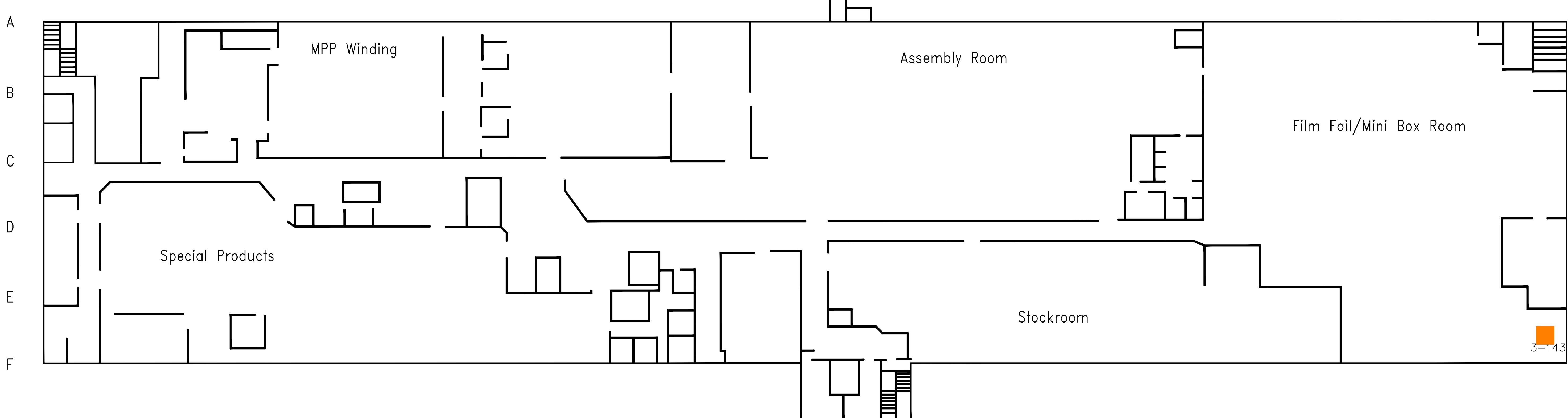
5 URS Corporation
5 Industrial Way
Salem, NH 03079-2830
Tel: 603.893.0616
Fax: 603.893.6240
www.urscorp.com

DWG TITLE: Second Floor
Aerovox
740 Belleville Avenue
New Bedford, MA

Sheet 2 of 3
Attachment #:

3

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70



Notes:

- Reference is made to the following sources:
 - General Locations of Collected Mercury Device Plans, Jacobs Engineering, dated April 2008.
 - Mercury Screening Location Plans, Weston Solutions, dated August 2007.



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5 Industrial Way
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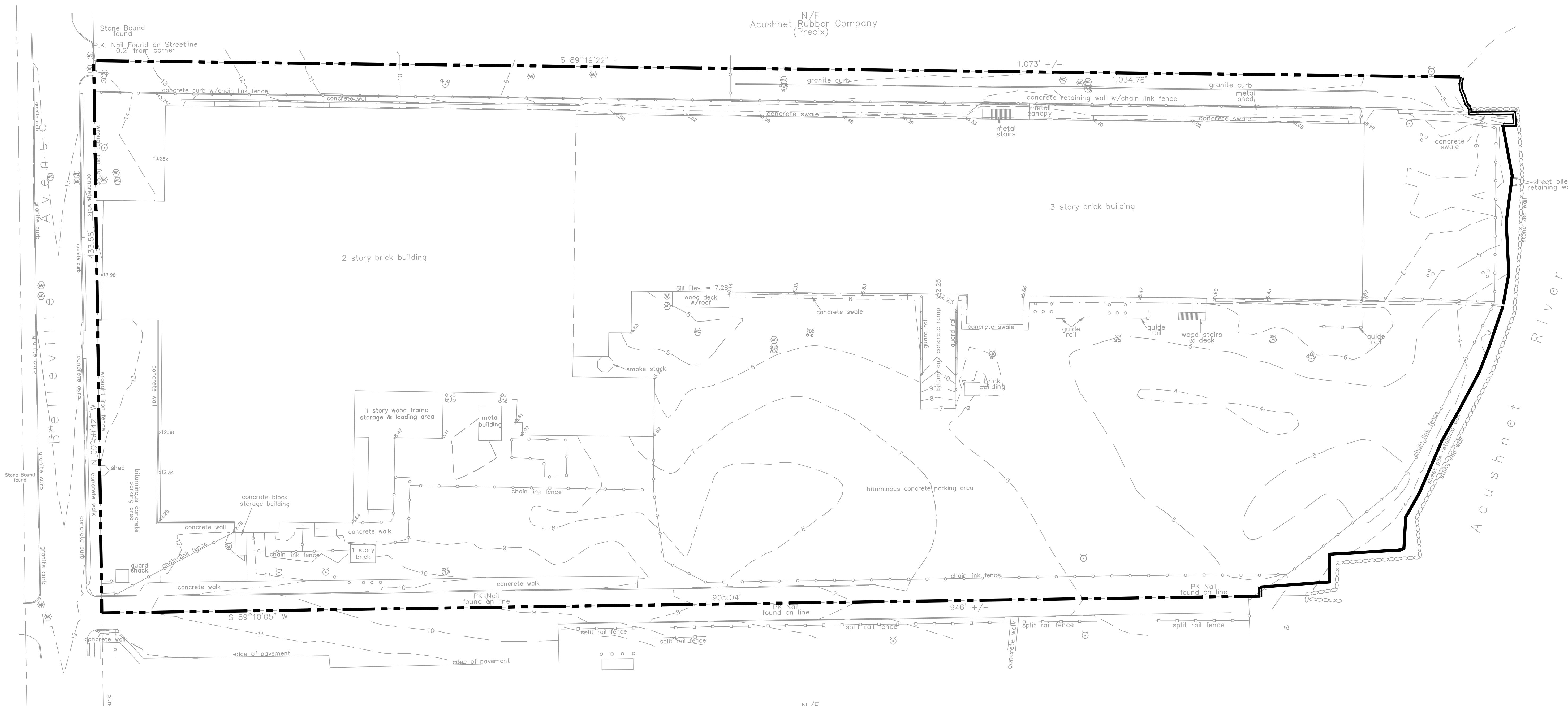
DWG TITLE: Third Floor
AeroVox
740 Belleville Avenue
New Bedford, MA

SCALE: NTS DATE: 05/22/09

Sheet 3 of 3
Attachment #: 3

Appendix C

Site Map



N/F
Acushnet Compan
(Titleist)

- Notes:

 1. Bearings as depicted hereon are based upon the maps referenced in note 2.
 2. Reference is made to the following maps:
 - A. Plan of Land in New Bedford, Tibbatts Engineering Corp., Surveyors, dated March 20, 1964 and revised March 22, 1968, Sheets 1-4, Land Court NO. 33314A.
 - B. Plan of Land in New Bedford, Tibbatts Engineering Corp., Surveyors, scale 1"=120', dated June 14, 1976 and revised December 26, 1990, Sheets 1 and 2 of 2, Land Court No. 39434A.
 - C. Plan Showing 15 Foot Wide Utility Easement Over Land Court Lot 17164A of Aerovox Corp. in New Bedford, Mass., Surveyed for Acushnet Process Company, scale 1"=50, dated February 14, 1968, prepared by Tibbatts Engineering Corp., New Bedford, Mass., Land Court Document No. 27932.
 3. Property is subject to a 15' Utility Easement in Favor of the Acushnet Process Company as recorded in Land Court Document No. 27932.
 4. Property is subject to rights in favor of the Acushnet Company to use the northerly half of Way as recorded in Book 91 Page 315.
 5. Elevations as depicted hereon are based upon the National Geodetic Vertical Datum of 1929, holding RM 2 with a published elevation of 17.063 feet as depicted on Flood Insurance Rate Map, City of New Bedford, Massachusetts, Bristol County, Panel 7 of 15, Community Panel Number 255216 0007 B, with a revision date of January 5, 1984.



DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS
FILE: NBH-AI-C101

DECEMBER 2009

AEROVOX SITE MAP

NEW BEDFORD, MASSACHUSETTS

APPENDIX C

LEGEND	
SITE FEATURES	
	WATER GATE/VALVE
	FIRE HYDRANT
	CHAIN LINK FENCE
SITE BOUNDARIES	
	PROPERTY LINE
	SHEET PILE
	STONE WALL
	NE & SE CORNER SITE BOUNDARY LINE

Appendix D

Form of Escrow Agreement

Administrative Settlement Agreement and Order on Consent for NTCRA

APPENDIX D

[SUBJECT TO REVIEW BY COUNSEL FOR ESCROW AGENT]

ESCROW AGREEMENT AEROVOX ESCROW FUND

This Escrow Agreement (this "Agreement") is made as of the _____ day of _____, 2012, by and among AVX Corporation, a corporation organized under the laws of the State of Delaware ("AVX"), the City of New Bedford, a municipal corporation organized under the laws of the Commonwealth of Massachusetts (the "City"), and _____, a national association (the "Escrow Agent").

WHEREAS, AVX has entered into an agreement with the United States Environmental Protection Agency ("EPA") entitled *Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action* (the "EPA Agreement"), a copy of which is attached hereto as Exhibit A, to perform a portion of the non-time critical removal action ("NTCRA") at the former Aerovox facility at 740 Belleville Avenue, New Bedford, Massachusetts (the "Site");

WHEREAS, EPA awarded a *Cooperative Agreement* to the City on September 7, 2006, which was affirmed by the City on September 29, 2006 and amended by agreement of the parties on September 29, 2009 (as amended, the "Cooperative Agreement"), pursuant to which the City is to undertake a portion of the NTCRA using funds made available to the City through the Cooperative Agreement;

WHEREAS, to facilitate their performance of certain obligations with respect to the Site, including those under M.G.L. c. 21E, AVX and the City entered into a *Cooperation and Settlement Agreement* among themselves dated as of _____, 2010 (the "Settlement Agreement"), a copy of which is attached hereto as Exhibit B;

WHEREAS, funds made available to the City through the Cooperative Agreement may only be used by the City, and not by any successor(s) in title, to pay for NTCRA Activities (as hereinafter defined), and may not be used to finance any obligations assumed by the City or the City's successor(s) in title pursuant to the Settlement Agreement with respect to activities related exclusively to obligations under M.G.L. c. 21E;

WHEREAS, within twenty (20) days after completing all the Work (as defined in the EPA Agreement), other than any continuing obligation under the EPA Agreement, AVX is required to establish the Aerovox Escrow Fund (as defined in the EPA Agreement);

WHEREAS, pursuant to Paragraph 86 of the EPA Agreement, AVX is required, among other obligations, to make certain payments to the Aerovox Escrow Fund to be used to pay for

post-removal site control measures described in Paragraph 67 of the EPA Agreement (“NTCRA Activities”);

WHEREAS, pursuant to Paragraph V.H. of the Settlement Agreement, AVX is required, among other obligations, to make one or more payments to the Aerovox Escrow Fund for long-term operation and maintenance and monitoring obligations pursuant to M.G.L. c. 21E (“21E Activities”);

WHEREAS, pursuant to the Settlement Agreement, the City is required, among other obligations, to deposit the unspent portion, if any, of the Site Security Funds (as defined in the Settlement Agreement) in the Aerovox Escrow Fund; and

WHEREAS, AVX and the City desire to appoint and the Escrow Agent desires to act as escrow agent with respect to the Aerovox Escrow Fund;

NOW, THEREFORE, the parties hereby agree as follows:

1. Purpose. The Aerovox Escrow Fund (the “Escrow Fund”) is established for the purpose of holding, managing, investing, reinvesting and disbursing the monies contributed to the Escrow Fund for the exclusive purposes of paying for the NTCRA Activities and the 21E Activities (hereinafter referred to collectively as the “City’s Maintenance Obligations”) and the expenses of administering the Escrow Fund. The Escrow Fund shall be held, invested, reinvested, managed, administered and distributed by the Escrow Agent, subject to the terms and conditions hereof.

2. Contributions. The Escrow Agent shall accept all payments tendered to it by AVX and the City in accordance with the terms of the EPA Agreement and the Settlement Agreement, or from any third party, so long as the payment is accompanied by a reference specifying the Escrow Fund, the identity of the person on whose behalf payment is made (the “contributor”), and the amount paid by such contributor. Within five (5) business days after receipt of a payment to the Escrow Fund, the Escrow Agent shall provide to the City and AVX written notice of the payment stating the identity of the contributor(s) and the amount so paid by such contributor. This notice requirement applies also to any contribution the Escrow Agent was unable to accept because of a deficiency in the required information; in such case the Escrow Agent will note the deficiency(ies). For purposes of this Agreement, the term “business day” shall mean any day on which the Escrow Agent is open for business at its offices in _____,

3. Distributions. Except as set forth in Paragraph 3.b., the City, and not the City’s successor(s) to all or a portion of the Site, shall be the only party that can submit Distribution Requests to the Escrow Agent.

a. Distribution Request. The City shall be entitled to receive distributions from the Escrow Fund as needed to pay for the costs incurred by the City to perform the City’s Maintenance Obligations. When it becomes entitled to receive a distribution, the City shall submit to the Escrow Agent a written request for such distribution (the “Distribution Request”).

Each Distribution Request shall be in the form attached hereto as Exhibit C, and shall require the City, at a minimum, to certify that:

- i. the Distribution Request seeks payment exclusively for costs and expenses to implement the City's Maintenance Obligations, which activities were performed in full compliance with the terms of the Settlement Agreement, and the City, therefore, is entitled to such distribution;
- ii. the City has attached to the Distribution Request documentation of the costs and expenses covered by the Distribution Request, including but not limited to intra-municipal invoices, as well as invoices submitted to the City by vendors, suppliers and/or third parties who performed any or all of the City's Maintenance Obligations;
- iii. the City has attached to the Distribution Request a Distribution Request Summary, using the form attached hereto as Exhibit D, which form categorizes at a summary level the costs associated with each type of activity, whether a NTCRA Activity or 21E Activity, for which the City seeks payment;
- iv. the City has forwarded to Aerovox Superfund Site Manager, U.S. Environmental Protection Agency, 5 Post Office Square, Suite 100 (OSRR07-4), Boston, MA 02109, a copy of: (A) the Distribution Request and Distribution Request Summary; and (B) any written notice, report or other document the City received or delivered pursuant to Paragraphs 5.d., 5.f., 6.a. or 6.b. of this Agreement since the date of the immediately prior Distribution Request;
- v. there are no remaining funds available under the Cooperative Agreement for NTCRA Activities, or the Distribution Request covers costs incurred by the City for 21E Activities for which funds available under the Cooperative Agreement cannot be used; and
- vi. the City is obligated to pay the vendors, suppliers and/or third parties whose costs are documented in the Distribution Request, and the City will indemnify and hold harmless AVX and the Escrow Agent from any and all claims brought by such vendors, suppliers and/or third parties who fail to receive payment for such costs.

The Distribution Request shall also include specific instructions for the Escrow Agent to follow when making the distribution. Provided the Distribution Request satisfies the above-stated requirements, the Escrow Agent shall make the distribution within four (4) business days after receiving the Distribution Request. The Escrow Agent shall have no obligation to independently verify the truth of any such certifications, statements or documentation.

b. Conveyance by the City.

- i. In the event that the City (A) exhausts all funds under the Cooperative Agreement, (B) conveys or otherwise transfers all of the Site to a single successor who conducts all of the City's Maintenance Obligations, and (C) provides a written certification to the Escrow Agent, simultaneously sending a copy to AVX and to EPA at the address in Paragraph 3.a.iv., certifying that all of the funds under the Cooperative Agreement have been exhausted and the Site has been conveyed or

transferred to a single successor who will conduct all of the City's Maintenance Obligations, then, effective ten (10) days after such certification is delivered, the City's successor named in the certification, and not the City, shall be the only party that can submit Distribution Requests to the Escrow Agent.

ii. For purposes of the preceding sentence, the City shall be deemed to have conveyed or otherwise transferred all of the Site even if the City retains a property interest in a small portion of the Site immediately adjacent to the Acushnet River to construct and maintain a public green space (the "Greenway"); provided, however, that the written certification required by Paragraph 3.b.i.(C) states that in conducting all of the City's Maintenance Obligations, such successor shall conduct all of the City's Maintenance Obligations for the Greenway.

iii. Neither AVX nor the Escrow Agent shall be liable to any party due to the failure of the City, or, if applicable, the City's successor, to properly (A) request that the Escrow Agent distribute funds from the Escrow Fund to any vendors, suppliers or third parties, or (B) redistribute funds received by the City or the City's successor, if applicable, from the Escrow Fund.

4. Investments. The Escrow Agent shall hold or invest the property held in the Escrow Fund and any income earned or accrued with respect thereto from time to time in any bonds, notes or other obligations issued or guaranteed by the United States of America or any agency thereof and backed by the full faith and credit of the United States of America selected by the Escrow Agent in its discretion, which investments shall have such maturities as the City may direct in writing from time to time.

5. Escrow Agent.

a. Fees and Expenses. The Escrow Agent shall receive compensation for its services as an escrow agent under this Agreement in accordance with the fee schedule attached hereto as Exhibit E. The fee schedule shall be binding upon the Escrow Agent, and any change to the fee schedule shall become effective only upon the written approval of the City. The Escrow Agent shall submit to the City a periodic invoice for its fees and expenses hereunder, but such fees and expenses shall be payable from the Escrow Fund.

b. Duties. The duties of the Escrow Agent are only such as are herein specifically provided, and the Escrow Agent shall incur no liability whatever hereunder except for gross negligence, bad faith or the failure to fully perform any of its obligations hereunder. The Escrow Agent shall be under no responsibility with respect to any of the items deposited with it other than to faithfully follow the instructions herein contained. The Escrow Agent is not charged with knowledge of any duties or responsibilities in connection with any other document or agreement. The Escrow Agent may consult with counsel and shall be fully protected in any action taken in good faith in accordance with such advice. AVX and the City agree to assume liability for and to indemnify, protect, save, and hold harmless the Escrow Agent from and against any and all liabilities, obligations, losses, damages, claims, actions, suits, costs, and expenses of whatever kind and nature, including reasonable attorneys' fees, imposed upon, incurred by, or asserted against the Escrow Agent in any way relating to or arising out of this

Agreement, except to the extent of any gross negligence or bad faith on the part of the Escrow Agent or its failure to fully perform any of its obligations hereunder. The Escrow Agent shall not be required to institute legal proceedings of any kind. The Escrow Agent shall be fully protected in acting in accordance with any written notices, directions, or instructions given to it hereunder and believed by it to have been signed by the proper parties.

c. Tax Treatment. The parties intend that this Agreement creates the relationship of principal and agent between AVX and the City, on the one hand, and the Escrow Agent, on the other, and does not create a trust, partnership or association; and the parties agree to so treat this Agreement for all purposes, including, without limitation, for purposes of federal and state income taxation. Accordingly, the City or its successors shall report all income and deductions, and pay any tax, if applicable, with respect to its interest herein.

d. Reports. Promptly following the end of each calendar quarter and calendar year, the Escrow Agent shall deliver to the City reports comprised of: (i) a listing of the assets in the Escrow Fund and the market value thereof at the end of the period covered by the reports; and (ii) a statement of activity listing each transaction involving the Escrow Fund, including but not limited to all distributions indicating the payee and the amount of each distribution, during the period covered by the reports.

e. Document Copy Requests. Promptly following a written request by AVX, a copy of which AVX will have simultaneously sent to the City, the Escrow Agent shall deliver to AVX copies of reports prepared in accordance with Paragraph 5.d. or Distribution Requests submitted in accordance with Paragraph 3.a. of this Agreement.

f. Final Report. Upon the distribution by the Escrow Agent of all amounts in the Escrow Fund, the Escrow Agent shall render a final report in writing to AVX and the City, of all amounts that have been deposited with and distributed by the Escrow Agent in and from the Escrow Fund.

6. Resignation, Removal, Successorship and Accounting.

a. Resignation. The Escrow Agent may resign at any time by giving sixty (60) days prior written notice thereof to AVX and the City. In such event, prior to the expiration of said sixty-day period, the Escrow Agent shall render to AVX and the City a final written report, including (i) the information required by Paragraph 5.d. with respect to the final quarter or portion thereof during which the Escrow Agent held the Escrow Fund, and (ii) a copy of the reports previously prepared and submitted for the entire period during which the Escrow Agent held the Escrow Fund. If AVX and the City approve such report in writing or fail to object in writing to such accounting within forty-five (45) days after the date of receipt of such report, the Escrow Agent shall be released forever from any and all claims or liabilities with respect to any actions or omissions hereunder. Simultaneously with such release, the Escrow Agent shall deliver the property held in the Escrow Fund to its successor designated in writing by AVX and the City. If AVX and the City fail to designate a successor Escrow Agent within such forty-five (45) day period, the Escrow Agent may, with notice to AVX and the City, designate as successor any bank or trust company that has assets in excess of \$500,000,000 and that agrees in writing to

be bound by all of the provisions hereof. If the Escrow Agent is unable to so designate a successor and does not promptly receive written instructions signed by both AVX and the City directing the Escrow Agent to deliver the Escrow Fund to a designated party or parties, then the Escrow Agent may apply to the appropriate court for appointment of a successor.

b. Removal. AVX and the City may remove the Escrow Agent at any time upon written notice signed by both AVX and the City to the Escrow Agent at least ten (10) days prior to the date of removal. On the date of removal (or if such date is not a business day, on the business day next following), the Escrow Agent shall deliver the property held in the Escrow Fund to its successor designated in writing by AVX and the City. Within forty (40) days following such notice of removal, the Escrow Agent shall render to AVX and the City a final written report, including (i) the information required by Paragraph 5.d. with respect to the final quarter or portion thereof during which the Escrow Agent held the Escrow Fund, and (ii) a copy of the reports previously prepared and submitted for the entire period during which the Escrow Agent held the Escrow Fund. If AVX and the City approve such report in writing or fail to object in writing to such report within forty-five (45) days after the date of receipt of such report, the Escrow Agent shall be released forever from any and all claims or liabilities with respect to any actions or omissions hereunder.

c. Objection to Reports; Successors. If AVX or the City object in writing to a report of the Escrow Agent within forty-five days after their receipt of any such report pursuant to Paragraphs 6.a. or 6.b., the Escrow Agent shall not be released hereunder and the parties hereto shall use their best efforts to reconcile their differences. Nothing in this Agreement shall prevent the Escrow Agent from bringing an action to settle its accounts and obtain its release hereunder, in any court of competent jurisdiction; and in such case, the costs and expenses of the Escrow Agent incurred in such action, including its reasonable attorneys' fees, shall be paid by the objecting party or parties if the Escrow Agent prevails. Any successor to the Escrow Agent appointed under any of the methods provided in this Paragraph 6 shall have all of the rights, obligations, and immunities of the Escrow Agent set forth herein and shall agree in writing to be bound by all of the provisions hereof.

7. Disputes Between the Escrow Agent and the City and/or AVX. In the event of any disagreement between the Escrow Agent and the City and/or AVX, the Escrow Agent shall be entitled to continue without liability to hold the Escrow Fund (or any portion thereof in dispute) until all rights of the parties have been resolved or adjudicated by a court having competent jurisdiction. The parties hereby consent and submit to the jurisdiction and venue of the United States District Court for the District of Massachusetts in connection with any litigation between the Escrow Agent and the City and/or AVX arising out of this Agreement.

8. Termination. Except with respect to the provisions of Paragraphs 3.b., 6 and 7 and the certifications contained in each Distribution Request, which shall survive any termination hereof, this Agreement shall terminate upon the distribution of all amounts held in the Escrow Fund pursuant to the terms hereof.

9. Notices. All notices, reports or other communications made hereunder shall be in writing and shall be sent to the party representatives designated below, and shall be deemed delivered when actually delivered at the below street address:

To the City:

City Solicitor
City of New Bedford
Office of the City Solicitor
133 William Street
New Bedford, MA 02740

To AVX:

AVX Corporation
Chief Financial Officer
801 17th Avenue South
P.O. Box 867
Myrtle Beach, SC 29578

with a copy to:

Nutter McCennen & Fish LLP
155 Seaport Boulevard
Boston, MA 02210
Attention: AVX Corporation

To Escrow Agent:

or to such other address as the addressee may hereafter designate by written notice to the other parties.

10. Waivers. No waiver by any party hereto of any condition or of any breach of any provision of this Agreement shall be effective, unless in writing signed by the party waiving compliance.

11. Amendments. This Agreement may not be amended, altered or modified except by a written instrument duly executed by the parties hereto.

12. Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws, but not the laws of conflicts of law, of the Commonwealth of Massachusetts.

13. Headings. The paragraph headings herein are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

14. Entire Agreement. This Agreement constitutes the entire agreement among the parties hereto as to the escrow contemplated hereby and supersedes all prior agreements and understandings relating thereto.

15. Severability. If any term or provision of this Agreement or the application thereof to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby and each term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by law.

16. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

17. Successors and Assigns. AVX may transfer or assign its interest in this Agreement to any successor or assignee, and this Agreement shall be enforceable by, and shall inure to the benefit of and be binding upon, such successor or assignee of AVX. The City may assign or otherwise transfer its interest in this Agreement in the event it transfers or conveys the entire Site to a single successor pursuant to the provisions of Paragraph 3.b.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties enter into this Agreement as a sealed instrument as of the date first above written. Each individual signing this Agreement represents and warrants that he or she has been duly authorized to enter into this Agreement by the party on whose behalf that individual is signing.

Approved as to form only:

CITY OF NEW BEDFORD

By: _____
Name:
Title:

By: _____
Name: Irene B. Schall, Esq.
Title: City Solicitor

AVX CORPORATION

By: _____
Name: Kurt P. Cummings
Title: Vice President, Chief Financial
Officer, Treasurer & Secretary

[ESCROW AGENT]

By: _____
Name:
Title:

EXHIBIT A

**Administrative Settlement Agreement and Order on Consent for
Non-Time Critical Removal Action**

Exhibit B

Cooperation and Settlement Agreement

Exhibit C

Form of Distribution Request

To: _____, national association, Escrow Agent under the Escrow Agreement (the "Agreement") among the City of New Bedford (the "City"), AVX Corporation ("AVX") and the Escrow Agent, dated _____, 2012.

Distribution Request No. _____ This Distribution Request is made pursuant to Paragraph 3.a. of the Agreement. Capitalized terms used herein that are not otherwise defined shall have the meanings ascribed to such terms in the Agreement. The City certifies as follows:

- i. the Distribution Request seeks payment exclusively for costs and expenses to implement the City's Maintenance Obligations, which activities were performed in full compliance with the terms of the Settlement Agreement, and the City, therefore, is entitled to such distribution;
- ii. the City has attached to this Distribution Request documentation of the costs and expenses covered by this Distribution Request, including but not limited to intra-municipal invoices, as well as invoices submitted to the City by vendors, suppliers and/or third parties who performed any or all of the City's Maintenance Obligations;
- iii. the City has attached to this Distribution Request a Distribution Request Summary, in the form attached hereto as Exhibit D, which form categorizes at a summary level the costs associated with each type of activity, whether a NTCRA Activity or 21E Activity, for which the City seeks payment;
- iv. the City has forwarded to Aerovox Superfund Site Manager, U.S. Environmental Protection Agency, 5 Post Office Square, Suite 100 (OSRR07-4), Boston, MA 02109, a copy of: (A) the Distribution Request and Distribution Request Summary; and (B) any written notice, report or other document the City received or delivered pursuant to Paragraphs 5.d., 5.f., 6.a. or 6.b. of this Agreement since the date of the immediately prior Distribution Request;
- v. there are no remaining funds available under the Cooperative Agreement for NTCRA Activities, or the Distribution Request covers costs incurred by the City for 21E Activities for which funds available under the Cooperative Agreement cannot be used; and
- vi. the City is obligated to pay the vendors, suppliers and/or third parties whose costs are documented in this Distribution Request, and the City will indemnify and hold harmless AVX and the Escrow Agent from any and all claims brought by such vendors, suppliers and/or third parties who fail to receive payment for such costs.

Provided this Distribution Request satisfies the above-stated requirements, the Escrow Agent is obligated, pursuant to Paragraph 3.a. of the Agreement, to make this distribution within four (4) business days. The distribution shall be made pursuant to the instructions contained in Schedule A attached hereto.

CITY OF NEW BEDFORD

Date: _____

By: _____
Name: _____
Title: _____

Exhibit D

Form of Distribution Request Summary

NTCRA Activities		
A1	Semi-annual cap inspection	\$ _____
A2	Semi-annual containment barrier inspection	\$ _____
B1	Annual cap inspection	\$ _____
B2	Annual containment barrier inspection	\$ _____
C1	Annual cap maintenance	\$ _____
C2	As needed containment barrier maintenance	\$ _____
D	Cap sealcoat	\$ _____
E	Catch basin clean	\$ _____
F	Annual report	\$ _____
G5	Fifth-year groundwater monitoring	\$ _____
H5	Fifth-year groundwater monitoring report	\$ _____
I	Well redevelopment	\$ _____
<i>subtotal:</i>		\$ _____

21E Activities		
G1	Annual groundwater monitoring (years 1-4)	\$ _____
H1	Annual groundwater monitoring report (years 1-4)	\$ _____
<i>subtotal:</i>		\$ _____

	<i>TOTAL:</i>	\$ _____
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Exhibit E

Escrow Agent Fee Schedule

1899897.1

Exhibit 1

Cooperation and Settlement Agreement

COOPERATION AND SETTLEMENT AGREEMENT

This Cooperation and Settlement Agreement (this "Agreement") is made as of the Effective Date (defined below) by and between the City of New Bedford, a municipal corporation organized under the laws of the Commonwealth of Massachusetts (the "City"), and AVX Corporation, a corporation organized under the laws of Delaware ("AVX"). The City and AVX are referred to herein as the "Parties" or "Party," as dictated by the context.

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EXHIBITS

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Exhibit 5	Precix Agreement (July 1, 1995)
Exhibit 6	City Accounting for \$250,000 Received from Aerovox Bankruptcy
Exhibit 7	Form of <i>Activity and Use Limitation</i>
Exhibit 8	Figure – Clean Utility Corridor
Exhibit 9	Form of <i>Declaration of Agreements Regarding Grant of Groundwater Restriction, Institutional Controls Including Activity and Use Limitation, Grant of Access Easement, and Covenants Not to Sue</i>

WHEREAS, the Aerovox property at 740 Belleville Avenue, New Bedford (the "Property") contains a vacant approximately 450,000 square foot former manufacturing building along with a parking lot located on approximately 10.3 acres of industrially-zoned land;

WHEREAS, beginning during the 1940s and ceasing on or about October 1978, dielectric fluid containing polychlorinated biphenyls ("PCBs") was used in capacitor manufacturing at the Property;

WHEREAS, AVX's predecessor, Aerovox Corporation, owned and operated an electronic component manufacturing business at the Property from 1938 to January 2, 1973;

WHEREAS, on or about January 2, 1973, the Property and the Aerovox name, among other assets, were purchased from Aerovox Corporation by a company named Belleville Industries, Inc., which later changed its name to Aerovox Industries, Inc.;

WHEREAS, Aerovox Industries, Inc. operated the Property from January 1973 to October 1978;

WHEREAS, in October 1978, Aerovox, Inc. ("Aerovox") became the owner and operator of the Property;

WHEREAS, in May 1982, the United States Environmental Protection Agency ("EPA") and Aerovox entered into an administrative order (the "1982 Order") pursuant to Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") which required Aerovox to: (i) conduct an investigation of certain areas of the Property; (ii) assess the relative costs of alternative remedial actions; (iii) recommend a course of action to EPA; and (iv) implement such course of action, subject to EPA approval;

WHEREAS, on June 3, 1982, the Massachusetts Department of Environmental Quality Engineering ("DEQE") and Aerovox executed a Consent Agreement which imposed virtually the same requirements on Aerovox as those in the 1982 Order;

WHEREAS, the investigation performed under the 1982 Order and the Consent Agreement with DEQE revealed that PCBs were present in soil and in shallow groundwater at the Property;

WHEREAS, under the 1982 Order and the Consent Agreement with DEQE, Aerovox installed a hydraulic asphalt concrete cap over a portion of the Property, and installed a steel sheet pile cutoff wall to serve as a vertical barrier to PCB-contaminated groundwater and tidal flow into and out of the PCB-contaminated soils, among other response actions;

WHEREAS, in late 1984, EPA and Aerovox entered into a Supplemental Consent Order pursuant to Section 106 of CERCLA (the "1984 Supplemental Order"), as part of which Aerovox agreed to implement through June 2014 a monitoring and maintenance program for the cap and to take such maintenance measures as were reasonably necessary to maintain the cap and the sheet pile cutoff wall to prevent releases of PCBs;

WHEREAS, in May and June, 1997, EPA inspected the Property for compliance with the Toxics Substances Control Act ("TSCA"), and determined that there had been improper disposal of PCBs;

WHEREAS, in July 1998, EPA issued an Approval Memorandum for the performance of an Engineering Evaluation/Cost Analysis ("EE/CA") at the Property;

WHEREAS, in August 1998, a consultant hired by Aerovox completed the EE/CA, and recommended demolition of the manufacturing building, with a combination of on- and off-site disposal of building material and equipment, followed by capping;

WHEREAS, in October 1998, EPA published a Proposed Plan involving off-site disposal of all City Waste Material (as hereinafter defined), burying the remainder of materials inside the manufacturing building's foundation, and capping the entire Property;

WHEREAS, under an Administrative Order on Consent pursuant to Section 7003 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C. § 6973, which became effective on December 2, 1999 (the "1999 AOC"), Aerovox agreed to pay for and conduct the cleanup of the Property under EPA supervision over an extended period of time;

WHEREAS, an Administrative Consent Order between the Massachusetts Department of Environmental Protection ("MassDEP," successor to DEQE) and Aerovox in connection with the Property became effective on February 3, 2000 (the "2000 ACO");

WHEREAS, pursuant to the 1999 AOC, and with the active assistance of the City, Aerovox relocated to a new manufacturing site by April 2, 2001, leaving behind a substantial amount of contaminated equipment and machinery and combustible materials;

WHEREAS, Aerovox filed a voluntary petition for Chapter 11 bankruptcy on June 6, 2001 in the United States Bankruptcy Court for the District of Massachusetts, *In re New Bedford Capacitor, Inc. (f/k/a Aerovox, Inc.)* (Case No. 01-14680-JNF);

WHEREAS, Aerovox never implemented the response actions required by the 1999 AOC and the 2000 ACO;

WHEREAS, on or about November 15, 2001, EPA filed a proof of claim in the Aerovox bankruptcy to protect its rights with respect to the obligations of Aerovox pursuant to CERCLA, the 1984 Supplemental Order and the 1999 AOC, and on or about November 30, 2002, EPA filed an *Application of the United States for Reimbursement of Administrative Expenses* for recovery of response costs EPA expected to incur to cleanup and perform operation and maintenance measures with respect to PCBs and other Waste Material (as hereinafter defined) disposed of in and around the Property;

WHEREAS, on or about November 15, 2001, the Commonwealth of Massachusetts (the "Commonwealth") filed a proof of claim in the bankruptcy proceeding asserting that Aerovox was required to perform various ongoing activities pursuant to the 2000 ACO, as well

as state and federal law; and on or about November 27, 2002, the Commonwealth filed a *Request for Administrative Expenses of the Commonwealth of Massachusetts*, which reiterated Aerovox's environmental obligations under the 2000 ACO and applicable state and federal law;

WHEREAS, on or about November 27, 2002, the City filed a proof of claim in the bankruptcy proceeding for an administrative priority claim in the amount of \$323,300, in which claim the City represented that such estimated amount reflected a projection of five years of maintenance of the Property;

WHEREAS, on or about September 30, 2003, the Court approved a settlement agreement (the "Bankruptcy Settlement") entered into by Aerovox, EPA, the Commonwealth and the City, among others, with respect to the costs for the cleanup of the Property;

WHEREAS, by the conclusion of the bankruptcy, EPA received a total of \$2,723,385.32 in settlement of its claims, which in accordance with the terms of the Bankruptcy Settlement must be used solely to conduct or finance response actions at the Property;

WHEREAS, under the Bankruptcy Settlement, the City was given continued site access and was designated as first responder for any problems that arose while Aerovox continued to own the Property, and the City received \$250,000 on its administrative claim for the purpose of maintaining the fire suppression system and performing other maintenance and security measures at the Property;

WHEREAS, under the Bankruptcy Settlement, the proceeds, if any, from a sale of the Property to a redeveloper or other entity are to be apportioned among EPA, the Commonwealth and the City in proportion to their unreimbursed expenses incurred in connection with the cleanup of the Property;

WHEREAS, as a result of the Bankruptcy Settlement, after a certain holding period, the Property became the property of 740 Belleville Avenue LLC, which was organized as a Massachusetts limited liability company and whose members are the City and the New Bedford Redevelopment Authority;

WHEREAS, in April 2006, EPA issued a supplement to the 1998 EE/CA (the "SEE/CA") which added two options for building demolition activities to be performed as part of a Non-Time Critical Removal Action ("NTCRA"), and requested public comment on the five removal action alternatives presented in the SEE/CA, as well as on EPA's specific request for comment on a proposed (draft) finding by the Regional Administrator, entitled "TSCA 761.61(c) Determination," to permit on-site disposal of all Waste Material (as hereinafter defined) including City Waste Material (as hereinafter defined) into the building foundation;

WHEREAS, on June 2, 2006, AVX received a letter from EPA dated May 31, 2006 (the "notice and demand letter") in which EPA demanded payment of its past costs at the Property as well as all future property-related costs;

WHEREAS, on August 15, 2006, AVX submitted extensive comments on the SEE/CA to EPA raising significant technical and legal issues, urging reconsideration of the recommended alternative, and advocating a building stabilization alternative to maintain adequate control of the Property until a long-term solution under M.G.L. c. 21E ("Chapter 21E") could be implemented;

WHEREAS, on August 31, 2006, AVX responded to the notice and demand letter, enumerating among other things its defenses to EPA's claim including the allegation that the lack of maintenance and repair of the manufacturing building had exacerbated and contributed to the release or threat of release of Waste Material (as hereinafter defined), making those responsible legally liable for future response costs at the Property including the costs of the proposed NTCRA;

WHEREAS, in September 2006, EPA and the City executed a Cooperative Agreement in connection with the Property which set forth a mechanism to implement the SEE/CA's preferred alternative and to coordinate the cleanup with redevelopment of the Property;

WHEREAS, under the Cooperative Agreement, EPA was to provide \$8,043,902 to the City, funded in part from the Bankruptcy Settlement, which the City would use to procure a cleanup contractor, implement all cleanup activities including demolition, and coordinate redevelopment with cleanup;

WHEREAS, on October 4, 2006, the City's Collector of Taxes recorded and filed an Instrument of Taking with the Bristol South District Registry of Deeds (the "Registry") in Book 8345, Page 326 and the Bristol South Registry District of the Land Court (the "Registry District") as Document No. 105416, and on October 28, 2008, the Land Court entered a Judgment in Tax Lien Case, foreclosing all rights of redemption to the Property, which decree the City recorded with the Registry in Book 9206, Page 104 and filed with the Registry District as Document No. 105418;

WHEREAS, EPA received comments on the SEE/CA from the public, including the Mayor of the City, demanding that at a minimum all City Waste Material (as hereinafter defined) be disposed off-site;

WHEREAS, EPA decided to modify the recommended alternative on the basis of such comments, and on February 14, 2008, EPA proposed that AVX conduct a NTCRA to achieve a controlled demolition of the facility, including the off-site disposal of all Aerovox Waste Material (as hereinafter defined);

WHEREAS, EPA's proposal sought to have AVX implement all activities except for the transportation and disposal of City Waste Material (as hereinafter defined);

WHEREAS, as the current owner and operator of the Property, the City could assert claims under CERCLA and Chapter 21E against AVX including those for contribution, reimbursement, equitable share or property damage;

WHEREAS, on _____, 2009 EPA issued an Action Memorandum for a NTCRA to achieve a controlled demolition of the facility, off-site disposal of Waste Material, capping and implementation of post-removal site control measures, which includes a determination by EPA (the “TSCA Determination”) that the NTCRA does not pose an unreasonable risk of injury to health or the environment as long as the conditions in the TSCA Determination are satisfied;

WHEREAS, AVX and the City independently have agreed with EPA, pursuant to the terms of the *Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action* (the “EPA Agreement”) and the Cooperative Agreement, respectively, to perform work at the Property as part of the NTCRA;

WHEREAS, the NTCRA involves demolition of the on-site building and the transportation and disposal of Aerovox Waste Material (as hereinafter defined), for which AVX is responsible, and the transportation and disposal of all City Waste Material (as hereinafter defined) for which the City, acting under and using funds provided through the Cooperative Agreement, is responsible;

WHEREAS, under an amended Cooperative Agreement, EPA is to reimburse the City for the costs the City incurs to transport and dispose of all City Waste Material (as hereinafter defined), for post-removal site control measures or any other activities EPA deems eligible for reimbursement pursuant to the terms of the Cooperative Agreement; and

WHEREAS, AVX has entered into an *Administrative Consent Order and Notice of Responsibility* (the “State Agreement”) with MassDEP, which shall be effective simultaneously with the execution hereof, pursuant to which AVX, after the NTCRA Endpoint (as hereinafter defined), shall implement a cleanup of the Site pursuant to Chapter 21E and the regulations promulgated thereunder, the Massachusetts Contingency Plan, 310 CMR 40.0000 (the “MCP”);

NOW, THEREFORE, in consideration of the foregoing and of the mutual promises and agreements herein contained, the City and AVX hereby agree as follows:

I. PURPOSE.

Without admitting any fact, responsibility, fault, or liability in connection with the Site, the Parties now deem it to be in their respective best interests, subject to the limitations and exceptions set forth herein, to settle fully and finally all claims and/or potential claims between them concerning the Site. The Parties also wish to establish a framework to coordinate and complete the NTCRA pursuant to CERCLA, achieve the cleanup of the Site pursuant to Chapter 21E and the MCP, and facilitate in a manner to the extent reasonable and feasible that will assist and not impede the redevelopment of the Property, and therefore agree to collaborate in good faith with each other to undertake the activities, including the Work, for which they are responsible under the EPA Agreement, the Cooperative Agreement, the State Agreement and this Agreement, including efforts to develop and maintain a coordinated schedule for performing the Work and, to the extent reasonable and feasible, to promote the hiring of qualified local firms and/or individuals to perform such activities. Unless otherwise

provided herein, once the Work Endpoint (as hereinafter defined) has been achieved, the City will be solely responsible, as more fully described below, for all future activity at the Site.

II. DEFINITIONS.

Unless otherwise expressly provided in this Agreement, terms used in this Agreement, whether defined in any Waste Material Law (as hereinafter defined) or in any agreement referenced herein, shall have the following specific meanings:

A. **Aerovox Waste Material** means all Waste Material that is to be transported off-site by AVX during the NTCRA in accordance with Section III.D. of Appendix B (Scope of Work) to the EPA Agreement.

B. **AVX Parties** means AVX's successors, assigns, employees, officers, agents, legal representatives, directors, shareholders, parent, subsidiary and affiliate corporations, and the parents thereof.

C. **CA Post-NTCRA Funds** has the meaning given to the term in Paragraph IV.A.4. of this Agreement.

D. **City Parties** means the City's successors, assigns, employees, officers, elected and appointed officials, agents, lessees, sub-lessees, occupants, licensees and legal representatives, and specifically includes the New Bedford Redevelopment Authority.

E. **City Supplemental Work** has the meaning given to the term in Paragraph V.D.3.(d) of this Agreement.

F. **City Waste Material** means all Waste Material described in Section III.E. of Appendix B (Scope of Work) to the EPA Agreement that is to be transported off-site by the City during the NTCRA in accordance with the Cooperative Agreement.

G. **City's Maintenance Obligations** has the meaning given to the term in Paragraph VI.A. of this Agreement.

H. **Cooperative Agreement** means the contract between EPA and the City and all exhibits and appendices attached thereto whereby EPA will reimburse the City up to \$9,843,902 for the costs the City incurs to transport and dispose of all City Waste Material and for post-removal site control measures. The Cooperative Agreement is attached hereto as Exhibit 1.

I. **Effective Date** means the effective date of this Agreement, which date shall be the same as the effective date of the EPA and State Agreements.

J. **EPA Agreement** means the *Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action*, and all appendices attached thereto (including as Appendix A the Action Memorandum, with the TSCA Determination attached

thereto), entered into by AVX and EPA as of the Effective Date. The EPA Agreement is attached hereto as Exhibit 2.

K. “NTCRA Endpoint” has the meaning given to the term in Paragraph IV.D. of this Agreement.

L. “Paragraph” means a portion of this Agreement identified by a Roman numeral and (1) a capital letter, or (2) a capital letter and an Arabic numeral.

M. “Physical Condition of the Property” means and includes, without limitation, the presence, suspected presence, release or suspected release of any Waste Material of any kind into the environment, whether into the air, soil, sediments, surface water, groundwater, pavement, structures, fixtures, equipment, tanks, containers or other personality at the Property.

N. “Property” means the Aerovox property encompassing approximately 10.3 acres located at 740 Belleville Avenue, New Bedford, Bristol County, Massachusetts, owned by the City, as depicted on the figure attached hereto as Exhibit 3.

O. “ROS Conditions” has the meaning given to the term in Paragraph V.A.1. of this Agreement.

P. “Section” means a portion of this Agreement identified by a Roman numeral.

Q. “Site,” for purposes of this Agreement, means any place or area where the release of oil and/or hazardous material at or from the Property has come to be located, except for any such places or areas that are part of the New Bedford Harbor Superfund Site. Places or areas that are part of the New Bedford Superfund Site include but are not limited to any land area, bank or water body located seaward of the sheet pile wall previously installed at the Property or, where there is no sheet pile wall, seaward of the mean high water level at the Property and running along the mean high water level in a northward and southward direction from the Property. The New Bedford Harbor Superfund Site is defined as the “New Bedford Harbor Site” in Paragraph 5.I. of the Consent Decree in *United States v. AVX Corporation*, Civil Action No. 83-3882-Y (D. Mass.), entered February 3, 1992. For the purposes of this Consent Order, the Site includes the sheet pile wall previously installed at the Property. The “Site” is referenced by MassDEP under Release Tracking Number 4-0601.

R. “State Agreement” means the *Administrative Consent Order and Notice of Responsibility* and all exhibits attached thereto, entered into by AVX and MassDEP as of the Effective Date. The State Agreement is attached hereto as Exhibit 4.

S. “Waste Material” means any material regulated by any Waste Material Law, including without limitation (1) any hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any solid waste under Section 1004(27) of RCRA, 42

U.S.C. § 6903(27); (4) any oil or hazardous material under Section 2 of Chapter 21E; and (5) any material regulated under the TSCA regulations at 40 CFR § 761.

T. “Waste Material Laws” means and includes any environmental laws or regulations promulgated by state, federal or local authorities, including but not limited to CERCLA, RCRA, TSCA, the Federal Water Pollution Control Act, the Federal Environmental Pesticides Act, the Clean Water Act, the Clean Air Act, the Massachusetts Oil and Hazardous Material Release Prevention and Response Act (Chapter 21E), the Massachusetts Hazardous Waste Management Act (M.G.L. c. 21C), each as amended, and any so called federal, state or local “Superfund” or “Superlien” statute, or any other statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to or imposing liability (including strict liability) or standards of conduct concerning any Waste Material, as that term is defined above.

U. “Work” means all activities required to be performed by AVX or the City respectively under the EPA Agreement, the State Agreement, the Cooperative Agreement, and this Agreement, until the Work Endpoint. The Work expressly does not include any activities the City undertakes after the Work Endpoint or that the City may undertake independently at any point in time.

V. “Work Endpoint” has the meaning given to the term in Paragraph V.F. of this Agreement.

III. PROVISIONS APPLICABLE TO ALL WORK.

A. Single Points of Contact.

1. The City designates James Ricci or his designee to assume overall responsibility for performance of the City’s obligations under this Agreement, and to serve as the City’s representative in communications between AVX and the City (the “City Point of Contact”). The person so designated shall have technical expertise sufficient to adequately coordinate all aspects of the Work, including but not limited to local permitting (demolition, sidewalk and street closing, stormwater discharge), utilities, emergency response, and community relations. If the City Point of Contact is a designee, the City shall notify AVX in writing of the name, address and telephone number of the designated City Point of Contact within fifteen (15) days of the Effective Date.

2. AVX designates Larry Blue or his designee to assume overall responsibility for performance of AVX’s obligations under this Agreement, and to serve as AVX’s representative in communications between AVX and the City (the “AVX Point of Contact”). If the AVX Point of Contact is a designee, *e.g.*, the Project Coordinator in accordance with Paragraph 61 of the EPA Agreement, AVX shall notify the City in writing of the name, address and telephone number of the designated AVX Point of Contact within fifteen (15) days of the Effective Date.

3. Each Party will notify the other Party in writing at least one week before any change is made in its point of contact.

B. City Approvals. The City and AVX Points of Contact shall meet on a regular basis to discuss, among other things, AVX's efforts to obtain from the appropriate bodies and agencies within the City, all permits, licenses and approvals which may be necessary or appropriate to carry out the Work in the most expeditious manner. Prior to the Work Endpoint, AVX shall apply as appropriate for any permit, license or approval necessary to perform the Work, and the City as the owner of the Property shall use best efforts to cooperate with and to expedite AVX obtaining any such permits, licenses and approvals required for the Work. The City makes no representations or warranties as to outcomes with regard to the actions of the City's boards and commissions that are not part of the executive branch of municipal government.

C. Access.

1. The City grants the right of continuous access onto and through the Property to AVX, the United States and the Commonwealth and their respective representatives, including, but not limited to, their employees, agents, authorized representatives, consultants, contractors and subcontractors for purposes of implementation of the Work, including the rights set forth in the Declaration, defined and more fully described in Paragraph VIII.B. of this Agreement. The City agrees to record and file the Declaration with the Registry and Registry District within thirty (30) business days of the Effective Date.

(a) The City acknowledges and agrees that the grant of access in this Paragraph III.C.1. expressly includes the 25-foot wide area at the Property's northern boundary (southern half of Graham Street), which area is subject to the July 1, 1995 Agreement between Aerovox Incorporated, a predecessor owner of the Property, and Acushnet Rubber Company, Inc. d/b/a Precix ("Precix Agreement"), which agreement was executed for a term of 25 years, ending June 30, 2020. A copy of the Precix Agreement is attached hereto as Exhibit 5. The City acknowledges and agrees that as part of the access easement granted herein, the City will use best efforts to suspend the rights of third parties to possess and use the southerly half of Graham Street when the suspension of such rights is needed to perform the Work or a governmental authority determines that such area must be kept under the exclusive control of the City or AVX for health, fire, safety or other reasons.

(b) The City acknowledges and agrees that it has rights in the 25-foot wide area at the Property's southern boundary (southern half of Hadley Street) which were retained by the City in the Discontinuance of Hadley Street, dated June 26, 1952, recorded with the Registry in Book 1058, Page 268, as affected by an amendment dated August 10, 1967,

recorded with the Registry in Book 1551, Page 373 (as amended, the "Discontinuance"). The City acknowledges and agrees that as part of the grant of access in this Paragraph III.C.1., the City shall use best efforts to exercise its rights under the Discontinuance so as to enable the efficient performance of the Work, and not cause delay or additional expense for AVX.

(c) The Parties acknowledge and agree that the Property is subject to the following easements which could interfere with the Work: (i) Easement from Aerovox Corporation to Acushnet Process Company, dated April 18, 1968, recorded with the Registry in Book 1563, Page 969 and filed with the Registry District as Document No. 27932; and (ii) Easement from Aerovox Incorporated to Commonwealth Electric Company, dated January 4, 1990, recorded with the Registry in Book 2436, Page 294 (collectively, the "Existing Easements"). The City acknowledges and agrees that as part of the grant of access in this Paragraph III.C.1., the City shall use best efforts to terminate, amend, suspend or otherwise modify the rights held by any parties under the Existing Easements so as to enable the efficient performance of the Work, and not cause delay or additional expense for AVX.

2. Insofar as the City controls any other property to which access is required in order to conduct activities involving the transportation and disposal of Waste Material, primarily to provide traffic management options to avoid congestion on Belleville Avenue and parking of vehicles that could obstruct local businesses and residences, and such property is in reasonable proximity to the Property and the City determines such property is available during the NTCRA, then following seven (7) days prior written notice, the City also grants the right of continuous access onto and through such property to AVX, the United States and the Commonwealth and their respective representatives, including, but not limited to, their employees, agents, authorized representatives, consultants, contractors and subcontractors for purposes of implementation of the Work. The Parties acknowledge the likelihood of competing requirements during implementation of the NTCRA with respect to the use of property, if any, made available in accordance with this Paragraph. The Parties agree, therefore, to use best efforts to ensure their contractors work cooperatively, in accordance with Paragraph IV.C. of this Agreement, with respect to the use of such property(ies).

3. To the extent that any other property to which access is necessary to perform the Work is owned or controlled by persons other than the City, the City will use best efforts to secure from such persons access for the City and AVX, as well as for the United States and the Commonwealth and their representatives, including, but not limited to, their employees, agents, authorized representatives, consultants or contractors as necessary to effectuate implementation of the Work. The City further agrees to use best efforts to take full advantage of its rights under the Precix Agreement to access the northern portion of Graham Street. For purposes of this Paragraph, "best efforts" include the payment of reasonable sums of money in consideration of access.

AVX will reimburse the City for any such payment; provided, however, that AVX approves such amount in advance of the City making the payment.

D. Security. The City agrees that as the owner it is responsible at all times for security at the Property, subject to the exceptions set forth in Paragraph III.D.1. below, *i.e.*, the measures expressly required of AVX pursuant to and for the time period specified in the EPA Agreement.

1. Appendix B (Scope of Work) to the EPA Agreement defines the scope of AVX's responsibility for site security during performance of the NTCRA. AVX is required, beginning with mobilization, to maintain a perimeter security fence around the Property at all times until the NTCRA Endpoint. AVX is further required, beginning with mobilization and continuing until completion of basement backfilling, to have a security guard present onsite at all times when its contractor's project manager or designee is not present.

2. The spreadsheet attached hereto as Exhibit 6 provides an accounting with respect to the \$250,000 the City received on its administrative claim in the Aerovox bankruptcy (the "Bankruptcy Funds"), detailing costs of \$245,202.84 the City has incurred through December 15, 2009 for the purpose of maintaining the fire suppression system and performing other maintenance and security measures at the Property. Until the NTCRA Endpoint, the City shall use the balance of \$4,797.16 to pay for utilities in accordance with Paragraph III.E.1. of this Agreement and the renewal of the policies of insurance required in accordance with Paragraph III.H.2. of this Agreement. After the NTCRA Endpoint, the City agrees to pay into the Aerovox Escrow Fund, established pursuant to Section XV of the EPA Agreement, any unspent portion of the Bankruptcy Funds.

3. The Parties agree that the City shall procure and manage, and AVX shall pay for, security at the Property from the Effective Date until AVX mobilizes to the Site. AVX agrees to make a lump sum payment in the amount of \$84,500 ("Site Security Funds") to the City to fund the costs the City is expected to incur to perform security between the Effective Date and the time AVX mobilizes to the Site.

4. The City acknowledges that as a good faith act to help the City to ensure the ongoing safety of persons and property in the City, and pursuant to a June 30, 2009 Agreement Regarding Interim Funding of Aerovox Facility Security, an October 6, 2009 Second Agreement Regarding Interim Funding of Aerovox Facility Security, and a December , 2009 Third Agreement Regarding Interim Funding of Aerovox Facility Security between the Parties, AVX paid \$83,780 (the "Interim Funds") to the City before the Effective Date to enable the City to pay for thirty-five (35) weeks of security services. The City herein agrees that after the Effective Date, the unspent portion of the Interim Funds, if any, will be used to pay for security at the Property before any of the Site Security Funds are spent.

5. If the Site Security Funds are insufficient to pay for security until AVX mobilizes to the Site, the City will provide to the AVX Point of Contact a written (a) accounting of all funds expended to date for security at the Property, and (b) budget for additional funds sought. Within fourteen (14) days of its receipt of such accounting and budget, provided that the AVX Point of Contact's questions, if any, have been promptly and reasonably answered, AVX shall pay the requested sum to the City.

6. The City agrees, within thirty (30) days of AVX's mobilization to the Site, to provide a written accounting of funds expended for security at the Property, and to pay into the Aerovox Escrow Fund, established pursuant to Section XV of the EPA Agreement, any unspent portion of the Site Security Funds.

7. After the NTCRA Endpoint, AVX will have no obligation to the City with respect to payment for security at the Property.

E. Utilities. AVX will pay for all utilities used to perform the Work, including but not limited to electricity, water, and stormwater and wastewater handling from the Effective Date until the Work Endpoint.

1. Notwithstanding the foregoing, the City agrees to continue to be the party billed for electricity delivered to the Property until the NTCRA Endpoint, at which time the existing electric service will be decommissioned. AVX agrees to pay each electricity bill in full within thirty (30) days of AVX's receipt of a bill from the City or NSTAR.

2. The City agrees, on behalf of its Department of Public Infrastructure, to ensure that AVX's use of water and sewer services to perform the Work is billed at the most favorable commercial billing rate.

F. Community Relations. The Parties will cooperate to support public involvement activities including a Public Involvement Plan, if any, established in accordance with Subpart N of the MCP. The City shall make resources available such as cable access television and the City website to disseminate information regarding the Work.

G. Submittals. Throughout the performance of the Work, each Party will provide to the other Party's Point of Contact a copy of any document submitted to or received from any governmental agency related to the Work.

H. Insurance. Until the Work Endpoint:

1. The City shall ensure, and shall deliver satisfactory evidence to AVX, that all contractors engaged by the City to perform activities necessary to effectuate implementation of the Work provide and maintain, throughout the period of their performance of such activities, comprehensive general liability insurance (including contractual liability coverage) with limits of \$5,000,000 and vehicular insurance with limits of \$2,000,000, naming AVX and its contractors performing work at the Site as insured parties.

2. The City shall maintain the policy providing first-party property coverage presently in effect and shall renew said policy until the work required by Section III.E. of the SOW involving building demolition begins. After the NTCRA Endpoint, and for so long as the Property is owned by the City, it shall be insured only to such extent and in such a manner as other similar City-owned properties are insured at the time.

3. The City shall provide for its own employees, and shall ensure that the City's contractors and subcontractors provide for other persons performing the Work, employer's liability insurance and worker's compensation insurance in compliance with all applicable laws and regulations.

4. AVX shall ensure, and shall deliver satisfactory evidence to the City, that all contractors engaged by AVX to perform the Work provide and maintain, throughout the period of their performance of such work, comprehensive general liability insurance (including contractual liability coverage) with limits of \$5,000,000 and vehicular insurance with limits of \$2,000,000, naming the City and its contractors performing work at the Site as insured parties.

I. Emergency Response.

1. If the City is required, pursuant to the Cooperative Agreement, to give EPA immediate notice of a reportable event and subsequent notice of the steps taken in response to that event, then the City shall simultaneously give such notice to AVX.

2. If AVX is required, pursuant to the EPA Agreement or the State Agreement, to give EPA or MassDEP, respectively, immediate notice of a reportable event and subsequent notice of the steps taken in response to that event, then AVX shall simultaneously give such notice to the City.

3. To the extent practicable under the circumstances and consistent with the requirements of applicable law and regulations, the City shall assume responsibility to perform emergency response activities if required under the Cooperative Agreement.

4. Appendix B (Scope of Work) to the EPA Agreement defines the scope of AVX's responsibility for health and safety planning and procedures during performance of the NTCRA. AVX is required to prepare an Emergency Response Plan ("ERP") which describes the intended response to fires or unplanned releases at the Site. The City shall cooperate with AVX in preparation of the ERP and shall be responsible for providing local emergency responders to support emergency services. The City shall work with AVX to identify and define the roles and responsibilities of the City emergency response coordinator and alternates, to supply emergency equipment when needed to provide emergency evacuation planning and hazard communications planning.

IV. PROVISIONS APPLICABLE TO NTCRA.

A. Financial Obligations.

1. AVX shall finance and perform, at its sole cost and expense, the demolition of the vacant Aerovox facility, and the transportation and disposal of all Aerovox Waste Material, as such activities are described in the EPA Agreement and Appendix B (Scope of Work) thereto.

2. The City agrees that it is solely responsible under the Cooperative Agreement for the transportation and disposal of all City Waste Material, subject to available and/or appropriated funds. In the event the funds EPA transfers to the City through the Cooperative Agreement are insufficient to effect the transportation and disposal of all City Waste Material, the City shall exercise best efforts to timely and fully fund the transportation and disposal of all City Waste Material so as not to cause delay or additional expense for AVX. Such best efforts include but are not limited to requesting funding from EPA, MassDEP and other public sources. Under the Cooperative Agreement, the City is to submit a report to EPA, within 45 days of the last shipment of City Waste Material, accounting for all transportation and disposal costs related to the NTCRA including the unreimbursed costs for the services of the Manifest Manager (as hereinafter defined) (the "Final T&D Cost Report"), a copy of which the City shall simultaneously provide to the AVX Point of Contact in accordance with Paragraph III.G. of this Agreement.

3. If the AVX Point of Contact by written notice to the City Point of Contact, which notice shall be provided not later than thirty (30) days prior to the beginning of the Work activities to be performed in accordance with Section III.F. of Appendix B (Scope of Work) to the EPA Agreement, requests that the City purchase and deliver clean fill to the Property to backfill the basement hole, the City agrees to do so, subject to the payment terms in Paragraphs IV.A.3.(a) through (c) below. If such request has been made, not later than five (5) business days prior to the beginning of the Work activities to be performed in accordance with Section III.F. of Appendix B (Scope of Work) to the EPA Agreement, the AVX Point of Contact shall provide written notice to the City Point of Contact concerning the date on which backfill must begin to be brought to the Site. The City shall coordinate the timing and execution of this task with AVX so as not to cause delay or additional expense for AVX.

(a) In the event the Final T&D Cost Report shows that the full cost for the transportation and disposal of City Waste Material is less than the funds remaining in the Cooperative Agreement, and the remaining funds (less a reasonable amount held in reserve to pay for the costs of an audit required by the Cooperative Agreement) suffice to pay for the entire quantity of fill required to backfill the basement hole, the City shall utilize such funds to pay for the clean fill that was delivered to the Property.

(b) In the event the Final T&D Cost Report shows that the amount of the funds remaining in the Cooperative Agreement is less than the amount needed to pay for the entire quantity of fill required to backfill the basement hole, the City shall utilize all of the funds remaining in the Cooperative Agreement (less a reasonable amount held in reserve to pay for the costs of an audit required by the Cooperative Agreement) to pay for the fill, and AVX agrees to pay, within fifteen (15) days of receipt of a bill from the City, for that portion of the fill for which the City was unable to pay with Cooperative Agreement funds.

(c) In the event the Final T&D Cost Report shows that the full cost for the transportation and disposal of City Waste Material exceeds the funds remaining in the Cooperative Agreement, AVX agrees to pay for the fill within fifteen (15) days of receipt of a bill from the City.

4. Not later than five (5) months after the NTCRA Endpoint, the City shall provide to AVX a written accounting of the funds it received through the Cooperative Agreement, indicating whether and in what amount any funds remain unspent. As used herein, "CA Post-NTCRA Funds" shall mean any Cooperative Agreement funds unspent at the NTCRA Endpoint.

5. Using Cooperative Agreement funds, the City is to retain and pay for the services of a "Manifest Manager" to coordinate and oversee project aspects involving the transportation and disposal of City Waste Material, including the signing of hazardous waste manifests or equivalent documents. The City agrees that the Manifest Manager, while under contract to the City, will sign hazardous waste manifests or equivalent documents for Aerovox Waste Material. AVX agrees to pay for the Manifest Manager's services, at the same rate of compensation the City contracts for under the Cooperative Agreement, for the period of time involving the transportation and disposal of Aerovox Waste Material. Such period will be set by the AVX Point of Contact's written notice to the City Point of Contact ten (10) business days before the beginning and end dates of the Work activities to be performed in accordance with Section III.D. of Appendix B (Scope of Work) to the EPA Agreement. The City agrees to be the party billed at all times for the Manifest Manager's services. AVX agrees to pay for the Manifest Manager's services involving the transportation and disposal of Aerovox Waste Material within thirty (30) days of receipt of a bill from the City.

B. Aerovox Waste Material. During performance of the NTCRA:

1. AVX agrees that all Aerovox Waste Material transported off-site for disposal will be transported in accordance with all Waste Material Laws and that, prior to any off-site transport of such materials, AVX will provide required notifications to EPA and obtain EPA's advance approval, in accordance with Paragraph 70 of the EPA Agreement. AVX shall identify to the City potential off-site disposal

facilities for each waste type identified in Section III.D. of Appendix B (Scope of Work) to the EPA Agreement. For any facility identified to the City, AVX shall use reasonable efforts to obtain readily-available information indicating that the facility, when identified: (a) is licensed and permitted to accept the identified waste type; (b) has no outstanding compliance or enforcement issues with local, state or federal regulatory authorities; and (c) has a financial assurance mechanism for long-term operation, monitoring, maintenance and closure that meets applicable regulatory requirements. The City expressly reserves the right to reject any facility AVX identifies, although the City's approval shall be assumed for any facility to which the City proposes to send City Waste Material. The City's written approval of a facility, which shall be timely provided, shall constitute the final decision with respect to its selection.

2. AVX will perform and pay for the transportation and disposal of all Aerovox Waste Material to each facility chosen by the City.

3. The City, and not AVX, shall sign any and all hazardous waste manifests, bills of lading or similar shipping documents for any and all Aerovox Waste Material. The City shall retain title to and assume any liability for any and all Aerovox Waste Material removed from the Site. AVX shall be responsible only to the extent that any liability is caused by AVX's negligence or arises as a result of AVX's failure to comply with the EPA Agreement or this Agreement.

C. Cooperation Among Contractors. The Parties acknowledge that the successful completion of the NTCRA will require, among other things, cooperation between their contractors. On such basis, the Parties agree to include in all agreements with their contractors provisions requiring the contractor and any subcontractor to:

1. use best efforts to perform the Work in a manner that affords the other Party's contractor(s) the maximum opportunity to exert its(their) best efforts in undertaking and completing the Work;

2. coordinate its work with the other contractors;

3. keep itself informed of the progress and the details of the work of the other contractors;

4. make no claim for damages against the Party with which it has contracted by reason of any act or omission to act by the other Party's contractors or in connection with the acts or omissions of the Party with which it has contracted to act in connection with the other contractors, but permitting the contractor to have a right to claim such damages from the other contractors, under a provision similar to the following which has been or will be inserted in a Party's contracts with the contractors: "Should any other contractor having, or who shall hereafter have, a contract with the City or AVX relating to the Work, sustain any damage through any negligent act or omission of the contractor, to the proportionate extent of its negligence the contractor agrees to reimburse such other contractor for all such damages and it further agrees to

defend, indemnify, and save harmless AVX and the City from all claims for such damages by whomever made or presented the claim.”

D. NTCRA Endpoint. For purposes of this Agreement, the NTCRA Endpoint is reached when EPA, acting in accordance with Paragraph 154 of the EPA Agreement, provides to AVX written notice, simultaneously sending a copy to the City, that all work under the EPA Agreement has been fully performed.

V. PROVISIONS APPLICABLE AFTER NTCRA ENDPOINT AND BEFORE WORK ENDPOINT.

A. MCP Response Actions.

1. AVX shall submit to MassDEP a Class A Response Action Outcome (“RAO”) unless, based on field conditions at the Property, the MCP prohibits such outcome. The presence of non-aqueous phase liquid or an exceedance of Upper Concentration Limits in groundwater, if any, could require that AVX achieve and submit to MassDEP a Remedy Operation Status (“ROS”). The City agrees to the submission of a Class A RAO or ROS, the latter only in the event of the presence of either of the above-described conditions (the “ROS Conditions”).

2. Subject to the results of a site-specific risk characterization, the anticipated primary components of the Phase III Remedial Action Plan to be implemented by AVX will include a combined cap and engineered barrier, a source area containment wall, groundwater monitoring, and long-term operation and maintenance.

3. The risk characterization and Phase III Remedial Action Plan will assume that the future uses of the Property will be limited to commercial or industrial uses, or use as open space available for passive recreational use.

4. In accordance with the State Agreement, MassDEP will review all documents AVX submits, and will provide to AVX written notice of approval or approval with conditions for each submission.

5. AVX will construct an engineered barrier necessary to support a Class A RAO or ROS. AVX will fully fund the financial assurance mechanism (“FAM”) to provide, in accordance with 310 CMR 40.0996(5)(a)7., “for ongoing future monitoring, maintenance and any necessary replacement of the barrier.” In accordance with the State Agreement, MassDEP will review, comment, and approve any documents that may be necessary to establish a FAM or any re-submitted documents.

6. In accordance with the State Agreement, MassDEP will review, comment and approve any Activity and Use Limitation (“AUL”) or a re-submitted AUL prepared by AVX in support of a Class A RAO or ROS, before its recording or filing in the Registry and/or Registry District.

7. MassDEP's issuance of a written notice of completion to AVX in accordance with Paragraph 14(f) of the State Agreement, simultaneously sending a copy to the City, means that MassDEP has completed an audit of AVX's Class A RAO or ROS submittal and did not identify any violations or deficiencies, or identified violations or deficiencies which were subsequently corrected.

B. Waste Material. During its performance of MCP response actions:

1. AVX agrees that all Waste Material transported off-site by AVX for disposal will be transported in accordance with all Waste Material Laws. AVX shall identify to the City potential off-site disposal facilities for each waste type requiring off-site disposal. For any facility identified to the City, AVX shall use reasonable efforts to obtain readily-available information indicating that the facility, when identified: (a) is licensed and permitted to accept the identified waste type; (b) has no outstanding compliance or enforcement issues with local, state or federal regulatory authorities; and (c) has a financial assurance mechanism for long-term operation, monitoring, maintenance and closure that meets applicable regulatory requirements. The City expressly reserves the right to reject any facility AVX identifies. The City's written approval of a facility, which shall be timely provided, shall constitute the final decision with respect to its selection.

2. AVX will perform and pay for the transportation and disposal of all Waste Material to the facility chosen by the City.

3. The City, and not AVX, shall sign any and all hazardous waste manifests, bills of lading or similar shipping documents for any and all Waste Material. The City shall retain title to and assume any liability for any and all Waste Material removed from the Site. In the event the City does not have on its payroll an employee qualified and available, in the sole and uncontrolled discretion of the City, to sign hazardous waste manifests, bills of lading or similar shipping documents, AVX will reimburse the City within thirty (30) days of receipt of a bill from the City for the reasonable costs the City incurs to pay an employee or consultant that it retains to obtain necessary information as to the Waste Material and to sign any hazardous waste manifests, bills of lading or similar shipping documents for any Waste Material. AVX shall be responsible only to the extent that any liability is caused by AVX's negligence or arises as a result of AVX's failure to comply with this Agreement.

C. Institutional Controls.

1. The City shall accept and maintain deed restrictions in the form of the Declaration defined in Paragraph VIII.B. below and in the form of one or more AULs in order to regulate the future use of the Property, including the groundwater thereunder.

2. The City acknowledges that an AUL is necessary and appropriate to meet the requirements of the TSCA Determination and to reach a Class A RAO or ROS, the latter only in the event of the presence of the ROS Conditions, and agrees to

record and file or consent to the recording and filing of an AUL on the Property promptly upon notification from AVX that remedial construction (Phase IV) is complete in accordance with the requirements of the MCP. The AUL recorded in the Registry and filed in the Registry District, as appropriate, shall be substantially in the form attached hereto as Exhibit 7, or in such other form as is reasonably satisfactory to AVX and the City, or, if the City has previously conveyed the Property or any portion thereof, the City and the successor(s) in title of the Property or portion(s) thereof, as applicable, which agreement of the City and its successor(s) in title shall not be unreasonably withheld, conditioned or delayed; however, in no event shall the recorded AUL allow restrictions on activities and uses (a) less restrictive than those now set forth in the form of AUL attached hereto as Exhibit 7 without the consent of AVX, which consent may be withheld in the sole and uncontrolled discretion of AVX, or (b) more restrictive than those now set forth in the form of AUL attached hereto as Exhibit 7 without the consent of the City, if the City then still owns the Property or portion of the Property affected by the modification of the form of the AUL, which consent may be withheld in the sole and uncontrolled discretion of the City. The right to withhold consent to a more restrictive AUL shall inure solely to the City and shall not pass to the City's successor(s) in title, unless the City has transferred at least 51% of the fee simple interest in the Property to a single party, in which case such party shall also have the same right as the City to withhold consent to a more restrictive AUL.

3. To the extent that the Property or any other property for which institutional controls are required to achieve closure under the MCP is owned or controlled by persons other than the City, the City shall use best efforts to secure and maintain from such persons institutional controls in form and substance sufficient to satisfy the requirements of the MCP so as to achieve a Class A RAO or ROS. For purposes of this Paragraph V.C.3., "best efforts" does not require the City to pay any money in consideration of access to property owned or controlled by persons other than the City.

4. The Parties acknowledge and agree that (a) the Property is unique and that AVX will be irreparably harmed if the City or, if the City has previously conveyed the Property or any portion thereof, the City or the owner of the Property, as applicable, fail to comply with the requirements of this Paragraph V.C. to record and file or consent to the recording and filing of an AUL, and (b) in the event the City, or, if the City has previously conveyed the Property or any portion thereof, the City or the owner of the Property, as applicable, fail to comply with the requirements of this Paragraph V.C., money damages will be inadequate, and that AVX shall be entitled to specific performance of the obligations of the City or, if the City has previously conveyed the Property or any portion thereof, the City or the owner of the Property, as applicable, under this Paragraph V.C. In the event that AVX commences an action to compel specific performance, AVX shall be entitled to recover the costs of that action, including reasonable attorneys' fees.

5. The provisions and obligations of this Paragraph V.C. shall survive beyond the term of this Agreement without limitation of time.

D. Future Redevelopment of Property.

1. *General.* The City agrees that nothing in this Paragraph V.D. or in any other provision of this Agreement obligates AVX to expend any funds to prepare a building site or do any other site work in preparation for the future redevelopment of the Property.

2. *Utility Corridor.* Notwithstanding the foregoing, AVX agrees, before the Work Endpoint, to construct a clean utility corridor, at its sole cost and expense, to serve any structure that may be built on the Property that is outside the 100-year flood plain. The locations of the utility corridor and the 100-year flood plain are depicted generally on the figure attached hereto as Exhibit 8.

3. *City Supplemental Work.* Notwithstanding the terms of Paragraph V.D.1., AVX agrees, before the Work Endpoint, to perform and, in the limited instances specified in Paragraph V.D.3.(a), to pay for a portion of the City Supplemental Work (as hereinafter defined), provided, however, that the City satisfies all applicable terms and conditions in this Paragraph V.D.3.

(a) *Greenway.* AVX agrees to design and construct a 25-foot wide riparian restoration greenway (the "Greenway") along the Acushnet River if, within forty-five (45) days of AVX's receipt of MassDEP's written approval of a Phase II Comprehensive Site Assessment in accordance with Paragraph 12(c) of the State Agreement, the City provides written notice to AVX stating that the City:

(i) wants to proceed with construction of the Greenway during AVX's performance of MCP response actions;

(ii) has the funds necessary to pay either all construction costs as a result of the New Bedford Harbor Natural Trustee Council's (the "Trustee Council") approval of the City's February 17, 2009 application for funding of the Acushnet River Upland Riparian Restoration Project, or, in the event that the Trustee Council denied the City's application, to pay 50% of all construction costs up to \$197,500 and 100% of all construction costs in excess of \$197,500;

(iii) has no expectation that AVX should incur any costs whatsoever, other than those design and construction costs specified in this Paragraph V.D.3.(a), to implement MCP response actions which integrate construction of the Greenway, and agrees that the City shall pay all construction costs and expenses associated with such effort; and

(iv) intends to pay for all of the construction costs for the Greenway as follows:

(1) in the event the Trustee Council did not approve the City's grant application, to place into escrow the amount specified in, and within the time period set by, Paragraph V.D.3.(f)(i)(1) of this Agreement; or

(2) in the event the Trustee Council approved the City's grant application and, with the City's representation that the funds available to the City through the Trustee Council grant, until construction of the Greenway is complete, exceed \$350,000, to reimburse AVX in accordance with Paragraph V.D.3.(f)(v) of this Agreement; or

(3) in the event the Trustee Council approved the City's grant application and, with the City's representation that the funds available to the City through the Trustee Council grant, until construction of the Greenway is complete, are less than \$350,000, to place into escrow, within the time period set by, Paragraph V.D.3.(f)(i)(1) of this Agreement, the amount by which the remaining funds fall short of \$350,000, and to reimburse AVX in accordance with Paragraph V.D.3.(f)(v) of this Agreement to the extent grant funds are available, and otherwise to reimburse AVX in accordance with Paragraph V.D.3.(f)(iv) of this Agreement for any and all amounts for which the grant funds are deficient.

If the City provides timely notice to AVX, and satisfies all of the funding requirements in Paragraph V.D.3.(f), AVX agrees during MCP response actions to undertake design and construction services as to the Greenway. Should such notice state that the Trustee Council denied the City's application and the City will fund 50% of all construction costs up to \$197,500 and 100% of all construction costs in excess of \$197,500, AVX also agrees to pay 50%, but in no event more than \$98,750, of the construction costs for the Greenway. If the City does not provide written notice in accordance with this Paragraph, or if the City fails to provide such notice within the specified time period, AVX shall have no further obligations under this Paragraph V.D.3.(a).

(b) *Active Recreational Use.* AVX agrees to work with the City to the extent reasonably feasible to implement MCP response actions that will permit a change in use of the Property from that

designated in Paragraph V.A.3. of this Agreement to active recreational use if, within forty-five (45) days of AVX's receipt of MassDEP's written approval of a Phase II Comprehensive Site Assessment in accordance with Paragraph 12(c) of the State Agreement, the City provides written notice to AVX stating that the City:

- (i) seeks to permit active recreational use of the Property, which the City acknowledges to be a different future use of the Property than provided in Paragraph V.A.3. of this Agreement;
- (ii) has no expectation that AVX should incur any costs whatsoever to implement MCP response actions that will permit active recreational use of the Property, and agrees that the City shall pay all costs and expenses associated with such effort, including without limitation, all professional, consulting, engineering and construction costs whether incurred by AVX or the City;
- (iii) agrees that active recreational use of the Property will necessitate amending the AUL in the form attached hereto as Exhibit 7, and further agrees that the City, in accordance with Paragraph VI.C. of this Agreement, bears sole responsibility for all costs associated with such amendment; and
- (iv) intends to place into escrow the amount specified in, and within the time period set by, Paragraph V.D.3.(f)(i)(2) of this Agreement.

If the City does not provide written notice in accordance with this Paragraph, or if the City fails to provide such notice within the specified time period, AVX shall have no further obligations under this Paragraph V.D.3.(b).

(c) *No Obligation.* If the City does not provide timely written notice in accordance with Paragraphs V.D.3.(a) and (b), AVX shall have no further obligations under this Paragraph V.D.3.

(d) *Definition of "City Supplemental Work."* The City acknowledges that AVX would not undertake the City Supplemental Work unless the City notifies AVX that it wants AVX to undertake such activities for the benefit of the City. Therefore, the (i) activities AVX undertakes during performance of MCP response actions, following receipt of the City's written notice(s) in accordance with Paragraphs V.D.3.(a) or (b) or both, including without limitation activities involving professional, consulting, engineering and construction services, and the (ii) City's continuing satisfaction of all of the terms and conditions in this

Paragraph V.D.3. including without limitation the funding obligations in Paragraph V.D.3.(f), are hereinafter referred to as the "City Supplemental Work."

(e) *Ongoing Responsibilities.*

(i) *Cooperation and Consultation.* The AVX Point of Contact and the City Point of Contact shall cooperate and consult with each other and shall provide each other with information relevant to the City Supplemental Work and the estimated costs thereof as that information becomes available throughout the relevant period of this Agreement until the City Supplemental Work has been completed.

(ii) *City's Timely Performance.* The City acknowledges that AVX, in performing MCP response actions, will be acting pursuant to the State Agreement and in accordance with the schedule established therein, and therefore, time is of the essence. The City further acknowledges that the successful completion of the City Supplemental Work will require, among other things, the active engagement and cooperation of the City's representatives, including the City Point of Contact, the City's Massachusetts Licensed Site Professional ("LSP"), and potentially other consulting professionals. The City agrees to provide timely responses to requests from the AVX Point of Contact for information or decisions relating to the implementation of the City Supplemental Work.

(iii) *Opportunity to Address City Concerns.* In the event the City believes that AVX is not performing the City Supplemental Work in good faith or that communications, in accordance with Paragraph V.D.3.(e)(i), between the City Point of Contact and the AVX Point of Contact have been inadequate to ensure implementation of the City Supplemental Work to the City's satisfaction, the City Point of Contact shall provide to the AVX Point of Contact a brief written statement describing the nature of the City's concerns. The City Point of Contact and the AVX Point of Contact will endeavor to address the City's concerns promptly through good faith negotiations. The Parties expressly agree that any discussions or negotiations undertaken in accordance with this Paragraph shall not be subject to the procedures in Section VII. of this Agreement. Notwithstanding the foregoing, (1) if the Parties are not able to address matters to their mutual satisfaction within ten (10) business days after the first meeting of their points of contact, either Party may request that executives of both Parties meet at least once to attempt to

address the City's concerns, and (2) if the Parties are not able to address matters to their mutual satisfaction at the conclusion of one or more meeting(s) between their executives, either Party may request, within three (3) business days of the conclusion of such meeting(s), to address the City's concerns through mediation. The mediation shall occur within ten (10) business days of either Party's written request and shall not extend beyond one (1) business day whether or not the Parties reach agreement. All remaining aspects of the mediation procedure shall be determined by the Parties in consultation with the mediator. The mediator shall attempt to facilitate a negotiated settlement of the dispute but shall have no authority to impose any settlement terms on the Parties. Before beginning any mediation, the Parties will ensure that the prerequisites for confidentiality of mediation under M.G.L. c. 233, § 23C are satisfied. The expenses of the mediation shall be borne equally by the Parties.

(f) *Funding City Supplemental Work.* For the purpose of ensuring AVX's performance of the City Supplemental Work:

(i) *Initial Payment(s).* Within fifteen (15) days after providing written notice to AVX pursuant to Paragraphs V.D.3.(a) or (b) or both, if the City is required to deliver funds to an escrow agent, the City shall establish a new escrow account in accordance with an escrow agreement and with an escrow agent reasonably agreed upon by AVX and the City. On the same day, immediately following establishment of the escrow account, the City shall deliver funds in the following amount(s) to the escrow agent:

(1) As to the Greenway portion of the City Supplemental Work: (A) if the Trustee Council did not approve the City's grant application, the City shall deliver to the escrow agent \$150,000; (B) if the Trustee Council approved the City's grant application, and the funds available to the City through the Trustee Council grant, until construction of the Greenway is complete, exceed \$350,000, the City shall not be required to deliver any funds to the escrow agent; or (C) if the Trustee Council approved the City's grant application, and the funds available to the City through the Trustee Council grant, until construction of the Greenway is complete, are less than \$350,000, the City shall deliver to the escrow agent the amount by which the remaining funds fall short of \$350,000.

(2) As to the active recreational use portion of the City Supplemental Work, the City shall deliver \$3,000,000 to the escrow agent. The Parties agree that such amounts are preliminary, and are subject to the continuous estimating, funding, disbursement and payment process described in this Paragraph V.D.3.(f). The City further agrees that the funds placed in escrow under this Paragraph shall be used to pay any and all costs to establish and maintain the escrow account.

(ii) *Assurance of Adequacy of Funds.* The estimated cost to perform and complete the City Supplemental Work shall be established from time to time by the AVX Point of Contact in consultation with, and assented to by, the City Point of Contact, and shall include a reasonable and customary allowance for contingencies not to exceed 10% of the estimated cost. The AVX Point of Contact shall prepare and submit the first such cost estimate to the City Point of Contact for review no later than forty-five (45) days after AVX's receipt of the City's written notice(s) in accordance with Paragraphs V.D.3.(a) and/or (b) of this Agreement. If, every ninety (90) days thereafter, the AVX Point of Contact deems it necessary or appropriate to prepare a new cost estimate, the AVX Point of Contact shall submit such cost estimate to the City Point of Contact no later than seven (7) days thereafter. Each cost estimate submitted to the City Point of Contact shall be accompanied by appropriate supporting information. The City Point of Contact must respond in writing to each such cost estimate no later than seven (7) days following the City's receipt of the cost estimate indicating whether or not the City assents to the cost estimate. In the event the City Point of Contact does not assent to the cost estimate established by the AVX Point of Contact, a dispute shall be considered to have arisen, and the City Point of Contact shall give a written statement and explanation of objections to the AVX Point of Contact no later than seven (7) days following the City's receipt of the cost estimate, specifically stating the grounds for the objections and the alternative cost estimate figure asserted by the City Point of Contact. The Parties expressly agree that such dispute shall not be subject to the procedures in Section VII. of this Agreement. To resolve their differences, the Parties shall engage in good faith negotiations among themselves for a period not to exceed seven (7) days. If the Parties reach an agreement, the City shall promptly indicate in writing its assent to the amount of the cost estimate agreed upon through negotiations. If the Parties do not reach agreement after such seven-day period, the AVX Point of Contact will set the amount of the cost estimate

and will communicate the amount by written notice to the City Point of Contact, and such amount shall be binding on the City.

(iii) *Additional Payment(s).* No later than fifteen (15) days after the City assents to a revised cost estimate or, in the event of a dispute which the Parties are unable to resolve between themselves, the amount of the cost estimate is set by the AVX Point of Contact, the City shall escrow the amount by which the revised cost estimate exceeds the amount of the prior cost estimate, or, if the cost estimate is the first one prepared by the AVX Point of Contact within the forty-five (45) day period after AVX's receipt of the City's written notice(s) in accordance with Paragraphs V.D.3.(a) and/or (b) of this Agreement, the amount the cost estimate exceeds the total amount the City delivered to the escrow agent in accordance with Paragraph V.D.3.(f)(i) of this Agreement. Should the City be required to deliver funds to an escrow agent and it is the first occasion requiring that funds be escrowed, the City shall first establish a new escrow account in accordance with an escrow agreement and with an escrow agent reasonably agreed upon by AVX and the City. Notwithstanding the foregoing, if the Trustee Council approved the City's grant application, and the funds available to the City through the Trustee Council grant, until construction of the Greenway is complete, (A) exceed the amount of the revised estimate of the cost to construct the Greenway only, the City shall not be required to deliver any funds to the escrow agent under this Paragraph to fund the construction of the Greenway only; or (B) are less than the amount of the revised estimate of cost to construct the Greenway only, the City shall deliver to the escrow agent the amount by which the remaining funds fall short of the revised estimate of the cost to construct the Greenway only. Neither the amount of any cost estimate to perform the City Supplemental Work nor the amount of funds held in the escrow account at any point in time shall in any way limit the City's obligations under this Paragraph V.D.3.

(iv) *Disbursements to AVX from Escrow.* AVX shall be entitled to draw on the funds held in escrow in order to pay for any and all costs incurred by AVX to perform the City Supplemental Work, provided that (1) each draw request to the escrow agent is accompanied by reasonably satisfactory evidence that such costs have actually been incurred (either as payments made or payments due), and (2) the City receives a copy of the draw request and the related submissions required hereunder at least three business days before the requested funds are released from escrow. Notwithstanding the foregoing, only with respect

to the costs AVX incurs to construct the Greenway, if the Trustee Council approved the City's grant application, and for so long as funds are available to the City through the grant, AVX's costs shall be reimbursed in accordance with Paragraph V.D.3.(f)(v) of this Agreement.

(v) *Trustee Council Payment of Greenway Costs.* In the event the Trustee Council approved the City's grant application, following the City's review of a periodic statement of costs incurred by AVX to construct the Greenway, accompanied by reasonably satisfactory evidence that such costs have actually been incurred (either as payments made or payments due), the City shall present the statement to the Trustee Council for payment, and shall forward the payment to AVX immediately upon receipt by the City. The City expressly agrees that any failure of the Trustee Council to pay the full amount of any statement will not relieve the City of its obligations hereunder.

(g) *City Termination of City Supplemental Work.* The City Supplemental Work will terminate upon AVX's receipt of written notice from the City stating that it is unable to fully fund the City Supplemental Work.

(h) *AVX Termination of City Supplemental Work.* Upon the occurrence of any one or more of the events set forth below, AVX may, after giving the City five (5) business days' prior written notice, and in the case of any event solely arising under Paragraphs V.D.3.(h)(ii), (iii) or (v), an opportunity, not longer than ten business (10) days, to cure any such failure to AVX's satisfaction, terminate performance of the City Supplemental Work:

(i) The City's failure to make timely delivery to the escrow agent of the entire amount due in accordance with Paragraph V.D.3.(f)(i);

(ii) The City's failure to respond in writing to each new cost estimate prepared by the AVX Point of Contact no later than seven (7) days following the City's receipt of the cost estimate indicating whether or not the City assents to the cost estimate;

(iii) The City's failure to specifically state, when objecting to any new cost estimate prepared by the AVX Point of Contact in accordance with Paragraph V.D.3.(f)(ii), the grounds for the objection(s) and the City's alternative cost estimate figure;

(iv) The City's failure to make timely delivery to the escrow agent of the entire amount due in accordance with Paragraph V.D.3.(f)(iii); or

(v) The City's failure to provide timely responses to requests for information or decisions relating to the implementation of the City Supplemental Work, or any failure by the City to fully cooperate in accordance with Paragraph V.D.3.(e).

AVX's decision to terminate the City Supplemental Work shall not be subject to the procedures in Section VII. of this Agreement and, upon termination, AVX shall have no further obligations under this Paragraph V.D.3. Further, AVX's exercise of the right to terminate the City Supplemental Work shall not give rise to any claim or cause of action for damages of any nature whatsoever, nor shall it affect in any way any other right or obligation of either Party under any provision of this Agreement other than this Paragraph V.D.3.

(i) *Remedies Available to AVX Upon Termination of City Supplemental Work.*

(i) The City acknowledges, following opportunity for review and consideration, that it is fully aware of and understands the terms and provisions contained in this Paragraph V.D.3.(i) and of their effect, and that it has voluntarily agreed to said terms and provisions.

(ii) In the event that the City Supplemental Work is terminated, in accordance with Paragraphs V.D.3.(g) or (h), AVX will endeavor to minimize costs to the City by among other things implementing MCP response actions as if there had been no agreements with respect to the City Supplemental Work.

(iii) Notwithstanding the foregoing, if the City Supplemental Work is terminated, the City, in addition to any other liability to AVX hereunder or otherwise provided for or allowed by law, shall be liable to AVX for any costs including reasonable legal fees and expenses AVX incurs for additional services including without limitation reasonable engineering and construction services necessary, in AVX's opinion, because of the termination, resulting from a number of factors including without limitation a deviation from the schedule set by the State Agreement, or a need to repeat previously-performed activities or to address regulator expectations created during performance of the City Supplemental Work, and the amount of such costs may

be charged against and disbursed from the escrow account as would have been payable to AVX as if the City Supplemental Work had been completed without termination. If such costs exceed the amount escrowed, the City shall pay the difference to AVX.

(j) *Termination of Escrow.* After the Work Endpoint, funds remaining in escrow, if any, shall be disbursed to the City, and the escrow account shall be closed.

E. Remedy Operation Status. In the event the presence of the ROS Conditions causes AVX to submit to MassDEP an ROS:

1. AVX agrees to consult with the City regarding the location on the Property of the remedial system.

2. The City agrees to complete the paperwork required by 310 CMR 40.0893(5) to effect the transfer of responsibility for the ongoing operation of response actions under ROS. The City further agrees to become the transferee upon receipt of a copy of MassDEP's written notice of completion to AVX in accordance with Paragraph 14(f) of the State Agreement.

3. The City acknowledges and agrees to perform, as part of the City's Maintenance Obligations, all requirements in accordance with 310 CMR 40.0893(1), (2), and (4) through (6) with respect to ROS including but not limited to operating, maintaining and monitoring the remedial system to maintain ROS. The City further agrees, at such time as its LSP opines that conditions at the Site can support a Class A RAO, to file a Phase V Completion Statement in accordance with 310 CMR 40.0894 and submit a Class A RAO in accordance with 310 CMR 40.1000.

F. Work Endpoint.

1. For purposes of this Agreement, the Work Endpoint is reached only when MassDEP provides to AVX a written notice of completion in accordance with Paragraph 14(f) of the State Agreement stating that all response actions required under the State Agreement have been fully performed, and AVX has provided a copy of that notice to the City.

2. In the event MassDEP does not issue a written notice of completion to AVX in accordance with Paragraph 14(f) of the State Agreement, AVX agrees that it will not seek reimbursement from the City for any expenses AVX incurs as a result of MassDEP's decision.

G. Use of CA Post-NTCRA Funds Before Work Endpoint.

1. If funds remain in the CA after the NTCRA Endpoint, the City agrees, until the Work Endpoint, to perform certain activities, at the request of the

AVX Point of Contact, involving post-removal site control measures, including but not limited to groundwater monitoring, and cap inspection and repair, or any other activities EPA deems eligible for reimbursement pursuant to the terms of the Cooperative Agreement.

2. The City further agrees to remain the grantee under the Cooperative Agreement until all available CA Post-NTCRA Funds have been expended or until the end of the CA project period, regardless of any change in the ownership of all or any portion of the Property. In the event there are unspent CA Post-NTCRA Funds when EPA proposes to end the CA project period, the City will exercise best efforts to extend the project period until all CA Post-NTCRA Funds are expended.

H. City Maintenance Obligations Funding.

1. The Parties intend to create a contractual obligation on the part of the City to perform its maintenance and other obligations under Section VI. of this Agreement, and therefore agree, in full accord and satisfaction of the assumption by the City and its successors of such obligations, that within thirty (30) business days of receiving MassDEP's written notice of approval issued in accordance with Paragraph 14(f) of the State Agreement with respect to AVX's Class A RAO or ROS submittal, AVX will pay:

(a) into the Aerovox Escrow Fund, established pursuant to Section XV of the EPA Agreement, the amount necessary, after AVX's deposit is credited to the Aerovox Escrow Fund, for the sum of the then unspent CA Post-NTCRA Funds and the Aerovox Escrow Fund to equal not less than \$517,400; and

(b) \$75,000 directly to the City, to be retained by the City in a restricted cash account, to enable the City to perform the City's Maintenance Obligations in cases of (i) Acts of God, as that term is defined in the MCP, including flood, drought, fire, hurricane or earthquake, or (ii) any other catastrophic failure, any of which may require replacement of the remedial cap and/or source area containment wall or portions thereof.

2. In the case of an ROS submittal, AVX will make an additional payment into the Aerovox Escrow Fund in accordance with the following:

(a) At the same time as it forwards an ROS submittal to MassDEP, AVX will provide to the City in writing a description of the additional obligations, if any, required by the MCP. Such correspondence will also include an estimate of the costs associated with such additional obligations, including costs for the services of a Massachusetts LSP and a reasonable and customary allowance for contingencies not to exceed 10% of the estimated costs.

(b) If the City agrees with AVX's estimate, AVX shall pay such amount into the Aerovox Escrow Fund.

(c) If the City disagrees with AVX's estimate, the Parties will resolve their difference in accordance with the procedures in Section VII. of this Agreement. Upon resolution of the matter in dispute, AVX shall pay the amount agreed upon or awarded into the Aerovox Escrow Fund. AVX will provide written notice of the payment to the City, with a copy to EPA and MassDEP.

3. Notwithstanding the foregoing, after the Work Endpoint, before requesting a disbursement from the Aerovox Escrow Fund, the City agrees to use the CA Post-NTCRA Funds, if any, to pay for all of the City's Maintenance Obligations which may continue to exist associated with the Work required by the TSCA Determination.

I. Technical Assistance.

1. AVX agrees to pay for the professional services of a Massachusetts LSP to review the following MCP major milestone deliverables: Tier Classification; Public Involvement Plan; Phase II Comprehensive Site Assessment; Phase III Remedial Action Plan; Phase IV Remedial Implementation Plan; Phase IV Final Inspection Report and Completion Statement; AUL; and RAO or ROS submittal. AVX agrees to pay for LSP services within thirty (30) days of receipt of a bill from the City; provided, however, that in no event shall AVX pay cumulatively more than \$51,700 for LSP services under this Paragraph V.I.1.

2. The City agrees that its LSP will review in draft each of the MCP major milestone deliverables enumerated in Paragraph V.I.1. and provide written comments to the AVX Point of Contact not later than seven (7) days before the date set for submission of the deliverable, provided the City's LSP has at least fourteen (14) days to review a pre-submission draft. The Parties' points of contact, following consultation and with their agreement, may modify the schedule with respect to when AVX will forward a pre-submission draft and when the City will provide written comments.

3. Notwithstanding the terms of Paragraph V.I.1., in the case of an ROS submittal, AVX agrees to pay for LSP services to evaluate and advise the City as to a cost estimate prepared in accordance with Paragraph V.H.2. of this Agreement. AVX agrees to pay for LSP services within thirty (30) days of receipt of a bill from the City; provided, however, that in no event shall AVX pay more than \$7,000 for LSP services under this Paragraph V.I.3.

VI. PROVISIONS APPLICABLE AFTER WORK ENDPOINT.

A. City's Maintenance Obligations. Subject to AVX making the payments required by Paragraph V.H. of this Agreement, and in consideration of AVX's performance of

the above-described activities and other good and valuable consideration, the City agrees to perform, after the Work Endpoint, at its sole cost and expense, all obligations which may continue to exist associated with the Work, whether required by Chapter 21E and the MCP or by the TSCA Determination, and which specifically include, but are not limited to, the inspection, maintenance, repair and/or replacement of the remedial cap; any other necessary inspection, maintenance and repair on the Property required by the AUL or the TSCA Determination; the inspection, maintenance, repair and/or replacement of the source area containment wall; periodic groundwater monitoring; if required, maintenance of ROS and active operation and maintenance of a remedial system; MCP filings associated with the response actions; and compliance with the health and safety plan and the soil management plan required by the AUL, all in a good and timely, workmanlike manner, in conformity with all applicable laws, rules, and regulations, including, without limitation, those relating to environmental, health and safety (collectively, the "City's Maintenance Obligations"). The City further agrees to maintain institutional controls and to perform long-term monitoring and maintenance for the capped areas, containment measures and groundwater wells consistent with the TSCA Determination, irrespective of whether such post-removal site control measures are required in accordance with Chapter 21E and the MCP.

B. Continuing Nature of City's Obligations. The obligations of the City described in this Section VI. shall run with the Property and shall be set forth in the Declaration, as defined in Paragraph VIII.B. below. In addition, the City promises that in any future land transfer documents concerning its interest in the Property, including but not limited to deeds, leases, occupancy agreements, license agreements or any other document that effects a transfer of interest in the Property, the City will require that such documents contain an assumption by any party under the applicable transfer document (a "transferee") of the obligations set forth in this Section and an agreement by such transferee to the same restrictions set forth in this Section and releases set forth in Section VIII. of this Agreement which the City has negotiated with AVX, and such documents will provide that if such transferee breaches such obligations or violates the restrictions, such transferee will be liable to the City and to AVX for any costs they incur as a result. The City shall be secondarily liable to AVX for a transferee's breach of the obligations or restrictions set forth in this Section. Notwithstanding the foregoing, in the event the City transfers at least 51% of the fee simple interest in the Property to a single transferee, the City shall be relieved of its obligations as to such portion of the Property, and shall not be secondarily liable to AVX under this Paragraph as to such portion of the Property.

C. Other City Obligations. Except as provided in Paragraph V.D.2., the City shall be solely responsible for any and all costs and expenses incurred in connection with the redevelopment of the Property. In particular, the City shall be solely responsible for compliance with the AUL and for any and all costs and expenses incurred in complying with the health and safety plan or the soil management plan required by the AUL. If the City amends the AUL, it shall be solely responsible for all costs, expenses, damages, liabilities and fines arising from such amendment, or from any use or development of the Property or a portion thereof that is permitted by such amendment, including but not limited to any additional response costs arising from such amendment and any liabilities directly and

proximately resulting from such amendment, and which in no event shall be the responsibility of AVX.

D. Future Sale. In the event of a sale of the Property to a redeveloper or other entity for a price which exceeds all unreimbursed expenses of the City, EPA and the Commonwealth in connection with the Property by at least \$100,000, then after all unreimbursed expenses of the City, EPA and the Commonwealth incurred in connection with the Property are reimbursed in accordance with the Bankruptcy Settlement, the City agrees to make reasonable efforts to modify the Bankruptcy Settlement and to cooperate with all necessary parties, including without limitation EPA and the Commonwealth, to effect such modification, so that the remaining proceeds from such sale, if any, shall be paid to AVX for its unreimbursed expenses in connection with the Property.

E. Survival. The provisions and obligations of this Section VI. shall survive beyond the term of this Agreement without limitation of time.

VII. DISPUTE RESOLUTION.

All disputes arising under this Agreement, except for any disputes arising under Paragraph V.D. of this Agreement, shall be resolved in accordance with this Section, whether or not reference hereto is made in other provisions hereof that may be relevant to the matter under dispute.

A. Negotiation. The Parties agree to work cooperatively to resolve promptly through informal, good faith negotiation among themselves any claim, dispute or controversy arising out of, or relating to, this Agreement. A dispute shall be considered to have arisen when one Party notifies the other Party in writing that there is a dispute.

B. Mediation. If the dispute has not been resolved within sixty (60) days after the written notice that there is a dispute, either Party may request, in writing, to resolve the claim or controversy through mediation. The mediation procedure shall be determined by the Parties in consultation with the mediator. The mediator shall attempt to facilitate a negotiated settlement of the dispute but shall have no authority to impose any settlement terms on the Parties. Before beginning any mediation, the Parties will ensure that the prerequisites for confidentiality of mediation under M.G.L. c. 233, § 23C are satisfied. The expenses of the mediation shall be borne equally by the Parties.

C. Arbitration. If the dispute has not been resolved within sixty (60) days after the commencement of mediation, or if no mediation has been commenced within sixty (60) days after the written notice that there is a dispute, the dispute shall be resolved, and the Parties agree to be bound by, arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator may be entered by any state court of the Commonwealth of Massachusetts having jurisdiction thereof. The place of arbitration shall be New Bedford, Massachusetts.

D. Continuing the Work. Each Party shall be required to carry on the performance of its obligations under this Agreement, if any, during all disputes. No activity shall be delayed or postponed pending resolution of any disputes unless otherwise agreed to by the Parties.

VIII. RELEASES AND COVENANTS NOT TO SUE.

A. City's Release and Covenant Not to Sue. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City, for itself and the City Parties, covenants not to sue and waives its right to initiate any action at law or in equity, or to recover from AVX, and forever releases and discharges AVX and the AVX Parties, for or from any and all claims (including without limitation claims under Chapter 21E or common law for contribution, reimbursement, equitable share, property damage or unjust enrichment, and claims with respect to the City's Maintenance Obligations, including but not limited to a demand for more funds), demands, actions, and causes of action of every kind, loss, obligation or liability of whatever nature, whether accrued or unaccrued, direct or indirect, known or unknown, past, present or future, foreseen or unforeseen, discovered or undiscovered, absolute or contingent, in law and equity, for response costs or property damage that may arise on account of or in connection with the Physical Condition of the Property or any law, regulation or ordinance applicable thereto, whether federal, state or local, including, without limitation, Waste Material Laws, except with respect to the enforcement of the City's contractual rights against AVX under this Agreement. Furthermore, the City agrees not to bring any claim against any other person or entity arising out of or in connection with the Physical Condition of the Property.

B. City's Release to Run With Land and Bind Successors. Each successor in title to the interests of the City in the Property, or any portion thereof, shall be deemed, by virtue of becoming such a successor, and its respective successors, assigns, officers, agents, directors, members, managers, subsidiary and affiliate corporations, employees, parents, lessees, sub-lessees, occupants, licensees, heirs, devisees and legal representatives, shall be deemed, to covenant not to sue and waive its right to initiate any action at law or in equity, or to recover from AVX, and forever releases and discharges AVX and the AVX Parties, for or from any and all claims (including without limitation claims under Chapter 21E or common law for contribution, reimbursement, equitable share, property damage or unjust enrichment and claims with respect to the City's Maintenance Obligations, including but not limited to a demand for more funds), demands, actions, and causes of action of every kind, loss, obligation or liability of whatever nature, whether accrued or unaccrued, direct or indirect, known or unknown, past, present or future, foreseen or unforeseen, discovered or undiscovered, absolute or contingent, in law and equity, for response costs or property damage that may arise on account of or in connection with the Physical Condition of the Property or any law, regulation or ordinance applicable thereto, whether federal, state or local, including, without limitation, Waste Material Laws, except with respect to the enforcement of such successor's contractual rights against AVX under this Agreement. Furthermore, any successor to the City agrees not to bring any claim against any other person or entity arising out of or in connection with the Physical Condition of the Property. The City agrees to enter into and record and file the *Declaration of Agreements Regarding Grant of Groundwater Restriction, Institutional Controls*

Including Activity and Use Limitation, Grant of Access Easement and Covenants Not to Sue attached hereto as Exhibit 9, the terms, provisions and agreements of which are incorporated herein by reference (the "Declaration"). In the event the City fails to comply with the foregoing obligation to record and file or consent to the recording and filing of the Declaration, the Parties agree that AVX will be irreparably harmed, money damages are inadequate, and AVX shall be entitled to specific performance of that obligation. In the event that AVX commences an action to compel specific performance, AVX shall be entitled to recover the costs of that action, including reasonable attorneys' fees.

C. AVX's Release and Covenant Not to Sue. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, AVX, for itself and the AVX Parties, covenants not to sue and waives its right to initiate any action at law or in equity, or to recover from the City and the City Parties, and forever releases and discharges the City and the City Parties from any and all claims, including without limitation claims under Chapter 21E or common law for contribution, reimbursement, equitable share, property damage or unjust enrichment, demands, actions, and causes of action of every kind, loss, obligation or liability of whatever nature, whether accrued or unaccrued, direct or indirect, known or unknown, past, present or future, foreseen or unforeseen, discovered or undiscovered, absolute or contingent, in law and equity, for response costs or property damage that may arise on account of or in connection with the Physical Condition of the Property or any law, regulation or ordinance applicable thereto, whether federal, state or local, including, without limitation, Waste Material Laws, except with respect to enforcement of AVX's contractual rights against the City under this Agreement. Furthermore, nothing in this Agreement shall restrict, limit or release AVX's right to pursue claims for contribution, equitable share, or reimbursement from any person or entity (other than the City and the City Parties), which caused or contributed to, or is otherwise legally responsible for the Physical Condition of the Property.

D. Reservation of Rights. Each Party expressly reserves any and all rights (including without limitation any right to contribution), defenses, claims, demands, and causes of action that it may have against the other Party with respect to any matter, transaction or occurrence that is not covered by this Agreement.

E. Survival. The provisions and obligations of this Section VIII. shall survive beyond the term of this Agreement without limitation of time.

IX. INDEMNIFICATION.

A. AVX's Indemnification of the City. AVX agrees to protect, defend, hold harmless and indemnify the City and the City Parties (collectively, the "Indemnified City Party") from and against any and all damages, losses, liabilities, obligations, penalties, fines, forfeitures, demands, defenses, claims, causes of action, suits and legal action of any kind, as well as all costs and expenses incidental thereto, including but not limited to attorneys' fees (collectively, "Claims") which may at any time be imposed upon, incurred by, asserted or awarded against the Indemnified City Party arising from or in connection with AVX's performance of, or failure to perform, any duty under this Agreement and Chapter 21E and the

MCP. AVX's indemnification obligations described under this Paragraph shall not cover any Claims to the extent they arise from or in connection with (1) any acts or omissions of the Indemnified City Party, made, omitted or perpetrated, including without limitation failure to comply with the terms and conditions of the AUL; and/or (2) the Indemnified City Party's performance or failure to perform any of the City's Maintenance Obligations when and as required. The Indemnified City Party shall provide written notice to AVX promptly after learning of facts or circumstances that could reasonably be anticipated to provide a basis for a Claim hereunder or, in the event that a Claim relating to indemnified matters hereunder is asserted in writing by a third party against the Indemnified City Party, the Indemnified City Party shall notify AVX within twenty (20) days of receipt of such Claim. Failure to give notice as required under this subsection shall discharge AVX from liability with respect to the subject of the Claim. AVX shall have the right to control the defense of any Claim tendered by the Indemnified City Party under this indemnity.

B. City's Indemnification of AVX. The City agrees to protect, defend, hold harmless and indemnify AVX and the AVX Parties (collectively, the "Indemnified AVX Party") from and against any and all Claims which may at any time be imposed upon, incurred by, asserted or awarded against the Indemnified AVX Party arising from or in connection with the City's performance of, or failure to perform, any duty under this Agreement including but not limited to the City's timely performance of its responsibilities under the Cooperative Agreement. Without limiting the generality of the foregoing, the City shall pay, and shall indemnify the Indemnified AVX Party against, all expenses, including without limitation attorneys' fees, incurred by the Indemnified AVX Party in performing obligations imposed upon the City (1) under the Cooperative Agreement, in seeking to compel the City to perform those obligations, or (2) after the Work Endpoint by EPA or MassDEP under any Waste Material Laws.

C. No Waiver. Nothing in this Section shall constitute a waiver or release of any right of contribution or indemnification of either Party from the other Party with respect to any obligations, liabilities or other matters not covered by this Agreement.

D. Survival. The provisions and obligations of this Section IX. shall survive beyond the term of this Agreement without limitation of time.

X. NO ADMISSION OF LIABILITY.

This Agreement shall not, for any purpose, constitute or be construed as an admission of any liability, or fact, as a waiver of any right or defense, or as an estoppel against either the City or AVX; provided, however, that nothing in this Section is intended to limit the enforcement of any obligation under this Agreement against either Party hereto. This Agreement shall not constitute, and no action taken pursuant to this Agreement shall constitute, any admission of fact, liability, causation, responsibility or fault, or proportionate share thereof, by either of the Parties with respect to any matter referred to herein.

XI. GENERAL PROVISIONS.

A. Termination.

1. This Agreement shall terminate in the event that one or both of the EPA and State Agreements is(are) not fully executed by all signatories thereto, or in the event that the EPA Agreement does not become effective due to EPA not issuing notice to AVX, in accordance with Paragraph 159 of the EPA Agreement, that public comments received, if any, pursuant to Paragraph 156 of the EPA Agreement, did not require EPA to modify or withdraw from Section XVI of the EPA Agreement with respect to the payment of future response costs.

2. This Agreement shall terminate in the event that the EPA Agreement is rendered null and void due to EPA's rescission or voiding of the Cooperative Agreement. At their discretion, following such termination, the Parties may elect to engage in good faith discussions regarding terms that would permit the performance and completion of the Work.

3. Except with respect to obligations which this Agreement expressly states are to survive beyond the term of this Agreement, AVX's obligations pursuant to this Agreement and the Declaration shall terminate at the Work Endpoint.

B. Entire Agreement. This Agreement constitutes the entire understanding of the Parties with respect to its subject matter and supersedes any previous agreements entered into with respect to its subject matter.

C. Construction. The Parties acknowledge that the Parties and their counsel have reviewed and revised this Agreement, and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any exhibits, attachments or amendments hereto.

D. Amendments. This Agreement may be modified, amended or supplemented only by a written instrument that specifically references this Agreement and is signed by both Parties.

E. Headings. Section and paragraph headings are included for the convenience of the Parties and shall not be used in the interpretation of this Agreement.

F. Notice. All notices, reports or other communications made hereunder shall be in writing and shall be sent to the Party representatives designated below, and shall be deemed delivered when actually delivered at the below street or e-mail address:

To the City:

Mayor Scott W. Lang
City of New Bedford
133 William Street
New Bedford, MA 02740

with a copy to:

Irene B. Schall, Esq.
City Solicitor
City of New Bedford
Office of the City Solicitor
133 William Street
New Bedford, MA 02740
Irene.Schall@newbedford-ma.gov

and

James Ricci
Superintendent, Water Division
Department of Public Infrastructure
City of New Bedford
1105 Shawmut Avenue
New Bedford, MA 02746
James.Ricci@newbedford-ma.gov

To AVX:

AVX Corporation
c/o Larry Blue
Corporate Senior Environmental Engineer
801 17th Avenue South, P.O. Box 867
Myrtle Beach, SC 29578
lblue@avxus.com

with a copy to:

Gary L. Gill-Austern, Esq.
Nutter, McClellan & Fish, LLP
155 Seaport Boulevard
Boston, MA 02210
ggill-austern@nutter.com

and

Marilyn M. Wade, P.E., LSP
URS Corporation
5 Industrial Way
Salem, NH 03079
Marilyn_Wade@urscorp.com

Either Party may redesignate its representative upon ten (10) days written notice to the other Party.

G. Successors and Assigns. This Agreement shall be binding upon, and inure only to the benefit of each Party hereto and their respective successors and assigns, and no right of action shall accrue, by reason of this Agreement, to or for the benefit of anyone, including any governmental entity, other than the Parties hereto.

H. Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, without regard to its conflict of law principles.

I. Severability. If any provision of this Agreement is found by a court of proper jurisdiction to be invalid or unenforceable, it is the intention of the Parties that the

remainder of this Agreement be enforced to the extent that enforcement in such circumstances is consistent with the purposes of this Agreement.

J. Counterparts. This Agreement may be executed in counterparts, which together shall comprise the executed Agreement.

K. Authority. Each Party represents and warrants to the other Party that the individual executing this Agreement on such Party's behalf is fully authorized to do so and, further, that such individual is fully authorized to bind the Party on whose behalf it is executing this Agreement to the terms of all releases of claims, undertakings and obligations of that Party as set forth in this Agreement.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties' authorized representatives have executed this Agreement as of the Effective Date.

AVX CORPORATION

By:

Kurt P. Cummings

Title: Vice President, Chief Financial
Officer, Treasurer and Secretary

Date: March 16, 2010

THE CITY OF NEW BEDFORD

By:

Scott W. Lang

Title: Mayor

Date:

By *[Signature]*

R. Renee Fernandes-Abbott

Title: Treasurer

Date:

Approved as to form only:

Name: Irene B. Schall, Esq.
Title: City Solicitor

Exhibit 2

Cooperative Agreement



SDMS DocID

460584

Superfund Records Center

SITE: Aero voxBREAK: 9.2OTHER: 460584

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 U.S. ENVIRONMENTAL PROTECTION AGENCY Cooperative Agreement	ASSISTANCE ID NO. <table border="1"> <tr> <td>PRG</td> <td>DOC ID</td> <td>AMEND#</td> </tr> <tr> <td>V -</td> <td>97158401</td> <td>- 0</td> </tr> </table>			PRG	DOC ID	AMEND#	V -	97158401	- 0
	PRG	DOC ID	AMEND#						
	V -	97158401	- 0						
	DATE OF AWARD <u>9/17/06</u>								
TYPE OF ACTION New									
PAYMENT METHOD: Reimbursement									
RECIPIENT TYPE: Municipal		Send Payment Request to: Grants Management Office							
RECIPIENT: City of New Bedford 133 William Street New Bedford, MA 02740 EIN: 04-6001402		PAYEE: City of New Bedford 133 William Street New Bedford, MA 02740							
PROJECT MANAGER Scott Alfonse 133 William Street New Bedford, MA 02740 E-Mail: scotta@ci.new-bedford.ma.us Phone: 508-979-1487		EPA PROJECT OFFICER Dave Dickerson 1 Congress Street, Suite 1100, HBO Boston, MA 02114-2023 E-Mail: Dickerson.Dave@epa.gov Phone: 617-918-1329							
PROJECT TITLE AND DESCRIPTION Demolition of Former Aerovox Facility Demolition and capping of the Polychlorinated-biphenyl (PCB) contaminated vacant Aerovox plant, 740 Bellevill Avenue, New Bedford, Massachusetts including preparation of a Request for Proposal, selection of a remediation contractor and coordination with redevelopment.		EPA GRANT SPECIALIST Cheryll Scott Grants Management Office, 1 Congress Street, Suite 1100 . MGM E-Mail: Scott.Cheryll@epa.gov Phone: 617-918-1174							
BUDGET PERIOD 07/01/2006 - 12/31/2007		PROJECT PERIOD 07/01/2006 - 12/31/2007							
		TOTAL BUDGET PERIOD COST \$8,043,902.00	TOTAL PROJECT PERIOD COST \$8,043,902.00						

NOTICE OF AWARD

Based on your application dated 07/05/2006, including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA), hereby awards \$8,043,902. EPA agrees to cost-share 100.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of \$8,043,902. Such award may be terminated by EPA without further cause if the recipient fails to provide timely affirmation of the award by signing under the Affirmation of Award section and returning all pages of this agreement to the Grants Management Office listed below within 21 days after receipt, or any extension of time, as may be granted by EPA. This agreement is subject to applicable EPA statutory provisions. The applicable regulatory provisions are 40 CFR Chapter 1, Subchapter B, and all terms and conditions of this agreement and any attachments.

ISSUING OFFICE (GRANTS MANAGEMENT OFFICE) ORGANIZATION / ADDRESS EPA New England 1 Congress Street, Suite 1100 Boston, MA 02114-2023		AWARD APPROVAL OFFICE ORGANIZATION / ADDRESS U.S. EPA, EPA New England 1 Congress Street, Suite 1100 Boston, MA 02114-2023
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THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

SIGNATURE OF AWARD OFFICIAL 		TYPED NAME AND TITLE James T. Owens, III, Dir. Office of Administration and Resource Mgmt.	DATE <u>9/17/06</u>
AFFIRMATION OF AWARD BY AND ON BEHALF OF THE DESIGNATED RECIPIENT ORGANIZATION			
SIGNATURE 		TYPED NAME AND TITLE Scott Lang, Mayor	DATE <u>9/29/06</u>

EPA Funding Information

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FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$	\$ 8,043,902	\$ 8,043,902
EPA In-Kind Amount	\$	\$	\$ 0
Unexpended Prior Year Balance	\$	\$	\$ 0
Other Federal Funds	\$	\$	\$ 0
Recipient Contribution	\$	\$	\$ 0
State Contribution	\$	\$	\$ 0
Local Contribution	\$	\$	\$ 0
Other Contribution	\$	\$	\$ 0
Allowable Project Cost	\$ 0	\$ 8,043,902	\$ 8,043,902

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.802 - Superfund State Political Subdivision and Indian Tribe Site Specific Cooperative Agreements	CERCLA: Sec. 104(d)(1)	40 CFR PTS 31 & 35 SUBPT O

Fiscal										
Site Name	DCN	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation	
AERO-NTCRA	RAP015 RUP008	2006 2006	T TR2	1A00R 1A00R	302DD2E 302DD2E	4185 4185	0120RV00 0120RV00	C002 C002	6,499,992 1,543,910	
										8,043,902

Budget Summary Page

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$0
2. Fringe Benefits	\$0
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$8,043,902
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$8,043,902
10. Indirect Costs: % Base	\$0
11. Total (Share: Recipient 0.00 % Federal 100.00 %.)	\$8,043,902
12. Total Approved Assistance Amount	\$8,043,902
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$8,043,902
15. Total EPA Amount Awarded To Date	\$8,043,902

Administrative Conditions

1. OPEN COMPETITION

The assistance recipient agrees to comply with Executive Order 13202 (Feb. 22, 2001, 66 Fed. Reg. 11225) of February 17, 2001, entitled "Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects," as amended by Executive Order 13208 (April 11, 2001, 66 Fed. Reg. 18717) of April 6, 2001, entitled "Amendment to Executive Order 13202, Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects."

2. LOBBYING AND LITIGATION - ALL RECIPIENTS

Pursuant to EPA's annual Appropriations Act, the chief executive officer of this recipient agency shall require that no grant funds have been used to engage in lobbying of the Federal Government or in litigation against the United States unless authorized under existing law. As mandated by this Act, the recipient agrees to provide certification to the award official via EPA Form 5700-53, *Lobbying and Litigation Certificate*, within 90 days after the end of project period. The form can be accessed at <http://www.epa.gov/ogd/forms/adobe/5700-53.pdf>.

Recipient shall abide by its respective OMB Circular (A-21, A-87, or A-122), which prohibits the use of federal grant funds for litigation against the United States. Any Part 30 recipient shall abide by its respective OMB Circular (A-21 or A-122), which prohibits the use of Federal grant funds to participate in various forms of lobbying or other political activities.

3. LOBBYING - ALL RECIPIENTS

The recipient agrees to comply with Title 40 CFR Part 34, *New Restrictions on Lobbying*. The recipient shall include the language of this provision in award documents for all subawards exceeding \$100,000, and require that subrecipients submit certification and disclosure forms accordingly.

In accordance with the Byrd Anti-Lobbying Amendment, any recipient who makes a prohibited expenditure under Title 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure.

4. RECYCLING TERM AND CONDITION

ALL RECIPIENTS:

In accordance with EPA Order 1000.25 and Executive Order 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*, the recipient agrees to use recycled paper for all reports which are prepared as a part of this agreement and delivered to EPA. This requirement does not apply to reports prepared on forms supplied by EPA, or to Standard Forms, which are printed on recycled paper and are available through the General Services Administration. Please note that Section 901 of E.O. 13101, dated September 14, 1998, revoked E.O. 12873, *Federal Acquisition, Recycling, and Waste Prevention* in its entirety.

STATE AGENCIES AND POLITICAL SUBDIVISIONS:

Any State agency or agency of a political subdivision of a State which is using appropriated Federal funds shall

comply with the requirements set forth in Section 6002 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6962). Regulations issued under RCRA Section 6002 apply to any acquisition of an item where the purchase price exceeds \$10,000 or where the quantity of such items acquired in the course of the preceding fiscal year was \$10,000 or more. RCRA Section 6002 requires that preference be given in procurement programs to the purchase of specific products containing recycled materials identified in guidelines developed by EPA. These guidelines are listed in 40 CFR 247.

5. DEBARMENT AND SUSPENSION

Recipient shall fully comply with Subpart C of 40 CFR Part 32, entitled "Responsibilities of Participants Regarding Transactions." Recipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 40 CFR Part 32, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. Recipient is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transactions. Recipient acknowledges that failing to disclose the information required under 40 CFR 32.335 may result in the delay or negation of this assistance agreement, or pursuance of legal remedies, including suspension and debarment.

Recipient may access the Excluded Parties List System at www.epls.gov. This term and condition supersedes EPA Form 5700-49, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters."

6. REIMBURSEMENT METHOD OF PAYMENT

- a. The recipient agrees to submit a Request for Advance or Reimbursement (SF270) to the Grants Management Office as costs are incurred on the assistance agreement. The SF270 should be submitted quarterly but no more frequently than monthly.
- b. No payment will be made to the recipient until the executed assistance agreement is returned to the Grants Management Office.
- c. The recipient agrees to sign and return the Standard Form 3881, ACH Vendor/Miscellaneous Payment Enrollment Form, to the Finance Office indicated on the memorandum dated June 30, 1998. As required by Public Law 104-134; Debt Collection Improvement Act of 1996, Electronic Fund Transfer payments will not be processed until this form has been received by the Finance Office.

7. SMALL BUSINESS IN RURAL AREAS

If a recipient awards a contract under an assistance agreement, the recipient agrees and is required to utilize the following affirmative steps:

- a. Placing Small Business in Rural Area (SBRAs) on solicitation lists;
- b. Ensuring that SBRAs are solicited whenever they are potential sources;
- c. Dividing total requirements, when economically feasible, into small tasks or quantities to

- permit maximum participation by SBRAs;
- d. Establishing delivery schedules, where the requirements of work will permit, which would encourage participation by SBRAs;
 - e. Using the services of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce, as appropriate; and
 - f. Requiring the contractor, if it awards subcontracts to take the affirmative steps in subparagraphs a. through e. of this condition.

8. PREAWARD COSTS

This award includes the approval of preaward costs which were incurred up to 90 days prior to the award date.

9. MBE/WBE FAIR SHARE

- A. The recipient agrees to comply with the requirements of EPA's Program for Utilization of Small, Minority and Women's Business Enterprises in procurement under assistance agreements:
 - 1. The recipient accepts the applicable FY 1998 Minority Business Enterprise (MBE)/Womens' Business Enterprise (WBE) "fair share" goals/objectives negotiated with EPA by the Massachusetts E.O.E.A. as the current MBE/WBE "fair share" goals/objectives as follows:

	MBE	WBE
Construction	5.30	4.40
Supplies	7.89	14.82
Services	4.65	16.03
Equipment	2.48	7.51

- 2. (a) The recipient agrees to ensure, to the fullest extent possible, that at least the applicable "fair share" objectives of Federal funds for prime contracts or subcontracts for supplies, construction, equipment or services are made available to organizations owned or controlled by socially and economically disadvantaged individuals, women and Historically Black Colleges and Universities.
- (b) For assistance agreements related to research under the Clean Air Act Amendments of 1990, the recipient agrees to ensure, to the fullest extent possible, that at least the applicable "fair share" objectives of Federal

funds for prime contracts or subcontracts for supplies, construction, equipment or services are made available to organizations owned or controlled by socially and economically disadvantaged individuals, women, disabled Americans, Historically Black Colleges and Universities, Colleges and Universities having a student body in which 40% or more of the students are Hispanic, minority institutions having a minority student body of 50% or more, and private and voluntary organizations controlled by individuals who are socially and economically disadvantaged.

3. The recipient agrees to include in its bid documents the applicable "fair share" objectives and require all of its prime contractors to include in their bid documents for subcontracts the negotiated "fair share" percentages.
4. The recipient agrees to follow the six affirmative steps or positive efforts stated in 40 CFR §30.44(b), 40 CFR §31.36(e), or 40 CFR §35.6580, as appropriate, and retain records documenting compliance.
5. The recipient agrees to submit an EPA form 5700-52A "MBE/WBE Utilization Under Federal Grants, Cooperative Agreements and Interagency Agreements," beginning with the Federal fiscal year quarter the recipient receives the award and continuing until the project is completed. These reports must be submitted to:

U.S. Environmental Protection Agency
Office of Administration and Resource Management
Grants Management Office (MGM)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

within 30 days of the end of the Federal fiscal quarter (January 30, April 30, July 30, and October 30). For assistance awards for continuing environmental programs and assistance awards with institutions of higher education, hospitals and other non-profit organizations, the recipient agrees to submit an EPA form 5700-52A to:

U.S. Environmental Protection Agency
Office of Administration and Resource Management
Grants Management Office (MGM)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

by October 30 of each year.

6. If race and /or gender neutral efforts prove inadequate to achieve a "fair share" objective, the recipient agrees to notify EPA in advance of any race and/or gender conscious action it plans to take to more closely achieve the "fair share" objective.

- B. EPA may take corrective action under 40 CFR Parts 30, 31, and 35, as appropriate, if the recipient fails to comply with these terms and conditions.

10. CONTRACTS OVER \$100,000

The recipient must, on request, make available for EPA pre-award review all contracts and subagreements exceeding \$100,000.

11. PAYMENT TO CONSULTANTS

EPA participation in the salary rate (excluding overhead and travel) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for Level IV of the Executive Schedule, to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. As of January 1, 2006, the limit is \$548.16 per day and \$68.52 per hour. The rate does not include overhead or travel costs and the recipient may pay these in accordance with its normal travel practices.

Subagreements with firms for services which are awarded using the procurement requirements in 40 CFR Parts 30 or 31, as applicable, are not affected by this limitation unless the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. See 40 CFR 31.36(j)(2) or 30.27(b), as applicable.

Programmatic Conditions

1. The City shall utilize the USACE (the Corps) as the project manager for this project, and respond appropriately to recommendations and advise provided by it. EPA is contracting with the Corps through an inter-agency agreement (IAG) to perform the project management responsibilities. Although the contractual chain-of-command will be EPA-City (via the cooperative agreement) and EPA-Corps (through the IAG), the City shall work with the Corps on a day to day basis as needed to effectively and successfully implement the Aerovox cleanup. All contractor submittals and correspondence relating to the project shall be submitted to EPA and the Corps for review and appropriate follow-up.
2. The City shall hold weekly construction progress meetings in which EPA and the USACE will attend. Similarly, EPA and USACE will have access to any other project meetings that may arise during project implementation.
3. The City shall allow EPA and the USACE to access the site as needed in order to perform technical oversight of the project (including environmental monitoring), as well as to implement various aspects of the abutting New Bedford Harbor Superfund

cleanup.

4. The City shall provide EPA and the USACE copies of the contractor's draft monthly invoices for review and approval prior to invoice finalization.

5. The City shall abide by and implement the revised Work Plan for the Aerovox project as submitted via email to EPA on 7/12/06. The City shall ensure full compliance with the project's final Technical Specifications and Performance Standards (currently attached to the Work Plan in draft form).

6. This cooperative agreement is subject to the procurement standards of 40 CFR Part 35 Subpart O.

7. In accordance with 40 CFR Part 35 Subpart O Section 35.6650, the City shall submit quarterly progress reports to the EPA Project Officer within thirty days of the end of each Federal fiscal quarter.

8. The City shall submit a final report within 90 days of completion of the Aerovox remediation.

9. The City's obligations are contingent on the issuance by EPA of an Action Memorandum for a non-time-critical removal action, consistent with the NCP, at the Site. In addition, if the selected non-time-critical removal action requires work materially different from that set forth in the City's revised Workplan (sent to EPA via email on 7/12/06) for this cooperative agreement, the City will submit an amended Workplan and budget consistent with the selected remedy, which will be subject to EPA's approval. In the event that EPA chooses not to select a non-time-critical removal action for this Site, this cooperative agreement will be void. In no event will monies be disbursed for work under this cooperative agreement until EPA has issued a decision document authorizing the performance of that work.

 <p>U.S. ENVIRONMENTAL PROTECTION AGENCY Assistance Amendment</p>	ASSISTANCE ID NO. <table border="1"> <tr> <td>PRG</td> <td>DOC ID</td> <td>AMEND#</td> </tr> <tr> <td colspan="3">V - 97158401 - 2</td> </tr> </table>			PRG	DOC ID	AMEND#	V - 97158401 - 2			DATE OF AWARD 09/09/2009
	PRG	DOC ID	AMEND#							
	V - 97158401 - 2									
	TYPE OF ACTION Augmentation: Increase									
	PAYMENT METHOD: Reimbursement									
RECIPIENT TYPE: Municipal		Send Payment Request to: U.S. EPA Las Vegas Finance Center P.O. Box 98515 Las Vegas, NV 89193-8515 Tel: (702) 798-2406 Fax: (702) 798-2423								
RECIPIENT: City of New Bedford 133 William Street New Bedford, MA 02740 EIN: 04-6001402		PAYEE: City of New Bedford 133 William Street New Bedford, MA 02740								
PROJECT MANAGER Scott Alfonse 133 William Street New Bedford, MA 02740 E-Mail: scott.alfonse@newbedford-ma.gov Phone: 508-991-6188		EPA PROJECT OFFICER Dave Dickerson 1 Congress Street, Suite 1100, HBO Boston, MA 02114-2023 E-Mail: Dickerson.Dave@epamail.epa.gov Phone: 617-918-1329		EPA GRANT SPECIALIST Brian Tocci Grants Management Office, MGM E-Mail: Tocci.Brian@epamail.epa.gov Phone: 617-918-1979						
PROJECT TITLE AND EXPLANATION OF CHANGES Demolition of Former Aerovox Facility Amendment #2 approves a Supplemental Increase in Federal Funds in the amount of \$1,800,000. A Change in the Scope of Work for use of an offsite disposal for mill demolition debris is also approved. A Time Extension until 12/31/2013 is also approved. EPA Grants Specialist has been updated. Administrative Terms and Conditions #12 (Management Fees), #13 (A-133 Audit), #14 (Reimbursement Limitation), #15 (Trafficking Victims Protection Act), and #16 (Unliquidated Obligations) are added. All other Terms and Conditions remain unchanged, and in full force and effect.										
BUDGET PERIOD 07/01/2006 - 12/31/2013		PROJECT PERIOD 07/01/2006 - 12/31/2013	TOTAL BUDGET PERIOD COST \$9,843,902.00	TOTAL PROJECT PERIOD COST \$9,843,902.00						

NOTICE OF AWARD

Based on your application dated 07/09/2009, including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA), hereby awards \$1,800,000. EPA agrees to cost-share 100.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of \$9,843,902. Such award may be terminated by EPA without further cause if the recipient fails to provide timely affirmation of the award by signing under the Affirmation of Award section and returning all pages of this agreement to the Grants Management Office listed below within 21 days after receipt, or any extension of time, as may be granted by EPA. This agreement is subject to applicable EPA statutory provisions. The applicable regulatory provisions are 40 CFR Chapter 1, Subchapter B, and all terms and conditions of this agreement and any attachments.

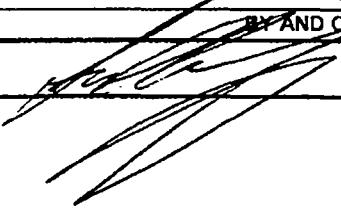
ISSUING OFFICE (GRANTS MANAGEMENT OFFICE) ORGANIZATION / ADDRESS EPA New England 1 Congress Street, Suite 1100 Boston, MA 02114-2023		AWARD APPROVAL OFFICE ORGANIZATION / ADDRESS U.S. EPA, EPA New England 1 Congress Street, Suite 1100 Boston, MA 02114-2023	
--	--	--	--

THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

SIGNATURE OF AWARD OFFICIAL Digital signature applied by EPA Award Official	TYPED NAME AND TITLE Linda Murphy, Director, Office of Administration & Resource Management	DATE 09/09/2009
---	---	---------------------------

AFFIRMATION OF AWARD

BY AND ON BEHALF OF THE DESIGNATED RECIPIENT ORGANIZATION

SIGNATURE 	TYPED NAME AND TITLE Scott Lang, Mayor	DATE 9/29/2009
---	--	--------------------------

EPA Funding Information

V - 97158401 - 2 Page 2

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$ 8,043,902	\$ 1,800,000	\$ 9,843,902
EPA In-Kind Amount	\$ 0	\$	\$ 0
Unexpended Prior Year Balance	\$ 0	\$	\$ 0
Other Federal Funds	\$ 0	\$	\$ 0
Recipient Contribution	\$ 0	\$	\$ 0
State Contribution	\$ 0	\$	\$ 0
Local Contribution	\$ 0	\$	\$ 0
Other Contribution	\$ 0	\$	\$ 0
Allowable Project Cost	\$ 8,043,902	\$ 1,800,000	\$ 9,843,902

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.802 - Superfund State Political Subdivision and Indian Tribe Site Specific Cooperative Agreements	CERCLA: Sec. 104(d)(1)	40 CFR PTS 31 & 35 SUBPT O

Fiscal									
Site Name	Req No	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
AEROVOX	091ARAP038	09	T	1A00R	302DD2E	4185	0120RV00	C002	1,800,000
									1,800,000

Budget Summary Page: Demolition of Former Aerovox Facility.

Table A - Object Class Category
(Non-construction)

	Total Approved Allowable Budget Period Cost
1. Personnel	\$0
2. Fringe Benefits	\$0
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$9,843,902
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$9,843,902
10. Indirect Costs: % Base	\$0
11. Total (Share: Recipient 0.00 % Federal 100.00 %.)	\$9,843,902
12. Total Approved Assistance Amount	\$9,843,902
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$1,800,000
15. Total EPA Amount Awarded To Date	\$9,843,902

Administrative Conditions

All Administrative Terms and Conditions remain the same except for the following: Term and Condition #12 is added. Term and Condition #13 is added. Term and Condition #14 is added. Term and Condition #15 is added. Term and Condition #16 is added.

12. MANAGEMENT FEES

Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs which are not allowable under this assistance agreement. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

13. A-133 AUDIT

In accordance with OMB Circular A-133, which implements the single Audit Act, the recipient hereby agrees to obtain a single audit from an independent auditor if it expends \$500,000 or more in total Federal funds in any fiscal year. Within nine months after the end of a recipient's fiscal year or 30 days after receiving the report from the auditor, the recipient shall submit a copy of the SF-SAC and a Single Audit Report Package. **For fiscal periods 2002 to 2007 recipients are to submit hardcopy to the following address:**

Federal Audit Clearinghouse
1201 East 10th Street
Jeffersonville, IN 47132

For fiscal periods 2008 and beyond the recipient MUST submit a copy of the SF-SAC and a Single Audit Report Package, using the Federal Audit Clearinghouse's Internet Data Entry System. Complete information on how to accomplish the 2008 and beyond Single Audit Submissions you will need to visit the Federal Audit Clearinghouse Web site:
<http://harvester.census.gov/fac/>

14. REIMBURSEMENT LIMITATION

EPA's financial obligations to the recipient are limited by the amount of federal funding awarded to date as shown on line 15 in its EPA approved budget. If the recipient incurs costs in anticipation of receiving additional funds from EPA, it does so at its own risk.

15. To implement requirements of Section 106 of the Trafficking Victims Protection Act of 2000, as amended, the following provisions apply to this award:

a. We, as the Federal awarding agency may unilaterally terminate this award, without penalty, if

a subrecipient that is a private entity: (1) is determined to have violated an applicable prohibition in the Prohibition Statement below; or (2) has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in the Prohibition Statement below through conduct that is either: (a) associated with performance under this award; or (b) imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1532. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in the Prohibition Statement below.

- b. Our right to terminate unilaterally that is described in paragraph a of this award term: (1) implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and (2) is in addition to all other remedies for noncompliance that are available to us under this award.
- c. You must include the requirements of the Prohibition Statement below in any subaward you make to a private entity.

Prohibition Statement - You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not engage in severe forms of trafficking in persons during the period of time that the award is in effect; procure a commercial sex act during the period of time that the award is in effect; or use forced labor in the performance of the award or subawards under the award.

16. Unliquidated Obligations Term and Condition: Part 31

Pursuant to 40 CFR 31.41(b) and 31.50(b), EPA recipients shall submit a final Financial Status Report – also called the SF269 – to EPA's Las Vegas Finance Center (LVFC), within ninety (90) days after the expiration of the budget period end date. Completed SF269s must be faxed to 702-798-2423 or mailed to the following address: USEPA LVFC, P.O. Box 98515, Las Vegas, NV 89193-8515. The LVFC will make adjustments, as necessary, to obligated funds after reviewing and accepting a final Financial Status Report. Recipients will be notified and instructed by EPA if they must complete any additional forms for the closeout of the assistance agreement.

EPA may take enforcement actions in accordance with 40 CFR 31.43 if the recipient does not comply with this term and condition.

Programmatic Conditions

All Programmatic Terms and Conditions remain the same except for the following:

- 1.) The City shall abide by and implement the revised Work Plan for the Aerovox project as submitted by email to EPA on 7/30/09. The City shall ensure full compliance with the Final

Request for Proposal for transportation and disposal of Aerovox demolition waste (currently attached to the Work Plan in draft form). This term and condition rescinds the programmatic term and condition #5 from the original award dated 9/7/06.

Application for Federal Assistance SF-424

Version 02

*1. Type of Submission:		*2. Type of Application		* If Revision, select appropriate letter(s)
<input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application		<input type="checkbox"/> New <input type="checkbox"/> Continuation <input checked="" type="checkbox"/> Revision		
3. Date Received:		4. Applicant Identifier:		
5a. Federal Entity Identifier:		*5b. Federal Award Identifier: V-97158401		
State Use Only:				
6. Date Received by State:		7. State Application Identifier:		
8. APPLICANT INFORMATION:				
*a. Legal Name: City of New Bedford				
*b. Employer/Taxpayer Identification Number (EIN/TIN): 04 6001402		*c. Organizational DUNS: 075719187		
d. Address:				
*Street 1: <u>133 William Street</u>				
Street 2: _____				
*City: <u>New Bedford</u>				
County: <u>Bristol</u>				
*State: <u>MA</u>				
Province: _____				
*Country: <u>US</u>				
*Zip / Postal Code <u>02740</u>				
e. Organizational Unit:				
Department Name: Environmental Stewardship Dept		Division Name:		
f. Name and contact information of person to be contacted on matters involving this application:				
Prefix: _____		*First Name: <u>Scott</u> _____		
Middle Name: _____				
*Last Name: <u>Alfonse</u>				
Suffix: _____				
Title: Director, Environmental Stewardship Dept.				
Organizational Affiliation:				
*Telephone Number: 508 991-6188		Fax Number: 508 961 3045		
*Email: scott.alfonse@newbedford-ma.gov				

Application for Federal Assistance SF-424

Version 02

***9. Type of Applicant 1: Select Applicant Type:**

C. City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

*Other (Specify)

***10 Name of Federal Agency:**

US Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

***12 Funding Opportunity Number:**

*Title:

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

New Bedford (Bristol County), Massachusetts

***15. Descriptive Title of Applicant's Project:**

Demolition of Former Aerovox Facility, New Bedford, MA

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

*a. Applicant: Fourth *b. Program/Project: Fourth

17. Proposed Project:

*a. Start Date: 7/1/2006 *b. End Date: 12/31/2013

18. Estimated Funding (\$):

*a. Federal	9,843,902
*b. Applicant	
*c. State	
*d. Local	
*e. Other	
*f. Program Income	
*g. TOTAL	9,843,902

***19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on _____
 b. Program is subject to E.O. 12372 but has not been selected by the State for review.
 c. Program is not covered by E. O. 12372

***20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U. S. Code, Title 218, Section 1001)

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions

Authorized Representative:

Prefix: _____ *First Name: Scott
Middle Name: _____
*Last Name: Lang
Suffix: _____

*Title: Mayor

*Telephone Number: 508 979 1410 Fax Number: 508 991 6189

* Email: scott.lang@newbedford-ma.gov

*Signature of Authorized Representative:

*Date Signed: JULY 9, 2009

Application for Federal Assistance SF-424

Version 02

***Applicant Federal Debt Delinquency Explanation**

The following should contain an explanation if the Applicant organization is delinquent of any Federal Debt.

BUDGET INFORMATION - Non- Construction Programs

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non- Federal (f)	Total (g)
1.		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
2.		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
3.		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
4.		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
5. TOTALS		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories		GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
		(1)	(2)	(3)	(4)	
a. Personnel		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
b. Fringe Benefits		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
c. Travel		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
d. Equipment		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
e. Supplies		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
f. Contractual		\$ 9,843,902.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 9,843,902.00
g. Construction		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
i. Total Direct Charges (sum of 6a -6h)		\$ 9,843,902.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 9,843,902.00
j. Indirect Charges		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
k. TOTALS (sum of 6i and 6j)		\$ 9,843,902.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 9,843,902.00
7. Program Income		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION C - NON- FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	\$	\$	\$	\$ 0.00
9.	\$	\$	\$	\$ 0.00
10.	\$	\$	\$	\$ 0.00
11.	\$	\$	\$	\$ 0.00
12. TOTALS (sum of lines 8 and 11)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 0.00	\$	\$	\$	\$ 00
14. Non- Federal	\$ 0.00	\$	\$	\$	\$
15. TOTAL (sum of lines 13 and 14)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$	\$	\$ 5,000,000.00	\$ 4,843,902.00
17.	\$	\$	\$	\$
18.	\$	\$	\$	\$
19.	\$	\$	\$	\$
20. TOTALS (sum of lines 16 -19)	\$ 0.00	\$ 0.00	\$ 5,000,000.00	\$ 4,843,902.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:	22. Indirect Charges:
23. Remarks	

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503

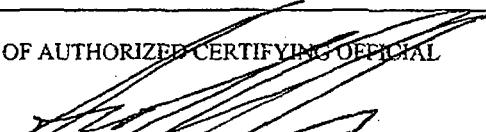
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §§874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1721 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, AAudits of States, Local Governments, and Non-Profit Organizations.
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL		TITLE	
		Mayor	
APPLICANT ORGANIZATION		DATE SUBMITTED	
City of New Bedford, MA		JULY 9, 2009	



V-97158401
EPA Project Control Number

CERTIFICATION REGARDING LOBBYING

CERTIFICATION FOR CONTRACTS, GRANTS, LOANS AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

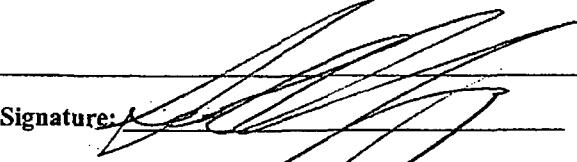
Scott W. Lang, Mayor
Typed Name & Title of Authorized Representative

Signature and Date of Authorized Representative

JULY 9, 2009

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

<p>1. Type of Federal Action (check 1):</p> <p><input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input checked="" type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance</p>	<p>2. Status of Federal Action (check 1):</p> <p><input type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award</p>	<p>3. Report Type (check 1):</p> <p><input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change</p> <p>For material change only: Year quarter Date of last report</p>
<p>4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier , if Known: City of New Bedford 133 William St. New Bedford, MA 02740</p>	<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p>	
<p>Congressional District, if known: 4th</p>	<p>Congressional District, if known:</p>	
<p>6. Federal Department/Agency: US Environmental Protection Agency</p>	<p>7. Federal Program Name/Description: CFDA Number, if applicable:</p>	
<p>8. Federal Action Number, if known: Cooperative Agreement Assistance ID No. V-97158401</p>	<p>9. Award Amount, if known: \$9,843,902</p>	
<p>10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI): N/A</p>	<p>b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): N/A</p>	
<p>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature:  Print Name: Scott W. Lang Title: Mayor Telephone No.: 508 979 1410 Date: JULY 9, 2009</p>	
<p>Federal Use Only</p>	<p>Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)</p>	

United States Environmental Protection Agency
Washington, DC 20460Preaward Compliance Review Report for
All Applicants and Recipients Requesting EPA Financial Assistance
Note: Read instructions on other side before completing form.

I.	Applicant/Recipient (Name, Address, State, Zip Code). City of New Bedford, 133 William Street	DUNS No. 075719187
II.	Is the applicant currently receiving EPA assistance? yes	
III.	List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7. See instructions on reverse side.) See Attachment	
IV.	List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective action taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7. See instructions on reverse side.) See Attachment	
V.	List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3)) Not Applicable	
VI.	Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below. no a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b). b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. § 7.70) applies.	
VII.*	Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its programs or activities? (40 C.F.R. § 5.140 and § 7.95) yes a. Do the methods of notice accommodate those with impaired vision or hearing? no b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications? yes c. Does the notice identify a designated civil rights coordinator? yes	
VIII.*	Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. § 7.85(a)) yes	
IX.*	Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166) yes	
X.*	If the applicant/recipient is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator. Angela Natho, Director of Personnel, 133 William St., New Bedford, MA 02740, angela.natho@newbedford-ma.gov , fax (508) 979-1619, tel. (508) 979-1444	
XI*	If the applicant/recipient is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet address for, or a copy of, the procedures. yes	

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

B. Title of Authorized Official
Mayor

C. Date

JULY 9, 2009

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized EPA Official

B. Title of Authorized EPA Official

C. Date

See ** note on reverse side.



City of New Bedford Case Report

MCAD

Category: Litigation	Type: MCAD	Status: OPEN	Docket No.: 03BEM02597	Date of Loss: 8/18/2003	Claim Amount: \$0.00
Plaintiff: Sheila Adesso	Defendant City of New Bedford, New Bedford Police Dept.				
Summary: Complainants allege that they have been discriminated against in the terms, conditions and privileges of their employment.					
Disposition: Pending					
CSNo: 151-2005-40-13	Department: Police				
Category: Litigation	Type: MCAD	Status: OPEN	Docket No.: 08BEM00100	Date of Loss: 12/10/2007	Claim Amount: \$0.00
Plaintiff: Ariel C. Alejandro	Defendant New Bedford Police Dept.				
Summary: Complainant alleges that he was discriminated against by the New Bedford Police Department, on the basis of sex, arrest record, race, color.					
Disposition: Pending					
CSNo: 210-2008-40-4	Department: Police				
Category: Litigation	Type: MCAD	Status: OPEN	Docket No.: 08BEM00668	Date of Loss: 4/9/2008	Claim Amount: \$0.00
Plaintiff: Larkin, Heather	Defendant New Bedford School Department et al				
Summary: Complainant believes that she was discriminated against on the basis of sex and sexual harassment.					
Disposition:					
CSNo: 300-2008-40-4	Department: School				
Category: Litigation	Type: MCAD	Status: OPEN	Docket No.: 08BPA01139	Date of Loss: 6/6/2007	Claim Amount: \$0.00
Plaintiff: Colon, Iris	Defendant City of New Bedford Police Dept.				
Summary: Complainant believes she was discriminated against by C-New Bedford Police Department, on the basis of Sex, Race, Color.					
Disposition: Pending					
CSNo: 210-2008-40-11	Department: Police				

Category: Litigation Type: MCAD Status: OPEN Docket No.: MCAD07BPA Date of Loss: 8/27/2008 Claim Amount: \$0.00

Plaintiff: Joanne Johnson Defendant: City of New Bedford/DPI

Summary: Dept: DPI (Discrimination) Sent to Knapp Schenck to be assigned by Kopelman and Paige for handling. The Complainant believe that she was discriminated against by City of New Bedford, Department of Public Works, on the basis of Sex(Female) and Disability.

Disposition:

CSNo: 434-2008-40-5 Department: DPI

Category: Litigation Type: MCAD Status: OPEN Docket No.: 08BEM02992 Date of Loss: 8/17/2008 Claim Amount: \$0.00

Plaintiff: Doyon, Macaila Defendant: New Bedford Police Department, Scott Lang, Mayor, Ronald Teachman, Chief of Police

Summary: The complainant, believe that she was discriminated against by New Bedford Police Department, and Scott Lang, Mayor, and Ronald Teachman, Chief of Police, individually on the basis of Sex discrimination. Case has been referred to Kopelman and Paige. Faxed request to Knapp, Schenck

Disposition: Pending

CSNo: 210-2008-40-20 Department: Police

Category: Litigation Type: MCAD Status: OPEN Docket No.: Date of Loss: 12/31/2007 Claim Amount: \$0.00

Plaintiff: Campbell, Aletha Defendant: City of New Bedford, Robert McPherson, Individually

Summary: I, Aletha Campbell, the Complainant believe that I was discriminated against by City of New Bedford, Robert McPherson, Individually, on the basis of Sex and Retaliation.

Disposition:

CSNo: 500-2008-51-1 Department: Human Resour



City of New Bedford

Case Report

MCAD

Category: Litigation Type: MCAD Status: CLOSED Docket No.: 07-11947-N Date of Loss: 12/17/2007 Claim Amount: \$0.00

Plaintiff: Maureen Curran Defendant: New Bedford Public Schools and Michael Longo

Summary: Complainant alleges that she had been discriminated against because of her sex, female, in that she was bypassed for a teaching position.

Disposition: She is requesting to be paid market rate of what other teachers made which would be approximately \$400,000.00 Closed file #2008-40-
CSNo: 300-32008-40-1

Department: School

Category: Litigation Type: MCAD Status: CLOSED Docket No.: 08BEM01376 Date of Loss: 2/18/2008 Claim Amount: \$0.00

Plaintiff: COLON, Melissa Defendant: City of New Bedford, Lt. Michael Jesus, Lt Jeffrey Silva

Summary: Complainant, believe that she was discriminated against by City of New Bedford, and Lt. Michael Jesus, and Lt. Jeffrey Silva, individually on the basis of, sex discrimination/sexual harassment.

Disposition: Complaint is being handled by Jay Tahan, Esq.-Kopelman & Paige Settlement agreement reached.

CSNo: 210-2008-40-13 Department: Police

Introduction

Consistent with EPA's current strategy for the Aerovox site, the City of New Bedford (the City) requests that the Cooperative Agreement (CA) between the City and EPA for the Aerovox site be amended to revise the scope of work to a) focus on offsite disposal, b) increase the amount of funding by an additional \$1.8 million, and c) extend the timeframe to 2013. With this additional funding the CA will total approximately \$9.8 million.

Several events since the 2006 CA was originally signed justify these changes: (1) EPA plans to revise the removal action from onsite to offsite disposal of building demolition waste based on public comment; (2) uncertain tonnage and unit costs for disposal are reflected in the proposed funding increase; (3) a potentially responsible party (PRP) will perform, among other things, building demolition and capping; and (4) the City will perform offsite transportation and disposal (T&D), and, if any CA funds remain after completion of T&D, backfilling and post-removal site controls (PRSCs).

The potential to use CA funds for PRSCs is the main reason why the period of performance is being requested to extend to December 31, 2013. Should funds remain in the CA at the end of 2013, a waiver of the seven-year time limit for this cooperative agreement will be requested earlier in 2013 to continue using these funds for PRSCs beyond 2013.

1. Background and Purpose

The vacant Aerovox mill at 740 Belleville Avenue in New Bedford, MA consists of an approximately 450,000 sq. ft. former manufacturing building located on approximately 10.3 acres of industrial-zoned land abutting the Acushnet River. From c.1940 to c.1978, polychlorinated biphenyls (PCBs) were used at the facility in the manufacture of electrical capacitors and transformers. As a result of this manufacturing history, soils and groundwater at the site as well as the building itself are heavily contaminated with PCBs. This facility is considered one of the major sources of historic PCB contamination to New Bedford Harbor.

The property directly abuts two active industrial mills to the north and south, and a large, densely populated, urban residential neighborhood on the opposite (west) side of Belleville Avenue. Nearby residential areas also exist one block north of Aerovox (on the east side of Belleville Avenue), as well as in the towns of Acushnet and Fairhaven on the eastern side of the Acushnet River.

Inspection and sampling of the building by EPA in 1997, as well as follow-up sampling performed by Aerovox, identified high levels of PCBs throughout the interior of the building as well as in site soils. In 1999, EPA issued a RCRA Administrative Consent Order to Aerovox, which required, among other things, the demolition of the building and capping of the entire site. Interim measures were taken to protect workers inside the building, and the building was vacated in 2001 when operations relocated to an alternative site in New Bedford. Aerovox filed for bankruptcy in June 2001, and the response actions required by the RCRA consent order were never completed.

Site inspections performed by EPA and the state after the bankruptcy found that many drums of hazardous waste had been left behind, and that cracks in an impermeable asphalt cap

Revised Aerovox Workplan 7/30/09

installed in the 1980s had gone unrepaired. Inspections also revealed that upon vacating the building, Aerovox left behind a significant amount of interior equipment and material. A removal action by EPA in 2004 removed the drummed wastes and repaired the cracks in the cap. More recently, site inspections have noted the presence of asbestos, inorganic mercury spills, and extensive water damage throughout the building.

EPA also performed PCB analyses of the asphalt parking lot in 2004 to complement previous pavement sampling reported in the 1998 Engineering Evaluation/Cost Analysis (EE/CA). (Fuel oil impacted site soils, potentially contaminated with PCBs, had been used to manufacture the base course of the asphalt parking lot.) EPA's analyses found PCBs in the top $\frac{1}{2}$ inch in all but one of the fourteen pavement samples, at levels ranging from 0.8 to 46 ppm. Also, as further discussed in the 2006 Supplemental EE/CA (SEE/CA), airborne PCBs from the eastern portion of the site (near the Acushnet River) are routinely the highest of any location monitored around the New Bedford Harbor Superfund site.

Since 2001, the former manufacturing building has continued to deteriorate, and without on-going maintenance the existing HAC cap will crack and deteriorate. A major failure of the interior fire suppression system after the building was vacated caused significant water damage throughout the building, and inspections inside the building in 2006 reported increased roof leaks. Limited fire suppression and security funding was provided to the City as a result of the bankruptcy proceedings, but trespassing and vandalism of the fire suppression system's copper piping has been a recurring problem. Due to the difficulty in maintaining the fire suppression system in the (unheated) building, the City has installed a temperature monitoring system designed to notify the fire department in the event of a fire.

Fire and fire suppression pose significant potential threats to area residents and to the surrounding environment. The two industrial facilities abutting the Aerovox site to the north and south are active manufacturing facilities with hundreds of employees working three shifts per day. To the north, only a small alley separates the abutting facility from the Aerovox building. To the south, a former public way and a parking lot separate the abutting facility and the Aerovox building. Similarly, only Belleville Avenue separates the Aerovox building from the large residential neighborhood across the street. Should a fire erupt, the burning materials would emit airborne PCBs and asbestos, as well as the potential for dioxins and furans formed during PCB combustion. In such a fire scenario large-scale evacuations of impacted neighborhoods would likely be required, as well as cleanup of PCB and other residues resulting from the fire. Fire suppression activities would also likely produce contaminated water that would run off into the Acushnet River.

Because of these issues, EPA's 2006 SEE/CA recommended that the Aerovox building be demolished, the demolition waste be placed in the basement, and the entire site be covered with a protective cap as part of a Non-Time Critical Removal Action (NTCRA). In 2006, EPA entered into this CA with the City to assist in implementing the recommended NTCRA and the CA was funded for approximately \$8 million. Subsequently, EPA received public comments against the onsite disposal portion of the removal action. As a result, EPA has indicated that the forthcoming Action Memorandum (scheduled for fall 2009) will include offsite disposal for almost all demolition-related debris.

Revised Aerovox Workplan 7/30/09

Related to these events, EPA has been in negotiations with a PRP that is now expected to participate in the removal action by performing, among other things, the building demolition and capping activities, thereby allowing the City to focus its efforts on offsite T&D tasks. EPA has updated the cost estimate for the removal action to include the offsite disposal and to take into account disposal of the interior equipment and material left behind by Aerovox. These latest cost estimates reflect the uncertainty in both the total tonnage to be disposed and the unit costs for this disposal. An additional \$1.8 million is being added to the CA through this amendment to cover this disposal cost uncertainty.

Any remaining funds in the CA after all T&D costs are paid will be used to purchase and deliver (but not place) backfill, and for PRSCs to be performed by the City. Accordingly, this work plan now reflects this revised scope of work.

2. Tasks

The following tasks will be implemented in close collaboration with both EPA and the U.S. Army Corps of Engineers (USACE). EPA has retained the services of the USACE and its contractor(s) for technical assistance and project management for this removal action under separate agreement.

Task 1: Procure a Transportation and Disposal (T&D) Contractor

In compliance with applicable state law, a request for proposals (RFP) will be issued to select and procure a T&D Contractor and to ensure the cost-effectiveness of this procurement. The RFP will be consistent with the forthcoming Action Memorandum and will include the technical requirements currently included in the draft Part A of the Aerovox RFP (see Attachment 1) to ensure that all interested firms understand what is expected of them during the cleanup. Included in this is the requirement that the T&D Contractor work in conjunction with the demolition contractor to implement and complete this cleanup in a coordinated, timely manner. The RFP will also include the Bid Sheet and Unit Price Schedule currently included in the draft of Part B of the Aerovox RFP (see Attachment 2) to ensure that all the required pricing information is available to provide for an informed decision on which T&D firm to select.

When Aerovox relocated in 2001, the building was vacated without removing its interior equipment and materials. More recently, EPA updated the T&D costs and included an estimate of this added tonnage; however, these latest cost estimates reflect the uncertainty in both the total tonnage to be disposed offsite and the unit costs for this disposal. As a result, using the updated cost estimate, \$1.8 million is being added as part of this amendment (for a total of approximately \$9.8 million).

Task 2: Procure a Manifest Manager

To ensure compliance with applicable federal and state law, the City will hire a Manifest Manager to coordinate and oversee all project aspects regarding City Waste Material (as defined in the NTCRA settlement documents) characterization, sampling, decontamination (if any), T&D and manifest signing. The CA will fund the Manifest Manager only for the duration of the NTCRA in which T&D of City Waste Material is being implemented, i.e., after T&D of the

Revised Aerovox Workplan 7/30/09

Aerovox Waste Material and prior to backfilling of the basement, approximately 5 months in total.

Task 3: Implement T&D Activities

Once the T&D Contractor and Manifest Manager are selected per Tasks 1 and 2, respectively, the performance of the T&D work itself will fall under this task. Attachment 1 will guide the technical scope of work for the T&D activities, and Attachment 2 (the version completed by the T&D Contractor) will form the basis for all payments to the T&D Contractor. The City, in close collaboration with EPA and the USACE, will ensure that the technical requirements in Attachment 1 are complied with, and will hold the T&D Contractor accountable to them, especially with regard to the standards for air- and water-borne PCBs and other hazardous constituents.

EPA's On-Scene Coordinator (OSC) with assistance from the USACE and its contractor(s) will assist the City in all aspects of Task 3. Under the direction of the OSC, the USACE and its contractor(s) will provide day-to-day oversight of the T&D Contractor's performance.

Task 4: Public Outreach

The City will collaborate with EPA in the implementation of an effective public outreach effort for this project. The City and EPA expect that monthly public informational meetings will be held to keep interested stakeholders apprised of the NTCRA's status. Based on discussions with EPA to date, EPA will have the lead role in this public outreach campaign, while the City, its T&D Contractor and the USACE will have a supporting role.

In addition to these expected monthly outreach meetings, the City will assist EPA with any other outreach efforts as required to answer stakeholder questions or resolve any issues that may arise during performance of the NTCRA.

Task 5: Final T&D Cost Report

Within 45 days of the last shipment of demolition debris by the T&D Contractor, the City shall submit a report to EPA accounting for ALL T&D costs. To accomplish this, the City shall require the T&D Contractor to submit its final invoice no later than 30 days from the last shipment of demolition debris by the T&D Contractor.

Task 6: Purchase and Deliver Clean Basement Backfill

If the Final T&D Cost Report (Task 5) shows that the full cost of T&D is less than the funds available in the CA, the City shall utilize these funds in a cost-effective manner to purchase and deliver clean fill to the site for backfilling the basement hole. The clean fill delivered by the City per this task shall comply with the specifications included in Section III.F of the demolition Scope of Work for the NTCRA settlement documents (see Attachment 3). The City will NOT be responsible for spreading or compacting this clean fill. These tasks will be performed by the PRP's demolition contractor. The City shall coordinate the timing and

execution of this task with the PRP's demolition contractor so that the overall project proceeds as reasonably and expediently as possible.

Task 7: Perform Post-Removal Site Controls (PRSCs)

Any unused funds remaining in the CA after completion of Tasks 1 through 6 may be used to reimburse the City or its contractor(s) for the performance of PRSCs, as defined in the forthcoming Action Memorandum.

3. Oversight Role of EPA

The City understands that, due to the nature of the project and the environmental monitoring required during the building demolition phase, EPA and the USACE will have a significant oversight role during project implementation. The City will coordinate closely with EPA (and the USACE) to ensure that the T&D Contractor fully complies with the project's contract requirements and works cooperatively with the demolition contractor. EPA and the USACE will be allowed access in order to collect the air and water quality samples required for the project. Similarly, EPA and the USACE will be allowed access to monitor the daily construction activities in order to have a full understanding of the project's status and to otherwise implement the NTCRA.

If EPA determines that the T&D Contractor is operating in non-compliance with the contract requirements and informs the City of such non-compliance, the City will act accordingly to ensure that compliance is attained in a timely manner. The City will not allow the T&D Contractor to operate in non-compliance with the contract requirements.

Only after USACE has reviewed and the OSC approved the T&D Contractor's draft invoices may the City authorize payment of the T&D Contractor's invoices. The City will work with EPA and the USACE to establish an invoice review process that provides for this review in a timely manner so that payment to the T&D Contractor is not delayed. The City will also use its retainage policy as currently included in the draft RFP, in which final payment of the retained amount is not made until the OSC's final approval is received.

4. Booster Pump Station

Consistent with the current Access Agreement with the City for the Aerovox property, the City will continue to allow EPA access to the shoreline portion of the Aerovox parking lot as needed to implement the New Bedford Harbor Superfund Site cleanup. In this regard, the City understands that EPA and the USACE will require a dredge slurry booster pump station to be placed on or along the Aerovox property shoreline from time to time. To avoid interference with the Aerovox site cleanup, however, EPA and the USACE will not use the Aerovox property parking lot for this pump station during the NTCRA. Instead, if needed, the booster pump station will be located outside of the parking lot, on the easterly end of the northern half of the former Hadley Street, and EPA will coordinate with both the demolition contractor and the T&D contractor to avoid interference with NTCRA activities.

(END)

**ATTACHMENT 1 - 6/24/09 DRAFT REQUEST FOR PROPOSALS
TRANSPORTATION AND DISPOSAL OF
DEMOLITION WASTES AND DEBRIS FROM THE VACANT
AEROVOX PLANT, NEW BEDFORD, MASSACHUSETTS**

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 - 2.2 Site History and Cleanup Actions to Date
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 - 2.3.1 Building Materials, Equipment and Surfaces
 - 2.3.1.1 PCBs
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PART A – PROJECT DESCRIPTION AND REQUIREMENTS

1.0 PURPOSE AND CONTRACT OVERVIEW

Purpose

The City of New Bedford (the “City”) will be acquiring one waste Transportation and Disposal (T&D) contract through a single procurement in order to support the Aerovox mill demolition project. The purpose of this solicitation is to evaluate and select for contract award a qualified Applicant that represents a “Best Value” to the City, considering price and technical evaluation. This contract will be dedicated to the execution of transportation and disposal activities associated with TSCA (Toxic Substance Control Act) and non-TSCA and hazardous building demolition waste streams. The Applicant shall obtain the necessary disposal capabilities and landfill capacities to allow the disposal of building debris without causing delay to the demolition contractor’s approved schedule.

Contract Overview

1.1 One demolition waste T&D contract will be awarded as a result of this solicitation. Services to be provided include all plant, labor, materials and equipment necessary for providing the transportation and disposal of TSCA and non-TSCA and hazardous waste from the demolition of the vacant Aerovox mill at 740 Belleville Avenue, New Bedford, MA as described herein. The total debris amount for removal and disposal is estimated at approximately 25,000 to 30,000 tons, but given the uncertainty regarding the amount of equipment and materials (E&M) remaining in the building, the ultimate tonnage to be removed may deviate significantly from this estimate. The vast majority of the demolition debris will be TSCA waste (for example, among other criteria, >50 parts per million (ppm) PCBs for porous material; > 10 ug PCBs/100 cm² for non-porous material), but a limited volume as described herein may be non-TSCA waste, hazardous waste, or potentially recyclable or reusable material once decontaminated, if necessary.

1.2 All demolition activities, loading of demolition waste on to T&D vehicles, and decontamination of T&D vehicles will be performed by a third-party demolition contractor. The start and end date for the T&D work of this solicitation will be dependent on the demolition contractor’s work schedule. The T&D Contractor selected pursuant to this solicitation is required to closely coordinate with the demolition contractor (specifically, the Demolition Project Coordinator), and is required to perform the T&D work in a manner that does not delay the demolition contractor’s approved schedule.

1.3 Note that the demolition contractor is required to create separate stockpiles for those materials that, based on previous sampling, have the highest potential to be classified as non-TSCA waste or to be recycled for reuse. Section 3.n (Part A) below requires the T&D Contractor to minimize total disposal costs by maximizing the amount of material from these separate stockpiles that gets disposed, recycled or reused as non-TSCA waste (provided the cost of this non-TSCA transportation and disposal, recycling or reuse, including

any required sampling or decontamination, is less than the applicable TSCA transportation and disposal cost).

Furthermore, Section 6.2 below requires Applicants to submit a TSCA Waste Minimization Plan (TWMP) as part of the initial proposal to the City. Similarly, note that the initial proposal to the City shall also include a Waste Management Plan (WMP) pursuant to Section 6.1 below.

1.4 Duration/Capacity: Demolition and associated T&D of the vacant Aerovox mill is currently estimated to take approximately 5 to 6 months to complete, but as noted above this time frame will be dependent on the demolition contractor's schedule. The period of performance of the T&D contract awarded under this solicitation will end upon completion of all T&D related work.

1.5 This vacant Aerovox plant demolition and offsite debris disposal project is being performed as part of a USEPA Superfund NTCRA (non-time critical removal action). As such the U.S. Army Corps of Engineers (USACE) will be supporting the EPA and the City by performing day to day oversight of both the demolition and T&D. EPA's On Scene Coordinator (OSC) or, in his or her absence, the USACE, as oversight contractor, shall resolve any field dispute regarding either the demolition contractor or the T&D Contractor. The City shall employ a City Project Manager who shall serve as the single point of contact for all T&D on-site issues that concern or need approval or review by the City. Among other duties set forth below herein, the City Project Manager or his/her designee shall consult with the OSC, the USACE, and the T&D Contractor on all matters concerning the T&D contract and any field disputes between the demolition contractor and the T&D Contractor.

1.6 This Request for Proposal (RFP) contains a Unit Price Schedule for the T&D of bulk TSCA and non-TSCA demolition waste and hazardous waste from the Aerovox mill demolition (see Attachment A of this solicitation). Since as described herein the vast majority of T&D material is expected to be >50 ppm PCBs, the principle basis for evaluating an Applicant's cost effectiveness pursuant to this solicitation shall be line item 3.3 in Attachment A (mixed debris, equipment and building materials > 50 ppm PCBs). The cost of T&D for other material types also will be based on this completed Bid Sheet and Unit Price Schedule. Attachment A must be completed in its entirety in order for the Applicant's proposal to be considered valid.

1.7 The T&D Contractor shall provide transportation and disposal services in complete compliance with this RFP.

1.8 It is extremely important that you completely review all sections of the solicitation and follow all instructions carefully.

2.0 PROJECT BACKGROUND

2.1 Location and Physical Setting

The former Aerovox facility is located on an approximately 10.3-acre parcel at 740 Belleville

Avenue in New Bedford, MA. A parking lot is located south of the former manufacturing building on the property. Aerovox and various predecessor companies occupied the site for over 60 years. The site is located in a highly developed residential and industrial area of New Bedford, Massachusetts.

The Aerovox building encompasses approximately 450,000 square feet of floor space and consists of a western section that contains two floors and an eastern section that contains three floors. The exterior walls of the building are brick, while the roof is constructed of wood. The first floor (i.e., basement floor) in both the eastern and western sections of the building is constructed of concrete. Structural components of the building include interior wood columns and steel I-beam floor joists. Wooden floors are present throughout the building's 2nd and 3rd floors, except that portions of the second floor of the western (or sawtooth) section are concrete.

2.2 Site History and Cleanup Actions to Date

Originally a cotton mill constructed in the 1920s, the vacant Aerovox facility was used to manufacture capacitors and other electronic components from c.1940 until 2001 when Aerovox relocated operations. Manufacturing operations have resulted in virtually all building materials and interior surfaces becoming contaminated with PCBs above TSCA regulatory levels. As described further below, an exception to this is the office annex area (the western most portion of the building along Belleville Avenue) which has been found to be below TSCA regulatory levels. Certain waste streams such as granite window sills, structural steel, steel shelving, wood beams and columns and bulk waste paper may also not require disposal at a TSCA facility. In addition there may be small amounts of material that are contaminated with PCBs and hazardous waste (e.g., mercury and PCB contaminated flooring) that will require disposal at a licensed RCRA Subtitle C disposal facility or at a TSCA facility that is also licensed to accept hazardous waste. Soils on site are also contaminated with PCBs, with levels generally increasing from west to east, with the highest levels generally along the shoreline.

Pursuant to an enforcement order issued by EPA in the early 1980s, sheet pile walls were placed to contain PCB-contaminated soils to the east of the Aerovox building and along the entire Acushnet River shoreline, and a cap material (hydraulic asphalt cement) was also placed over PCB-contaminated soils. An asphalt cap in the parking lot also functions as a cover over contaminated soils.

Pursuant to an EPA removal action in 2004, barrels of hazardous material and other wastes were removed from the building and disposed at appropriate off-site facilities.

2.3 Site Characterization Data

The major investigatory effort for building contamination was the Engineering Evaluation/Cost Analysis (EE/CA) published in August 1998 by Blasland, Bouck & Lee, Inc. (BBL) for Aerovox, Inc. In addition, Jacobs Engineering investigated the potential for non-TSCA demolition waste in a report published in July 2007 for the USACE. The western-most office annex area was also heavily sampled for PCBs (ENSR, June 2006, see Section 2.5.2 below)

2.3.1 Building Materials, Equipment and Surfaces

2.3.1.1 PCBs. In summary, and with certain exceptions noted below in Section 2.5, all building and E&M sampling performed to date by a variety of parties has found PCBs above 50 ppm and $>10 \text{ ug}/100 \text{ cm}^2$ throughout the building. This includes EPA's 1997 sampling and BBL's sampling, as reported in the 1998 EE/CA, as well as the 2007 Jacobs Engineering sampling. **All building material and interior and exterior E&M, with the exceptions noted herein, shall be considered to be contaminated with PCBs above these regulatory levels unless proven (via sampling) otherwise.** The demolition contractor will also identify materials that contain hazardous waste.

Based on these sampling efforts, the building areas with the highest PCB levels are believed to be the impregnation (or tank) room area in the northwest section of the 2nd floor, and the pump room and oil storage stockroom on the 1st floor below the impregnation room area. For example, the maximum PCB concentration reported was in the impregnation room (128,000 ppm, wood floor sample, 1997 EPA data), while the highest wipe sample reported was in the adjacent impregnation rack room ($2,300 \text{ ug}/100 \text{ cm}^2$, 1997 EPA data). Many other areas of the facility showed very high PCB levels as well.

2.3.1.2 Asbestos. The demolition contractor (not the T&D Contractor) is responsible for removal of all regulated asbestos containing material (RACM) within the building prior to demolition. However, various non-friable asbestos containing material (ACM), such as floor tiles, ceiling tiles, roofing material, etc. will be commingled in with the PCB-contaminated demolition debris to be disposed by the T&D Contractor. The best source of information regarding ACM at the Aerovox Site is a June 2006 report prepared by Jacobs Engineering for the USACE titled "Aerovox Asbestos and Lead-Based Paint Survey."

2.3.1.3 Metals. The only building sampling effort to date that has included analysis for metals was the 2007 Jacobs Engineering survey. Table 3-2 of that report shows the Toxicity Characteristic Leaching Procedure (TCLP) results for lead on painted wood: all 25 samples passed the TCLP test, with 21 of the 25 samples reported as non-detect. The four other samples ranged from 260 ug/l to an estimated 648 ug/l.

2.3.1.4 Other Contaminants. The Aerovox facility was known to have used various solvents such as trichloroethylene and perchloroethylene in the manufacturing process. Mercury switches and mercury containing devices existed in the building. Various grades of oils were also used. Drummed waste materials were removed during the removal action by EPA's removal contractor in 2004, however, residuals of these waste materials may be found in piping, tanks and vats on the site. It is not anticipated that these liquid hazardous waste materials will be encountered during this scope of work, as the demolition contractor is responsible for these wastes. Similarly, EPA collected and removed visible spilled mercury and mercury containing devices. However, certain portions of the building debris, such as wood flooring, may contain mercury above regulatory levels. See further discussion in Section 2.4 below.

2.4 Controlled Wastes Requiring Off-Site Disposal

Any material or object characterized as RCRA hazardous waste shall be disposed off-site at a properly permitted facility. As discussed above, trichloroethylene was used in degreasing operations at Aerovox, but prior investigations did not indicate that significant quantities, if any, of the solvent remain. Some amounts of solvents may nevertheless be discovered during the demolition process in porous surfaces or materials as a result of spills. Similarly, as a result of mercury spills in the building that were subsequently cleaned by EPA, spilled mercury may be mixed with PCBs in some media. The demolition contractor will evaluate whether suspected areas are potentially characteristic hazardous waste for mercury. Material determined to potentially be characteristic hazardous waste for mercury will be stockpiled for the T&D Contractor to perform further characterization. In the event that the waste is determined to be characteristic hazardous waste, disposal at a licensed RCRA Subtitle C disposal facility or a TSCA facility licensed to accept disposal of RCRA hazardous waste will be necessary.

Considerable amounts of the Aerovox facility's product (i.e., capacitors) remain in the building. It is assumed that these do not contain liquid PCBs, but, due to the oils within them, will require characterization by the T&D Contractor for disposal. There are oil-filled electrical transformers at the facility which must also be characterized for disposal.

PCB remediation waste will be generated by structural demolition. Disposition of this waste stream will be governed by TSCA disposal requirements for PCB remediation waste (40 CFR § 761.61(c)). Other waste streams that contain PCBs which are not considered PCB remediation waste such as PCB liquids generated by decontamination of possible reusable material and removal of outside transformers must be disposed of in accordance with TSCA disposal requirements (40 CFR § 761.60).

2.5 Non-Controlled Wastes for Off-Site Disposal/Recycling

2.5.1: A building sampling program was conducted in winter 2006/07 to determine if certain building materials could be disposed as non-TSCA waste, or reused or recycled (Jacobs, July 2007). The conclusions of that report are summarized below. The demolition contractor is required to create separate stockpiles for these following potentially non-TSCA materials during demolition (or, alternatively, direct load this non-TSCA material in to T&D vehicles).

Granite window sills: 4 of 5 samples were non-detected for PCBs, with the 5th sample at 2.6 ppm PCBs. After washing, all 5 samples were non-detect for PCBs. Consistent with Section 3.n (Part A) below, the T&D Contractor will therefore wash all granite window sills, and after representative sampling to confirm acceptability for reuse, send these sills offsite for unrestricted reuse. The unit cost provided on the Unit Price Schedule shall reflect the cost of this washing step which includes containment and disposal of the PCB contaminated wash water, and any related sampling.

Steel beams: 15 of 16 wipe samples were below the 100 ug/100 cm² criteria for smelting prior to washing (the one sample at 127 ug/100 cm² PCBs was from the pump/tank room). 9 of these 16 wipe samples were below the 10 ug/100 cm² criteria for unrestricted reuse prior to washing (Jacobs, 2007 at Table 3-1). Sampling indicated that the particular washing protocol used in this study did more harm than good. The T&D Contractor shall review this information and

determine the best approach for minimizing total T&D costs related to steel beams. The unit cost(s) provided on the Unit Price Schedule shall reflect the costs of any additional tasks related to this best approach and shall reflect as needed the cost of a washing step which includes containment and disposal of the PCB-contaminated wash water and any related sampling.

Steel Shelving: 2 of the 3 wipe samples were below the 10 ug/100 cm² criteria for unrestricted reuse. The 3rd sample was an estimated 17.4 ug/100 cm². The T&D Contractor shall review this information and determine if a cost-effective washing and sampling process can be used to reduce T&D costs for steel shelving. The unit cost provided on the Unit Price Schedule shall reflect the cost of this washing step which includes containment and disposal of the PCB contaminated wash water and any related sampling. An estimated 1,600 linear feet of various size shelving exists inside the building.

Wood Beams and Columns: Sampling results from the Jacobs study indicates that wood beams and columns, except for those from the tank/pump room, can potentially be disposed as special waste (1-50 ppm PCBs) if based on full coring rather than surface characterization. The T&D Contractor shall review this information and coordinate with the disposal facility(ies) to determine the appropriate disposal method. The unit cost provided on the Unit Price Schedule shall reflect the results of this coordination with disposal facilities regarding the characterization approach. (Note that wood floors shall be assumed to be greater than 50 ppm PCBs, unless proven otherwise with sampling.)

Copper Pipe: The Jacobs study indicated that with effective washing, copper pipe except that from the pump/tank room area, could be recycled for reuse. The T&D Contractor shall review this information and determine if a cost-effective washing process can be used to reduce T&D costs. The unit cost provided on the Unit Price Schedule shall reflect the cost of this washing step which includes containment and disposal of the PCB contaminated wash water and any related sampling.

Exterior Brick: The Jacobs study indicated that exterior brick (with the exception of that from the impregnation room) should have PCB levels below 1 ppm. In addition, this study indicated that bricks (or cement blocks) from the smoke stack and boiler room should contain PCB levels in the 2 to 4 ppm range. If the demolition contractor can demonstrate, with City and EPA approval, that the brick (not including brick from the impregnation room) can be disposed as non-TSCA waste or be reused or recycled based on representative sampling either with or without segregation of interior or exterior brick, then the T&D Contractor, in consultation with City and EPA, shall dispose, recycle or reuse the brick in the most cost-effective manner allowed by state or federal regulations. Similarly, bricks or cement blocks from the smoke stack and boiler room shall be disposed, recycled or reused in the most cost-effective manner allowed by state or federal regulations.

The T&D Contractor shall coordinate with the demolition contractor to allow decontamination activities, waste characterization sampling and subsequent wastewater disposal to proceed smoothly, in a location that does not impede demolition work and without delay to the demolition contractor's approved schedule.

The T&D Contractor shall provide daily notice of the status of each pile of wastes for off-site disposal to the Demolition Project Coordinator and City Project Manager and no pile shall remain on-site for longer than 24 hours after the waste characterization analytical results have been received by the T&D Contractor (provided the demolition contractor can load the T&D vehicles accordingly) unless otherwise agreed to by the OSC, Demolition Project Coordinator, City Project Manager and T&D Contractor.

2.5.2 The office annex: Samples were taken throughout the office annex (westernmost) area of the facility in 2006 to determine if demolition debris from the office annex could be disposed as non-TSCA waste (ENSR, June 2006). With the exception of carpet and certain areas of plywood (which were removed from the office annex in spring 2008 by Jacobs Engineering for USACE), this study found all materials to be below the TSCA disposal criteria of 50 ppm and 10 ug/100 cm². As a result, the demolition contractor is required to demolish the office annex first, prior to any other building demolition, so that the debris may be disposed of, after any further sampling required by the disposal facility, as special or unrestricted waste. Note that this sampling effort showed that the steel beams from the office annex are likely to be acceptable for unrestricted reuse. The T&D Contractor shall coordinate with the demolition contractor to allow this office annex demolition and disposal to proceed smoothly and without delay to the demolition contractor's approved schedule.

Also, this ENSR sampling found that the flagpole, guard shack and the exterior pump house in the south-central portion of the site (once the interior motors are removed from the pump house) are also below the TSCA criteria of 50 ppm and 10 ug/100 cm². These items shall therefore be disposed, after any further sampling required by the disposal facility, at the same time and in the same manner as the office annex debris discussed immediately above.

2.5.3 Note that Section 3.n requires the T&D Contractor to minimize overall T&D costs by maximizing, if cost-effective, the amount of non-TSCA and recyclable or reusable materials.

2.6 Equipment and Materials Volume and Tonnage

2.6.1 *Building Material:* The unprocessed volume of building material, minus the concrete foundation which is to remain in place, is estimated in the 1998 EE/CA to be approximately 11,100 cy.

The EE/CA estimated the mass of this building material (less the concrete foundation) to be approximately 8,701 tons.

2.6.2 *Interior and Exterior Equipment and Materials:* The raw (in place) volume of interior and exterior E&M estimated to be in and around the facility based on a 2005 inventory performed by USACE and Jacobs Engineering is 14,281 cy. The volume of many items can be reduced by crushing.

It is difficult to accurately estimate the tonnage of this E&M given the large and variable amount of this material left behind in and around the facility. Using a crushed volume of 7,140 cy based on the 2005 inventory, with 50% of this volume a "lighter" debris at 1.5 tons/cy and 50% of this

volume a 'heavier' debris at 3 tons/cy, a total estimated mass of E&M is calculated to be 16,065 tons.

2.6.3 Total Tonnage: Combining the total mass from 2.6.1 and 2.6.2, a total estimated tonnage for all debris from the Aerovox demolition is estimated to be approximately 25,000 tons. Given the inherent uncertainty in estimating the total tonnage, a margin of error of 20% is deemed reasonable, for a total estimated tonnage of 25,000 to 30,000 tons.

3.0 DESCRIPTION OF WORK

The Contractor shall provide the City with qualified personnel, equipment and facilities to perform the required work. The work to be performed under this contract shall include:

- a. Supplying sufficient transportation equipment (i.e., trucks and containers) and logistical support to meet predefined project needs regarding waste quantities and shipment schedules defined within this scope of work.
- b. Supplying all ancillary equipment such as a scale, truck tarps and liners to cover containers, etc.
- c. Installation of truck liners AND heavy duty tarps, etc., as appropriate to the type of T&D vehicle being used, to ensure that no dust, debris or liquids (e.g., water from debris washing or dust suppression) are lost from the vehicle during transport.
- d. Furnishing all transportation equipment, tools, materials, all other equipment, labor, services, bonds, insurance, and supervision to perform all work proper and necessary to complete the work as specified.
- e. Performing the testing and analysis required by the disposal facility(ies) for the various materials to be disposed. The T&D Contractor shall require a laboratory turn-around time of 4 days or less to minimize delay to the demolition contractor, unless an alternative schedule is otherwise agreed to by the Demolition Project Coordinator, OSC, City Project Manager and the T&D Contractor.
- f. Scheduling and delivery of sufficient quantities of clean and serviceable containers, transport vehicles, liners, covers, placards, stickers and associated materials.
- g. All T&D vehicles supplied by the T&D Contractor shall be adequately sealed (e.g., with water-tight liners, gaskets, etc.) to prevent any water (or other fluids) in or on the debris from being released from the vehicles during transport.
- h. Transportation of all demolition related debris from the vacant Aerovox facility to the disposal facility(ies) designated by the T&D Contractor and approved by the City.
- i. Assuring that the transportation equipment is cleaned and decontaminated upon completion of the work at the disposal facility.

- j. Compliance with all U.S. Department of Transportation (USDOT) regulations relating to the handling, packaging, preparation of applicable shipping documents, emergency notification and all other applicable requirements in the transport of these materials.
- k. Transportation management and provision of manifests and tracking systems sufficient to meet all federal, state and local laws and regulations for the transportation and disposal of PCB contaminated materials, RCRA hazardous waste, controlled, universal, special and solid waste, and that is adequate to meet all the terms of this solicitation.
- l. All necessary reporting, notice of and response to any spill, notice of violation or similar incident during transportation.
- m. Assumption of all responsibility for all material after it has been loaded into Applicant's transportation equipment and accepted by Applicant until it is accepted by the designated disposal or reuse facility.
- n. Assumption of all responsibility to minimize the City's overall disposal costs by maximizing the amount of material from the potential non-TSCA stockpiles to be created by the demolition contractor that is to be disposed or reused as non-TSCA waste (provided the cost of this non-TSCA disposal or re-use, including any required sampling or decontamination, is less than the applicable TSCA disposal cost). Section 2.5 (Part A) herein identifies those materials that, based on previous sampling, have the highest potential for non-TSCA disposal or reuse. This responsibility includes all sampling, cleaning, washing, and collection and disposal of contaminated wash water and solvents that may be required in order for these materials to be disposed or re-used as non-TSCA waste, provided that these activities in total result in lower disposal costs to the City.
- o. Assuring compliance with all federal and state regulations and guidance regarding disposal of ACM that may be commingled with the demolition debris.
- p. Coordinating effectively on a daily basis with the demolition contractor to ensure that adequate disposal vehicles and associated equipment and supplies are on site to meet the demolition contractor's approved schedule. The coordination shall be conducted as a daily meeting, at a minimum, between the T&D Contractor's Transportation and Disposal Coordinator (see section 5.2) and the demolition contractor's representative (to be appointed by the Demolition Project Coordinator). This daily coordination shall include at a minimum a discussion and evaluation of the following:
 - transportation equipment (i.e., trucks and containers) and associated supplies (liners, covers, placards, stickers and associated materials) required to meet the demolition contractor's schedule for the following two days ;
 - potential schedule impacts, including providing the demolition contractor with an updated schedule for transportation and disposal of TSCA materials and materials to be disposed of as non-TSCA and providing at least 5 business days prior notice of when any

disposal facility or any intermediary transload facility is closed for business and thus unable to accept material

- the status of each pile of wastes staged for off-site disposal;
 - analytical results (both decontamination results and waste characterization results) received by the T&D contractor during the previous day.”
- q. Perform maintenance and periodic calibration of the truck scale.

4.0 GENERAL REQUIREMENTS AND RESPONSIBILITIES

For the purpose of this document the successful Applicant, after award of the contract, will become the Transportation and Disposal (T&D) Contractor. The T&D Contractor will be required to meet all applicable local, state and federal laws and regulations for shipment and permanent disposal, or if applicable, delivery for reuse, of the material described in this solicitation. The T&D Contractor shall assume all waste transport and disposal responsibilities, and all such responsibilities for recycling or reuse, for the material once it has been loaded on to its vehicle for transportation and disposal. The T&D Contractor shall use best management practices for management of wastewater and air emissions to maintain compliance with the performance standards included in Attachment F. The City shall not be responsible for any damages to the T&D Contractor's equipment under any circumstances.

4.1 Licenses, Permits and Agreements

The City will require evidence that the Applicant is properly licensed to perform the activities required in the state(s) where the work is to be performed as a condition precedent to an award of any contract action. The Contractor shall provide copies of all necessary licenses, certificates of registration, and/or permits issued to the Contractor and/or subcontractors as they relate to the transportation and disposal (or reuse) of the material.

4.2 Training and Medical Monitoring

The T&D Contractor shall provide all necessary OSHA training and medical monitoring for all its on-site and off-site employees and assure that all required training and medical monitoring is provided to employees of any subcontractor, vendor or other suppliers involved in this project. Employees shall be trained, tested, and certified to safely and effectively carry out their duties in accordance with federal, state and local laws and regulations and procedures.

4.3 Security Requirements

The T&D Contractor shall have its own U.S. Department of Transportation (USDOT) Security Plan that meets the requirements of 49 CFR 172, Subpart I. The T&D Contractor will be required to sign a certification statement upon initiation of waste transport activities. This certification will be placed in the project files in association with the shipping documents. Subsequent shipments of the same hazard class of materials transported by the T &D Contractor

will not require additional certifications. The certification will be typed on a separate page and read as follows: "I hereby certify that (name of T&D Contractor) has a Security Plan in place that meets the requirements of 49 CFR 172, Subpart I for the hazardous or TSCA materials described in the attached shipping papers." This certification shall be signed by the T&D Contractor and dated.

4.4 Employee Health and Safety

All work performed shall meet the applicable requirements of Department of Labor (DOL), and Occupational Safety and Health Administration (OSHA) (including Hazardous Waste Site Operations at 29 CFR 1910.120). The T&D Contractor will be responsible to review and comply with the demolition contractor's Health and Safety Plan for the vacant Aerovox plant demolition project. The T&D Contractor shall provide documentation that all involved personnel have successfully completed training in accordance with OSHA requirements (as applicable), and the Site Safety and Health Plan. The T&D Contractor shall maintain and implement its own safety and health procedures addressing all transportation activities performed both on-site and off-site.

4.5 Project Schedule

It is anticipated that award of this contract will occur in winter 2009/2010. The schedule for all waste shipment activities will be established by the Aerovox demolition contractor. The T&D Contractor's unit prices included on the Unit Price Schedule herein shall be effective for the duration of the T&D work.

Site Operation Hours: Standard hours of operation for both the demolition contractor and the T&D Contractor shall not be greater than 11 hours per day (7:00 am to 6:00 pm), Monday through Friday, and 9 hours (8:00 am to 5:00 pm) on Saturdays, except that trucks loaded and secured the previous night (and parked inside the site fence) and ready to ship may depart from the site as early as 6:00 am. Work that involves use of the transload T&D facility in Worcester shall not be performed on Saturdays, nor on any other day the transload T&D facility is not operating provided that the T&D Contractor gives the demolition contractor notice of the facility's closing not less than five (5) business days before such date (except, in the case of emergency, in which the T&D Contractor shall make its best effort to notify the demolition contractor as soon as possible). No work shall be performed on Sundays or on a federal- or state-recognized holiday. If hours or days beyond the above schedule are required to support your proposal, Applicants must clearly identify the hours and days associated with the respective proposal and pricing. The demolition, size reduction, remediation progress, weather conditions and other constraints may limit shipment of material.

4.6 Key Personnel

At a minimum the T&D Contractor key personnel shall include: Program Manager, the person responsible for overall management of the contract including cost, schedule and technical quality; Transportation & Disposal Coordinator, duties and responsibilities as specified in this solicitation; and Regulatory Specialist, responsible for all regulatory compliance as specified in

this solicitation. The Applicant's proposal must include the names, qualifications and applicable experience for these key personnel and the City must approve any changes to proposed key personnel, before or after award of the contract.

5.0 WASTE TRANSPORTATION REQUIREMENTS AND RESPONSIBILITIES

The on-site demolition contractor will operate the site of the former Aerovox facility. Activities performed by the demolition contractor will include debris processing, loading of the T&D Contractor's vehicles, decontamination of those vehicles, operation of environmental controls, air monitoring and general housekeeping associated with the area and operations.

5.1 Truck Operations and Staging

The shipment of waste utilizing trailer dump trucks and/or trucks with containers will be required at the vacant Aerovox facility. The demolition contractor will load trucks up to the weight specified by the T&D Contractor. The T&D Contractor shall specify to the demolition contractor the maximum size of the material being processed for disposal. The T&D Contractor shall provide instruction to the demolition contractor as to how to load the T&D vehicles to achieve the maximum target weight of each vehicle (e.g., mixing steel waste with wood waste). The T&D Contractor shall provide a means to weigh each vehicle on site. The T&D Contractor shall recommend a waste shipment schedule based on their specific transport capabilities.

The T&D Contractor must adhere to the truck routes through the City of New Bedford as described in Attachment G below.

Staging of Disposal Vehicles: The City anticipates that a number of disposal vehicles daily will be loaded and ready for shipment to the disposal facility without sufficient time remaining in the day to complete delivery to the facility. Any such vehicle shall remain on the actual demolition site until the morning of the next working day before attempting delivery, unless the Applicant can establish that it has arranged for secure staging of the loaded vehicles on site at the disposal facility or at an off site staging area normally utilized by the disposal facility. In either case, such staging area must be approved by the City prior to its use. **THE CITY WILL NOT PERMIT ANY DISPOSAL VEHICLES LOADED WITH TSCA WASTE TO BE STAGED OUTSIDE THE LIMITS OF THE DEMOLITION SITE EXCEPT AT THE DISPOSAL FACILITY AS SET FORTH ABOVE WITHOUT PRIOR APPROVAL OF THE CITY.**

The City will permit Applicants to stage empty disposal vehicles outside the limits of the demolition site providing any such staging area is accessible via approved truck routes as described in Attachment G.

5.2 Transportation and Disposal Coordinator

The T&D Contractor shall designate by position and title, one person to act as the Transportation and Disposal Coordinator for this contract. The Transportation and Disposal Coordinator shall serve as the single point of contact for all T&D on-site issues, as well as

environmental regulatory matters and shall have overall responsibility for total environmental compliance including, but not limited to:

- Accurate identification and classification of regulated and non-regulated materials
- Determination of proper shipping names
- Preparation of shipping documents and manifests for all materials transported to the designated facility using verbiage concurred with by the City
- Completion of all material profiles and related documents
- Completion of all exception and discrepancy reports
- Identification and compliance with marking, labeling, packaging and placard requirements
- Signing all inspection documents of equipment arriving or departing the site.
- Preparation of and submission of Weekly Status Tracking Reports
- Coordination with the City Project Manager and the on-site demolition contractor, the EPA OSC or, in the OSC's absence, the USACE representative. The demolition work associated with this project, i.e., demolition, salvaging, size reduction and all related site operations shall be performed by the demolition contractor. Specifically, the demolition contractor will be responsible for loading of trucks, decontamination of equipment and personnel at the former Aerovox Facility. Successful completion of this scope of work will require extremely effective coordination with the demolition contractor.
- Preparation and submission of other documents required by federal, state or local laws or regulations or by the designated facility.
- Prior to the initial shipment of any hazardous or PCB-contaminated material off-site, the Transportation and Disposal Coordinator shall provide written certification to the City Project Manager that the waste materials have been properly packaged, labeled, marked, manifested and placarded in accordance with the requirements of USDOT, USEPA, Massachusetts Department of Environmental Protection (MassDEP) and this contract.

5.3 Transportation Vehicles and Containers

All transportation vehicles and containers shall comply with all requirements of the USDOT regulations in the 49 CFR 100-180. Transport vehicles and containers are defined as trucks with inter-modal or roll-off containers, semi-trailer trucks, and trucks with end-dump capability. The T&D Contractor shall coordinate the schedule for all vehicle arrival and material deliveries at the construction site so that the demolition contractor's approved schedule is not delayed. If necessary, the T&D Contractor shall provide containers and related equipment that are dedicated to the vacant Aerovox facility demolition project in order to meet the waste shipment schedules.

All vehicles shall be decontaminated prior to leaving the site, but note that the demolition contractor (not the T&D Contractor) will perform all vehicle decontamination activities. The T&D Contractor shall inspect all vehicles leaving the project site to ensure that no soil or other contaminants adheres to any part of the vehicle, including its wheels or undercarriage. Based on these inspections, the T&D Contractor shall direct the demolition contractor to remove any soil or other contaminants remaining on the vehicles at the vehicle decontamination pad. EPA's On Scene Coordinator or, in his or her absence, the USACE, as oversight contractor, shall resolve

any disputes arising in the field with regard to the adequacy of vehicle decontamination (or any other dispute arising in the field).

The T&D Contractor shall utilize transporters having proper USEPA identification numbers and MassDEP hauler registrations and shall ensure through the manifest system that the waste arrives at the authorized waste disposal facility.

The T&D Contractor shall provide transportation of the waste directly to the disposal facility or the reuse facility. If a trans-load facility is required, the T&D Contractor shall be responsible for any transfer of material from one transportation vehicle to another, e.g., from a truck to a rail car. The T&D Contractor will be solely responsible for all property requirements (e.g., leases), permits/licenses, equipment, personnel, and costs required to perform any transfer of material.

The T&D Contractor shall be required to provide detailed information on the tare and gross weights of all vehicles, containers, and if applicable any transfer vehicle to ensure that maximum allowable weights are not exceeded. The T&D Contractor shall provide instruction to the demolition contractor as to how to load the T&D vehicles to achieve the maximum target weight of each vehicle (i.e., mixing steel waste with wood waste). The T&D Contractor is responsible for providing a means to weigh each vehicle on site to verify that gross vehicle weights and axle weights per applicable state regulations are legal before vehicles are driven on the public roads. Neither the City nor AVX Corporation (AVX) or its agents and contractors including the demolition contractor assume any responsibility for any violation by the T&D Contractor of local, state, and/or federal transportation regulations, including weight limits.

5.4 Shipping Documents

The T&D Contractor shall ensure that each shipment of hazardous or PCB waste sent off-site for disposal is accompanied by properly completed shipping documents as required by Federal, State and local laws and regulations. The shipping documents shall be in accordance with USDOT regulation, Hazardous Materials Regulations 49 CFR, Parts 100 – 178. The T&D Contractor shall prepare hazardous waste manifests for each shipment of hazardous and PCB waste shipped off-site. Manifests shall be completed using instructions in 40 CFR 761, Sections 207 and 208 and all other applicable requirements. Shipping documents shall be submitted to the City Project Manager or his/her designated representative for review and approval at least two weeks before the first shipment is scheduled to occur and two days prior to all subsequent shipments from the site. Review and approval time frames shall be adjusted if shipment schedules so require.

If the exception under 40 CFR 761.208 applies; i.e., PCB waste is less than 50 ppm and does not contain hazardous waste that require manifesting pursuant to RCRA, the T&D Contractor may prepare a bill of lading for each shipment of waste in lieu of a hazardous waste manifest. The bill of lading shall satisfy the requirements of 49 CFR 172, Subpart C and any applicable state or local law or regulation and shall be submitted to the City Project Manager or his/her designated representative for review and approval at least two weeks before the first shipment is scheduled

to occur and two days prior to all subsequent shipments from the site. Review and approval time frames shall be adjusted if shipment schedules so require.

If necessary, the T&D Contractor shall complete EPA Form 8700-12, Notification of Hazardous Waste Activity, and submit copies to the City Project Manager or his/her designated representative for information and to EPA for review and approval. The Contractor shall allow a minimum of 30 days for processing the application and assigning the EPA ID number. Shipment shall be made not earlier than one week after receipt of the EPA ID number. All transportation related shipping documents shall be provided and completed by the T&D Contractor and completed copies furnished to the City Project Manager or his/her designated representative for review and approval. Draft documents shall be provided as part of the Waste Management Plan specified below in paragraph 6.1.

The City shall sign the T&D Contractor's shipping documents as owner/generator.

The T&D Contractor shall not cause delays to the demolition contractor's approved schedule due to any delays resulting from the preparation of shipping documents.

5.5 Shipping Materials

The T&D Contractor shall provide all of the materials required for the packaging, labeling, marking, placards and transportation of TSCA and hazardous wastes and hazardous materials in conformance with USDOT standards. Details in this specification shall not be construed as establishing the limits of the T&D Contractor's responsibility.

5.6 Packaging

The T&D Contractor shall provide bulk containers for packaging TSCA and hazardous materials/wastes consistent with the authorizations referenced in the Hazardous Materials Table in 49 CFR 172, Section 101, and Column 8. Bulk and non-bulk packaging shall meet the Materials Table, 49 CFR 172, and Section 101. Each packaging shall conform to the general packaging requirements of Subpart B or 49 CFR 173, to the requirements of 49 CFR 178 at the specified packing group performance level, and to the requirements of special provisions of column 7 of the Hazardous Materials Table in 49 CFR 172, Section 101. The T&D Contractor shall also provide other packaging related materials such as materials used to cushion or fill voids in over-packed containers. Sorbent materials shall not be capable of reacting dangerously with, being decomposed by, or being ignited by the hazardous materials being packaged. Additionally, sorbents used to treat free liquids to be disposed of in landfills shall be non-biodegradable as specified in 40 CFR 264, Section 314.

5.7 Markings

The T&D Contractor shall provide markings for each TSCA or hazardous material/waste package, freight container, and transport vehicle consistent with the requirements of 49 CFR 172, Subpart D. Markings shall be capable of withstanding, without deterioration or substantial

color change, a 180-day exposure to conditions reasonably expected to be encountered during container storage and transportation.

5.8 Labeling

The T&D Contractor shall provide primary and secondary labels for TSCA and hazardous materials/wastes consistent with the requirements in the Hazardous Materials Table in 49 CFR 172, Section 101, and Column 6. Labels shall meet design specifications required by 49 CFR 172, Subpart E including size, shape, color, printing, and symbol requirements. Labels shall be durable and weather resistant and capable of withstanding, without deterioration or substantial color change, a 180-day exposure to conditions reasonable expected to be encountered during container storage and transportation.

5.9 Placards

For each off-site shipment of TSCA and hazardous material/waste, the T&D Contractor shall provide primary and secondary placards consistent with the requirements of 49 CFR 172, Subpart F. Placards shall be provided for each side and each end of bulk packaging, freight containers, transport vehicles, and rail cars requiring such placards. Placards may be plastic, metal, or other material capable of withstanding, without deterioration, a 180-day exposure to open weather conditions and shall meet design requirements specified in 49 CFR 172, Subpart F.

5.10 Spill Response Materials

The T&D Contractor shall provide spill response materials including, but not limited to, containers, adsorbent, shovels, and personal protective equipment. Spill response materials shall be available at all times in which T&D materials/wastes are being handled or transported. Spill response materials shall be compatible with the type of material being handled.

5.11 Equipment and Tools

The T&D Contractor shall provide miscellaneous equipment and tools necessary to handle T&D materials and wastes in a safe and environmentally sound manner.

5.12 Spill Response

The T&D Contractor shall respond to any spill of material, which is in its custody or care, pursuant to this contract. All spill response or cleanup costs shall be the responsibility of the T&D Contractor, at no additional cost to the City. Any direction from the City Project Manager or his/her designated representative concerning a spill or release shall not be considered a change under the contract. The T&D Contractor shall comply with all applicable requirements of federal, state and local laws and regulations regarding any spill incident.

The T&D Contractor shall be responsible for complying with the emergency contact provisions in 49 CFR 172, Section 604. Whenever the T&D Contractor ships TSCA or hazardous material,

it shall provide a 24-hour emergency response contact and phone number of a person knowledgeable about the TSCA or hazardous material being shipped and who has comprehensive emergency response and incident mitigation information for that material, or has immediate access to a person who possesses such knowledge and information. The phone must be monitored 24 hours a day, 7 days a week when TSCA or hazardous materials are in transportation, including during storage incidental to transportation. The T&D Contractor shall ensure that information regarding this emergency contact and phone number is placed on all TSCA or hazardous material shipping documents. The T&D Contractor shall designate an emergency coordinator and post the following information at areas in which wastes are managed:

- Name of emergency coordinator;
- Phone number through which the emergency coordinator can be contacted on a 24 hour basis;
- Telephone numbers of the local fire department; and
- Location of fire extinguishers and spill control materials.

In the event of a spill or release of TSCA or hazardous material, the T&D Contractor shall notify the City Project Manager or his/her designated representative immediately. If the spill exceeds a reporting threshold, the T&D Contractor shall follow the pre-established procedures for immediately reporting to the City Project Manager or his/her designated representative and any other reporting required by federal, state or local laws or regulations.

5.13 Decontamination of Equipment

At the conclusion of the use of any individual container, the T&D Contractor shall assure decontamination and document that all shipping containers meet USDOT shipping criteria prior to releasing the container. After final use, the T&D Contractor must provide documentation to the satisfaction of the City Project Manager that all equipment that was utilized during the project has been adequately decontaminated and that no objectionable materials remain on the equipment.

5.14 Reporting and Coordination Requirements

The T&D Contractor shall maintain direct, concise and daily contact/coordination with the OSC, USACE, City Project Manager, and the demolition contractor concerning site operations and scheduling for off-site shipments. Anticipated loading/shipping schedules for the following two week period will be outlined by the demolition contractor at the daily meetings (see section 3.0.p). The T&D Contractor shall be responsible for maintaining adequate records to support all project information needs, including any exception reports (see Part A, Section 6.3.1 below).

PLACEHOLDER: AVX COMMENT RE. REPORTING REQUIREMENTS AND RECORD RETENTION. [AVX - see AOC s.XI. Is T&D Contractor bound by same?]

6.0 WASTE DISPOSAL REQUIREMENTS AND RESPONSIBILITIES

6.1 Waste Management Plan (WMP)

The T&D Contractor shall execute the requirements of this contract in accordance with an approved WMP. The WMP shall be submitted as part of the Applicant's initial proposal to the City. The plan shall detail the manner in which the material shall be managed from the time the T&D Contractor accepts custody of the material until acceptance and final disposal of the material at the designated facility ("cradle to grave"). The plan will describe the types and volumes of materials to be managed as well as the management practices to be utilized. The plan will describe and elaborate upon the specific standard operating procedures the Applicant shall implement to receive, manage, dispose of and monitor the materials.

The WMP shall address the following at a minimum, as appropriate:

- Disposal or reuse facility name and EPA Identification Number.
- Disposal or reuse facility location.
- Name of responsible contact for the facility.
- Telephone and fax numbers for the contact.
- A listing of all permits, licenses, letters of approval and other authorizations to operate.
- Testing and analysis requirements of the disposal facility(ies)for the various types of materials/ debris to be disposed of.
- Draft shipping documents.
- Draft land disposal restriction notification.
- List of corresponding proposed labels, packages, marks, and placards to be used for shipment.
- Waste Acceptance Criteria and Non-Conforming Waste.
- Supporting waste analysis documents.
- Advance shipment notification forms.
- Waste Reception: The Applicant shall describe all points of reception for all waste conveyances. Information for the waste receiving points, methods of offloading, distance from rail spur and/or access road to disposal site, acceptance rate, temporary storage capacity, decontamination procedures, and inclement weather operations. The narrative on function, design, capacity, and expected operational capacity shall include information on the following equipment items:
 - Conveying equipment;
 - Pollution control equipment; and
 - Spill control equipment.

- Formal measurement and documentation process: The Applicant shall describe, in detail, the measurement and documentation process used for the receipt, acceptance processing, and disposal of materials received.
- Tracking and communications systems: The Applicant shall describe, in detail, the tracking system implemented for acceptance, decontamination, and release of waste conveyances from the facility. Procedures used to formally notify the carrier to retrieve decontaminated conveyances shall be detailed. The Applicant shall specify the criteria used to determine whether each conveyance is suitable for restricted or unrestricted reuse. Include average turnaround times to be experienced by the facility.
- Long-term monitoring of disposed materials.
- Auditing and corrective action procedures.
- The T&D Contractor shall specify and describe the units or cells that the proposed disposal facility will use to manage the waste and provide dates of construction and beginning of use. If applicable, drawings may be provided.
- The T&D Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
- The T&D Contractor shall provide the date of the proposed disposal facility's last compliance inspection.
- List of all active compliance orders, enforcement notices or notices of violation issued against proposed transporters and disposal facilities. State the source and nature of the cause of violation, if known. If groundwater contamination is noted for the disposal facility, provide details of the facility's groundwater monitoring program.
- Designation and utilization of a readily accessible point or points of delivery (e.g., plant, warehouse, store, lot, warehouse unloading platform, receiving dock or other location to which shipments can be made) for the carrier's conveyances. The City shall not be liable for any delivery, storage, demurrage, accessorial, or other charges, incurred by the T&D Contractor, or any of its subcontractors, at any tiers, either before or after, or for "constructive placement" as defined in carrier tariffs, unless such charges are caused by an act or order of the City acting in its contractual capacity.
- Method for formally documenting to the City the receipt of each shipment. Chain-of-custody and security control procedures shall be implemented for all shipments received.
- Inspection and decontamination procedures for all conveyances used to transport material. These procedures shall be in accordance with applicable or relevant and appropriate Federal, State and local regulations.
- Communication procedures that will be used to formally notify (e.g., by certified mail/return receipt and/or confirmed fax) the carrier to retrieve decontaminated conveyances. The Applicant shall specify the criteria to be used to determine if each conveyance is suitable for restricted or unrestricted reuse.
- Existing engineering controls, safe work practices, contingency plans and other standard operating procedures used to contain contaminated waste during unloading, placement,

- and disposal. The Applicant shall include procedures used to minimize impacts of adverse weather occurrences (e.g., erosion due to wind and rain).
- Provide the technical approach for permanent disposal of material according to applicable licenses and permits, held by the T&D Contractor, and in accordance with all applicable, relevant and appropriate Federal, State and local regulations.
 - Results of the facility's most recent State compliance inspection. Indicate all types of waste that is or has been accepted at the facility. Provide certification that the facility will accept the conforming waste material in total. Provide assurance that the site is capable of accepting the waste year-round. As an alternative, show that the facility is licensed to temporarily stockpile the waste during inclement weather or other unsuitable periods, and include a contingency plan to address alternate waste disposal facilities in the event that the proposed facility is unavailable for an extended period of time that would preclude temporary stockpiling of waste.
 - A listing of all permits, licenses, letters of approval and other authorizations to operate applied for by proposed transporters and disposal facilities but not yet granted or issued. Provide dates of applications submitted. Planned submittals shall also be noted.
 - Copies of all waste description and other forms that will be required for use by the City in performance of this contract as specified in Section 5.4 Shipping Documents. It is the responsibility of the T&D Contractor to ensure that the analytical results provided by the City are acceptable and that the waste contaminants identified are in compliance with all applicable permits and licenses.

6.2 TSCA Waste Minimization Plan (TWMP)

The T&D Contractor shall execute the requirements of this contract in accordance with an approved TWMP. *The TWMP shall be submitted as part of the Applicant's initial proposal to the City.* The TWMP shall detail the manner in which the Applicant plans to comply with the requirement of Section 3.n (Part A) herein to minimize the City's total disposal cost by maximizing the disposal or reuse volume of those materials identified in Section 2.5 herein as potentially being contaminated below the TSCA criteria of 50 ppm and 10 ug/100cm² for porous and non-porous materials, respectively.

The TWMP shall address the following, as appropriate:

1. The materials most likely to be handled as non-TSCA waste;
2. Any additional decontamination or washing activities anticipated to reduce PCB contamination to below TSCA regulatory criteria, with as much detail as possible regarding the specifics means and methods of this decontamination or washing activity;
3. The engineering controls, safe work practices, contingency plans and other operating procedures to be used to collect, contain and dispose of TSCA and hazardous substances during washing, wiping or other decontamination activities for potentially reusable materials. The Applicant shall include procedures used to 1) prevent ambient air

emissions above the performance levels established in Attachment F hereto, and 2) prevent water runoff from any washing or decontamination efforts pursuant to this Section. Note that, provided the Applicant secures and fully complies with an industrial pre-treatment permit from the City, wash water less than 5 ppb (ug/l) may be sent to the City sewer;

4. The area in square feet that would be required for this effort;
5. The types and frequencies of sampling, analytical methods and turnaround times specific to each waste material type, that would be required for this effort; and
6. Any other pertinent aspects of this work that the City should be aware of.

6.3 Waste Acceptance and Non-Conforming Waste Procedures

DEFINITIONS:

- **ARRIVAL:** The date shipments are dropped-off at the T&D Contractor's designated waste disposal facility.
- **RECEIPT:** The date receipt inspection is completed by the waste disposal facility. Upon completion of the receipt inspection, the T&D Contractor will assign a "bates" number to the waste manifest. The waste disposal facility shall receive waste within one (1) calendar day after arrival at the designated waste disposal facility.
- **ACCEPTANCE:** The date the T&D Contractor's designated disposal facility signs the manifest.
- **DISCOVERY:** The date the T&D Facility inspects the conveyance.
- **CONSTRUCTIVE PLACEMENT:** When, due to some inability on the part of the consignor or consignee, a T&D vehicle cannot be placed for loading or unloading at a point previously designated by the consignor or consignee and it is placed elsewhere. It is then considered as being under Constructive Placement and subject to demurrage, rules and charges, the same as if it were actually placed at the designated point.
- **DEMURRAGE:** A Carrier's charge made on conveyance or other equipment held by or for consignor or consignee for loading or unloading, for forwarding directions or for any other purpose.
- **CONSIGNEE:** The individual or organization to which waste is shipped (i.e., Disposal Facility).
- **CONSIGNOR:** The individual or organization shipping freight to a consignee (i.e., T&D Contractor).

6.3.1 Non-conforming Waste. An acceptance decision shall be made by the Disposal Facility. If the waste is determined to be non-conforming by the Disposal Facility, the T&D Contractor shall notify the City Project Manager, the OSC and the Demolition Project Coordinator by telephone, fax, or email within 24 hours. After this notification, the T&D Contractor shall provide a written copy of the "exception report" to the City Project Manager, the OSC and the Demolition Project Coordinator within two calendar days. This problem report shall include:

- A description of why the waste is non-conforming.
- Photographs and/or analytical results
- A description of the steps required to make the waste conforming
- The number or calendar days required to make the waste conforming, and
- An estimated cost for these services. The cost proposal shall include a complete breakout of all components.

Once this information is received and acknowledged by the City Project Manager, the additional work required to make the waste conforming shall be the subject of a contract modification.

6.3.2 Notice of Violation. The T&D Contractor shall provide the City Project Manager, the OSC and the Demolition Project Coordinator copies of all Notices of Violations received during the prosecution of this work, within two calendar days of receipt.

6.3.3 Responsibility for Coordination. The City is not responsible for any cost incurred by the failure of the T&D Contractor to effectively coordinate receipt of material.

6.3.4 Documentation. The T&D Contractor shall deliver to the City Project Manager the following reports in an original and three copies:

A monthly report, which accounts for all waste material received. This report shall provide the volume of material handled from the site of origin. The report shall contain:

- Shipment/container number;
- Volume received by Unit Price Schedule line item (see Attachment A below);
- Dates sampling and analysis were performed by disposal facility (if any) and sample results;
- Date of material receipt;
- Date of material acceptance;
- Date conveyance was released;
- A description of any containers not accepted and the reason(s) for this;
- Copies of all pertinent documentation (i.e., manifests, analytical results, photos of non-compliant material); and

- The status of each conveyance as of report date.

A final report shall be submitted 30 calendar days after physical completion of this contract and shall include the following:

- An accounting of all materials disposed;
- Certification that all vehicles and containers were properly decontaminated prior to release for other services;
- Description of the actual methods utilized for disposal and decontamination;
- Final quantities received by line item;
- Any problems encountered (i.e., non-compliant shipments, and supporting documentation); and
- Copies of final manifests, bills of lading or related shipping documents.

7.0 NOTIFICATIONS

The T&D Contractor shall immediately provide to the City Project Manager or his/her designated representative, the OSC and the Demolition Project Coordinator copies of any notice of non-compliance or notice of violation from any federal, state or local regulatory agency issued in connection to any work performed under this contract. The T&D Contractor shall furnish all relevant documents regarding the incident and any information requested by the City Project Manager or the OSC and shall coordinate its response to the notice with the City Project Manager or his/her designated representative and the OSC prior to submission to the notifying authority. The T&D Contractor shall also furnish a copy to the City Project Manager or his/her designated representative and the OSC of all documents submitted to the regulatory authority, including the final reply to the notice, and all other materials, until the matter is resolved.

All communications regarding execution of this contract shall be made through the City Project Manager or designated representative. Upon receipt of any non-conforming material, the Contractor shall immediately notify the City Project Manager, via facsimile or email. Within 48 hours of receipt, the T&D Contractor shall provide supporting documentation such as photographs and/or analytical results.

8.0 REGULATIONS AND STANDARDS

All waste transportation and disposal activities shall meet or exceed all requirements established by federal, state and local laws and regulations, which are applicable. These requirements are amended frequently and the T&D Contractor shall be responsible for complying with amendments as they become effective. In the event that compliance exceeds the scope of work or conflicts with specific requirements of the contract, the T&D Contractor shall immediately provide written notification to the City Project Manager or his/her designated representative.

Services covered in this Contract shall comply, at a minimum, with the latest edition of the following applicable regulations and standards. In addition, the T&D Contractor shall comply with all applicable OSHA, USDOT and state standards.

- 10 CFR 19; Notices, Instructions and Reports to Workers: Inspection and Investigation;
- 40 CFR 261; Identification and Listing of Hazardous Waste
- 40 CFR 262; Standards Applicable to Generators of Hazardous Waste
- 40 CFR 263; Standards Applicable to Transporters of Hazardous Waste
- 40 CFR 264; Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
- 40 CFR 265 D; Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
- 40 CFR 266; Standards for the Management of Specific Hazardous Waste and Specific Types of Hazardous Waste Management Facilities
- 40 CFR 268; Land Disposal Restrictions
- 40 CFR 270; EPA Administered Permit Programs: The Hazardous Waste Permit Program
- 40 CFR 300; National Oil and Hazardous Substances Pollution Contingency Plan
- 40 CFR 302; Designation, Reportable Quantities, and Notification
- 40 CFR 761, *et seq.*; Toxic Substance Control Act
- 49 CFR 107; Hazardous Materials Program Procedures
- 49 CFR 172; Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements.
- 49 CFR 172; Sub Part F, Special Placarding provisions: Rail
- 49 CFR 173; Shippers - General Requirements for Shipping and Packing
- 49 CFR 174; Carriage by Rail
- 49 CFR 178; Specifications for Packing
- 49 CFR 263; Standards Applicable to Transporters of Hazardous Waste
- 49 CFR 264; Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (for offsite disposal)

COOPERATIVE AGREEMENT ATTACHMENT 2

6/24/09 DRAFT BID SHEET AND UNIT PRICE SCHEDULE TRANSPORTATION AND DISPOSAL OF BULK TSCA AND NON-TSCA DEMOLITION WASTE FROM THE VACANT AEROVOX MILL

NOTES:

- a. Unit prices included herein shall be effective for the duration of the T&D work.
- b. Unit prices included herein shall include all associated laboratory testing costs. **All such laboratory testing costs shall be based on a maximum 4 day turn-around time.**
- c. For potentially recyclable or reusable materials, the unit prices included herein shall include any and all costs for sampling, washing or decontamination, including containment and disposal of all such wash waters or solvents. **The maximum turn-around time for all associated sampling shall be 4 days.**

1. MOBILIZATION AND DEMOBILIZATION \$ _____ (lump sum)

2. ON-SITE LABOR FOR T&D SUPPORT \$ _____ (lump sum)
Assume staff of 2, 23 weeks @ 60 hours/week

3. PCB – MIXED DEBRIS, EQUIPMENT, AND BUILDING MATERIALS

Total quantity of ALL debris to be transported and disposed is estimated at 30,000 tons.

3.1	< 2 ppm PCBs	\$ _____	/ton
3.2	2 - 49 ppm PCBs	\$ _____	/ton
3.3	> 50 ppm PCBs*	\$ _____	/ton

***as discussed in Part A, Section 1.6 above, this line item 3.3 will be the basis of the evaluation of the Offerors' cost effectiveness pursuant to this solicitation.**

4. STEEL (contaminated by contact with non-liquid PCBs)

Total quantity of steel beams and steel plate associated with the building is estimated at 1,216 tons

4.1	Unrestricted Reuse/Disposal (40 CFR 761.79)	\$	/ton
4.2	Smelter Permitted (40 CFR 761.72(a))	\$	/ton

5. STEEL (contaminated by contact with liquid PCBs)

5.1	< 10 ug PCBs/100 cm ² - Unrestricted Reuse/Disposal (40 CFR 761.79)	\$	/ton
5.2	10 - <100 ug PCBs/100 cm ² - Smelter Permitted (40 CFR 761.72(a))	\$	/ton

6. COPPER (contaminated by contact with non-liquid PCBs)

6.1	Unrestricted Reuse/Disposal (40 CFR 761.79)	\$	/ton
6.2	Smelter Permitted (40 CFR 761.72(a))	\$	/ton

7. COPPER (contaminated by contact with liquid PCBs)

7.1	< 10 ug PCBs/100 cm ² - Unrestricted Reuse/Disposal (40 CFR 761.79)	\$	/ton
7.2	10 - < 100 ug PCBs/100 cm ² - Smelter Permitted (40 CFR 761.72(a))	\$	/ton

8. WOOD COLUMNS AND BEAMS

Total quantity of wood columns was estimated at 110 tons (BBL, 1998), but may be biased high since many 2nd and 3rd floor columns are now known to be hollow. Quantity of wood beams is unknown.

8.1	1 ppm PCBs or less - Unrestricted Reuse/Disposal (40 CFR 761.61)	\$	/ton
8.2	>1 and < 50 ppm PCBs - Special Waste Landfill (40 CFR 761.61)	\$	/ton

9. GRANITE WINDOW SILLS

Total quantity estimated at 330 sills.

9.1	<10 ug/100 cm ² - Unrestricted Reuse/Disposal (40 CFR 761.61)	\$	/sill
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10. STEEL SHELVING

Total estimated linear footage (various size shelving) is 1,600 ft

10.1	<10 ug PCBs/100 cm ² - Unrestricted Reuse/Disposal (40 CFR 761.79)	\$	/linear ft
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11. PCB LIQUIDS

PCB liquids are NOT expected to be part of the demolition debris generated by the demolition contractor, but may be generated by the T&D Contractor as a result of washing the demolition debris in order to maximize the amount of non-TSCA waste per RFP Part A, Section 3.n

PCB - Oil

11.1	< 2 ppm	\$ _____	/gallon
11.2	>2, < 25 ppm	\$ _____	/gallon
11.3	>25, <50 ppm	\$ _____	/gallon
11.4	> 50 ppm	\$ _____	/gallon

PCB - Water

11.5	< 2 ppm	\$ _____	/gallon
11.6	<25 ppm	\$ _____	/gallon
11.7	<50 ppm	\$ _____	/gallon
11.8	> 50<500 ppm	\$ _____	/gallon
11.9	>500 <10,000 ppm	\$ _____	/gallon
11.10	>10,000 ppm	\$ _____	/gallon

12. Non-PCB Capacitors

The T&D Contractor must verify that these capacitors (e.g., unshipped final product) were manufactured post-1978 and that they do not contain PCB oils.

(load = 25 yard container, total quantity unknown)

12.1	Transportation	\$ _____/load
12.2	Recycling	\$ _____/load

13. HAZARDOUS WASTE (mercury-contaminated wood/flooring, minimal amount expected; drum = 55 gallon)

13.1	Disposal at RCRA Subtitled C Licensed Facility	\$ _____/drum
13.2	Disposal at a TSCA facility Licensed to accept Hazardous Waste	\$ _____/drum

14. BRICK

14.1	1 – 49 ppm PCBs	\$ _____/ton
14.2	<1 ppm PCBs	\$ _____/ton

The undersigned hereby submits the above Price Proposal to the City of New Bedford in response to this Request for Proposals (RFP).

Proposer's Name:

Owner's Name (if different from Applicant):

Owner Entity and State of Incorporation:

Applicant's Address:

Applicant's Telephone:

Applicant's E-Mail:

Applicant's Fax Number:

Signature of Applicant

Date

COOPERATIVE AGREEMENT ATTACHMENT 3

(Extracted from 7/8/09 draft demolition Scope of Work)

Basement Backfilling.

1. Respondent shall place clean backfill into the basement hole created by the building demolition. This backfill shall meet or exceed the S-1 chemical criteria of the MCP at 310 CMR 40.0975, and be structurally suitable for supporting, at a minimum, parking lot loads. This backfill shall also meet the Massachusetts Highway Department's specifications for Gravel Borrow (M1.03.0), Type a, modified as follows:

Gravel Borrow shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings, and deleterious material. Gradation requirements for gravel shall be determined by AASHTO T 11 and T 27 and shall perform to the following:

Sieve Designation	Percent Passing
12.5 mm	50 - 85
4.75 mm	0 - 75
300 um	8 - 28
75 um	0 - 10

Maximum size of stone in gravel shall be 150 mm in the largest dimension. The use of Processed Glass Aggregate meeting the requirements of M2.01.8 may be homogeneously blended with the processed gravel up to an addition rate of 10% by mass. The resulting blend will meet the physical requirements specified above.

Respondent may propose alternate structural fill material that differs from the Gravel Borrow standard described above, and utilize this alternate material with prior approval from EPA, provided that this alternate material meets or exceeds the S-1 chemical criteria of the MCP at 310 CMR 40.0975 and is suitable for supporting parking lot loads.

Exhibit 3

State Agreement



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE
20 RIVERSIDE DRIVE, LAKEVILLE, MA 02347 508-946-2700

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

COPY

March 17, 2010

Kurt P. Cummings
Vice President, Chief Financial Officer,
Treasurer and Secretary
AVX Corporation
801 17th Avenue South
Box 867
Myrtle Beach, SC 29578-0687

RE: **NEW BEDFORD**
Release Tracking Number: 4-0601
Former Aerovox Facility
740 Belleville Avenue
**ADMINISTRATIVE CONSENT ORDER
AND NOTICE OF RESPONSIBILITY**

Dear Mr. Cummings:

The Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup (MassDEP) has enclosed two (2) copies of the *Administrative Consent Order and Notice of Responsibility* (Consent Order) for the above-referenced disposal site. The Consent Order, in the form enclosed, memorializes the terms, following extended negotiations, agreed to by MassDEP, the Office of the Attorney General (OAG) and AVX Corporation (AVX).

MassDEP and the OAG request that both copies of the Consent Order be signed by a duly-authorized representative of AVX, and returned to MassDEP within ten (10) business days following receipt by AVX. We further request that AVX's signatory also initial the designated location at the lower right corner of each page of both copies of the Consent Order. The executed copies of the Consent Order should be mailed to the letterhead address and directed to Gerard M.R. Martin.

After receiving a copy of a written communication from the United States Environmental Protection Agency (EPA) to AVX stating that the public comment period for the *Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action* (Settlement Agreement) has closed and that public comments received, if any, did not require EPA to modify or withdraw from Section XVI of the Settlement Agreement, MassDEP and the OAG will expeditiously execute the two copies of the Consent Order previously signed by AVX. MassDEP and the OAG further agree that each office's signatory also will initial the designated location at the lower right corner of each page of both copies of the Consent Order previously signed by AVX. MassDEP shall return one fully-executed copy to AVX.

In the event the Settlement Agreement does not become effective, MassDEP and the OAG agree that they will not execute the Consent Order and that they will provide written confirmation to AVX of such fact. MassDEP reserves the right to exercise the full extent of its legal authority to obtain full compliance with M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.0000.

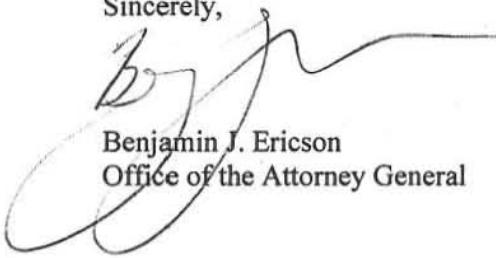
If you have any questions regarding this letter or the enclosed Consent Order, please contact Rebecca Tobin at the letterhead address or by calling (508) 946-2709.

Sincerely,



Gerard M.R. Martin, Chief
Compliance & Enforcement

Sincerely,



Benjamin J. Ericson
Office of the Attorney General

cc: Cynthia E. Catri, Esq., EPA
Irene B. Schall, Esq., City of New Bedford
Gary L. Gill-Austern, Esq., AVX

1857923.4

**COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the matter of:)
AVX Corporation)
801 17th Avenue)
Box 867)
Myrtle Beach, SC 29578)

File No.: ACO-SE-09-3P-016
Release Tracking Number: 4-0601

**ADMINISTRATIVE CONSENT ORDER
AND
NOTICE OF RESPONSIBILITY**

I. THE PARTIES

1. The Massachusetts Department of Environmental Protection (“MassDEP”) is a duly constituted agency of the Commonwealth of Massachusetts (the “Commonwealth”) established pursuant to M.G.L. c. 21A, § 7. MassDEP maintains its principal office at One Winter Street, Boston, Massachusetts 02108, and its Southeast Regional Office at 20 Riverside Drive, Lakeville, Massachusetts 02347.
2. The Massachusetts Office of the Attorney General (the “OAG”) is a duly constituted agency of the Commonwealth charged with the legal representation of the Commonwealth. The OAG maintains offices at One Ashburton Place, Boston, Massachusetts 02108.
3. AVX Corporation (“Respondent”) is a Delaware company whose mailing address for the purposes of this Consent Order is 801 17th Avenue South, Box 867, Myrtle Beach, South Carolina 29578-0687.

II. STATEMENT OF FACTS AND LAW

4. MassDEP is responsible for the implementation and enforcement of M.G.L. c. 21E and the Massachusetts Contingency Plan (“MCP”) at 310 CMR 40.0000. MassDEP has authority under M.G.L. c. 21A, § 16 and the Administrative Penalty Regulations at 310 CMR 5.00 to assess civil administrative penalties to persons in noncompliance with the laws and regulations set forth above.
5. Aerovox Corporation owned and operated the Aerovox Facility located at 740 Belleville Ave, New Bedford, Massachusetts (the “Property”) at which there has been a release and/or threat of release of oil and/or hazardous material pursuant to M.G.L. c. 21E. The Property is further depicted on the map attached as Exhibit A to this Consent Order. For purposes of this Consent Order, the “Site” is referenced by MassDEP under Release Tracking Number 4-0601 and shall mean any place or area where a release of oil and/or hazardous material at or from the Property

which occurred before the Effective Date (as hereinafter defined) has come to be located, except for any such places or areas that are part of the New Bedford Harbor Superfund Site. Places or areas that are part of the New Bedford Harbor Superfund Site include, but are not limited to, any land area, bank or water body located seaward of the sheet pile wall previously installed at the Property or seaward of the mean high water level at the Property and running along the mean high water level in a northward and southward direction from the Property. The New Bedford Harbor Superfund Site is defined as the "New Bedford Harbor Site" in Paragraph 5.I. of the Consent Decree in United States v. AVX Corporation, Civil Action No. 83-3882-Y (D. Mass.), entered February 3, 1992. For the purposes of this Consent Order, the Site includes the sheet pile wall previously installed at the Property.

6. The following facts have led MassDEP to issue this Consent Order:

- (a) The Property abuts Hadley Street and a factory operated by Acushnet Company (Titleist) to the south, a factory operated by Acushnet Rubber Company, d/b/a Precix, Inc. to the north, the Acushnet River to the east, and a residential area along Belleville Avenue to the west.
- (b) The Property contains a vacant, approximately 450,000 square foot, former manufacturing building along with a parking lot located on approximately 10.3 acres of industrially-zoned land. The building consists of a western section containing two floors, and an eastern section containing three floors. The exterior walls are brick; the roof is constructed of wood. The first floor, which is the building foundation floor, is constructed of concrete; the second floor consists of both concrete and wood; and the third floor is constructed of wood. Ancillary structures include a brick sewer pump station and a brick boiler house located along the south side of the main manufacturing building, and a brick structure housing electrical switching equipment located at the southwest corner of the main building.
- (c) The Property began to be used for electrical component manufacturing in approximately 1938. Beginning in approximately the 1940s, dielectric fluid containing polychlorinated biphenyls ("PCBs") was used in capacitor manufacturing. Various solvents were also used in manufacturing operations. Use of PCBs in the manufacturing process ceased on or about October 1978.
- (d) Respondent's predecessor Aerovox Corporation owned and operated an electronic component manufacturing business at the Site from 1938 to January 2, 1973. On June 4, 1973, Aerovox Corporation merged into AVX Ceramics Corporation, which changed its name to AVX Corporation. Operations and disposal practices during this period which involved the use of PCBs and solvents constituted a release and a disposal of hazardous substances that contributed to the contamination of soils, building materials and equipment, surface water runoff and groundwater at the Site.
- (e) On or about January 2, 1973, the Property and the Aerovox name, among other assets, were purchased from Aerovox Corporation by a company named Belleville Industries, Inc., which later changed its name to Aerovox Industries, Inc. Aerovox Industries, Inc. operated the Property from January 1973 to October 1978.
- (f) In October 1978, Aerovox, Inc. ("Aerovox") became the owner and operator of the Property.
- (g) On June 18, 1981, Versar, Inc., an authorized representative of the United States Environmental Protection Agency ("USEPA") and the Massachusetts Department of Environmental Quality Engineering ("DEQE"), MassDEP's predecessor, inspected the

Property. In the course of the inspection, Versar took samples from the soil in a yard area outside the factory on the Property. Versar subsequently reported the results of its analysis of the soil samples, which indicated the presence of PCBs in the soil of the yard.

- (h) In May 1982, USEPA and Aerovox entered into an administrative order pursuant to Section 106 of CERCLA (the "1982 Order"), which applied to that portion of Aerovox's property lying to the west of the seawall separating the factory grounds from the waters of the Acushnet River. The 1982 Order required Aerovox to: (1) conduct an investigation of certain areas of the Property; (2) assess the relative costs of alternative remedial actions; (3) recommend a course of action to USEPA; and (4) implement such course of action, subject to USEPA approval.
- (i) The investigation conducted by Aerovox pursuant to the 1982 Order revealed that PCBs were present in soil and in shallow groundwater at the Property. Aerovox recommended the installation of a cap over certain contaminated soils and a steel sheet pile cutoff wall to serve as a vertical barrier to groundwater.
- (j) In June 1982, DEQE and Aerovox executed a Consent Agreement which imposed virtually the same requirements on Aerovox as those in the 1982 Order.
- (k) Under the 1982 Order with USEPA and the Consent Agreement with DEQE, Aerovox installed a hydraulic asphalt concrete cap over a portion of the Property soils, and a steel sheet pile cutoff wall to serve as a vertical barrier between PCB-contaminated soils and groundwater, and tidal flow into and out of the Acushnet River.
- (l) In 1984, USEPA and Aerovox entered into a Supplemental CERCLA Consent Order pursuant to Section 106 of CERCLA (the "1984 Supplemental Order"), as part of which Aerovox agreed to commence and carry out a long-term monitoring and maintenance program, including compliance with the reporting requirements outlined in the program, and to take maintenance measures as necessary to maintain on-site containment and prevent the release of PCBs.
- (m) On May 29, 1997, USEPA inspected the Property for compliance with the Toxic Substances Control Act, as amended, 15 U.S.C. §§ 2601, *et seq.* ("TSCA"). During the inspection, heavy oil staining was observed in several areas, including the impregnation tank room and a nearby capacitor degreasing room.
- (n) On June 25 and June 26, 1997, USEPA inspectors took samples from one of the manufacturing areas, known as the impregnation tank room, consisting of shavings from the wood floor. USEPA took 20 samples: twelve randomly selected and eight selected after a visual inspection of the tank room. Tests of the samples revealed very high PCB levels in the wood shavings, well above the TSCA regulatory threshold of 50 parts per million or greater that constitutes the disposal of PCBs from a spill and other uncontrolled discharges of PCBs.
- (o) In July 1998, USEPA issued an Approval Memorandum for the performance of an Engineering Evaluation/Cost Analysis ("EE/CA") at the Property. In August 1998, a consultant hired by Aerovox completed the EE/CA, which recommended demolition of the building, with a combination of proposals for on- and off-site disposal of building material and equipment, followed by capping.

- (p) In October 1998, USEPA published a Cleanup Proposal. The recommended proposal included demolition of the building, off-site disposal of all TSCA demolition waste material, leaving the first floor concrete slab in place, covering the building footprint with clean fill, and capping the entire Property. No public comments were received.
- (q) Under an Administrative Order on Consent pursuant to Section 7003 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6973, which became effective on December 2, 1999 (the "1999 AOC"), Aerovox agreed to pay for and conduct the cleanup of the Site. Among other things, the 1999 AOC required that Aerovox: (1) deposit funds, in specified installments, into a trust fund called the Aerovox Facility Fund (the "Fund"); (2) begin demolition of the manufacturing facility and the installation of a cap at the Property when the Fund reached the lesser of \$4.8 million, or 60% of the total estimated cost; and (3) relocate to another manufacturing facility (by 16 months from the effective date of the order, or April 2, 2001). Completion of demolition of the manufacturing facility and cap installation were required within 9 months of accumulating the required funds but no later than November 1, 2011.
- (r) An Administrative Consent Order between MassDEP and Aerovox in connection with the Property became effective on February 3, 2000 (the "2000 ACO").
- (s) Aerovox relocated to a new manufacturing location by April 2, 2001, leaving behind, among other things, a substantial amount of contaminated equipment and machinery, PCB-contaminated rinse water, PCB-contaminated personal protective gear, solvents, acids and compressed gas cylinders.
- (t) Aerovox filed a voluntary petition for Chapter 11 bankruptcy on June 6, 2001 in the United States Bankruptcy Court for the District of Massachusetts, *In re New Bedford Capacitor, Inc. (f/k/a Aerovox, Inc.)* (Case No. 01-14680-JNF). As a result, Aerovox never completed the response actions required by the 1999 AOC or the 2000 ACO.
- (u) On or about November 15, 2001, USEPA filed a proof of claim in the Aerovox bankruptcy, asserting in part that Aerovox, as the owner and operator of the Property, was required to clean up and perform operation and maintenance measures with respect to the PCBs and other hazardous substances disposed of in and around the Property, pursuant to the administrative orders under CERCLA and RCRA.
- (v) On or about November 26, 2002, USEPA filed an *Application of the United States for Reimbursement of Administrative Expenses* in part for recovery of response costs USEPA expected to incur in cleaning up and performing operation and maintenance measures with respect to PCBs and other hazardous substances disposed of in and around the Property.
- (w) On or about November 15, 2001, the Commonwealth filed a proof of claim in the bankruptcy proceeding asserting that Aerovox was required to perform various ongoing activities pursuant to the 2000 ACO, as well as state and federal law. On or about November 27, 2002, the Commonwealth filed a *Request for Administrative Expenses of the Commonwealth of Massachusetts*, which reiterated Aerovox's environmental obligations under the 2000 ACO and applicable state and federal law.
- (x) On or about November 27, 2002, the City of New Bedford (the "City") filed a proof of claim for an administrative priority claim in the amount of \$323,300. The City represented that this estimated amount reflected a projection of five years of maintenance of the Property.

- (y) On or about August 11, 2003, Aerovox, USEPA, the Commonwealth and the City entered into a settlement agreement (the "Bankruptcy Settlement") with respect to the costs for the cleanup of the Property. The Bankruptcy Settlement was approved by the Court on September 30, 2003. USEPA settled all its claims against Aerovox with respect to the Property in exchange for, among other things: (1) payment of the \$750,000 placed in the Fund by Aerovox prior to its bankruptcy, plus interest and any appreciation; (2) allowance of USEPA's administrative priority claim in the amount of \$200,000; and (3) allowance of a pre-petition, non-priority, general unsecured claim in the amount of \$8,235,000 (reduced by the amount by which the Fund exceeded \$830,000).
- (z) Pursuant to the Bankruptcy Settlement, USEPA received \$2,723,385.32 to be used solely to conduct or finance response actions at the Property.
- (aa) Under the Bankruptcy Settlement, the City was designated as first responder for problems at the Property during the time that Aerovox retained legal and record title to the Property. The City received \$250,000 on its administrative claim for the purpose of maintaining the fire suppression system and performing other property maintenance and security measures at the Property.
- (bb) Under the Bankruptcy Settlement, upon sale of the Property, the City is to share the sale proceeds with USEPA and the Commonwealth pro rata in proportion to the amount of their expenses in excess of the amount each recovered pursuant to the terms of the Bankruptcy Settlement.
- (cc) In March 2004, USEPA issued an action memorandum to initiate a time-critical removal action ("TCRA") at the Property. The purpose of the TCRA was to remove drums and containers abandoned at the Property, and general repair of the cap installed by Aerovox pursuant to the 1982 Order.
- (dd) USEPA implemented the TCRA to remove waste drums and containers and to remove vegetation from and seal cracks in the existing cap.
- (ee) A January 2005 Site Information and Preplan, prepared by the City's Fire Department, describes the fire hazards posed by the manufacturing building, includes a fire plan as to how the Fire Department should respond to a fire at the building, and describes the existing fire suppression equipment in the building.
- (ff) As a result of the Bankruptcy Settlement, after a certain holding period, the Property became the property of 740 Belleville Avenue, LLC, which was organized as a Massachusetts limited liability company for the purpose of facilitating the transfer of the Property to a brownfields developer and whose members are the City and the New Bedford Redevelopment Authority.
- (gg) In April 2006, USEPA issued a supplement to the 1998 EE/CA (the "SEE/CA"). On June 7 and 11, 2006, USEPA published notice of a public meeting and the beginning of a 30-day public comment period on the SEE/CA. The majority of comments received reflected dissatisfaction with leaving PCB-contaminated materials on-site.
- (hh) On June 2, 2006, Respondent received a letter from USEPA dated May 31, 2006. USEPA demanded payment of its past costs as well as all future Property-related costs.
- (ii) On September 7, 2006, USEPA awarded, and on September 29, 2006, the City affirmed a *Cooperative Agreement* in connection with the Property pursuant to which the City was to

implement the SEE/CA's preferred alternative and to coordinate the cleanup with redevelopment of the Property. Under the Cooperative Agreement, USEPA was to provide \$8,043,902 to the City which the City would use to procure a site cleanup contractor, implement all cleanup activities, and coordinate redevelopment with cleanup.

- (jj) Sampling and analysis performed since the EE/CA, including that performed as recently as 2007, confirms the presence of widespread PCB contamination throughout the building, in soils under the concrete foundation, in soils outside the building, and mixed into the asphalt parking lot.
- (kk) The building has remained vacant since 2001, and despite implementation of site security measures and the TCRA, the building has deteriorated considerably. Flooding from burst pipes caused water damage to the PCB-contaminated wooden floors causing them to weaken and buckle; the wooden roof, sections of which are highly deteriorated, leaks into the interior of the building; and structural columns have fallen out of plumb and PCB-contaminated stormwater continues to runoff the building.
- (ll) On October 4, 2006, the City's Collector of Taxes recorded and filed an Instrument of Taking with the Bristol South District Registry of Deeds (the "Registry") in Book 8345, Page 326 and the Bristol South Registry District of the Land Court (the "Registry District") as Document No. 105416, and on October 28, 2008, the Land Court entered a Judgment in Tax Lien Case, foreclosing all rights of redemption to the Property, which decree the City recorded with the Registry in Book 9206, Page 104 and filed with the Registry District as Document No. 105418.
- (mm) Despite implementation of site security measures, trespassing and vandalism have occurred and continue at the Property, including illegal entry into the building. Damage includes broken windows which allow PCB-contaminated dust to be released outside the building. Broken switches, thermostats and other mercury containing equipment have resulted in mercury spills and releases. Direct contact with mercury and PCB contaminated floors, building material and equipment allows contamination to be tracked outside the building. Asbestos is also present in the building.
- (nn) In November 2007, Jacobs Engineering Group, an authorized representative of USEPA, began collecting the visible mercury containing manufactured articles ("MCMA") used as controls and switches within the facility, as well as the visible elemental mercury which had spilled on to various interior surfaces. This spilled mercury and MCMA was removed and disposed off-site in December 2007 and February 2008.
- (oo) On January 27, 2010, USEPA issued an Action Memorandum for a NTCRA to achieve a controlled demolition of the facility, off-site disposal of the waste material, capping and implementation of post-removal site control measures.
- (pp) USEPA and Respondent have entered into an *Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action* ("AOC"), which shall be effective on the Effective Date (as hereinafter defined), related to conducting a NTCRA at the Property. The NTCRA involves demolition of the building, for which Respondent is to be responsible, and transportation and disposal of TSCA demolition debris for which the City, acting under and using funds provided through a Cooperative Agreement with the USEPA, is to be responsible.

- (qq) Respondent and the City have entered into a *Cooperation and Settlement Agreement* which shall be effective on the Effective Date (as hereinafter defined), attached hereto as Exhibit B, which establishes a framework to coordinate and complete the NTCRA pursuant to CERCLA and to achieve the cleanup of the Property pursuant to M.G.L. c. 21E and the MCP in a manner that will assist and not impede the redevelopment of the property to the extent reasonable and feasible.
- (rr) Hazardous materials were disposed of and released at or from the Property as a result of historical manufacturing operations during the period from 1938 to 2001. Such materials include, without limitation, PCBs and volatile organic compounds ("VOCs") such as chlorobenzene and trichloroethene. PCBs have been detected in soil, surface water, air, building materials and equipment, parking lot asphalt and groundwater. VOCs have been detected in soils and groundwater. PCBs are very stable compounds that can persist for years when released into the environment.
- (ss) Based upon data derived from animal experiments and human studies, USEPA has concluded that human exposure to PCBs constitutes a health threat. USEPA has classified PCBs as a B2, probable human carcinogen, under its weight of evidence classification system. Exposure pathways to PCBs at the Property include inhalation, dermal exposure, and ingestion. PCBs spilled indoors may be distributed into other areas of a building in a number of ways, such as through ventilation equipment, ductwork or by tracking. Industrial equipment and other non-structural materials such as clothing also can be contaminated. As a result, trespassers can be subject to dermal exposure during illegal entry into the plant, and may also be subject to oral exposure during smoking or eating. Inhalation of PCBs can also result from the inhalation of dust particles contaminated with PCBs and by PCB volatilization.
- (tt) PCBs may also be released outside the Property in various ways, by trespassers whose clothes and shoes have become contaminated with PCBs as they enter and exit the Property. PCBs can be released through volatilization and release of PCB-contaminated dust out a window, through openings in the deteriorated roof, or other openings. PCBs may also be released in stormwater runoff.
- (uu) There is the potential for a release of PCBs and other hazardous materials in the event of a fire at the facility. If PCBs are exposed to fire, breakdown products may include dioxins and furans, potentially exposing nearby populations to inhalation and dermal contact threats.
- (vv) Additional response actions, beyond those to be conducted in accordance with the AOC are required in order to comply with M.G.L. c. 21E and the MCP and to facilitate future redevelopment of the Property.
7. The "subject matter covered by this Consent Order" is defined as response actions, response action costs, contribution, property damage, and public involvement activities, pursuant to M.G.L. c. 21E, the MCP or CERCLA, or property damage under the common law, in connection with the Site.
8. This document shall also serve as a Notice of Responsibility pursuant to M.G.L. c. 21E, § 5 and 310 CMR 40.0006.

9. This Consent Order establishes deadlines for Respondent's completion of the response actions at the Site described in Paragraph 12. Notwithstanding the foregoing or any other provision of this Consent Order, MassDEP expressly acknowledges that Respondent shall perform the response actions described in Paragraph 12 only upon Respondent's receipt of written notice from USEPA that all work under the AOC has been fully performed (the "NTCRA Endpoint").

III. DISPOSITION AND ORDER

For the reasons set forth above, MassDEP hereby issues, and Respondent hereby consents to, this Consent Order:

10. The parties have agreed to enter into this Consent Order because they agree that it is in their own interests, and in the public interest, to proceed promptly with the actions called for herein rather than to expend additional time and resources litigating the matters set forth above. Respondent enters into this Consent Order without admitting or denying the facts or allegations set forth herein. However, Respondent agrees not to contest such facts and allegations for the purposes of the issuance or enforcement of this Consent Order.
11. MassDEP's authority to issue this Consent Order is conferred by the Statutes and Regulations cited in Part II of this Consent Order.
12. MassDEP hereby determines, and Respondent hereby agrees, that the deadlines set forth in this Paragraph constitute reasonable periods of time for Respondent to take the actions described. Accordingly, Respondent shall perform the following actions:
 - (a) Within 90 days of the NTCRA Endpoint, Respondent shall submit to MassDEP a Tier Classification, prepared in accordance with 310 CMR 40.0500, and a Phase II Scope of Work ("SOW"), prepared in accordance with 310 CMR 40.0830, for the Site.
 - (b) Within 545 days of Respondent's receipt of MassDEP's written approval of the Phase II SOW, Respondent shall submit to MassDEP a Phase II Comprehensive Site Assessment ("Phase II CSA") for the Site, prepared in accordance with 310 CMR 40.0830.
 - (c) Within 180 days of Respondent's receipt of MassDEP's written approval of a Phase II CSA which indicates that additional Comprehensive Response Actions are necessary to achieve a Response Action Outcome ("RAO") at the Site, Respondent shall submit to MassDEP a Phase III Remedial Action Plan ("Phase III RAP"), prepared in accordance with 310 CMR 40.0850.
 - (d) Within 365 days of Respondent's receipt of MassDEP's written approval of the Phase III RAP, Respondent shall submit to MassDEP a Phase IV Remedy Implementation Plan ("Phase IV RIP"), prepared in accordance with 310 CMR 40.0870.
 - (e) Within 730 days of Respondent's receipt of MassDEP's written approval of the Phase IV RIP, Respondent shall submit to MassDEP a Phase IV Final Inspection Report and a Phase IV Completion Statement (collectively, "Phase IV Completion"), prepared in accordance with 310 CMR 40.0878 and 40.0879, respectively. Concurrent with submittal of the Phase IV Completion, Respondent shall submit a Remedy Operation Status ("ROS") Submittal, in accordance with 310 CMR 40.0893, or Respondent shall submit a Class A RAO Statement to MassDEP, prepared in accordance with 310 CMR 40.1056.

- (f) If, at any time after Respondent submits the Phase II CSA, in accordance with Paragraph 12(c), and MassDEP issues written approval of the Phase II CSA, Respondent submits a Class A RAO Statement, in accordance with 310 CMR 40.1000, Respondent need not continue with Comprehensive Response Actions at the Site pursuant to 310 CMR 40.0550(3) or 310 CMR 40.0560(3), whichever is applicable.
13. The deadlines established in Section III of this Consent Order and any amendment hereto, are not subject to the seven (7) day grace period allowed by 310 CMR 40.0008(4). The submittals required by this Consent Order are due to MassDEP on or before the deadlines established herein.
14. MassDEP agrees to perform the following actions in a timely fashion:
- (a) MassDEP agrees to review the submissions made pursuant to Paragraphs 12(a) through 12(f), including any revised versions of same made in accordance with Paragraph 14(b).
 - (b) If MassDEP determines that any submission, made pursuant to Paragraphs 12(a) through 12(f), has not been completed in accordance with the MCP or this Consent Order, MassDEP agrees to provide a written notice of deficiency to Respondent.
 - (c) MassDEP agrees to provide to Respondent a written notice of approval, conditional approval, deficiency or denial for each submission and/or revised submission made pursuant to Paragraphs 12(a) through 12(f).
 - (d) If an Activity and Use Limitation ("AUL"), as defined at 310 CMR 40.1070, is necessary to support a Class A RAO or ROS, MassDEP agrees to review and identify any deficiencies in such AUL, prior to its recording or registration in the appropriate Registry of Deeds and/or Land Registration Office.
 - (e) If an engineered barrier, as defined by 310 CMR 40.0996(5), is necessary to support a Class A RAO or ROS, MassDEP agrees to review and identify any deficiencies in any documents that may be necessary to establish a financial assurance mechanism ("FAM"), as described in 310 CMR 40.0996(5)(a)7.
 - (f) After review and approval of documents supporting the conclusion that a Class A RAO or ROS has been achieved for the entire Site, including any documents associated with an AUL and a FAM, MassDEP agrees to provide to Respondent written notice of approval, with copies to USEPA, the OAG and the City.
 - (g) In the event that the City submits documentation that meets the requirements of the MCP to effect the transfer of responsibility for the ongoing operation of Comprehensive Response Actions under ROS, MassDEP shall approve such transfer.
 - (h) Nothing in this Paragraph 14 shall be construed or operate to prevent MassDEP from taking or initiating enforcement for Respondent's failure to perform the actions as set forth herein, subject to the completion of dispute resolution, set forth in Paragraph 22.
15. This Consent Order does not relieve Respondent's obligation to pay Annual Compliance Assurance Fees and Permit Application Fees payable pursuant to 310 CMR 4.00. The first "status date" for such annual compliance assurance fees, as such term is used in 310 CMR 4.03, shall be the deadline for Tier Classification provided in Paragraph 12(a) of this Consent Order.

16. Except as otherwise provided herein or required under the MCP, all notices, submittals and other communications required by this Consent Order shall be directed to:

Gerard Martin
MassDEP Bureau of Waste Site Cleanup
20 Riverside Drive
Lakeville, Massachusetts 02347

Such notices, submittals and other communications shall be considered delivered by Respondent upon receipt by MassDEP.

17. Actions required by this Consent Order shall be taken in accordance with all applicable federal, state, and local laws, regulations and approvals. This Consent Order shall not be construed as, nor operate as, relieving Respondent or any other person of the necessity of complying with all applicable federal, state, and local laws, regulations and approvals.
18. Respondent understands, and hereby waives, its right to an adjudicatory hearing before MassDEP on, and judicial review of, the issuance and terms of this Consent Order and to notice of any such rights of review. This waiver does not extend to any other order issued by MassDEP.
19. This Consent Order may be modified only by the written agreement of the parties hereto.
20. MassDEP agrees to extend the time for performance of any requirement of this Consent Order if MassDEP determines that such failure to perform is caused by a *Force Majeure* event. The failure to perform a requirement of this Consent Order shall be considered to have been caused by a *Force Majeure* event if the following criteria are met:
- (a) an event delays performance of a requirement of this Consent Order beyond the deadline established herein;
 - (b) such event is beyond the control and without the fault of Respondent and Respondent's employees, agents, consultants, and contractors; and
 - (c) such delay could not have been prevented, avoided or minimized by the exercise of due care by Respondent or Respondent's employees, agents, consultants, and contractors.

Financial inability and unanticipated or increased costs and expenses associated with the performance of any requirement of this Consent Order shall not be considered a *Force Majeure* event.

If any event occurs that delays or may delay the performance of any requirement of this Consent Order, Respondent shall immediately, but not later than 5 days after obtaining knowledge of such event, notify MassDEP in writing of such event. The notice shall describe in detail the: (i) reason for and the anticipated length of the delay or the potential delay; (ii) measures taken and to be taken to prevent, avoid, or minimize the delay or potential delay; and (iii) timetable for taking such measures. If Respondent intends to attribute such delay or potential delay to a *Force Majeure* event, such notice shall also include the rationale for attributing such delay or potential delay to a *Force Majeure* event, and all available documentation supporting a claim of *Force Majeure* for the event. Failure to comply with the notice requirements set forth herein shall constitute a waiver of Respondent's right to request an extension based on the event.

If MassDEP determines that Respondent's failure to perform a requirement of this Consent Order is caused by a *Force Majeure* event, and Respondent otherwise complies with the notice provisions above, MassDEP agrees to extend in writing the time for performance of such requirement. The duration of this extension shall be equal to the period of time the failure to perform is caused by the *Force Majeure* event. No extension shall be provided for any period of time that Respondent's failure to perform could have been prevented, avoided or minimized by the exercise of due care. No penalties shall become due for Respondent's failure to perform a requirement of this Consent Order during the extension of the time for performance resulting from a *Force Majeure* event.

A delay in the performance of a requirement of this Consent Order caused by a *Force Majeure* event shall not, of itself, extend the time for performance of any other requirement of this Consent Order.

21. If Respondent has reason to know that an event has occurred or may occur which could cause delay of performance of the actions described in this Consent Order, Respondent may submit a written request to MassDEP to extend the deadlines for performing the actions described in this Consent Order. MassDEP, in its sole and absolute discretion, may on its own initiative or upon a reasonable documented request from Respondent, extend any deadline established in Section III of this Consent Order. Respondent's request for an extension must be submitted as soon as Respondent learns of the delay, but not later than fourteen (14) days prior to the deadline. The request shall contain the following information:

- (a) the reason for and the anticipated length of the delay or potential delay;
- (b) if any, the measures taken and to be taken to prevent, avoid, or minimize the delay or potential delay;
- (c) the timetable for taking such measures, if any; and
- (d) if the delay is due to an inability to obtain property access, Respondent shall certify in writing when requesting the extension that it has followed the requirements of 310 CMR 40.0173 that describe the procedure for obtaining property access.

MassDEP may approve, conditionally approve, or deny, Respondent's request. Should MassDEP approve or conditionally approve the request, an amended administrative consent order will be executed. A decision under this Paragraph 21 is not subject to administrative or judicial review.

22. Respondent may invoke the following dispute resolution procedures to challenge a decision by MassDEP under Paragraphs 14 and 20 of this Consent Order:

- (a) Respondent shall invoke dispute resolution by providing written notice to MassDEP within five (5) days after obtaining knowledge of such a dispute. Respondent's written notice shall include a description of the nature of the dispute. Failure to provide MassDEP with a written notice of dispute within the five (5) day period shall constitute a waiver of Respondent's right to dispute resolution.
- (b) The parties shall participate in a conference call or meeting to attempt to resolve the dispute within ten (10) days of MassDEP's receipt of Respondent's notice of dispute.
- (c) If the parties are unable to resolve the dispute as a result of the conference call or meeting, Respondent shall, within ten (10) days of said conference call or meeting, submit a written Statement of Position to MassDEP. Such Statement of Position shall, without limitation, set forth the specific points of dispute, the position of Respondent and the basis for it, any

action(s) Respondent considers necessary to resolve the dispute, any factual data, analysis or opinion supporting Respondent's position, and any supporting documentation upon which Respondent relies. Failure to provide such Statement of Position within the ten (10) day period shall constitute a waiver of Respondent's right to further dispute resolution.

- (d) Within fourteen (14) days after receipt of Respondent's Statement of Position, MassDEP shall present a written Statement of Position to Respondent. Such Statement of Position shall, without limitation, set forth the specific points of dispute, the position of MassDEP and the basis for it, any action(s) MassDEP considers necessary to resolve the dispute, any factual data, analysis or opinion supporting MassDEP's position, and any supporting documentation upon which MassDEP relies.
 - (e) The Statements of Position will be submitted to the Regional Director for MassDEP's Southeast Office or his/her designee ("Regional Director") on the date MassDEP presents its written Statement of Position to Respondent. The Regional Director shall issue a final written decision on the dispute based upon the Statements of Position and any other relevant information, which may include a meeting with one or both parties. The Regional Director's written decision shall constitute the final decision on the matter, which shall be binding on the parties and not subject to administrative or judicial appeal or review.
23. The provisions of this Consent Order are severable, and if any provision of this Consent Order or the application thereof is held invalid, such invalidity shall not affect the validity of other provisions of this Consent Order, or the application of such other provisions, which can be given effect without the invalid provision or application, provided however, that MassDEP shall have the discretion to void this Consent Order in the event of any such invalidity.
24. Except as specifically provided in Paragraph 30 of this Consent Order, nothing in this Consent Order shall be construed or operate as barring, diminishing, adjudicating or in any way affecting (i) any legal or equitable right of MassDEP to issue any additional order or to seek any other relief with respect to the subject matter covered by this Consent Order, or (ii) any legal or equitable right of MassDEP to pursue any claim, action, suit, cause of action, or demand which MassDEP may have with respect to the subject matter covered by this Consent Order, including, without limitation, any action to: (a) enforce this Consent Order in an administrative or judicial proceeding; (b) recover costs incurred by MassDEP in connection with response actions conducted at the Site; and (c) recover damages for injury to and for destruction or loss of natural resources pursuant to M.G.L. c. 21E, § 5 or CERCLA.
- Except as specifically provided in Paragraph 30 of this Consent Order, nothing in this Consent Order shall be construed or operate as barring, diminishing, adjudicating or in any way affecting MassDEP's authority to: (a) perform response actions at the Site; or (b) require Respondent to conduct response actions at the Site or take other actions beyond those required by this Consent Order in order to comply with all applicable laws and regulations including, without limitation, M.G.L. c. 21E and the MCP.
25. This Consent Order shall not be construed or operate as barring, diminishing, adjudicating, or in any way affecting, any legal or equitable right, claim, demand, or cause of action of the Commonwealth, including but without limitation MassDEP, against Respondent or any other person with respect to the New Bedford Harbor Superfund Site as defined in Paragraph 5 of this Consent Order or any other subject matter not covered by this Consent Order, and the

Commonwealth reserves any and all rights, claims, demands, and causes of action with respect to the New Bedford Harbor Superfund Site. Nor shall this Consent Order constitute, be construed or operate as an admission of any liability or fact, as a waiver of any right or defense, or as an estoppel against Respondent with respect to the New Bedford Harbor Superfund Site, and Respondent reserves any and all rights, defenses, claims, demands, and causes of action relating in any way to the New Bedford Harbor Superfund Site, as set forth in the Consent Decree entered into between the parties in Civil Action No. 83-3882-Y.

26. This Consent Order shall be binding upon Respondent and upon Respondent's successors and assigns. Respondent shall not violate this Consent Order and shall not allow or suffer Respondent's directors, officers, employees, agents, contractors or consultants to violate this Consent Order. Until Respondent has fully complied with this Consent Order, Respondent shall provide a copy of this Consent Order to each successor or assignee at such time that any succession or assignment occurs.
27. If Respondent violates any provision of this Consent Order, Respondent shall pay stipulated civil administrative penalties to the Commonwealth in accordance with the following schedule:

For each day, or portion thereof, of each violation, Respondent shall pay stipulated civil administrative penalties in the following amounts:

<u>Period of Violation</u>	<u>Penalty per day</u>
1 st through 7 th days	\$ 100.00 per day
8 th through 14 th days	\$ 250.00 per day
15 th day and thereafter	\$ 500.00 per day

Stipulated civil administrative penalties shall begin to accrue on the day a violation occurs and shall continue to accrue until the day Respondent corrects the violation or completes performance, whichever is applicable. Stipulated civil administrative penalties shall accrue regardless of whether MassDEP has notified Respondent of a violation or act of noncompliance. All stipulated civil administrative penalties accruing under this Consent Order shall be paid within thirty (30) days of the date MassDEP issues Respondent a written demand for payment. If simultaneous violations occur, separate penalties shall accrue for separate violations of this Consent Order. The payment of stipulated civil administrative penalties shall not alter in any way Respondent's obligation to complete performance as required by this Consent Order. MassDEP reserves its right to elect to pursue alternative remedies and alternative civil and criminal penalties which may be available by reason of Respondent's failure to comply with the requirements of this Consent Order. In the event MassDEP collects alternative civil administrative penalties, Respondent shall not be required to pay stipulated civil administrative penalties pursuant to this Consent Order for the same violations.

Respondent reserves whatever rights it may have to contest MassDEP's determination that Respondent failed to comply with this Consent Order and/or to contest the accuracy of MassDEP's calculation of the amount of the stipulated civil administrative penalty. Upon exhaustion of such rights, Respondent agrees to assent to the entry of a court judgment if such court judgment is necessary to execute a claim for stipulated penalties under this Consent Order.

28. Failure on the part of MassDEP to complain of any action or inaction on the part of Respondent shall not constitute a waiver by MassDEP of any of its rights under this Consent Order. Further,

no waiver by MassDEP of any provision of this Consent Order shall be construed as a waiver of any other provision of this Consent Order.

29. Respondent has arranged for access to the Property by agreement with the City, the owner of the Property. The *Cooperation and Settlement Agreement* grants to Respondent, Respondent's authorized representatives and contractors, MassDEP, and MassDEP's employees, representatives and contractors access at all reasonable times to the Property for purposes of implementing and overseeing the implementation of activities under this Consent Order. Notwithstanding any provision of this Consent Order, MassDEP retains all of its access authorities and rights under applicable state and federal law.
30. In consideration of the response actions that will be performed by Respondent under the terms of this Consent Order, and subject to the termination for cause provisions in Paragraph 33 of this Consent Order, and effective on the date provided in Paragraph 35 of this Consent Order, the Commonwealth:
 - (a) covenants not to sue or take administrative action against Respondent, pursuant to M.G.L. c. 21E, the MCP, or CERCLA, for response action costs, contribution, property damage, or to compel further response actions or public involvement activities, or for property damage under the common law, for any and all releases of oil and/or hazardous material which occurred at or from the Property before the Effective Date (as hereinafter defined) for which Respondent submitted a Class A RAO Statement or ROS Submittal pursuant to Paragraph 12(e) of this Consent Order, as long as MassDEP provides to Respondent written approval of the Class A RAO Statement or ROS Submittal, pursuant to Paragraph 14(f) of this Consent Order. These covenants extend only to Respondent and do not extend to any other person.
 - (b) agrees, in the event of a sale of the Property for a purchase price which exceeds all unreimbursed expenses of the Commonwealth, the City and USEPA in connection with the Property by at least \$100,000, to make reasonable efforts to modify the Bankruptcy Settlement, and to cooperate with all necessary parties, including without limitation USEPA and the City, to effect such modification, so that after all previously unreimbursed expenses of the Commonwealth, the City and USEPA are reimbursed from the proceeds of the sale of the Property, the remaining proceeds from such sale, if any, shall be paid to Respondent for its unreimbursed expenses in connection with the Property.
31. The covenants not to sue or take administrative action in Paragraph 30 of this Consent Order shall not apply to:
 - (a) any release of oil and/or hazardous material not part of the Site;
 - (b) any response actions, response action costs, contribution or property damage in connection with the New Bedford Harbor Superfund Site as defined in Paragraph 5 of this Consent Order, whether or not the source of the release or threat of release resulting in such response actions, response action costs, contribution or property damage is or may be the Site;
 - (c) any release of oil and/or hazardous material that first begins to occur after the Effective Date (as hereinafter defined), and

- (d) any release of oil and/or hazardous material which Respondent contributed to or caused to become worse after the Effective Date (as hereinafter defined).
32. In consideration of the Commonwealth's covenants not to sue or take administrative action in Paragraph 30, Respondent covenants not to sue and not to assert any claims or causes of action against the Commonwealth, including any department, agency, or instrumentality, and its authorized officers, employees, or representatives with respect to the following matters as they relate to the Site or this Consent Order:
- (a) any direct or indirect claims for reimbursement, recovery, injunctive relief, contribution or equitable share of response costs or for property damage pursuant to CERCLA or M.G.L. c. 21E;
 - (b) any claims for "takings" under the Fifth Amendment to the United States Constitution, under the Massachusetts Constitution, or under M.G.L. c. 79 based on the argument that, with respect to the Property, the requirements of CERCLA, M.G.L. c. 21E, the MCP, or this Consent Order constitute a taking;
 - (c) any claims for monetary damages arising out of response actions;
 - (d) any claims or causes of action for interference with contracts, business relations or economic advantage based upon the conduct of MassDEP pursuant to CERCLA or M.G.L. c. 21E prior to the Effective Date (as hereinafter defined); or
 - (e) any claims for costs, attorneys' fees, other fees or expenses incurred.
33. In the event that the OAG or MassDEP determines that Respondent has (a) submitted materially false or misleading information in connection with the negotiation of this Consent Order or in the documents supporting the conclusion that a Class A RAO or ROS has been achieved for the entire Site or any part thereof, or (b) failed to provide funding to the City for the maintenance of ROS pursuant to Paragraph V.H.2. and, if applicable, Section VII. of the *Cooperation and Settlement Agreement*, the OAG may terminate the covenant not to sue in Paragraph 30 of this Consent Order, and MassDEP may terminate the covenant not to take administrative action contained in Paragraph 30 of this Consent Order. A statement made by Respondent in connection with the negotiation of this Consent Order, whether orally or in writing, will not be considered false or misleading for purposes of this Paragraph if the statement was asserted in good faith at the time it was made. Before terminating such covenants in Paragraph 30, MassDEP and/or the OAG will provide Respondent with written notice of the proposed basis for, and a 60-day opportunity to comment on the proposed termination. The notice from MassDEP and/or the OAG shall, if appropriate, provide a reasonable period of time for Respondent to cure. The decision whether to provide an opportunity to cure is in the sole discretion of MassDEP and/or the OAG and shall be exercised reasonably. MassDEP's or the OAG's decision to terminate the covenants in Paragraph 30 shall constitute the final decision on the matter, which shall be binding on the parties and not subject to administrative or judicial appeal or review. Termination of the covenants in Paragraph 30 pursuant to this Paragraph shall not affect any defense that Respondent might otherwise have pursuant to M.G.L. c. 21E.
34. The undersigned certify that they are fully authorized to enter into the terms and conditions of this Consent Order and to legally bind the party on whose behalf they are signing this Consent Order.

35. This Consent Order shall become effective on the date that it is executed by MassDEP and the OAG (the "Effective Date"). Notwithstanding the foregoing, the covenants not to sue and agreements in Paragraphs 30 and 32 of this Consent Order will be effective if and when MassDEP, pursuant to Paragraph 14(f) of this Consent Order, provides written approval of the documents supporting the conclusion that a Class A RAO or ROS has been achieved for the Site. If MassDEP does not provide such approval pursuant to Paragraph 14(f) of this Consent Order, the covenants not to sue and other agreements in Paragraphs 30 and 32 of this Consent Order will not come into effect.

[SIGNATURES ON FOLLOWING PAGE]

In the Matter of: AVX Corporation

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Consented To:
AVX CORPORATION

By: 

Kurt P. Cummings
Vice President, Chief Financial Officer, Treasurer & Secretary
801 17th Avenue South
Box 867
Myrtle Beach, South Carolina 29578-0687

Federal Employer Identification Number: 33-0379007

Date: 3/23/10

Issued By:
DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: _____

David Johnston
Acting Regional Director
Department of Environmental Protection
20 Riverside Drive
Lakeville, Massachusetts 02347

Date: _____

For purposes of Paragraphs 30-35 only:
OFFICE OF ATTORNEY GENERAL

By: _____

Benjamin J. Ericson
Assistant Attorney General
Office of the Attorney General
One Ashburton Place
Boston, Massachusetts 02108

Date: _____

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Exhibit A

Property Map

In the Matter of: AVX Corporation

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Exhibit B

Cooperation and Settlement Agreement