

DATE: August 18, 2005

SUBJECT: Region 1 Request for a Ceiling Increase at the Baldwinville Residential Properties Site, Templeton, MA
HEADQUARTERS ADDENDUM

FROM: Deborah Y. Dietrich, Director
Office of Emergency Management (5104A)

D. S. Steer 9/14/05

TO: Thomas P. Dunne, Acting Assistant Administrator
Office of Solid Waste and Emergency Response (5101T)

This Memorandum requests your approval of the Action Memorandum for Region 1's request for a ceiling increase for the on-going removal action at the Baldwinville Residential Properties Site located in Templeton, Massachusetts. This Action Memorandum requests a proposed ceiling increase of \$3,369,698, which will bring the total project ceiling to \$9,036,186.

EPA initiated removal activities at the Baldwinville Residential Properties Site in August 2004, when commencing the removal of PCB contaminated soil from residential properties. Additional site investigation was performed concurrently, which indicated both the need to conduct removal activities at additional properties and the need for an expanded site investigation to determine the full extent of the contamination. This summer EPA completed removals at the first two groups of properties. As of this date, removal activities yet to be completed include the following:

- i. Complete restoration of the first two groups of properties excavated ;
- ii. Perform a removal action at additional properties.

According to EPA Delegation 14-2, only the AA of OSWER has the authority to approve emergency exemptions for sites that will cost more than \$6 million.

I recommend that you approve the Region 1 request. Extensive removal work and the restoration of residential properties are presently on-going at the Site, and your approval will allow the completion of the removal action. The conditions at the Site meet the emergency exemption criteria under Section 104(c) of CERCLA. This action will be funded from Region 1's FY-05 and FY-06 removal budget. Please indicate your decision by signing below.

APPROVE: *[Signature]*, PDAA, *[Signature]* **DATE:** 9/14/05
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

DISAPPROVAL: _____ **DATE:** _____
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

CONTAINS ENFORCEMENT-SENSITIVE INFORMATION

MEMORANDUM

DATE: August 24, 2005

SUBJ: Request to Continue a Removal Action, Extend a Removal Action beyond 12 Months and Raise Action Memo Ceiling at the Baldwinville Residential Properties Site, Templeton, Worcester County, Massachusetts - **Action Memorandum Amendment**

FROM: *js* Susan Studlien, Director *Nick Stroyer*
Office of Site Remediation and Restoration

TO: Thomas P. Dunne, Acting Assistant Administrator
Office of Solid Waste and Emergency Response

THRU: Deborah Y. Dietrich, Director *D. Y. Dietrich*
Office of Emergency Management

ATTN: Gilberto Irizarry, Director *GI*
Program Operations and Coordination Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of a 12-month exemption and increase the project ceiling to continue a removal action at the Baldwinville Residential Properties Site, (the Site), which is located at 4 Holman Street, Templeton (Baldwinville), Worcester County, Massachusetts.

A \$2 million exemption was approved in the original Action Memo of July 9, 2004. Hazardous substances present in residential soils at the Site, 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 OSC's \$200,000 warrant authority.

The total project ceiling, if approved will increase from \$5,666,488 to \$9,036,186.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# : MAN000103312
SITE ID# : 01BN
CATEGORY : Time Critical

A. Site Description

1. Removal site evaluation This project was/will be evaluated in 3 phases:

Phase 1. EPA sampled 35 properties in the summer of 2003 using a 30' x 30' grid pattern on a total of 511 grids with one sample taken from the center of each grid from the 0 to 6" depth interval (just below the sod line). These results showed widespread PCB soil contamination in the range of non-detect to 69 parts per million (ppm) for individual samples with an average of 9.3 ppm; property averages ranged from 0.3 to 31.1 ppm. EPA also evaluated 2 additional properties but determined that no further action was warranted.

PCB levels exceeded federal screening levels recommended by ATSDR and MADEP regulatory limits for PCB soil concentrations of residential soils at 2.0 ppm; there is also a MADEP 10.0 ppm imminent hazard level. The Phase 1 SI was not successful in bounding the extent of contamination.

Phase 2. EPA sampled 26 properties in the fall of 2004 using a 20' x 20' grid pattern on a total of 1170 grids in a similar manner as in Phase 1. The results showed widespread PCB soil contamination in the range of non-detect to 110 parts per million (ppm) for individual samples, with an average of 4.4 ppm; property averages ranged from 0.9 to 15.8 ppm. EPA also evaluated 4 additional properties but determined that no further action was warranted. The Phase 2 SI was not successful in bounding the extent of PCB contamination which required removal.

Phase 3. A phase 3 SI of approximately 30+ additional residential properties is planned to fully bound the area of PCB contamination requiring a removal action. This amendment's purpose is to perform the estimated removal resulting from the Phase 3 SI, in addition to finishing the Phase 1 & 2 removals.

A map is at the appendix and a summary spreadsheet of results is at pages 4-5.

2. Physical location

The Site now consists of approximately 90-100 residential properties; all other information remains the same as in the original Action Memo of 7/9/2004.

3. Site characteristics

According to the EPA Region 1 Environmental Justice Mapping Tool, the Site is not in an environmental justice area. All other information in this section has not changed since the original Action Memo of 7/9/2004.

4. Site History

The original Action Memo of 7/9/2004 and approved on 7/16/2004 authorized a phase 1 (26 residences) and phase 2 (22 residences) removal of PCB contaminated soil. Removal

Activities commenced on 8/19/2004 for phase 1 and on 4/18/2005 for phase 2. The Action Memo approved 4 primary actions; whose current status is:

- Excavation of contaminated soil: 46 of 46 yards are complete (834 of 834 grid squares) as of 8/17/2005.
- Transport and disposal of contaminated soil off-site: all soil from phase 1 has been transported (7500 tons) and approximately 3000 tons of a projected 5000 tons from phase 2 has been transported off-site.
- Restoration of yards: All phase 1 and 20 of 22 phase 2 yards have been backfilled and hydro-seeded. A landscape sub-contractor is scheduled to commence re-planting removed trees and shrubbery in August/September 2005.
- The phase 2 PASI to determine the full extent of PCB contamination left unbound from the initial PASI was performed on 26 residences in the fall of 2005; it included 1170 grid squares. Results indicated that 22 of the residences required a removal action. However, it was not successful in bounding the extent of PCB contamination in all directions.

Several problems were encountered with completing the removal action within the 12-month limit:

- A late lasting winter and very cold and wet spring delayed re-mobilization for the phase 2 removals. Poor spring weather conditions also delayed hydro-seeding and resulted in a large amount of yard rework to maintain the yard soil in good condition for hydro-seeding.
- The large number of mature trees and large extent of the removal action required professional removal of a large number of interfering trees.
- Difficulties obtaining quality topsoil backfill in this area in 2004 delayed phase 1 restoration that had to be done in parallel with phase 2 work in 2005.
- A minor, but contributing factor was high priority focus of the region, including the project OSC, upon supporting the Democratic National Convention, TOPOFF3 and preparatory exercises in 2004-2005. Also a contributing factor was a two-month gap between the end of the START 2000 contract and approval of the START3 contract, which was filled by extending the START 2000 contract, but with much fewer resources.
- Approximately 30 additional residences have been identified for the phase 3 PASI, to be performed in the fall of 2005. If results are consistent with phases 1 and 2; a lower portion of the properties, yet still a significant amount of soil is expected to be contaminated with PCBs above limits and require removal.

- Phase 3 will be performed optimally in the summer of 2006.

The ceiling increase is needed to:

- Complete phase 1 and 2. Additional funding is needed due to:
 - Filling gaps in the phase 1 PASI resulted in a 20% increase in removal soil volume.
 - More extensive and intricate tree removal services were required than expected to remove interfering trees from areas to be excavated; the vast majority of these were in close proximity to the houses and power lines.
 - Three applications of weed treatment herbicide and fertilizer were required due to weeds in the loam. In addition lime treatment was necessary due to high acidity in the soil.
 - Approximately 300 tons of PCB- contaminated soil required more expensive T&D to a TSCA facility since it's grid sample was > 50 ppm PCBs.
 - Weather delays contributed to approximately 2-4 weeks additional mobilization time and associated costs.
- Conduct phase 3 in the summer of 2006.

Site history prior to the original Action Memo of 7/9/2004 has not changed; please see it for that information.

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

There has been no change since the original Action Memo of 7/9/2004.

6. NPL status

No change since the original Action Memo of 7/9/2004; the Site is not currently on the National Priorities List, and has not received a Hazardous Ranking System rating.

B. Other Actions to Date Please see the original Action Memo of 7/9/2004.

C. State and Local Authorities' Roles Please see the original Action Memo of 7/9/2004.

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

A. Threats to Public Health or Welfare There have been no change to threats to the Public Health since the original Action Memo of 7/9/2004.

B. Threats to the Environment New information has been discovered regarding threats to the environment since the original Action Memo of 7/9/2004 in coordination with MADEP and the US Army Corps of Engineers.

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

The original PCB deposition mechanism has likely contributed to PCB contamination of area stream sediments and resulted in take-up by aquatic organisms and fish in local streams and by other land animals that eat these aquatic animals as food. PCB's accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water. Several local studies conducted by the MADEP and US Army Corps of Engineers have indicated that low level PCB contamination in stream sediments is wide-spread in the area.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.¹

V. EXEMPTION FROM STATUTORY LIMITS

A. Emergency Exemption: The Site continues to meet the criteria for an Emergency Exemption, please see the original Action Memo dated 7/9/2004. The original Action Memo also included an exemption to the \$2 million limit. Updated information to the chart in the original Action Memo is below:

<i>Property Statistics</i>	<i>No. of Properties, Phase 1</i>	<i>No. of Properties, Phase 2</i>
Total number	35	26
Number with PCB average concentration > 10.0 ppm	11	1
Number with PCB average concentration < 10.0 and > 2.0 ppm	16	21
<i>PCB Sample Statistics</i>	<i>Phase 1, PPM</i>	<i>Phase 2, PPM</i>
Highest individual sample	69.0	110.0
Highest property average	31.1	15.8
Average property average	7.7	3.9

¹ In accordance with OSWER Directive 9360.0-34, an endangerment determination is made based on relevant action level or clean-up standards promulgated by the federal government or the applicable state.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The goal of this action remains the same as in the original Action Memo of 7/9/2005; to remove PCB contaminated soil from residential properties at the Site. Specific to this amendment are these objectives:

- Remove PCB-contaminated soil from an additional 20-25 residential properties.
- Restore phase 1, 2 and 3 properties to pre-excavation conditions.
- Transport and dispose all contaminated material.

The proposed action for the phase 3 properties will be similar to that of the original Action Memo with some minor changes and improvements as a result of experience gained. To meet the project goal, the following action is proposed:

- Maintain a command post and staging area, and necessary utilities;
- Conduct public information sessions and outreach activities;
- Document existing property conditions for later restoration;
- Reach consensus on and document with each homeowner the removal and restoration activities to be accomplished;
- Remove interference for excavation such as shrubbery, trees, outbuildings, playground equipment, etc., as required;
- Conduct air monitoring and sampling;
- Remove contaminated grid squares as defined by MADEP standards (individual grid squares of >10.0 ppm and property average of all grid squares to < 2.0 ppm respectively). Removal will be performed in one foot increments with confirmation samples taken;
- Remove grid squares on the sampled properties with the same methodology as the ones sampled in 2003 and 2004; grids will be 20' x 20' for ease of excavation;
- Restore excavated grids and impacted yards as closely to prior existing condition as possible. Property condition will be documented prior to and after the action.
- Temporarily relocate residents, if required, in the course of the removal;
- Procure security and traffic management as required; and
- Dispose of soil and roots/stump at a facility in accordance with the off-site rule.

2. **Community relations** No changes please see the original Action Memo.

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. The actions taken at the Site would be consistent with and will not impede any future responses.

4. **Description of alternative technologies** No changes please see the original Action Memo.

5. Applicable or relevant and appropriate requirements (ARARs)

Federal ARARs:

40 CFR Part 264 Standards for Owners and Operators of Hazardous waste Treatment, Storage, and Disposal Facilities:

Subpart I - Use and Management of Containers

264.171 : Condition of containers

264.172 : Compatibility of waste with containers

264.173 : Management of containers

264.174 : Inspections

264.175 : Containment

40 CFR Part 264 Hazardous Waste Regulations - RCRA Subtitle C:

268-270 : Hazardous and Solid Waste Amendments Land Disposal Restrictions Rule

40 CFR Part 761.60 and Parts 761.202-218 : TSCA requirements for disposal of PCBs

State ARARs:

310 CMR 40.0975(6)(a) Table 2, MCP Method 1: Soil Category S-1 Standards

310 CMR 40.0321(2)(b) Reporting of Releases and Threats of Release that Pose or Could Pose and Imminent Hazard

310 CMR 40.1885 Massachusetts Oil and Hazardous Material List

Note: Additional ARARs may be identified as the removal action progresses and the cleanup methods are selected. In accordance with the National Contingency Plan and the EPA Guidance documents, the OSC will determine the practicability of complying with all identified ARARs.

6. Project schedule

Removal activities under the original Action Memo are in progress. Pending funding availability, removal activities will continue. Restoration of phase 1 and 2 properties will be accomplished in the fall of 2005; excavation of phase 3 properties will start in the spring of 2006 and restoration will be completed by September 30, 2006.

B. Estimated Costs

COST CATEGORY	CURRENT CEILING	COSTS TO DATE	PROPOSED CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:²</i>			
ERRS ³ Contractor	\$3,989,833.00	\$3,926,200.00	\$6,072,915.00
Interagency Agreement	\$0.00	\$0.00	\$0.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>			
START ⁴ Contractor	\$682,240.00	\$600,000.00	\$1,382,240.00
USCG AST	\$50,000.00	35,000.00	\$75,000.00
Extramural Subtotal	\$4,722,073.00	\$4,561,200.00	\$7,530,155.00
Extramural Contingency ([20]%)	\$944,415.00	\$912,240.00	\$1,506,031.00
TOTAL, REMOVAL ACTION CEILING	\$5,666,488.00	\$5,473,440.00	\$9,036,186.00

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

Delayed action will increase resident children and adult's public health risks from exposure to PCB contaminated soil due to dermal contact and ingestion.

Not continuing this action would be inconsistent with EPA's previous actions at the Site.

VII. OUTSTANDING POLICY ISSUES

There are no precedent setting policy issues associated with this site.

VIII. ENFORCEMENT ... For Internal Distribution Only

See attached Enforcement Strategy.

The total EPA costs for this removal action based on full-time accounting practices that will be eligible for cost recovery are estimated to be \$9,036,186 (extramural costs) + \$264,080 (EPA intramural costs) = \$9,300,266 X 1.3151 (regional indirect rate) = **\$11,903,327^{5 6}**.

²This cost will be driven by the selected option(s). Should longer term options need to be implemented, additional funding may be required.

³Emergency Rapid Response Services

⁴Superfund Technical Assistance and Response Team

IX. RECOMMENDATION

Conditions at the Baldwinville Residential Properties Site in Templeton, MA continue to meet the following NCP section 300.415(b) criteria for a removal action, the CERCLA section 104(c) emergency exemption from the \$2 million limitation, and I recommend you approve the project ceiling increase

This decision document represents the selected removal action for the Baldwinville Residential Properties Site in Templeton, MA developed in accordance with CERCLA, as amended, and 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 as the Site continue to meet the following NCP Section 300.415 (b) criteria for a removal action:

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)];

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)];

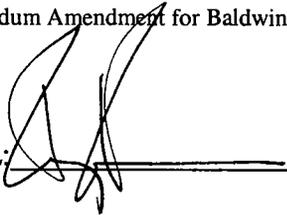
Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; [§300.415(b)(2)(v)];

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

Also, conditions at the Site continue to meet the criteria for a CERCLA 104(c) emergency exemption, and I recommend your approval of an exemption from the 12-month and \$2 million limitations and an extramural ceiling increase of \$3,369,698. The total extramural ceiling, if approved, will be \$9,036,186, of which an estimated \$7,578,946 is/will be funded from the FY04, FY05 and FY06 Regional Removal Allowance.

⁵Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific costs [31.51%], for the Amendment and [27.9%] for the original Action Memo of 7/9/2004, consistent with the full accounting methodology effective October 2, 2000. 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.

⁶Total costs do not multiply out exactly due to different indirect rates for the original Action Memo and for the Amendment.

APPROVAL:  _____

DATE: 9/14/05

DISAPPROVAL: _____

DATE: _____

- Attachment I
- Attachment II
- Attachment III

- Site Maps
 - Action Memo dated 7/9/2004
 - Action Memo Addendum dated 8/2/2004
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Attachment I

Site Maps

Baldwinville, MA

