

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 1

)	
IN THE MATTER OF:)	
)	CERCLA Docket No. 01-2023-0031
Mansell Field Superfund Site)	
Salem, MA)	
)	
City of Salem, MA,)	
)	
Respondent)	
)	
Proceeding Under Sections 104, 106(a),)	ADMINISTRATIVE SETTLEMENT
107 and 122 of the Comprehensive)	AGREEMENT AND ORDER ON
Environmental Response, Compensation,)	CONSENT FOR REMOVAL ACTION
and Liability Act, 42 U.S.C. §§ 9604,)	
9606(a), 9607 and 9622)	
)	

**ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR
REMOVAL ACTION**

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Appendix A – Action Memorandum

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (“Settlement”) is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and the City of Salem, MA (“Respondent”). This Settlement provides for the performance of a removal action by Respondent at or in connection with the “Mansell Field Superfund Site” (the “Site”) generally located at 50 Proctor Street in Salem, MA.

2. This Settlement 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, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622 (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14A (Determinations of Imminent and Substantial Endangerment, Jan. 31, 2017), 14-14C (Administrative Actions through Consent Orders, Jan. 18, 2017) and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). This authority was further redelegated by the Regional Administrator of EPA to the Director of Region 1’s Office of Site Remediation and Restoration on September 3, 1996 (EPA Delegation Numbers 14-14-D), and on March 1, 2002 (EPA Delegation Numbers 14-14-A), and updated per the Region 1 Realignment on April 29, 2019 (Region 1 Realignment: General Temporary Redelegation) to redelegate all authorities of the Director of Region 1’s Office of Site Remediation and Restoration to the Director of the Superfund Emergency Management Division. This Settlement 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 Assistant Attorney General for the Environment and Natural Resources Division.

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

4. EPA and Respondent recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not 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, the validity of the findings of facts, conclusions of law, and determinations in Sections IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondent agrees to comply with and be bound by the terms of this Settlement and further agrees that it will not contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

5. This Settlement is binding upon EPA and upon Respondent and its successors and assigns. Any transfer of assets or real or personal property shall not alter Respondent’s responsibilities under this Settlement.

6. Respondent is liable for carrying out all activities required of it by this Settlement.

7. Each undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.

8. Respondent shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing Respondent with respect to the Site or the Work (provided that if the “person” is a company Respondent shall only have to provide a single copy to a person acting in a supervisory capacity for the company), and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Settlement. Respondent or its contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

III. DEFINITIONS

9. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that 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 or its attached appendices, the following definitions shall apply:

“Action Memorandum” shall mean the EPA Action Memorandum relating to the Site signed on September 8, 2022, by the Regional Administrator, EPA Region 1, or his/her delegate, and all attachments thereto. The “Action Memorandum” is attached as Appendix A.

“Affected Property” shall mean all real property at the Site and any other real property where EPA determines, at any time, that access or land, water, or other resource use restrictions are needed to implement the removal action, including, but not limited to, the following property: 50 Proctor Street, Salem, MA (City of Salem Assessors Office Parcel #15-0329-0 on Lot 329 of Tax Map 15). The phrase “Respondent’s Affected Property” means Affected Property owned or controlled by Respondent.

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9601-9675.

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

“Effective Date” shall mean the effective date of this Settlement as provided in Section XXIX.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“EPA-Lead Costs” shall mean all of EPA’s direct costs associated with EPA’s performance of the EPA Superfund-Lead Work.

“EPA Superfund-Lead Work” shall mean all work performed by EPA to implement the removal action set forth in the Action Memorandum for the Site, except work performed by EPA under Paragraph 82 (Work Takeover). EPA Superfund-Lead Work does not include Work to be performed by Respondent under this Agreement and the SOW.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

“Future Response Costs” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that the United States pays between August 30, 2022 and issuance of the Notice of Completion of Work in implementing, overseeing, or enforcing this settlement, including: (i) in developing, reviewing, and approving deliverables generated under this Settlement; (ii) in overseeing Respondent’s performance of the Work; (iii) in assisting or taking action to obtain access under Section IX (Property Requirements); (iv) in taking response action because of Respondent’s failure to take emergency action under Section XIII (Emergency Response and Notification of Releases); (v) in implementing a Work Takeover under Paragraph 82 (Work Takeover); (vi) in implementing community involvement activities including the cost of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e); (vii) in implementing EPA Superfund-Lead Work beyond the dollar amount specified for EPA-Lead Costs in EPA’s Covenant Not to Sue under Section XVIII; and (viii) in enforcing this Settlement, including all costs paid under Section XV (Dispute Resolution) and all litigation costs. Future Response Costs also includes all Interest accrued after August 30, 2022.

“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. Rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.

“MassDEP” shall mean the Massachusetts Department of Environmental Protection and any successor departments or agencies of the State.

“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.

“Paragraph” shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

“Parties” shall mean EPA and Respondent.

“Past Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through the Effective Date, plus Interest on all such costs through such date.

“RCRA” shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

“Respondent” or “City” shall mean the City of Salem, Massachusetts.

“Section” shall mean a portion of this Settlement identified by a Roman numeral.

“Settlement” shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXVIII (Integration/Appendices)). In the event of conflict between this Settlement and any appendix, this Settlement shall control.

“Site” shall mean the Mansell Field Superfund Site, encompassing approximately 1.5 acres, located at 50 Proctor Street, Salem, Massachusetts.

“State” shall mean the Commonwealth of Massachusetts.

“Statement of Work” or “SOW” shall mean the document describing the activities that Respondent must perform to implement the removal action pursuant to this Settlement, as set forth in Appendix C, and any modifications made thereto in accordance with this Settlement.

“Transfer” shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Waste Material” shall mean (a) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (c) and any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

“Work” or “Respondent-Lead Work” shall mean all activities and obligations Respondent is required to perform under this Settlement except those required by Section XI (Record Retention).

IV. FINDINGS OF FACT

10. The Mansell Field Superfund Site is located at 50 Proctor Street and is approximately 1.5 acres in size. The Site is owned by the City of Salem and is identified by the City of Salem’s Assessors Office as Parcel #15-0329-0.

11. The Site is part of a public park and recreational complex known as Gallows Hill Park. The Site includes a basketball court and a large grassy area that was previously used for soccer practice and other activities.

12. The Site is in a densely populated residential neighborhood. The Site is bounded by to the north by Langdon Street, to the east by Proctor Street, to the south by Mansell Parkway, and to the west by the remaining portions of Gallows Hill Park.

13. The City acquired title to the Site in fee by eminent domain in 1940. The taking order is dated January 11, 1940 and was recorded with the Registry on January 23, 1940 at Book 3208, Page 328.

14. From around the late 1800s to 1930s, the Site and surrounding properties were tanneries used for leather-making operations. There were several buildings thought to have been used for wet work, finishing, stuffing, and drying. In 1938, the tannery facility was demolished and the property became mostly vacant, prior to the City's taking of the Site.

15. During the City's ownership of the Site for a period of over approximately 80 years, it has removed the remains of an old factory building from the Site, built a roadway, rough-graded the Site, covered the Site with topsoil, fertilized and seeded the Site, built a basketball court, and conducted various maintenance activities. The Site has been used as a park since at least the 1960s.

16. In 2018, the City, through its contractor, conducted environmental site assessment work at the Site in preparation for planned renovations of Mansell Field. Sampling revealed the presence of elevated levels of arsenic across the Site at above Massachusetts Contingency Plan (MCP) cleanup standards. Once it was determined that the Site contained arsenic contamination, the park was fenced and closed to the public.

17. In 2018 and 2019, the Massachusetts Department of Environmental Protection ("MassDEP") was notified by the City of Salem of elevated levels of arsenic, lead and chromium in the soil at Mansell Park.

18. By letter dated January 16, 2019, MassDEP notified the City of its responsibility to address contamination at Mansell Field, pursuant to the MCP (310 CMR 40), MGL c.21E, Section 5.

19. On March 20, 2019, the City contacted EPA due to the City's concerns about the expected high cost of the cleanup at the Site. On April 17, 2019, MassDEP formally requested the assistance of EPA Region 1's Emergency Response and Removal Program with assessment and remediation at the Site and targeted bordering residential properties.

20. From October 2019 to August 2020, EPA performed time-critical removal actions on three adjacent residential properties located on Langdon Street. As part of those removal actions, EPA removed the top three feet of soil from the residential properties along its shared boundary with Mansell Field.

21. On June 6, 2022, EPA received another request for assistance from MassDEP for the assessment and remediation of arsenic-contaminated soils at the Site. In July 2022, EPA conducted a Preliminary Assessment/Site Investigation (PA/SI), which confirmed that arsenic, lead and chromium was detected at levels comparable to the previous data presented by the City.

22. On September 8, 2022, EPA issued an Action Memorandum, which is attached as Appendix A to this Settlement. The Action Memorandum involves the excavation and off-site disposal of soil contaminated primarily with arsenic to both eliminate the direct contact threat and remove sources of contamination.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

23. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:

a. The Mansell Field Superfund 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 a “hazardous substance” 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) because it is the “owner” and/or “operator” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

e. The conditions described in 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).

f. EPA determined in an Action Memorandum dated September 8, 2022, that the conditions at the Site may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

g. The removal action required by this Settlement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

24. Based upon the Findings of Fact, Conclusions of Law, and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondent shall

comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

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

25. Respondent shall retain one or more contractors or subcontractors to perform the Work and shall notify EPA of the names, titles, addresses, telephone numbers, email addresses, and qualifications of such contractors or subcontractors within seven days after the Effective Date or, if retained later than the Effective Date, then seven days after the date on which the contractor or subcontractor is awarded a contract in accordance with state and local procurement law. Respondent shall notify EPA of the names, titles, contact information, and qualifications of any other contractors or subcontractors retained to perform the Work at least seven 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 or subcontractor, Respondent shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within seven days after EPA's disapproval, or, if it is not possible to select a different contractor or subcontractor in accordance with state and local procurement law, then within seven days after a new contractor or subcontractor is awarded a contract in accordance with this law, but no later than seven days prior to commencement of the Work by the contractor or subcontractor. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

26. Within seven 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 and shall submit to EPA the designated Project Coordinator's name, title, address, telephone number, email address, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinator who does not meet the requirements of Paragraph 25. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within seven days following EPA's disapproval. Notice or communication relating to this Settlement from EPA to Respondent's Project Coordinator shall constitute notice or communication to Respondent.

27. EPA has designated Athanasios Hatzopoulos of the Emergency Planning and Response Branch, Region 1, as its On-Scene Coordinator (OSC). EPA and Respondent shall have the right, subject to Paragraph 26, to change their respective designated OSC or Project

Coordinator. Respondent shall notify EPA seven days before such a change is made. The initial notification by Respondent may be made orally, but shall be promptly followed by a written notice.

28. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement. 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, or to direct any other 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.

VIII. WORK TO BE PERFORMED

29. Respondent shall perform, at a minimum, all actions necessary to implement the Respondent-Lead Work described in the SOW. The actions to be implemented generally include, but are not limited to, the following: site preparation work, including the construction of an access road; ensure site security; provide staging area for office trailers and generator; support services for removal actions; removal, transportation and disposal of trees and other vegetation, light poles, and wiring located in areas impacted by removal actions; conducting air monitoring and dust suppression and treating contaminated water (e.g., groundwater, surface runoff, decontamination water); excavating, transporting and disposing of soils in areas not excavated by EPA; characterize and verify additional and remaining soil to meet MassDEP standards; conduct confirmatory soil sampling to assure cleanup meets project goals; backfilling and compacting areas not backfilled or compacted by EPA to bring the site back to grade; and vegetating/re-seeding the field. The Parties acknowledge that EPA will be performing a portion of the removal action on a fund-lead basis, described in the SOW as EPA Superfund-Lead Work.

30. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

31. Work Plan and Implementation

a. Within 40 days after the Effective Date, in accordance with Paragraph 32 (Submission of Deliverables), Respondent shall submit to EPA for approval a draft work plan for performing the removal action described in the SOW (the "Removal Work Plan"). The draft Removal Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement.

b. EPA may approve, disapprove, require revisions to, or modify the draft Removal Work Plan in whole or in part. If EPA requires revisions, Respondent shall submit a revised draft Removal Work Plan within 10 days after receipt of EPA's notification of the required revisions. Respondent shall implement the Removal Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement.

c. Upon approval or approval with modifications of the Removal Work Plan Respondent shall commence implementation of the Work in accordance with the schedule included therein. Respondent shall not commence or perform any Work except in conformance with the terms of this Settlement.

d. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the Removal Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.

32. Submission of Deliverables

a. General Requirements for Deliverables

(1) Except as otherwise provided in this Settlement, Respondent shall direct all submissions required by this Settlement to the OSC:

Athanasios Hatzopoulos, On-Scene Coordinator
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100 (02-2)
Boston, MA 02109
(617) 918-1284
Hatzopoulos.Athanasios@epa.gov

(2) Respondent shall submit all deliverables required by this Settlement, the attached SOW, or any approved work plan to EPA in accordance with the schedule set forth in such plan

(3) Respondent shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 32.b. All other deliverables shall be submitted to EPA in the form specified by the OSC. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondent shall also provide EPA with paper copies of such exhibits, unless the OSC waives this requirement in writing. For purposes of this waiver an email from the OSC constitutes a writing.

b. Technical Specifications for Deliverables

(1) Sampling and monitoring data should be submitted in standard Regional Electronic Data Deliverable (EDD) format (e.g., .xlsx or .csv). Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (a) in the ESRI File Geodatabase format; and (b) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s).

Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <https://www.epa.gov/geospatial/epa-metadata-editor>.

(3) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.

(4) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.

33. **Health and Safety Plan.** Within 40 days after the Effective Date, Respondent shall submit for EPA review and comment a Health and Safety Plan (“HASP”) that meets the requirements of 29 C.F.R. 910.120 for developing the HASP, that describes all activities to be performed to protect on-site personnel and area residents from physical, chemical, biological and other hazards related to the performance of on-site work under this Settlement. This HASP shall be prepared in accordance with “OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities,” Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at <https://www.epa.gov/nscep>, and “EPA’s Emergency Responder Health and Safety Manual,” OSWER Directive 9285.3-12 (July 2005 and updates), available at https://www.epaosc.org/_HealthSafetyManual/manual-index.htm. In addition, the HASP shall comply with all currently applicable Occupational Safety and Health Administration (“OSHA”) regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the HASP shall also include contingency planning. Respondent shall incorporate all changes to the HASP recommended by EPA and shall implement the HASP during the pendency of the removal action.

34. Quality Assurance, Sampling, and Data Analysis

a. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with EPA’s Environmental Information Quality Policy, CIO 2105.1) (Mar. 2021) at <https://www.epa.gov/irmpoli8/environmental-information-quality-policy>, the most recent version of Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use, ASQ/ANSI E-4 (Feb. 2014), and EPA Requirements for Quality Assurance Project Plans, EPA QA/G-5 (EPA/240/B-01/02) (March 2001) at <https://www.epa.gov/quality/epa-qar-5-epa-requirements-quality-assurance-project-plans>.

b. Within 40 days after the Effective Date, Respondent shall submit a Sampling and Analysis Plan to EPA for review and approval. This plan shall consist of a Field Sampling Plan (FSP) and a Quality Assurance Project Plan (QAPP) that is consistent with the

Removal Work Plan, the NCP, and applicable guidance documents including, but not limited to, “Guidance for Quality Assurance Project Plans (QA/G-5)” EPA/240/R-02/009 (December 2002), “EPA Requirements for Quality Assurance Project Plans (QA/R-5)” EPA 240/B-01/003 (March 2001, reissued May 2006), and “Uniform Federal Policy for Quality Assurance Project Plans,” Parts 1-3, EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA, the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Settlement.

c. Respondent shall ensure that EPA and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent in implementing this Settlement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the Agency’s “EPA QA Field Activities Procedure,” CIO 2105-P-02.1 (9/23/2014) available at <http://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures>. Respondent shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA’s “Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions” available at <http://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements> and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA’s Contract Laboratory Program (<http://www.epa.gov/clp>), SW 846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (<https://www.epa.gov/hw-sw846>), “Standard Methods for the Examination of Water and Wastewater” (<http://www.standardmethods.org/>), 40 C.F.R. Part 136, “Air Toxics - Monitoring Methods” (<http://www3.epa.gov/ttnamtl1/airtox.html>).

d. However, upon approval by EPA, Respondent may use other appropriate analytical method(s), as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the method(s) and the method(s) are included in the QAPP, (ii) the analytical method(s) are at least as stringent as the methods listed above, and (iii) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 “Quality management systems for environmental information and technology programs - Requirements with guidance for use” (American Society for Quality, February 2014), and “EPA Requirements for Quality Management Plans (QA/R-2)” EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

e. Upon request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA and the State not less than seven days in advance of any sample collection activity unless shorter notice is agreed to by EPA. For purposes of documenting such agreement, an email from the OSC suffices. In addition, EPA and the State shall have the right to take any additional samples that EPA or the State deems necessary. Upon request, EPA and the State shall provide to Respondent split or duplicate samples of any samples they take as part of EPA's oversight of Respondent's implementation of the Work.

f. Respondent shall submit to EPA the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent with respect to the Site and/or the implementation of this Settlement.

g. Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the QA/QC procedures required by the Settlement or any EPA-approved Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the Work, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

35. **Community Involvement Plan.** EPA may prepare a community involvement plan, in accordance with EPA guidance and the NCP. If requested by EPA, Respondent shall participate in community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. Respondent's support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any community advisory groups, (2) any technical assistance grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. All community involvement activities conducted by Respondent at EPA's request are subject to EPA's oversight. Upon EPA's request, Respondent shall establish a community information repository at or near the Site to house one copy of the administrative record.

36. **Progress Reports.** Respondent shall submit monthly progress reports to EPA concerning actions undertaken pursuant to this Settlement, or as otherwise requested by EPA, from the date of receipt of EPA's approval of the Removal Work Plan until issuance of Notice of Completion of Work pursuant to Section XXV, 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.

37. **Final Report.** Within 90 days after completion of all Work required by this Settlement, other than continuing obligations listed in Paragraph 103 (Notice of Completion of Work), Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled “OSC Reports.” The final report shall include a good faith estimate of total costs or a statement of actual costs incurred by Respondent in complying with the Settlement, a listing of quantities and types of materials removed off-Site by Respondent or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of the Respondent or Respondent’s Project Coordinator:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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.”

38. **Off-Site Shipments**

a. Respondent may ship hazardous substances, pollutants and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility’s state and to the OSC. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the OSC of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the removal action and before the Waste Material is shipped.

c. Respondent may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992) (<https://semspub.epa.gov/work/03/136166.pdf>), and any IDW-specific requirements contained in the Action Memorandum. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

IX. PROPERTY REQUIREMENTS

39. **Agreements Regarding Access and Non-Interference.** Respondent shall, with respect to the Affected Property: (i) provide the EPA, the State, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those activities listed in Paragraph 39.a (Access Requirements); and (ii) refrain from using such Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation, integrity, or protectiveness of the removal action.

a. **Access Requirements.** The following is a list of activities for which access is required regarding the Affected Property:

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to the United States;
- (3) Conducting investigations regarding contamination at or near the Site;
- (4) Obtaining samples;
- (5) Assessing the need for, planning, implementing, or monitoring response actions;
- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved quality assurance quality control plan;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 82 (Work Takeover);
- (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section X (Access to Information);
- (9) Assessing Respondent's compliance with the Settlement;

(10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and

(11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

40. **Best Efforts.** As used in this Section, “best efforts” means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including incurring the cost of employing professional assistance and other reasonable costs, to secure access and/or use restriction agreements, as required by this Section. If Respondent is unable to accomplish what is required through “best efforts” in a timely manner, it shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions.

41. If EPA determines in a decision document prepared in accordance with the NCP that institutional controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondent shall cooperate with EPA’s and the State’s efforts to secure and ensure compliance with such institutional controls.

42. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondent shall continue to comply with its obligations under the Settlement, including its obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Affected Property.

43. Notwithstanding any provision of the Settlement, EPA and the State retain all of their access authorities and rights, as well as all of their rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

X. ACCESS TO INFORMATION

44. Respondent shall provide to EPA and the State, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as “Records”) within Respondent’s possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement, 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 regarding the Work. Respondent shall also make available to EPA and the State, for purposes of investigation, information gathering, or testimony, its employees agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

45. **Privileged and Protected Claims**

a. Respondent may assert all or part of a Record requested by EPA or the State is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 45.b, and except as provided in Paragraph 45.c.

b. If Respondent asserts such a privilege or protection, they shall provide EPA and the State with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA and the State in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that they claim to be privileged or protected until EPA and the State have had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.

c. Respondent may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Settlement.

46. **Business Confidential Claims.** Respondent may assert that all or part of a Record provided to EPA and the State under this Section or Section XI (Record Retention) is business confidential 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). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondent asserts business confidentiality claims. Records that Respondent claims to be confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA and the State, or if EPA has notified Respondent that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondent.

47. Notwithstanding any provision of this Settlement, EPA and the State retain all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XI. RECORD RETENTION

48. Until 10 years after EPA provides Respondent with notice, pursuant to Section XXV102 (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, and must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form)

now in their possession or control or that come into their possession or control that relate in any manner to the performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

49. At the conclusion of the document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 45 (Privileged and Protected Claims), Respondent shall deliver any such Records to EPA.

50. Respondent certifies 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 (other than identical copies) relating to its potential liability regarding the Site since any notification of potential liability by EPA or the State and that it has fully complied with any and all EPA and State requests for information regarding the Site 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, and state law.

XII. COMPLIANCE WITH OTHER LAWS

51. Nothing in this Settlement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(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 shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws. Respondent shall include ARARs selected by EPA in the Removal Work Plan.

52. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondent may seek relief under the provisions of Section XVI (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that it has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

53. **Emergency Response.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondent shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer at (617) 918-1236 of the incident or Site conditions.

54. **Release Reporting.** Upon the occurrence of any event during performance of the Work that Respondent is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondent shall immediately orally notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer at (617) 918-1236, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

55. For any event covered under this Section, Respondent shall submit a written report to EPA within seven days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XIV. PAYMENT OF RESPONSE COSTS

56. **Payments by Respondent for Future Response Costs.** Respondent shall pay to EPA all Future Response Costs not inconsistent with the NCP.

a. **Periodic Bills.** On a periodic basis, EPA will send Respondent a bill requiring payment that includes an Itemized Cost Summary, which includes direct and indirect costs incurred by EPA, its contractors, and subcontractors, that are in excess of EPA-Lead Costs of \$1,841,000. Respondent shall make all payments within 60 days after Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 58 (Contesting Future Response Costs), by making all payments at <https://www.pay.gov> using the "EPA Miscellaneous Payments Cincinnati Finance Center" link, and including references to the Site Name, Docket Number, and Site/Spill ID number and the purpose of the payment.

b. **Notice of Payment.** At the time of payment, Respondent shall send notice that payment has been made to Stacy Greendlinger via email at:

Stacy Greendlinger, Enforcement Coordinator
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100 (02-2)

Boston, MA 02109
(617) 918-1403
Greendlinger.stacy@epa.gov

Such notice shall reference Site/Spill ID Number 01QX and the EPA docket number for this action.

c. Deposit of Future Response Costs Payments. The total amount to be paid by Respondent pursuant to Paragraph 56.a. (Periodic Bills) shall be deposited by EPA in the EPA Hazardous Substance Superfund.

57. Interest. In the event that any payment for Future Response Costs is not made by the date required, Respondent shall pay Interest on the unpaid balance. The Interest shall accrue through the date of Respondent's 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 XVII (Stipulated Penalties).

58. Contesting Future Response Costs. Respondent may initiate the procedures of Section XV (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 56 (Payments for Future Response Costs) if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such dispute, Respondent shall submit a Notice of Dispute in writing to the OSC within 30 days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondent submits a Notice of Dispute, Respondent shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 56, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within five days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 56. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 56. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XV. DISPUTE RESOLUTION

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

60. **Informal Dispute Resolution.** If Respondent objects to any EPA action taken pursuant to this Settlement, including billings for Future Response Costs, it shall send EPA a written Notice of Dispute describing the objection(s) within 30 days after such action. EPA and Respondent shall have 30 days from EPA's receipt of Respondent's Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA, and if mutually agreed by the Parties, can include using mediation to attempt to resolve the dispute. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

61. **Formal Dispute Resolution.** If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within 20 days after the end of the Negotiation Period, submit a statement of position to the OSC. EPA may, within 20 days thereafter, submit a statement of position. Thereafter, an EPA management official at the 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. 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.

62. Except as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondent under this Settlement. Except as provided in Paragraph 72, stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVII (Stipulated Penalties).

XVI. FORCE MAJEURE

63. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondent, or any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work, or increased cost of performance.

64. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement for which Respondent intend or may intend to assert a claim of force majeure, Respondent shall notify EPA's OSC orally or, in his or her absence, the alternate EPA OSC, or, in the event both of EPA's designated representatives are unavailable, the Director of the Superfund and Emergency Management Division, EPA Region 1, within seven days of when Respondent first knew that the event might cause a delay. Within five days thereafter, Respondent shall provide in writing to EPA 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; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 63 and whether Respondent has exercised its best efforts under Paragraph 63, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

65. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure 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 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, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

66. If Respondent elects to invoke the dispute resolution procedures set forth in Section XV (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of Paragraphs 63 and 64. If Respondent carries this burden, the delay at issue shall be deemed not to be a violation by Respondent of the affected obligation of this Settlement identified to EPA.

67. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from meeting one or more deadlines under the Settlement, Respondent may seek relief under this Section.

XVII. STIPULATED PENALTIES

68. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 69.a and 70 for failure to comply with the obligations specified in Paragraphs 69.b and 70, unless excused under Section XVI (Force Majeure). “Comply” as used in the previous sentence includes compliance by Respondent with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

69. Stipulated Penalty Amounts – Future Response Cost Payment.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 69.b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$250	1st through 14th day
\$500	15th through 30th day
\$800	31st day and beyond

b. Obligations

(1) Payment of any amount due under Section XIV (Payment of Response Costs).

(2) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 58 (Contesting Future Response Costs).

70. **Stipulated Penalty Amounts – Other Deliverables.** The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables pursuant to this Settlement, other than those specified in Paragraph 69.b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$250	1st through 14th day
\$500	15th through 30th day
\$800	31st day and beyond

71. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 82 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$750,000.00. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 82 (Work Takeover).

72. 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 noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA’s decision or order. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Paragraph 31 (Work Plan and Implementation), 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 (b) with respect to a decision by the EPA Management Official at the Branch Chief level or higher, under Paragraph 61 (Formal 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 shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

73. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement, EPA may give Respondent written notification of the failure and describe the noncompliance. 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

74. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the Dispute Resolution procedures under Section XV (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be by Fedwire EFT made payable to "EPA Hazardous Substances Superfund" in accordance with the instructions provided in Paragraph 56 of Section XIV (Payment of Future Response Costs). Each payment shall include a reference to the Site/Spill ID and EPA docket number for this action.

75. If Respondent fails to pay stipulated penalties when due, Respondent shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondent has timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 72 until the date of payment; and (b) if Respondent fails to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 74 until the date of payment. If Respondent fails to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

76. The payment of penalties and Interest, if any, shall not alter in any way Respondent's obligation to complete the performance of the Work required under this Settlement.

77. Nothing in this Settlement 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 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 Section 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 Settlement, except in the case of a willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 82 (Work Takeover).

78. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XVIII. COVENANTS BY EPA

79. Except as provided in Section XIX (Reservations of Rights by EPA), 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), for: (i) the Work (ii) Future Response Costs; (iii) EPA-Lead Costs up to \$ 1.841 million. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement. These covenants extend only to Respondent and do not extend to any other person.

XIX. RESERVATIONS OF RIGHTS BY EPA

80. Except as specifically provided in this Settlement, nothing in this Settlement 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 shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

81. The covenants set forth in Section XVIII (Covenants by EPA) do not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. liability for failure by Respondent to meet a requirement of this Settlement;
- b. liability for Past Response Costs;
- c. liability for EPA-Lead Costs incurred by EPA to perform EPA Superfund-Lead Work that are above the amount of \$ 1.841 million;
- d. liability for performance of response actions other than the Work;
- e. criminal liability;
- f. liability for violations of federal or state law that occur during or after implementation of the Work;
- g. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

h. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

i. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.

82. Work Takeover

a. In the event EPA determines that Respondent: (1) has ceased implementation of any portion of the Work; (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. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondent a period of 30 days from the date on which Respondent receives the Work Takeover Notice within which to remedy the circumstances giving rise to EPA’s issuance of such notice.

b. If, after expiration of the notice period specified in Paragraph 82.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 will notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 82.b.

c. Respondent may invoke the procedures set forth in Paragraph 61 (Formal Dispute Resolution) to dispute EPA’s implementation of a Work Takeover under Paragraph 82.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 82.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 written decision terminating such Work Takeover is rendered in accordance with Paragraph 61 (Formal Dispute Resolution).

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

XX. COVENANTS BY RESPONDENT

83. 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 Work or EPA Superfund-Lead Work, Future Response Costs, EPA-Lead Costs up to \$ 1.841 million, and this Settlement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund 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 claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Past Response Costs, Future Response Costs, and this Settlement; or

c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.

84. Except as provided in Paragraph 87 (Waiver of Claims by Respondent), 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 any of the reservations set forth in Section XIX (Reservations of Rights by EPA), other than in Paragraph 81.a (liability for failure to meet a requirement of the Settlement), 81.e (criminal liability), or 81.f (violations of federal/state law during or after implementation of the Work), 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.

85. Nothing in this Settlement 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).

86. Respondent reserves, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent's deliverables or activities.

87. Waiver of Claims by Respondent

a. 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) that it may have:

(1) **De Micromis Waiver.** 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.

b. Exceptions to Waiver

(1) The waiver under this Paragraph 87 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person otherwise covered by such waiver if such person asserts a claim or cause of action relating to the Site against such Respondent.

XXI. OTHER CLAIMS

88. By issuance of this Settlement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

89. Except as expressly provided in Paragraph 87 (Waiver of Claims by Respondent) and Section XVIII (Covenants by EPA), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement, 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.

90. No action or decision by EPA pursuant to this Settlement 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).

XXII. EFFECT OF SETTLEMENT/CONTRIBUTION

91. Except as provided in Paragraph 87 (Waiver of Claims by Respondent), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XX (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(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).

92. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and 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, or as may be otherwise provided by law, for the “matters addressed” in this Settlement. The

“matters addressed” in this Settlement are the Work, EPA-Lead Costs up to \$1.841 million, and Future Response Costs.

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

94. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

95. In any subsequent administrative or judicial proceeding initiated by EPA, or by 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 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 by EPA set forth in Section XVIII (Covenants by EPA).

XXIII. INDEMNIFICATION

96. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA’s authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. 300.400(d)(3). Respondent, to the extent permitted by Article 89 of the Amendments of the Massachusetts Constitution, M.G.L. c. 44, § 31, and the Massachusetts Tort Claims Act, M.G.L. c. 258, and its contractor(s), (a) shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or 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, and any persons acting on Respondent’s behalf or under its control, in carrying out activities pursuant to this Settlement; and (b) agrees to pay the United States all costs it incurs, 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, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement. 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. Neither Respondent nor any such contractor shall be considered an agent of the United States.

97. 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.

98. Respondent covenants not to sue and agrees not to assert any claims or causes of action 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, to the extent permitted by Article 89 of the Amendments of the Massachusetts Constitution, M.G.L. c. 44, § 31 and the Massachusetts Tort Claims Act, M.G.L. c. 258, Respondent and its contractor(s) 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.

XXIV. INSURANCE

99. No later than seven days before commencing any on-site Work, Respondent shall require that any contractor or subcontractor performing this Work secure and maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Paragraph 103 (Notice of Completion of Work), commercial general liability insurance with limits of liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent pursuant to this Settlement. In addition, for the duration of the Settlement, Respondent shall require that any contractor or subcontractor performing this Work provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall require that the contractor or subcontractor resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, 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. 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 a lesser amount, Respondent need provide, through insurance policies or self-insurance, the equivalent of only that portion of the insurance described above that is not maintained by the contractor or subcontractor, but in no event shall Respondent be required to maintain commercial general liability insurance with limits of liability greater than \$1 million per occurrence, automobile liability insurance with limits of liability greater than \$1 million per accident, and umbrella liability insurance with limits of liability greater than \$3 million in excess of the required commercial general liability and automobile liability limits. Respondent shall ensure that all submittals to EPA under this Paragraph identify the Mansell Field Superfund Site, Salem, MA and the EPA docket number for this action.

100. The OSC may modify any plan or schedule or the SOW, in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.

101. If Respondent seeks permission to deviate from any approved work plan or schedule or the 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 100.

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

XXV. NOTICE OF COMPLETION OF WORK

103. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, including payment of Future Response Costs, or record retention, EPA will provide written notice to Respondent. If EPA determines that such Work has not been completed in accordance with this Settlement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Removal Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Removal Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Removal Work Plan shall be a violation of this Settlement.

XXVI. PUBLIC COMMENT

104. Final acceptance by EPA of the Future Response Cost compromise included in this Settlement shall be 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 settlement, and to consider comments filed in determining whether to consent to the proposed settlement. EPA may withhold consent from, or seek to modify, all or part of Section XIV (Payment of Response Costs) of this Settlement if comments received disclose facts or considerations that indicate that Section XIV of this Settlement is inappropriate, improper, or inadequate. Otherwise, Section XIV 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 XIV of this Settlement.

XXVII. INTEGRATION/APPENDICES

105. This Settlement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or

understandings relating to the settlement other than those expressly contained in this Settlement. The following appendices are attached to and incorporated into this Settlement:

- a. “Appendix A” is the Action Memorandum.
- b. “Appendix B” is the SOW

XXVIII. EFFECTIVE DATE

106. This Settlement shall be effective seven days after the Settlement is signed by the Regional Administrator or his/her delegatee, with the exception of the EPA-Lead Cost compromise included in this Settlement, which shall be effective when EPA issues notice to Respondent that public comments received, if any, do not require EPA to modify or withdraw from the compromises included within this Settlement.

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY:

BRYAN OLSON

Digitally signed by BRYAN
OLSON
Date: 2023.01.05 11:28:47
-05'00'

Dated

Bryan Olson, Director
Superfund and Emergency Management Division
U.S. Environmental Protection Agency, Region 1

FOR THE U.S. DEPARTMENT OF JUSTICE:

Todd Kim
Assistant Attorney General
U.S. Department of Justice
Environment and Natural Resources Division

HENRY
FRIEDMAN

 Digitally signed by HENRY
FRIEDMAN
Date: 2023.02.14 13:47:57 -05'00'

Henry Friedman, Assistant Section Chief
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Enforcement Section
Washington, D.C. 20044-76

Signature Page for CERCLA Docket No. 01-2023-0031; Mansell Field Superfund Site

**FOR THE CITY OF SALEM,
MASSACHUSETTS:**

12.14.23
Dated


Kimberley Driscoll, Mayor

APPENDIX A

Action Memorandum



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE – SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

MEMORANDUM

DATE: August 30, 2022

SUBJ: Request for a Removal Action at the Mansell Field Site
Salem, Essex County, Massachusetts - **Action Memorandum**

FROM: Athanasios Hatzopoulos, On-Scene Coordinator
Emergency Response and Removal Section II

ATHANASIOS
HATZOPOULOS

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HATZOPOULOS
Date: 2022.09.06 16:05:41 -04'00'

THRU: Edward Bazenias, Chief
Emergency Response and Removal Section II

EDWARD BAZENAS

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Date: 2022.09.07 13:56:36 -04'00'

Carol Tucker, Chief
Emergency Planning & Response Branch

EDWARD BAZENAS

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Date: 2022.09.08 11:57:52 -04'00'

TO: Bryan Olson, Director
Superfund and Emergency Management Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document a \$2 million exemption to conduct a time-critical removal action at the Mansell Field Site (the Site), which is located at 50 Proctor Street in Salem, Essex County, Massachusetts. Hazardous substances present in Site soil, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to pose a threat to human health and the environment.

There are no nationally significant or precedent-setting issues associated with this Site, and there has been no use of the On-Scene Coordinator's (OSC's) \$200,000 warrant authority.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# : MAN000120436
SITE ID# : 01QX
CATEGORY : Time-Critical

A. Site Description

1. Removal site evaluation

On December 19, 2018, the City of Salem (City) notified the Massachusetts Department of Environmental Protection (MassDEP) of elevated levels of arsenic, lead, and chromium in soils at the Site. The elevated levels were identified by a licensed site professional (LSP) hired by the city to sample Mansell Field prior to the initiation of improvement projects. On January 6, 2019, MassDEP sent the city a notice of responsibility indicating its belief that the city is a potentially liable party under the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E and the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. MassDEP also issued Release Tracking Number (RTN) 3-0035355 to the Site for a condition that could pose an imminent hazard to human health. Since then, the Site has been fenced off to restrict public access and use.

On March 20, 2019, the city contacted EPA regarding its concerns about the expected high cost of the cleanup at Gallows Hill Park. On April 17, 2019, MassDEP requested EPA's assistance with assessment and remediation at the Mansell Field portion of Gallows Hill Park and at targeted bordering residential properties. Between May 2019 and August 2020, EPA performed shallow soil assessments on seven residential properties surrounding the Site, followed by a time-critical removal action on three of those residential properties where elevated levels of contamination were identified. As part of those removal actions, EPA removed the top three feet of soil from the residential properties along its shared boundary with Mansell Field.

After EPA completed the removal action on the residential properties, on June 6, 2022, EPA received another request for assistance from MassDEP for the assessment and remediation of arsenic-contaminated soil at the Site. On July 5, 2022, after obtaining consent for site access, EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted a Preliminary Assessment/Site Investigation (PA/SI) to confirm the previous data and reports submitted by the city's LSP. Soil samples were collected and analyzed for metals by USEPA Laboratory Services and Applied Sciences Division. The PA/SI confirmed that arsenic is the main contaminant of concern (COC) with other collocated contaminants such as but not limited to chromium and lead. The contaminants were detected in similar sampling locations at levels comparable to the previous data presented by the city's LSP. The highest EPA and city LSP results are as follows:

Hazardous Substance	EPA PA/SI Highest Sample Concentration milligram/kilogram (mg/kg)	City (LSP) Highest Sample Concentration
Arsenic	19,000 mg/kg	12,300 mg/kg
Chromium	4,200 mg/kg	1,820 mg/kg
Lead	1,100 mg/kg	354 mg/kg

The results of the sampling events and all other sampling can be found in the Mansell Field Site file.

Based upon the sampling results and potential for further release of contaminants from the Site, the evaluation was concluded, and a time-critical removal action was recommended in the Site Investigation Closure Memorandum dated August 24, 2022.

2. Physical location

The Site, which is part of the larger Gallows Hill Park, is located at 50 Proctor Street in Salem, Essex County, Massachusetts. It is bounded to the north by Langdon Street; to the east by Proctor Street; to the south by Mansell Parkway; and to the west by the remaining portions of Gallows Hill Park, including a playground area. The parcel is defined by the City of Salem Assessor's Office as Parcel #15-0329-0 and its geographic coordinates are 42°30'58.434"N and 70°54'33.98"W.

3. Site characteristics

Comprising the lower elevation portion of the 23.3-acre Gallows Hill Park, the approximately 1.5-acre Site consists of a large grass-covered area, as well as a basketball court and small playground. Two stormwater lines and two water lines run under the Site to Proctor Street. Due to the contaminated soil, the Site is currently fenced and closed to the public. Prior to the fence installation, the grassy area was used for soccer practice and other activities.

The Site is located a densely populated residential neighborhood. Within one mile of the Site the population is approximately 25,500 residents, with seven schools, two nursing homes, and 11 childcare centers.

Based on information in EPA's EJSCREEN environmental justice screening tool, zero of 11 Environmental Justice Indexes for the area within a one-mile radius exceed the 80th percentile on a national basis.

The city has owned the Site for over 80 years and maintained it as a public park for most of that time. Prior to the city's ownership, the Site and surrounding properties were used for industrial purposes for several decades. Historical records indicate that a tannery and leather-making facility operated on the far eastern portion of the Site during the late 1800s. At that time, there was a stream channel crossing the eastern portion of the property, where the stormwater drain system is currently located. The tannery facility was demolished circa 1938 and the property became mostly vacant.

In 1940, the city took the Site property in fee by eminent domain for \$3500.¹ In or around 1950, the city removed the remains of an old tannery facility building from the Site, including its foundation and cellar. It also built a 28-foot roadway with temporary gravel sidewalks on both sides and erected a chain link fence. In addition, the city rough-graded the Site, covered it with seven inches of topsoil, and fertilized and seeded it. By 1952, the Site was a grass field. In or around 1958, the city built a basketball court, repaired the chain link fence, and did some other maintenance work. The Site has been used as a park since at least the late 1950s.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

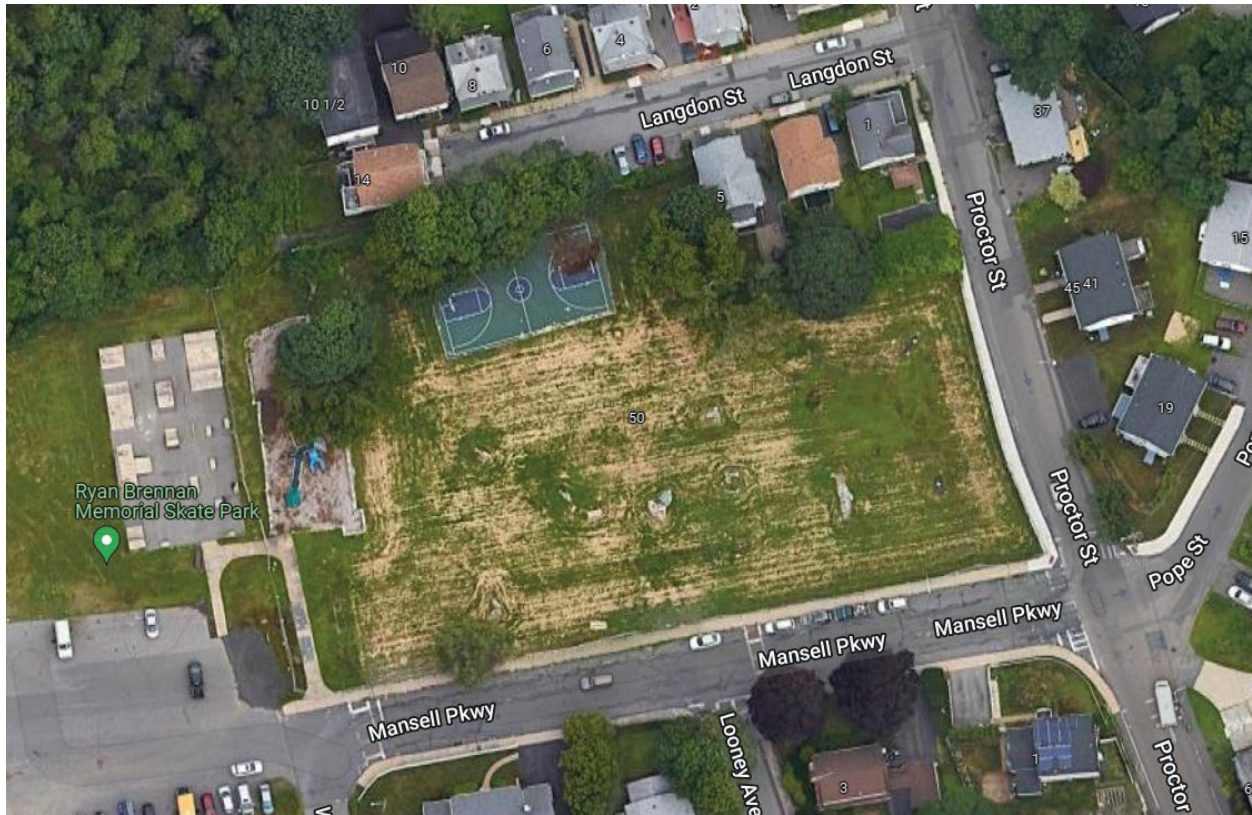
As previously mentioned, sampling analysis by EPA determined the presence of hazardous substances as defined by Section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. §9601(14), and 40 CFR § 302.4, including but not limited to arsenic, chromium, and lead with arsenic being the COC. These hazardous substances are collocated and have been detected in the Site's surface and subsurface soils. The areas that were sampled are exposed to the elements and are a health threat to anyone walking on, traveling by, or living near the Site.

5. NPL status

The Site is not currently on the National Priorities List, nor has it been proposed. It has not received a Hazardous Ranking System rating, and referral to the National Priorities List site assessment program is not anticipated.

¹ The city issued a taking order dated January 11, 1940 and recorded with the Registry on January 23, 1940 at Book 3208, Page 328. The prior owner, Clotilde Jones, executed a confirmatory deed dated January 11, 1940 and recorded with the Registry at Book 3208, Page 329.

6. Maps, pictures and other graphic representations



B. Other Actions to Date

1. Previous actions

EPA has been involved with the Site since 2019. On March 20, 2019, the city contacted EPA regarding its concerns about the expected high cost of the cleanup at Gallows Hill Park. On April 17, 2019, MassDEP requested EPA's assistance with assessment and remediation at the Mansell Field portion of Gallows Hill Park and at targeted bordering residential properties. From October 2019 to August 2020, EPA performed a time-critical removal action on three residential properties adjacent to Mansell Field. As part of that removal action, EPA removed the top three feet of soil from the residential properties along its shared boundary with Mansell Field.

2. Current actions

The Site remains closed to the public while local, state, and federal entities assess the data and consider cleanup options. This proposed Action Memorandum will help address the Site's environmental issues. EPA has been discussing and coordinating impending cleanup activities with the city and MassDEP.

C. State and Local Authorities' Roles

1. State and local actions to date

Beginning in 2018, the city has been consulting with MassDEP and EPA to define the nature and extent of contamination. By letter to the city dated January 6, 2019, MassDEP issued Notice of Responsibility indicating its belief that the city is a potentially liable party under the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.0000.

On March 20, 2019, the city contacted EPA regarding its concerns about the expected high cost of the cleanup at Gallows Hill Park. On April 17, 2019, MassDEP requested EPA's assistance with assessment and remediation at the Mansell Field portion of Gallows Hill Park and at targeted bordering residential properties. After EPA performed a removal action at three of those residential properties, MassDEP again requested EPA's assistance with the assessment and remediation of the Site, notably in areas with arsenic concentrations above 500 mg/kg.

2. Potential for continued State/local response

In its request for assistance, MassDEP stated that it does not have the resources to undertake the removal action proposed in this Action Memorandum. Therefore, EPA does not anticipate that the state will be able to assist in the remediation of the Site. The city has expressed interest in working cooperatively with EPA to address Site cleanup.

The city will support the EPA portion of the removal action as follows:

- constructing Site ingress/exit to enable EPA contractor mobilization,
- ensuring that Site security is provided by re-installing/repairing damaged portions of the site fence,
- providing staging area adjacent to the Site, area for three office trailers and generator,
- providing water for dust suppression,
- providing police details for traffic control during the transportation and disposal and other major soil transportation activities, and

- controlling or containing water flow in the 36-inch stormwater pipe during excavation and backfilling work around the pipe.

In addition, the city has indicated that it intends to implement park improvements and upgrades following remediation activities. Such activities are beyond the scope of this Action Memorandum and will be completed pursuant to the Massachusetts Contingency Plan, under state oversight.

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

The presence of metals not limited to arsenic, chromium, and lead and current conditions at the Site constitute a release or threat of release of a hazardous substance into the environment that may present an imminent and substantial endangerment to public health or welfare. As described below, Site conditions meet the general criteria for a removal action, as set forth in 40 C.F.R. §300.415(b)(1), in that “there is a threat to public health or welfare of the United States or the environment,” and in consideration of the factors set forth in 40 C.F.R. §300.415(b)(2) as described below.

Arsenic is naturally occurring element widely distributed in the earth’s crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Inorganic arsenic compounds are mainly used to preserve wood. Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs. Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of “pins and needles” in hands and feet. Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small “corns” or “warts” on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling. Almost nothing is known regarding health effects of organic arsenic compounds in humans. Studies in animals show that some simple organic arsenic
Agency for Toxic Substances and Disease Registry Division of Toxicology and Human Health Sciences August 2007 Page 2 of 2 Arsenic CAS # 7440-38-2 compounds are less toxic than inorganic forms. Ingestion of methyl and dimethyl compounds can cause diarrhea and damage to the kidneys. Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services and the EPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer has determined that inorganic arsenic is carcinogenic to humans. There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores and that exposure to arsenic in the womb and early childhood may increase mortality in young adults. Based on some evidence, inhaled or ingested arsenic can injure pregnant women or their unborn babies, although the studies are not definitive. Studies in animals show that large

doses of arsenic that cause illness in pregnant females, can also cause low birth weight, fetal malformations, and even fetal death. Arsenic can cross the placenta and has been found in fetal tissues. Arsenic is found at low levels in breast milk.²

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)];

Arsenic presents a hazard to public health and the environment. Arsenic is a hazardous substance as defined by Section 101(14) of CERCLA, 42 U.S.C. §9601(14) and 40 C.F.R. § 302.4. As documented in this Action Memorandum, arsenic has been detected in Site soil and poses an inhalation threat to residents and those who may enter the Site. Because the Site is not secured with a polyethylene cover, arsenic-laden dust can become airborne with air gusts or inclement weather. As discussed earlier, the Site is a public park that attracts many small children and young adults. While everyone recreating at the Site can be potentially exposed to airborne contamination (dust/dirt particles), smaller children are also at a higher risk for ingestion of arsenic contaminated soil via actual eating of soil and from putting dirty hands, toys or other objects in their mouths.

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

The Site has two stormwater lines and two water lines that run underground to Proctor Street. If either water line within the site were to rupture, backflow could allow arsenic from the soil to enter the water line and contaminate the drinking water system.

High levels of hazardous substances or pollutants or contaminants in soil largely at or near the surface, that may migrate [§300.415(b)(2)(iv)]; and weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [§300.415(b)(2)(v)];

Laboratory analysis of the Site soil indicates that the soils are contaminated with elevated levels arsenic. The Site is temporarily fenced, but the soil is not secured by a polyethylene cover. Therefore, high winds or inclement weather may cause the arsenic to migrate in the environment.

The availability of other appropriate Federal or State response mechanisms to respond to the release [§300.415(b)(2)(vii)];

In their letters requesting EPA's assistance, both MassDEP and the city indicate that they currently lack the resources to address the Site.

² Agency for Toxic Substances and Disease Registry (ATSDR), *Toxicological Profile for Arsenic*, April 2007.

IV. ENDANGERMENT DETERMINATION

Arsenic, chromium, and lead are hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. §9601(14) and 40 C.F.R. § 302.4. During the PA/SI, EPA confirmed the presence of actual or threatened releases of hazardous substances or pollutants or contaminants from the Site that, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

In accordance with OSWER Directive 9360.0-34 (August 19, 1993), an endangerment determination is made based on “appropriate Superfund policy or guidance, or on collaboration with a trained risk assessor,” which is outlined and discussed in Section III above. Appropriate sources include, but are not limited to, relevant action level or clean-up standards, Agency for Toxic Substances and Disease Registry documents or personnel, or staff toxicologists.

In this case, EPA relied on the following in making an endangerment determination for this Site. Sampling data collected by the city’s LSP in December 2018 lead to MassDEP assigning a Release Tracking Number. The property has been designated a disposal site under the Massachusetts Oil and Hazardous Material Release Prevention Act, M.G.L. c.21E.

EPA’s July 2022 PA/SI soil sampling confirmed the high concentrations of arsenic and chromium are above EPA’s Removal Management Levels (RMLs)³ and arsenic, chromium, and lead above the MassDEP’s Standards for Soil Remediation. In addition to the exceedance of state standards as described above, EPA also reviewed ATSDR ToxFAQs (Section III of this Action Memorandum) for arsenic.

Hazardous Substance	EPA PA/SI Highest Sample Concentration	EPA RML Residential Soil	City (LSP) Highest Sample Concentration	MassDEP Standards for S1-Soil Remediation
Arsenic	19,000 mg/kg	68 mg/kg	12,300 mg/kg	20 mg/kg
Chromium	4,200 mg/kg	400 mg/kg	1,820 mg/kg	100 mg/kg
Lead	1,100 mg/kg	Not Listed	354 mg/kg	200 mg/kg

³ U.S. Environmental Protection Agency. <https://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>. November 2018

Since arsenic is the COC, EPA will use the EPA RML (68mg/kg for residential soil) to initiate cleanup, and the MassDEP standard for S-1 soil remediation (20 mg/kg for residential soil) as the target cleanup level to a depth of 6 feet below grade (fbg).

V. EXEMPTION FROM STATUTORY LIMITS

CERCLA Section 104(c) states that removal actions can exceed the \$2 million statutory limits if conditions meet either the emergency exemption criteria or the consistency exemption criteria. As described below, conditions at the Site meet the criteria for the emergency exemption, as follows:

A. Emergency Exemption

Under CERCLA § 104(c)(1)(A), removal actions may exceed the \$2 million statutory exemption if:

1. There is an immediate risk to public health or welfare or the environment.

Arsenic and other metals in site soils, pose an immediate direct contact threat and/or potential exposure. Access to the Mansell Field had to be restricted as soon as hazardous substances were identified on the property. Further, under adverse weather conditions, exposed contaminated soil could potentially migrate off-site via wind, soil erosion and surface water runoff pose a risk to those who live or walk near the field.

As stated earlier, the Site is in a densely populated residential neighborhood. Mansell Field is abutted by Mansell Parkway to the south, Proctor Street to the east, Langdon Street and residences to the north, and the remaining portions of the larger Gallows Hill Park area to the west. Due to the contaminated soil, the field is closed and off-limits until the property is remediated to prevent exposure to children and other users. There is an approximate population of 25,800 within one mile of the Site. Seven schools, two nursing homes and eleven childcare centers are also located within one mile of the Site.

2. Continued response actions are immediately required to prevent, limit, or mitigate an emergency.

Elevated levels of metals in the soils have been detected with arsenic as high as 19,000 mg/kg. The scope of the action memorandum is to excavate/dispose arsenic and other collocated soil using the EPA RML (68mg/kg for residential soil), and the MassDEP standard for S-1 soil remediation (20 mg/kg for residential soil) as the target cleanup levels to a depth of 6 fbg. If these measures are not implemented, there will be a continued threat to public health, welfare and the environment posed by conditions at the Site.

3. Assistance will not otherwise be provided on a timely basis.

MassDEP does not have adequate available resources to address the contamination and has requested EPA assistance.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The proposed action will protect public health, welfare, and the environment. The goal of the removal action is to eliminate the direct contact threat and remove the source contamination by excavating and disposing of soils contaminated with arsenic and potentially other hazardous substances. The excavated areas will be resampled, delineated with geotechnical fabric, and backfilled with clean soil. Once EPA has completed its work, any post removal site controls, such as deed restrictions, will be implemented by the City under MassDEP oversight.

During the removal action, EPA's OSC will continue to coordinate all Site-related activities with the city, MassDEP, and the public. Specific removal activities will include the following:

- Conduct a site walk with environmental remediation contractor to assess layout of the Site and determine required equipment, personnel, and utilities.
- Develop and implement a site-specific Health and Safety Plan.
- Develop and implement a Community Involvement Plan.
- Develop a site-specific work plan providing estimate of materials, time and costs.
- Establish site security as necessary based on conditions.
- Mobilize personnel and equipment.
- Delineate work zones and decontamination area.
- Perform air monitoring and implement dust control and suppression for worker protection and public health, as needed.
- Excavate soil contaminated with arsenic and other collated contaminants in hot/spot identified areas from 0 to 6 fbg.
- Treat surface water accumulated in excavated areas if necessary.
- Decontaminate onsite larger debris, and segregate hazard-free debris.
- Remove and dispose other hazardous substances discovered during this removal action.
- Conduct additional soil characterization to verify that remaining soil meets MassDEP Standards for Soil Remediation and EPA RMLs.
- Provide and place geotextile fabric and warning barrier across excavation areas.
- Transport and dispose contaminated soil at EPA approved disposal facilities.

- Investigate soil stabilization treatment options for soil failing the Toxicity Characteristic Leaching Procedure. Perform on-site stabilization of leachable arsenic, if warranted and cost-efficient.
- Conduct confirmatory soil sampling in accordance with the Phase IV Remedy Implementation Plan and Site-specific Quality Assurance Project Plan, to assure that the cleanup program meets the project goals.
- Backfill excavated areas and cap the excavated footprint of the Site.
- Repair response related damages; and
- Demobilize resources.

2. Community relations

The EPA Community Involvement Coordinator will maintain communications with the local community by sharing information through press releases, fact sheets, and public meetings, as necessary. EPA will continue to coordinate communication activities with MassDEP and the city.

3. Contribution to remedial performance

The cleanup proposed in this Action Memorandum is designed to mitigate the threats to human health and the environment posed by the Site. Based upon available information, the actions taken will be consistent with, and not impede, any future responses.

4. Description of innovative technologies and sustainable approaches

In accordance with the December 23, 2013, Memorandum, updated August 2, 2016, issued by Office of Land and Emergency Management as well as the Region 1 Clean and Greener Policy for Contaminated Sites, greener cleanup practices should be considered for all cleanup projects. Greener cleanup is the practice of incorporating practices that minimize the environmental impacts of cleanup actions and maximize environmental and human benefit. Alternative technologies and sustainable approaches will be considered and incorporated, as appropriate, throughout the implementation of the removal action. For instance, EPA will implement recycling practices including recycling of paper, plastic, metal debris, etc.

The use of alternative technologies regarding disposal options will be further examined as the site work progresses. For instance, the contaminated soil may be pre-treated to reduce landfill costs. On-site field screening and analytical techniques may be utilized during the removal action.

5. Applicable or relevant and appropriate requirements (ARARs)

The federal cleanup standards, standards of control, and other substantive requirements that have been identified to are listed below. They are applicable if noted, but otherwise relevant and appropriate.

Federal ARARs:

Clean Water Act, National Pollutant Discharge Elimination System (NPDES), 40 C.F.R. Parts 122 – 125; 122.26: Establishes the specifications for discharging pollutants from any point source into the waters of the U.S. Also, includes storm water standards for construction sites over one acre. Removal activities will be managed to prevent stormwater discharge from the Site.

Clean Water Act, 40 C.F.R. Sections 122.26(c)(ii)(C) and 122.44(k): NPDES regulations for storm water control and management will be met if the removal action triggers this ARAR.

Clean Air Act, 40 CFR Part 61, 42 U.S.C. Section 112(b)(1): The Clean Air Act regulates 188 air toxics, also known as “hazardous air pollutants.” Arsenic is listed as one of these air toxics. These regulations include the National Emission Standards for controlling dust. If the removal of soil generates regulated air pollutants, then measures will be implemented to meet these standards.

State ARARs:

40 C.F.R. Parts 260-262 and 264 Resource Conservation and Recovery Act, Subtitle C: Hazardous Waste Identification and Listing Regulations; Generator and Handler Requirements, Closure and Post-Closure. Massachusetts has been delegated the authority to administer these RCRA standards through its state hazardous waste management regulations. Waste generated will be tested to determine whether it exceeds hazardous waste thresholds, and, if so, the hazardous waste will be managed on-site and until such time as it is shipped to an EPA-approved off-site disposal location.

310 CMR 6.00: Ambient Air Quality Standards Massachusetts Ambient Air Quality Standards sets primary and secondary standards for emissions of certain contaminants including particulate matter. Removal activities, including excavation and management of soil will be implemented in accordance with these rules.

310 CMR 7.00: Massachusetts Air Pollution Regulations stipulate that during construction and/or demolition activities, air emissions (i.e., dust, particulates, etc.) must be controlled to prevent air pollution. Construction activities will be managed to meet standards for visible

emission (310 CMR Section 7.06): dust, odor, construction, and demolition. During the removal action, appropriate measures would need to be taken to comply with these regulations.

The OSC will coordinate with state officials to identify additional state ARARs, if any. In accordance with the National Contingency Plan and EPA Guidance Documents, the OSC will determine the applicability and practicability of complying with each ARAR that is identified in a timely manner.

6. Project schedule

Upon approval of the proposed removal action, EPA expects to initiate the time-critical removal action in late fall 2022 and estimates that the removal will be complete within six months.

B. Estimated Costs

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$2,800,000.00
Interagency Agreement		\$0,000.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$185,000.00
Extramural Subtotal		\$2,985,000.00
Extramural Contingency	20%	\$597,000.00
TOTAL, REMOVAL ACTION CEILING		\$3,582,000.00

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

A delayed removal action or the absence of a removal action described herein will cause conditions to remain unaddressed. The Site will continue to release or threaten to release hazardous substances into the environment, which poses a threat to human health and the environment.

VIII. OUTSTANDING POLICY ISSUES

There are no precedent-setting policy issues.

IX. ENFORCEMENT ... For Internal Distribution Only

See attached Confidential Enforcement Strategy.

The total EPA costs for this removal action that will be eligible for cost recovery are estimated to be **\$3,582,000** (extramural costs) + **\$200,000** (EPA intramural costs) = **\$3,782,000** X 1.4009 (regional indirect rate) = **\$ 5,298,204**⁴

X. RECOMMENDATION

This decision document represents the selected removal action for the Mansell Field Site in Salem, Massachusetts, developed in accordance with CERCLA, as amended, and is not inconsistent with the National Contingency Plan. The basis for this decision will be documented in the administrative record to be established for the Site.

Conditions at the Site meet the National Contingency Plan Section 300.415 (b) (2) criteria for a removal action due to the following:

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)];

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [§300.415(b)(2)(iv)];

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

The availability of other appropriate Federal or State response mechanisms to respond to the release [§300.415(b)(2)(vii)];

⁴ Direct Costs include direct extramural costs \$ 3,582,000 and direct intramural costs \$200,000. Indirect costs are calculated by using regional indirect rate in effect at time cost estimate is prepared and is expressed as a percentage of the direct costs, 40.09% (effective February 8, 2022) x \$3,782,000 consistent with EPA's full cost accounting methodology. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

Other situations or factors that may pose threats to public health or welfare of the United States or the environment [§300.415(b)(2)(viii)].

I recommend that you approve the proposed removal action. The total extramural removal action project ceiling, if approved, will be \$3,582,000.

APPROVAL: **BRYAN
OLSON**  Digitally signed by
BRYAN OLSON
Date: 2022.09.08
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DATE: _____

APPENDIX B

Statement of Work

STATEMENT OF WORK

MANSELL FIELD SITE *SALEM, MASSACHUSETTS*

Pursuant to the

Administrative Settlement
Agreement and Order on
Consent to Perform a Removal
Action

CERCLA Docket No. 01-2023-0031

A. Introduction

This statement of work (“SOW”) identifies the components of work required pursuant to the Administrative Order on Consent (“AOC”) (CERCLA Docket No. 01-2023-0031) for performance of a removal action set forth in the Action Memorandum (“Removal Action”) for the Mansell Field Park Site (the “Site”), located in Salem, Massachusetts. Under this SOW, the City of Salem (“Respondent”) shall prepare and submit to the On-Scene Coordinator (“OSC”) for approval the items identified below. The Removal Action conducted under this Administrative Order and SOW shall abate the potential danger to public health or welfare or the environment, which may otherwise result from the actual or threatened release of hazardous substances at or from the Site.

Pursuant to the terms of the AOC, the U.S. Environmental Protection Agency (“EPA”) and Respondent are dividing the tasks related to this Removal Action into EPA Superfund-Lead Work to be performed by EPA and Respondent-Lead Work to be performed by Respondent.

During performance of this Removal Action, several of the same or very similar response-related tasks will be conducted by both EPA and Respondent, but at different times. For example, both EPA and Respondent will conduct air monitoring and dust suppression as part of each of their separate soil excavation activities.

B. General Requirements of Respondent

1. For communication between EPA and Respondent related to the implementation of the SOW, the OSC shall be the point of contact for EPA and Thomas Devine, Senior City Planner, City of Salem, shall be the point of contact for Respondent. Respondent shall communicate freely and frequently with the OSC prior to and during the development of plans and deliverables, and continually throughout the implementation of the work described in this SOW. Open and routine communication will facilitate a cleanup that is as effective, safe, and efficient as possible. Where deliverables are required, draft documents may be submitted for comments and consideration prior to the due date to prepare for submission of the final documents for OSC approval. EPA will notify Respondent of the identities of any OSC-designated representatives assigned to the Site during oversight of any on-Site Removal Action activities.
2. All Respondent-Lead Work shall be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (“CERCLA”), the National Contingency Plan (“NCP”), 40 C.F.R. Part 300 and any applicable amendments thereto, applicable guidance documents provided by EPA, and the provisions of this Statement of Work, including any standards, specifications, and time schedules provided here or as specified by the OSC.

3. Each required plan generated pursuant to this SOW must be submitted to the OSC for approval prior to implementation.
4. Unless otherwise allowed or approved by EPA in writing, Respondent shall perform and complete all activities that have been authorized in accordance with this SOW and the AOC.
5. Respondent may be required (if and to the extent authorized by applicable law) or may (at its discretion) request to alter or expand upon the plans after approval, based on new information, changes in Site conditions, or subsequently identified deficiencies.
6. By telephone or otherwise, Respondent shall inform the OSC of any disposal shipments no less than three (3) working days prior to the event.
7. Respondent shall, submit monthly written progress reports to the EPA OSC via email concerning actions undertaken pursuant to this AOC after the date of receipt of EPA's approval of the Removal Work Plan (as defined in Section E.3., below) until termination of this AOC, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the Respondent-Lead Work performed and any problems encountered, analytical data received during the reporting period, and developments anticipated during the next reporting period, including a schedule of the Respondent-Lead Work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

C. Description of Superfund-Lead Work and Respondent-Lead Work.

Performance of the Removal Action identified in the AOC involves coordination between Respondent and EPA, and the general division of work is described below.

1. EPA Superfund-Lead Work

EPA will perform EPA Superfund-Lead Work as follows:

- a. mobilize cleanup contractor with required equipment, and personnel;
- b. perform air monitoring and implement dust control throughout EPA earth-moving activities;
- c. excavate, transport and dispose arsenic and other collated contaminants in hot/spot identified areas, 0 to 6 feet below grade (fbg). Investigate soil stabilization treatment options for soil failing the Toxicity Characteristic Leaching Procedure (TCLP). If cost efficient perform treatment for T&D;
- d. treat surface water accumulated in excavated areas if necessary;
- e. decontaminate larger debris, and segregate hazard-free debris to reduce

- disposal costs;
- f. remove and dispose other hazardous substances discovered during this removal action;
- g. conduct additional soil characterization to verify that remaining soil meets MassDEP Standards for Soil Remediation and EPA RMLs;
- h. install geotextile fabric and warning barrier across excavation areas; and
- i. backfill of excavated areas of the Site with clean soil.

2. Respondent-Lead Work

Respondent-Lead Work will include activities listed below, the requirements for which are more specifically addressed in section D:

- a. construct Site ingress/exit to enable EPA contractor mobilization;
- b. ensure that Site security is provided by re-installing/repairing damaged portions of the site fence;
- c. provide staging area for three office trailers and generator, at parking lot area adjacent to the Site;
- d. provide water to be used as an engineering control for dust suppression.
- e. direct city Sewer Water and Drain Department to work on controlling or containing water flow in the 36 inch RFP storm water pipe during EPA's excavation, as needed;
- f. excavate, transport and dispose soil with concentrations of arsenic greater than or equal to (\geq) 500 mg/kg in areas depicting 0 to 3 fbg and areas 3 to 6 fbg in hot spots/identified areas of Site. Investigate soil stabilization treatment options for soil failing TCLP. Perform on-site stabilization of leachable arsenic, if warranted and cost-efficient;
- g. excavate approximately 1,300 cubic yards of contaminated soil with arsenic concentrations <500 ppm (and ≥ 20 ppm) in other areas needed, and place and compact where the New Field is scheduled;
- h. provide police detail for all truck incoming and outgoing site traffic (disposal related and clean fill), as needed;
- i. characterize additional soil to verify that remaining soil meets MassDEP Standards for Soil Remediation and EPA RMLs;
- j. conduct confirmatory soil sampling in accordance with the Phase IV Remedy Implementation Plan and Site-specific Quality Assurance Project Plan, to assure that the cleanup program meets the project goals.
- k. backfill the excavated areas and cap the excavated footprint of the Site. Capping process will involve building different layers of soil that will allow for proper drainage and future sustentation of the field;
- l. re-install the basketball court;
- m. raise existing catch basins and retrofit other underground infrastructure utilities that were altered during the Removal Action to meet new capping grades and intended use of the field; and
- n. vegetate/seed the field.

D. Specific Requirements of Respondent-Lead Work.

Respondent shall provide the technical experts, personnel, equipment and materials necessary to perform and complete the following the Respondent-Lead Work as part of the Removal Action set forth in the Action Memorandum for this Site and within the approved time schedule set forth in the AOC. Requirements of the Respondent-Lead Work are separated into **plans** and **tasks**, as enumerated below.

Respondent shall prepare the following plans with respect to the Respondent-Lead Work.

1. Plans

- a. Develop a site-specific **Health and Safety Plan** (“HASP”) for EPA review, as required by NCP § 300.150 and in accordance with Occupational Safety and Health Administration (“OSHA”) regulations, 29 CFR Parts 1910, 1926 and 1904. The HASP must:
 - i. Be initiated at the commencement and implemented throughout all stages of the Removal Action for the duration of all field activities;
 - ii. Include contingency planning;
 - iii. Incorporate all changes recommended by EPA; and
 - iv. Include an air monitoring plan to ensure worker and public safety during any removal activities that may cause a release or airborne dust/contaminants.

All employers are responsible for the health and safety of their employees and for maintaining compliance with OSHA. Nothing contained in the SOW or any approved plans shall relieve Respondent of its liability, if any, for noncompliance with OSHA or for not taking appropriate measures to protect that health and safety of its employees.

- b. Develop a site-specific **Removal Work Plan** (“RWP”) to address the remediation strategy, including anticipated timelines. The RWP shall include a **water treatment plan** that will address how potentially contaminated water (precipitation, groundwater, decontamination) will be treated and returned to the sub-surface if applicable.
- c. Develop a **Salem-wide traffic plan** for all trucks leaving the Site transporting soil/material for disposal as well as for trucks arriving at the Site transporting clean fill/site resources.

- d. Develop a **Site security plan** to prevent unauthorized access during performance of the Removal Action. The plan must address securing site equipment, installing hazardous waste warning signs, and other similar measures to prevent unauthorized access.
- e. Develop a site-specific **Quality Assurance Project Plan** (“QAPP”) consistent with EPA Region I’s Quality Assurance Project Plan (“QAPP”) to assure that all analytical results generated during the Removal Action are of known quality.
- f. Develop a site-specific **sampling and analysis plan** (“SAP”) for sampling.

Respondent shall perform the tasks identified below and include them in its site-specific RWP.

2. Tasks

- a. Delineate the work zones and decontamination area in compliance with OSHA regulations.
- b. Conduct sampling, as needed, to define the extent of the contamination (utilizing EPA’s guidance on pre-excavation sampling) and to provide data for disposal characterization. In addition, document all hazardous materials via waste profiles for T&D.
- c. Conduct air monitoring and dust suppression per the HASP.
- d. Based on the results of the sampling, identify, excavate, stockpile, and stage the material accordingly. All stockpiles shall be covered with polyethylene sheeting during non-working hours.
- e. Following EPA’s limited backfilling of areas excavated due to the presence of arsenic concentrations, Respondent will backfill remaining areas to the appropriate grade.
- f. Any backfill material brought to the Site shall be sampled to ensure that it does not contain any hazardous substances or contaminants above acceptable levels or concentrations.
- g. Assess and characterize any additional hazardous materials discovered during the course of this action.
- h. Arrange for disposal of all waste streams, including decontamination waste and spent personal protective equipment.

- i. Repair any response-related damage.
- j. Dispose of materials in accordance with 40 CFR § 300.440, *Procedures for Planning and Implementing Off-Site Response Actions*. Determine that all disposal facilities are EPA-approved and are in compliance with the CERCLA Off-Site Rule, 40 CFR § 300.440 regarding off-site disposal facilities.
- k. Provide and affix all appropriate labels in accordance with state and federal regulations for storage, transportation, and/or disposal of waste streams, as appropriate.
- l. Ensure all drivers of vehicles transporting waste off site are in compliance with applicable US, state and local DOT regulations (e.g., 49 CFR 397).
- m. Vehicles transporting waste off site shall be properly placarded as required to comply with DOT and/or state regulations.
- n. Generate a Completion of Work Report (“CWR”).

E. Deliverables and Reporting Instructions and Requirements

1. Supervising Contractor and Project Coordinator

Respondent shall propose an environmental consulting services contractor or an environmental services cleanup contractor (one or more contractors or subcontractors) for the purpose of performing and/or supervising the work required by this AOC in accordance with the terms and conditions of the AOC and shall notify EPA of the name(s) and qualifications of such contractor(s) within seven (7) days of the effective date of the AOC (the “Effective Date”) or, if retained later than the Effective Date, then seven days after the date on which the contractor or subcontractor is awarded a contract in accordance with state and local procurement law. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Respondent-Lead Work under this AOC at least seven (7) days prior to commencement of such Work. EPA retains the right to disapprove of a selected contractor. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and again shall notify EPA of that contractor’s name and qualifications within seven (7) days of EPA’s disapproval, or, if it is not possible to select a different contractor or subcontractor in accordance with state and local procurement law, then within seven (7) days after a new contractor or subcontractor is awarded a contract in accordance with this law, but no later than seven (7) days prior to commencement of the Work by the contractor or subcontractor.

Within seven (7) 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 AOC and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. EPA retains the right to disapprove the designated Project Coordinator. If EPA disapproves 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 AOC shall constitute receipt by Respondent.

2. Site Specific Health and Safety Plan (HASP)

Within 60 days of the Effective Date, Respondent shall submit a site-specific Health and Safety Plan ("HASP") for its workers. Respondent shall submit for EPA review and comment a HASP that ensures the protection of the public health and safety during performance of Work under this AOC.

The HASP shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable OSHA regulations found at 29 C.F.R. Part 1910. If applicable, the HASP must also include an Air Monitoring Plan for their Respondent-Lead Work. This plan will address personal protective equipment based on airborne contamination levels, monitoring and calibration of air monitoring equipment, personnel monitoring to determine worker safety levels, perimeter air monitoring to ensure public safety, dust and contaminant reduction techniques.

"Monitoring" can mean both the collection/analyzation of air samples to identify the concentration of airborne contaminants as well as the use of real time instrumentation that might not be compound specific but can determine the amount of particulate matter being released to the air. Monitoring data will provide the basis for determining if additional engineering controls or other actions are necessary to achieve the goal of protection of persons other than Site workers. On-site monitoring data used to assure worker protection in accordance with OSHA can be used to meet the requirement in the above paragraph but must be augmented where such information alone does not demonstrate that off-site exposures are not occurring.

Examples of "engineering controls" include but are not limited to covering soil stockpiles, wetting, limiting the area of excavation, capturing and treating air emissions, and providing a temporary structure over excavation areas, if any.

The HASP shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the Removal Action.

3. Removal Work Plan (RWP)

Within 60 days of the Effective Date, Respondent shall provide a draft Removal Work Plan (“RWP”) that describes how the Respondent will complete the Respondent-Lead Work identified in the AOC and this SOW, including a proposed schedule for performing the Respondent-Lead Work. The plan should be technically sound, consistent and integrated with each of the other required plans. The plan shall provide a description of the major tasks and sub-tasks and identify the methods that will be used including, but not limited to, the following:

- a. Plan objectives and cleanup actions to reduce/eliminate the hazardous substances and environmental conditions that necessitate the removal under 40 CFR Section 300.415(b)(2) of the National Contingency Plan, as described in the Action Memorandum for this Site.
- b. Cleanup levels and specify how, through additional sampling or other actions, it will be documented that cleanup levels and/or requirements have been attained. The RWP shall also identify how both state and federal applicable or relevant and appropriate requirements (“ARARs”) will be met and final regulatory closure will be achieved.
- c. Plan implementation to identify of how cleanup actions (soil excavation, staging, disposal, capping, etc.) start and progress, avoid cross contamination in order to minimize the potential for human exposure with the contaminated materials, and prevent the release of arsenic to surrounding community and environment.
- d. Site soil management procedures to describe where soils that are generated during excavation and construction activities will be staged, managed, and/or secured by a polyethylene cover within the Site boundaries.
- e. Describes how groundwater will be handled if encountered throughout the removal activities.
- f. Identifies engineering control measures such as, but not limited to, air monitoring and water use to eliminate any migration of arsenic contamination to surrounding properties or the environment as a result of implementing required removal activities.
- g. Outlines earthen cap construction, monitoring & maintenance. The RWP shall identify any details of capping (including placement of geotextile fabric

over excavated areas). The RWP shall also outline maintenance and site restoration activities, including a description of when and how they will be implemented. Note that if there is a period of time between completion of soil excavation activities and backfilling of the Site to its original grade, maintenance activities shall include interim security measures to prevent access to the Site and geotextile-covered contaminated soil until Site restoration is completed.

- h. Provides a detailed schedule for carrying out the removal, noting the completion date for interim activities. The RWP shall also identify an estimated time frame for completion of Site restoration activities with a goal of completing this restoration within twelve months after conclusion of the EPA Superfund-Lead Work, and shall identify protective measures to be taken immediately after EPA has completed excavation, backfill and geotextile covering activities. The RWP and schedule shall be reviewed regularly and updated based on available information. Any changes to the project objectives, resources needed, costs and tasks and subtasks shall be described in the updated documents.
- i. If requested by EPA, a comprehensive estimate of cost to complete the project shall accompany the RWP and project schedule. The cost estimate shall be linked to the project work plan and capture the labor, materials, equipment, subcontracts, etc. associated with performance of the Respondent-Lead Work.
- j. Outlines maintenance and site restoration activities, including a description of when and how they will be implemented. Note that if there is a period of time between completion of soil excavation activities and backfilling of the Site to its original grade, maintenance activities shall include interim security measures to prevent access to the Site and geotextile-covered contaminated soil until Site restoration is completed.
- k. Water run-off procedures for the duration of the Removal Action, which will account for, but not be limited to, loose soils deposited at the Site for the purpose of capping contaminated soils and to provide the appropriate sub-surface layering for the ballfield, decontamination waters from the cleaning of vehicles, as well as potential decontamination waters produced during waste characterization activities.

4. Sampling and Analysis Plan (SAP)

Within 60 days of the Effective Date of this AOC, Respondent shall submit a Sampling and Analysis Plan (“SAP”) that will discuss, but not be limited to, sample methodology; the name, address, and point of contact of the laboratory that will be utilized; and quality assurance/quality control (“QA/QC”) procedures. The SAP shall also include the EPA standard methods to be used for analysis. This SAP can be a part

of the RWP or, if it is to support the pre-excavation sampling, submitted prior to the RWP as a separate stand-alone document.

5. Quality Assurance Project Plan (QAPP)

Prior to the commencement of any sampling or monitoring activities under this AOC, Respondent shall submit a Quality Assurance Project Plan (“QAPP”) in conjunction with the SAP. The QAPP shall be consistent with *EPA Requirements for Quality Assurance Project Plans (QA/R5)* (EPA/240/B-01/003, March 2001, reissued May 2006), and *Guidance for Quality Assurance Project Plans (QA/G-5)* (EPA/240/R-02/009, December 2002).

6. Site Security Plan

Respondent shall develop a Site Security Plan within 60 days of the Effective Date, which will address site access during work and non-work hours. Respondent shall take reasonable precautions, in consultation with EPA, to prevent unauthorized access onto the Site for the duration of the Removal Action.

The plan must address securing site equipment, installing hazardous waste warning signs, and other similar measures to prevent unauthorized access.

7. Traffic Plan

Within 60 days of the Effective Date, Respondent shall submit a detailed traffic plan that maps out the routes to and from the Site that all trucks shall abide by. This plan will be applicable to trucks departing the site with soil/other waste streams for disposal as well as for trucks arriving at the site with clean backfill or other site supplies.

8. Transportation and Disposal Plan (T&D Plan)

Fourteen (14) days prior to the first off-site shipment of waste for disposal, Respondent shall submit a Transportation and Disposal (“T&D”) Plan. Respondent shall submit to EPA for approval the T&D facilities where Respondent will transport any waste material away from the Site to an off-Site disposal facility.

Transporters and disposal facilities must have a proper license and permit for handling the constituents of the waste from the Site. The T&D Plan shall describe how all waste streams involving hazardous substances will be packaged, staged, and prepared for disposal (with applicable name, address, and RCRA identification number of the proposed disposal facility).

9. During the Removal Action

Respondent shall submit to EPA monthly progress reports detailing Site activities, problems encountered, other important issues, and activities anticipated in the week to follow. Respondent will submit the initial report at the end of the second week of on-Site work.

10. Within 90 Days of Generation of Material

Respondent shall complete T&D of all waste-streams designated for off-site disposal to an EPA approved disposal facility.

11. Completion of Work Report (CWR)

DUE NINETY (90) DAYS AFTER COMPLETING THE TASKS OUTLINED IN THE RWP

Respondent shall submit to EPA for approval a Final Report (Completion of Work Report) for the Respondent-Lead Work.¹ The Final Report shall conform to the requirements set forth in Section 300.165 of the NCP entitled “OSC Reports.” In addition to fulfilling the requirements of the AOC and if applicable, the **Completion of Work Report shall include:**

- a. A list of all required activities and certification that each has been completed in accordance with approved plans;
- b. If appropriate, a legible copy of all shipping papers and waste manifests, for hazardous and non-hazardous waste, signed by the disposal facility and any other disposal documents;
- c. If appropriate, a list of all clean-up levels approved by EPA with data showing that these levels are no longer exceeded at the Site;
- d. Original photographs with a written description to document completion of work tasks;
- e. If appropriate, tabular summary of all analytical results;
- f. If appropriate, tabular summary of all waste shipped or treated for a period not to exceed one month, the name of each waste stream, state and federal waste codes assigned (if any), the total weight, and the total number of shipments;
- g. If appropriate, sketches and other forms of documentation showing Site

¹ This CWR may also include, as an addendum, information required for final site closure, such as the requirements under Chapter 21E and the MCP regulations.

conditions at commencement of work, interim milestones, and final Site conditions, including data supporting the completion of work; and

- h. An estimate of Respondent's costs incurred.

F. Removal Action Standards

In conducting all activities under this SOW, and if applicable, Respondent shall do the following:

1. Institute practices during Site related traffic and loading and unloading to ensure the safe transfer of materials to and from the Site.
2. Identify and comply with all State and Federal Applicable or Relevant and Appropriate Requirements ("ARARs") including but not limited to: manifesting, packaging, labeling, marking, recordkeeping, use of containers, and land disposal restrictions. Respondent shall also comply with all applicable local, state, and federal laws and regulations, which include all Department of Transportation regulations regarding transportation of hazardous substances.
3. If appropriate, provide the OSC, upon request, all sampling data and quality assurance/quality control procedures utilized by the supervising contractor and its laboratory pertaining to all sampling and analytical work performed pursuant to this SOW.
4. Provide three (3) days advance notification to the OSC of any planned field activities related to this Statement of Work including sampling, bulking, and/or loading for T&D.
5. Implement the RWP as follows:

Implementation of the approved RWP shall begin and proceed in accordance with the schedule approved in the RWP.

End of Scope of Work