



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

MEMORANDUM

DATE: September 14, 2021

SUBJ: Request for a Removal Action at the Bliss Corner Neighborhood Site, Dartmouth, Bristol County, Massachusetts, **Action Memorandum**

FROM: John McKeown, On-Scene Coordinator
Emergency Response and Removal Section I

THRU: Edward J. Bzenas, Chief
Emergency Response and Removal Section I

Carol Tucker, Chief
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TO: Karen McGuire, Director, Enforcement and Compliance Assistance Division for
Bryan Olson, Director, Superfund and Emergency Management Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action at the Bliss Corner Neighborhood Site (the Site), which consists of residential properties located in an approximate ¼ square mile area generally centered around a vacant property located at 85 McCabe Street in Dartmouth, Massachusetts. Hazardous Substances, specifically lead and PCBs exceeding the Massachusetts Department of Environmental Protection (MassDEP) site-specific Imminent Health (IH) Risk Level present in 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 has been no use of the OSC's \$200,000 warrant authority.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#: MAN000101112
SITE ID#: 01QB

CATEGORY: Time-Critical

A. Site Description

1. Removal site evaluation

In a letter dated August 23, 2021, MassDEP requested support from the U.S. Environmental Protection Agency (EPA) to conduct removal actions at certain residential properties in the Bliss Corner neighborhood where elevated levels of lead and/or polychlorinated biphenyls (PCBs) have been identified in surficial soil.

In July 2018, MassDEP Emergency Response inspected an odor complaint at an unoccupied residential lot located at 85 McCabe Street in Dartmouth, Massachusetts. A visit to the property by MassDEP identified buried waste material and was followed up with soil sampling for polychlorinated biphenyls (PCBs). The owner of the 85 McCabe Street property hired a Licensed Site Professional who provided historical records to MassDEP documenting the location of dumpsites in the area dating back to the 1930s. In October 2018, MassDEP inspected and sampled unoccupied properties located at 20 and 21 Kraseman Street, Dartmouth, Massachusetts, and at 31 McCabe Street. These inspections and sampling results indicated similar contaminants as the 85 McCabe Street property. Soils at 20 Kraseman Street exceeded the MassDEP Imminent Hazard level of 10 parts per million (PPM) for PCBs.

In May of 2019, MassDEP conducted “right-of-way” sampling at 18 locations in the neighborhood looking for evidence of subsurface fill material. Each boring advanced 10 feet below ground surface and included installation of a monitoring well. In 9 of the 18 locations, MassDEP observed a fill layer consisting of coal ash, glass, brick and coal-clinkers. In a few locations, lead and PCBs exceeded the MassDEP Residential MCP Standard for lead (200 PPM) and PCBs (1 PPM).

In September 2019, MassDEP began sampling residential properties located within the study area. Selection of properties was based on requests by residents. The analytical results from the residential sampling indicated a wide range of lead and PCB levels in residential soils, with many properties exceeding the MassDEP Residential MCP Standards for lead and PCBs. Two of the properties exceeded the MassDEP IH level for PCBs, an owner-occupied residential property located on Kraseman Street (KR1) and a day care located on Donald Street. Both of these properties are located in Dartmouth, Massachusetts. In October 2020, EPA received a request from the MassDEP for assistance in sampling additional residential properties in the Bliss Corner neighborhood.

In July and September 2020, MassDEP and EPA sampled 37 residential properties located in Dartmouth, Massachusetts. The EPA Superfund Technical Assistance and Response Team (START) and the EPA New England Regional Laboratory completed the sampling and the analysis for all 37 properties. In June of 2021, MassDEP and EPA sampled nine additional residential properties based on proximity to properties where contamination had been identified.

The results of this sampling and all other sampling are summarized in the Bliss Corner Neighborhood Site file.

2. Physical location

Located in the Bliss Corner neighborhood of Dartmouth, Bristol County, Massachusetts, the Site does not have a central point due to potentially contaminated materials dispersed throughout the neighborhood as fill for low areas on residential properties. For the purpose of the Site subject to this removal action, the original complaint location of 85 McCabe Street, Dartmouth, Massachusetts is being used as the Site's geographic center location for internal EPA tracking purposes.

The Site is located in a mostly residential neighborhood that extends approximately a half mile from north to south and east to west and includes a large wetland area in the south-southwest portion. The Site is located entirely in Dartmouth, however the northeast border is Rockdale Avenue, which is the boundary with the City of New Bedford.

3. Site characteristics

The EPA Removal Management Level (RML) for lead is 400 PPM and for total PCBs is 23 PPM. As of June 2021, twenty sampled residential properties exceed the EPA RML for lead and one property exceeds the EPA RML for total PCBs. MassDEP has established IH levels for hazardous substances in soil at or near the surface that may pose a significant risk to human health. In January of 2020, the MassDEP established a site-specific IH level for lead of 1000 PPM. The statewide MassDEP IH level for PCBs is 10 PPM.

In August 2021, EPA received the official request from the MassDEP to conduct a Removal Action. The EPA Case Team reviewed the information and determined that levels of PCBs and lead in residential soils pose a significant health risk to human health. This decision is documented in the Closure Memorandum dated September 13, 2021. The time-critical removal action proposed in this Memorandum will address the five residential properties which exceed both the MassDEP IH and the EPA RMLs for either lead or PCBs. These five property addresses are identified in Table 1 (below).

Based on information in EPA's EJSCREEN environmental justice screening tool, none of the twelve Environmental Justice Indexes for the area within a one-mile radius of the Site are at or above the 80th percentile on a state, regional or national basis. Other significant EJ numbers expressed in percentile of population include the categories of Low Income; Linguistically Isolated; Less Than High School Education and Population over 80 Years of Age. Please see the attached EJSCREEN standard report for more information.

Property Identifier*	Average Lead Concentration	EPA RML Lead	MassDEP IH Lead	Average PCBs Concentration	EPA RML PCBs	MassDEP IH PCBs
KR1	> 400 PPM	400 PPM	1000 PPM	> 23 PPM	23 PPM	10 PPM
MC2	2689 PPM	400 PPM	1000 PPM	ND	23 PPM	10 PPM
MC1	1213 PPM	400 PPM	1000 PPM	ND	23 PPM	10 PPM
DO1	1008 PPM	400 PPM	1000 PPM	1 PPM	23 PPM	10 PPM
EW1	996 PPM	400 PPM	1000 PPM	ND	23 PPM	10 PPM

* Each property address has been designated with a Property Identifier (PI) to protect the privacy of the homeowners and residents.

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

As discussed in the Removal Site Evaluation paragraph of this Site Description Section, EPA and MassDEP have conducted multiple phases of soil sampling in the Bliss Corner neighborhood. Most of the properties sampled have been occupied residential properties, but MassDEP also sampled one commercial property, several vacant residential lots, and Town of Dartmouth right-of-way locations. Initial analysis of samples collected by MassDEP covered a wide range of hazardous substances, but total PCBs and lead were detected most often and at the highest concentrations and are the contaminants of concern for this removal action. PCBs and lead are hazardous substances as defined by Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. 9601(14)

The EPA RML for lead is 400 PPM and for total PCBs is 23 PPM. To date, EPA and MassDEP have sampled 74 total residential properties. The table below displays the total number of residential properties that exceed the EPA RML for either lead or PCBs.

Hazardous Substance	EPA RML	Number of Properties Exceeding
Lead	400 PPM	20
Total PCBs	23 PPM	1

The intent of this Action Memorandum is to address those properties that have the highest levels of surface soil contamination. EPA and MassDEP acknowledge that there are other properties that exceed the EPA RML values for lead or PCBs and will continue to work together with the municipalities and any other responsible parties to address these risks, as determined appropriate.

5. NPL status

The Site is not currently on the National Priorities List and has not received a Hazardous Ranking System rating.

6. Maps, pictures and other graphic representations

The Site Location Map is attached to this document (Attachment #1).

B. Other Actions to Date

1. Previous actions

EPA has taken no previous actions at the Site.

2. Current actions

MassDEP requested assistance with sampling from EPA beginning in 2019. EPA and MassDEP conducted joint residential sampling activities in July and October of 2020, and in June of 2021. The samples were collected by the EPA START contractor and analyzed by the EPA Region 1 new England Regional Laboratory. EPA continues to coordinate with MassDEP on next steps and future activities.

C. State and Local Authorities' Roles

1. State and local actions to date

MassDEP has been the lead agency on this project since its initial response to the odor complaint at 85 McCabe Street. MassDEP has subsequently conducted sampling of Dartmouth rights-of-way, vacant residential lots and one commercial property. MassDEP conducted multiple public meetings to share information with residents of the Bliss Corner neighborhood and compile a list of residents requesting to have their properties sampled. MassDEP, either independently or with the assistance of EPA, sampled the residential properties of all residents requesting to have their property sampled. MassDEP has coordinated with both the City of New Bedford and the Town of Dartmouth to gather historical information regarding the origins and history of the fill materials brought to the Bliss Corner neighborhood.

The Town of Dartmouth, primarily the Health Department, has been actively involved with the project since 2018. The Dartmouth Health Department has provided assistance with staging areas, coordination with residents, and other support and administrative activities.

2. Potential for continued State/local response

Any future EPA activity at this Site will involve close coordination with both MassDEP and the Town of Dartmouth.

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

As described below, the conditions at the Site 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.

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 Site consists of five residential properties with lead and PCBs in soil exceeding the MassDEP Imminent Hazard levels and EPA RMLs for both lead and PCBs. All five properties are occupied and potential exposure to harmful levels of lead and PCBs hazardous substances in soil can occur through various common outdoor activities such as gardening, landscaping or small children playing in the soil. The potential exposure will persist until addressed by the actions recommended in this Action Memorandum.

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

EPA and MassDEP confirmed the presence of lead and PCBs in surface soils exceeding both the EPA RML and the MassDEP IH levels. Most of the surfaces are covered with vegetation consisting primarily of lawns; however, EPA observed locations with limited to no ground cover where contaminants may have a potential to migrate to adjacent properties if conditions are not addressed by the actions recommended in this Action Memorandum.

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

EPA and MassDEP confirmed the presence of lead and PCBs in surface soils exceeding both the EPA RML and MassDEP IH levels. The potential for migration of contaminated soils to adjacent properties due to runoff from rainfall or snow melt is very likely to occur if conditions are not addressed by the actions recommended in this Action Memorandum.

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

At this time, MassDEP has limited resources, and cannot completely address the situation at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances or pollutants or contaminants 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. 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." EPA relied on the U.S. EPA Removal Management Levels (RMLs) for Residential Soil to determine risk at the Site. MassDEP also developed a site-specific Imminent Hazard Level for lead which is documented in a MassDEP Interoffice Memorandum dated January 22, 2020. More specifically, the potential risks of exposure to PCBs and lead at the Site are described below.

PCBs - The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various kinds of health effects, including anemia; acne-like skin conditions; and liver, stomach and thyroid gland injuries.

Other effects of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic to humans.¹

Lead – The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Additionally, lead exposure causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause

¹ Agency for Toxic Substances and Disease Registry (ATSDR). 2000. Toxicological Profile for Polychlorinated Biphenyls (PCBs). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service

miscarriage. High level exposure in men can damage the organs responsible for sperm production.

The DHHS has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and EPA has determined that lead is a probable human carcinogen. The IARC has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.²

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The proposed action will address removal of lead and PCB contaminated soils at five residential properties. EPA will remove soils to a depth of three feet below ground surface or until the MassDEP Residential Soil M-1 Standard for lead (200 PPM) or total PCB (1 PPM) is achieved. The soil will be staged until transportation and disposal is coordinated and completed. EPA will restore the properties to original conditions.

The removal action will include the following actions:

- Conduct a Site walk with environmental remediation contractor to assess layout of the Site and determine required equipment, personnel and utilities,
- Conduct a pre-removal survey of each property to document existing conditions of the structures and documenting the types and number of plants on-site,
- Develop and implement a Site-specific Health and Safety Plan (HASP);
- Develop a Site-specific work plan providing estimates of materials, time and costs,
- Provide Site security as necessary based on Site conditions,
- Mobilize personnel and equipment,
- Delineate work zones and decontamination area,
- Perform air monitoring as needed,
- Perform public communication and outreach activities,
- Excavate contaminated surface soils,
- Perform post-excavation confirmation sampling,
- Backfill excavated areas with clean fill and prepare to restore properties to

² Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Lead (Update). Atlanta, GA. U.S. Department of Health and Human Services, Public Health Service.

- original conditions,
- Stage contaminated soil and prepare for Transportation and Disposal (T&D),
- Coordinate T&D of contaminated soil and spent personal protective equipment to an EPA approved disposal facility,
- Demobilize resources.

Following the completion of the Removal Action, the control of the Site will be remanded to the MassDEP for post-removal site controls and other long-term actions.

2. Community relations

EPA will continue to engage with the local community during the course of the removal action through press releases, fact sheets, and public meetings, as necessary. The OSC will receive assistance from the EPA Community Involvement Coordinator (CIC) with all public relations activities. Due to the large-scale nature and complexity of this project, the EPA CIC will work with the OSC to develop a Community Involvement Plan and/or Communications Plan as needed. EPA will work closely with the state, town, government, local businesses, and the community.

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 will be consistent with and will not impede any future responses.

4. Description of innovative technologies and sustainable approaches

In accordance with the December 23, 2013 Memorandum, updated August 02, 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.

5. Applicable or relevant and appropriate requirements (ARARs)

Pursuant to 40 C.F.R. 300.415(j), removal actions shall, to the extent practicable considering the exigencies of the situation, attain ARARs. EPA has been working in coordination with

MassDEP to determine the applicable state ARARs for the Site. Current ARARs identified, but not limited to, are listed below:

Clean Air Act, 40 C.F.R. Part 61; 42 U.S.C. Section 112(b)(1): National Emission Standard for controlling dust. The regulations establish emissions standards for 187 hazardous air pollutants. Standards set for dust and release sources. If the removal of contaminated soils generate regulated air pollutants, then measures will be implemented to meet these standards.

40 C.F.R. Part 761.61: TSCA requirements for cleanup and disposal of PCBs.

40 C.F.R. 761.61(a): requirements for off-site disposal of bulk PCB remediation wastes and porous and non-porous PCB remediation waste – bulk remediation waste will be managed and disposed of off-site in accordance with these standards.

40 C.F.R. 761.65: Requirements for temporary TSCA regulated waste storage, including design requirements. Proper design considerations will be implemented to ensure that all temporary storage of TSCA-regulated waste satisfies the requirements of the regulations.

40 C.F.R. Section 761.79: TSCA Decontamination standards and procedures for removing PCBs, which are regulated for disposal.

State ARARs:

Massachusetts:

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: 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 Control Regulations: stipulates 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 (310 CMR Section 7.09). During the removal action, appropriate measures will 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

The project will begin as soon as possible following approval of this Action Memorandum.

B. Estimated Costs

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$1,500,000.00
Interagency Agreement		\$ 0.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$340,000.00
Extramural Subtotal		\$1,840,000.00
Extramural Contingency	10%	\$150,000.00
TOTAL, REMOVAL ACTION CEILING		\$1,990,000.00

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

Delayed action will increase public health risks by allowing residents continued exposure to harmful levels of lead and PCBs in surface.

VII. OUTSTANDING POLICY ISSUES

There are no precedent-setting policy issues associated with this Site.

VIII. 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 \$1,990,000 (extramural costs) + \$112,000 (EPA intramural costs) = \$2,100,000 X 1.3523 (regional indirect rate) = **\$ 2,839,830**³.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Bliss Corner Neighborhood Site in Dartmouth, 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 NCP 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)];

High levels of hazardous substances or pollutants or contaminants in soils at or largely 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)];

I recommend that you approve the proposed removal action. The total extramural removal action project ceiling if approved will be \$1,990,000.

³Direct Costs include direct extramural costs \$1,990,000 and direct intramural costs \$110,000. 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 35.23% x \$2,100,000, consistent with EPA's full cost accounting methodology effective October 01, 2020. 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.

APPROVAL: _____

DATE: _____

DISAPPROVAL: _____

DATE: _____