



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

MEMORANDUM

DATE: July 26, 2024

SUBJ: Request for a Removal Action at the Riverside Square PCB Site
Hyde Park (Boston), Suffolk County, Massachusetts- **Action Memorandum**

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

THRU: Edward Bzenas, Manager
Emergency Response and Removal Section II

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TO: Bryan Olson, Director
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I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of an exemption to the \$2 million and 12-month statutory limitations to conduct the proposed time-critical removal action at the Riverside Square PCB Site (Site). Located within the Riverside Square area of Hyde Park, a section of Boston, the Site consists of mainly residential areas and dredge spoils-created land situated between the residential areas and the Neponset River. Hazardous substances, primarily polychlorinated biphenyls (PCBs) and metals, present in soils, 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 \$200,000 warrant authority.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID# : MAN000106137
SITE ID# : 01HG
CATEGORY : Time-Critical

A. Site Description

1. Removal site evaluation

From the 1930s through the 1970s, several industries using PCBs were located along the Neponset River and the Mother Brook, a Neponset River tributary. In 1955, major flooding occurred within the Neponset River basin and across southern New England. In 1962 and 1964, to control flooding and increase recreational use of the basin, the Metropolitan District Commission [now merged with the Department of Conservation and Recreation (DCR)] conducted flood control measures, including dredging of the Neponset River to deepen the channel. The Massachusetts Department of Environmental Protection (MassDEP) and DCR have identified several actively used areas where the dredged spoils were placed along the banks of the Neponset River. The Riverside Square PCB Site is one of these areas and was initially identified as the *1964 Contract, C-296, Spoil Area A*. It is estimated that approximately 17,800 cubic yards of dredged spoils were placed along this section of the river, essentially creating new land.

Federal Involvement

In 2002, the U.S. Army Corps of Engineers conducted a study of the Neponset River that included the analysis of two sediment core samples. Analytical results indicated that the bottom sediments contained elevated concentrations of PCBs.

In 2002 and 2003, the U.S. Geological Survey, in cooperation with the Massachusetts Executive Office of Environmental Affairs Department of Fish and Game Riverways Program and the U.S. Environmental Protection Agency (EPA), studied sediment and water quality, with a specific focus on PCBs, in the Neponset River. The analysis of bottom-sediment samples (grab and core) samples in Boston and Milton, as documented in a 2004 report, showed elevated levels of PCBs that could pose a threat to benthic organisms and may potentially cause human health risks if humans come into contact with the sediment.

The U.S. Geological Survey conducted additional sampling in 2002, and between 2004 and 2006, collecting samples of bottom sediment, and water, as well as fish tissue from fish taken from the Tileston and Hollingsworth and Walter Baker Impoundments, located approximately 0.15 and 2.45 miles northeast of the Site, respectively. The study, first published in 2011 and then revised in 2014, suggested that widespread PCB contamination of the lower Neponset River originated from Mother Brook, a Neponset River tributary and stated that the dam failure caused by the 1955 flooding likely released PCB-contaminated sediment downstream and into the Neponset River Estuary.

State Involvement

DCR and MassDEP identified fourteen areas where dredge spoils were placed during the Metropolitan District Commission's 1962 and 1964 flood control project. In eight of the fourteen locations, the dredge spoils were placed near parks and residential areas which are accessible to the public. Due to a concern over the presence of PCBs in the dredge spoils, MassDEP completed a sampling program within the eight dredge spoils areas of concern. The Riverside Square area, as one of these locations, was identified as 1964 Contract, C-296, Spoil Area A, and further described as "Business/Residential Area near Railroad Ave/Riverside Square."

In June and October 2010, MassDEP collected surface (0 to 1 feet) and subsurface (1 to 15 feet) soil samples from several properties within the Riverside Square area. Results showed PCBs concentrations which exceeded state standards. Maximum concentrations of total PCBs detected in these surface and subsurface soil samples were 11.2 milligrams per kilogram (mg/kg) and 98 mg/kg, respectively.

Following this sampling effort, in January 2011, MassDEP asked EPA to conduct a preliminary assessment and site investigation for C-296 Spoil Area A, thereafter, known as the Riverside Square PCB Site.

EPA Involvement

EPA has been involved with the Site since January 2011 and has performed three investigations. The EPA chronological investigatory findings are as follows:

- In July 2011, EPA conducted a preliminary assessment/site investigation (PA/SI) to verify MassDEP's 2010 sampling results. Thirty surface soil samples (0 to 1-foot depth) were collected from six of eight residential areas. Two areas were not sampled because written access was not granted from the owners. PCBs were detected in 29 of the 30 samples collected with the highest level being 730 mg/kg.
- In October and November 2012, EPA conducted an extent of contamination study on the areas where PCBs were detected. Laboratory screening analytical results from the soil samples collected during the extent of contamination investigation detected PCBs in 167 of the 275 soil samples collected from 0 to 3 feet below ground surface. The highest level detected was 150 mg/kg.

Based on the investigations that led to the March 2022 addition of the Lower Neponset River Site, a portion of which is adjacent to the site, to the Superfund National Priorities List, its own investigations of the Riverside Square area, as well as EPA's 2011 sampling and 2012 extent of

contamination study, on October 5, 2022, MassDEP asked EPA to further investigate the Riverside Square PCB Site and remove contaminated soil. Unlike previous EPA sampling efforts, this request also included the undeveloped land bounded by West Street, Pierce Street, Riverside Square, and the river.

- In May and July of 2023, EPA conducted the final extent of contamination investigations that included collecting 319 surface and subsurface soil samples from 233 soil borings from the Site. Samples were collected from depths of 0 to 1-foot interval and 1- to 3-foot intervals. All samples were submitted to the EPA New England Regional Laboratory for field method PCB analysis. Following a MassDEP request for additional laboratory analysis, all soil samples were also field screened for metals (arsenic, lead, and chromium) using an X-Ray Fluorescence analyzer. In addition, 20% of the soil samples were analyzed for PCB and metal confirmation.

PCBs were detected in 171 surface and subsurface soil samples, up to 18 mg/kg. Of those samples, 73 exceeded the Massachusetts Contingency Plan Method 1 soil standards. Metal analysis of the samples also revealed metal contamination as follows: Arsenic in 230 samples up to 68 mg/kg, chromium in 354 samples up to 1,200 mg/kg, and lead in 347 up to 1,500 mg/kg.

Laboratory analysis of soil samples collected to date reveals that PCBs and metal contamination have been detected in the Site soils at concentrations above the Massachusetts Contingency Plan Method 1, S-1 Standards for PCBs, lead, chromium and arsenic as well as the EPA's Removal Management Levels¹ (RMLs) for PCBs, lead and chromium (see table for highest detection levels in mg/kg).

¹ U.S. Environmental Protection Agency. <https://www.epa.gov/risk/regional-removal-management-levels-chemicals-rmls>. November 2018

Hazardous Substance	MassDEP 2010 (mg/kg)	EPA PA/SI 2011 (mg/kg)	EPA PA/SI 2012 (mg/kg)	EPA PA/SI 2023 (mg/kg)	EPA RML (mg/kg)	MassDEP Standards for S1-Soil Remediation (mg/kg)
PCBs	98	730	150	18	23	1
Lead	Not analyzed	Not analyzed	Not analyzed	1500	200	200
Chromium				1200	300	100
Arsenic				62	68	20

The results of the EPA PA/SIs are documented in the reports submitted by Weston Solutions, Inc. Region I Superfund Technical Assessment and Response Team entitled: 1) *Removal Program Preliminary Assessment and Site Investigation Report for the Riverside Square PCB Site, Hyde Park, Boston, Suffolk County, Massachusetts 9 June 2011 and 19-21 July 2011*, 2) *Removal Program Extent of Contamination Report for the Riverside Square PCB Site, Hyde Park, Boston, Suffolk County, Massachusetts 22 through 26 October 2012 and 1 November 2012*, and 3) the *Removal Program Preliminary Assessment/Site Investigation Report for the Riverside Square PCB Site, Boston (Hyde Park), Suffolk County, Massachusetts 1 through 5 May 2023 and 18 through 27 July 2023*.

Based on the cumulative sampling results and potential for further release of the contaminants from the Site, a time-critical removal action was recommended in the Site Investigation Closure Memorandum dated June 20, 2024.

2. Physical location

The Riverside Square PCB Site is located along the northern bank of the Neponset River within the Riverside Square area in Hyde Park (Boston), Suffolk County, Massachusetts. The geographical coordinates of the approximate midpoint along the center of Riverside Square are 42° 15' 35.16" north and 71° 06' 51.72" west. The Site is located in a primarily residential area, and the land slopes down towards approximately 20 to 45 feet toward the Neponset River.

3. Site characteristics

The approximate 8-acre Site consists of residential areas, a commercial property, and areas created by dredge spoils that lie between the residences and the northern bank of the Neponset River. The backyards of the residential areas vary from being grassy lawns, paved or are inaccessible due to the nature of the Site's topography.

Within one mile of the Site there is an approximate population of 31,258 with six schools, two nursing homes and seven childcare centers.

Based on information in EPA's EJSCREEN environmental justice screening tool, 11 of 12 Environmental Justice Indexes for the area within a one-mile radius of the site exceed the 80th percentile on a state basis and five of 12 exceed the 80th percentile on a national basis.

Based on information in the [Climate Mapping tool for Resilience and Adaptation](#) (CMRA), the following Climate Hazards exceed a National Risk Index Rating of Relatively Moderate in Suffolk County: extreme heat, flooding and coastal inundation.

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

In 2023, EPA conducted a third PA/SI to supplement previous soil analytical data from 2011 and 2012. The soil samples collected were analyzed for PCBs and metals by EPA's New England Regional Laboratory.

The presence of PCBs, metals and the current Site conditions constitute a release or threat of release of hazardous substances into the environment that may present an imminent and substantial endangerment to public health or welfare. The 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.

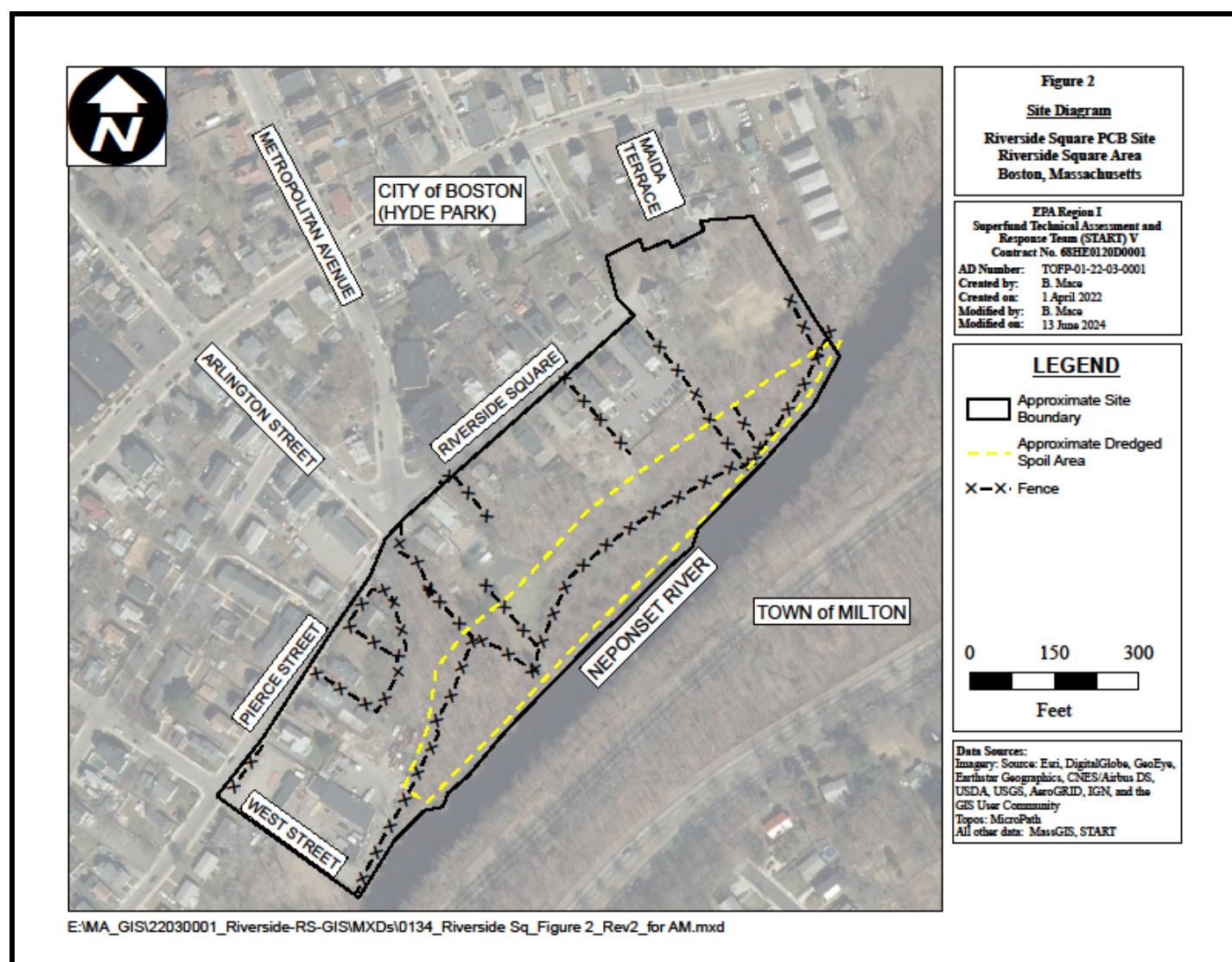
Sampling analysis by EPA determined that the presence of hazardous substances as defined by Section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. §9601(14), and 40 CFR § 302.4, including but not limited to PCBs and metals, have been released to the environment. The hazardous substances were detected in the Site's surface and subsurface soils. The areas that were sampled are exposed to the elements. These hazardous substances are a health threat to anyone walking on, traveling by or living near the Site. The highest EPA sampling results are summarized as follows:

Hazardous Substance/Waste	Media	Highest Concentration (mg/kg)
PCBs	Soil	730 (2011 data)
Lead	Soil	1,500 (2023 data)
Chromium		1,200 (2023 data)
Arsenic		62 (2023 data)

5. NPL status

The Site is not currently on the Superfund 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. The Site is next to a portion of the Lower Neponset River Superfund Site, which is on the National Priorities List.

6. Maps, pictures and other graphic representations



B. Other Actions to Date

1. Previous actions

EPA has taken no previous removal actions at this Site. In 2011, EPA conducted a PA/SI on 6 of the 8 residential areas and the dredge spoils-created land situated between the residential areas and the river and sampled for an extent of contamination investigation on 3 of the 6 areas and the dredge spoils-land situated between the residential areas and the river were collected in 2012 (published in May 2013). Following these studies, EPA referred the Site back to the State.

2. Current actions

EPA completed its third investigation in June 2024 and there are no other ongoing EPA activities. The Site currently contains elevated levels of PCB- and metal-contaminated soils that this Action Memorandum will address.

C. State and Local Authorities' Roles

1. State and local actions to date

MassDEP has been involved with this Site since 2010 when it conducted soil sampling activities on several of the residential areas of the Site. As discussed earlier, in January 2011 and on October 5, 2022, MassDEP asked EPA to evaluate the need for a removal action.

2. Potential for continued State/local response

As previously mentioned in Section A.1. above, MassDEP requested EPA's assistance as it does not have the resources to undertake the removal action presented in this Action Memorandum. MassDEP will provide EPA with a list of state environmental regulations for consideration during the removal as applicable or relevant and appropriate. After EPA completes its removal action, the Site will be referred to MassDEP for any long-term measures that may be required to address remaining risks, including post-removal site controls.

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

The presence of PCBs, metals and current Site conditions constitute a release or threat of release of hazardous substances into the environment that may present an imminent and substantial endangerment to public health or welfare. As described below, the 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.

The following substances are hazardous substances as defined by Section 101(14) of CERCLA, 42 U.S.C. 9601(14). For information on the adverse health effects related to PCBs, lead, arsenic, and chromium please refer to the Agency for Toxic Substances and Disease Registry (ATSDR), U.S. Department of Health and Human Services, Public Health Service.

Toxicity fact sheets for the contaminants can be reviewed by using the following URL links:

PCBs- <https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=140&toxid=26>

Lead- <https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=93&toxid=22>

Arsenic- <https://wwwn.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=3>

Chromium- <https://wwwn.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=17>

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)];

Soil samples were taken at residential areas and areas frequented by foot traffic. Hazardous substance concentrations exceeded the MassDEP Massachusetts Contingency Plan Standards for S1-Soil Remediation and the EPA Removal Management Levels for PCBs, lead and chromium. All the residential areas are occupied and potential exposure to harmful levels of PCBs and metals in soil can occur through various common outdoor activities such as gardening, landscaping or small children playing in the soil. The land created by dredge spoils is also walked on by individuals involved in recreational activities. The potential exposure will persist until addressed by the actions recommended in this Action Memorandum.

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

The Site soils (residential and areas created by dredge spoils) are contaminated with PCBs and metals. The Site also abuts the Neponset River which is a sensitive ecosystem. Migration of these contaminants can occur into the river especially during heavy rain/snow events. The known toxic effects of PCBs on aquatic species and wildlife include mortality, compromises in immune system function, and various adverse effects on reproduction, development, and endocrine function, in addition to a number of equally serious effects on other body systems. Toxicity of heavy metals like lead, chromium and arsenic on aquatic organisms include adverse effects on survival, reproduction, and behavior. Additionally, metals accumulated by organisms can enter the food chain and can contribute to toxic effects to humans through dietary exposures.

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)];

Soil sampling data collected by EPA and MassDEP reveal the presence of PCBs, lead, and chromium in surface and subsurface soils exceeding both the EPA Removal Management Level and the MassDEP standards and arsenic exceeding MassDEP Massachusetts Contingency Plan Standards for S1-Soil Remediation. Most of the surfaces are covered with vegetation; however, the Site abuts the Neponset River and is located at a higher elevation. The contaminants have a potential to migrate to the river 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)];

PCBs, lead, and chromium in Site surface and subsurface soils exceed both the EPA Removal Management Level and the MassDEP standards and arsenic exceeds the MassDEP Massachusetts Contingency Plan Standards for S1-Soil Remediation. These contaminants can migrate or be released into the Neponset River by heavy rains, snow melt and early spring runoff events. In addition, flooding of the river during heavy rainfall can also cause soil erosion and soil migration into the river.

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

In a letter requesting EPA's assistance on October 5, 2022, MassDEP indicated that due to limited funding, it does not have resources available to address Site contamination.

IV. ENDANGERMENT DETERMINATION

An actual or threatened releases of hazardous substances from this site may present an imminent and substantial endangerment to public health, or 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. During the PA/SI, EPA performed extensive sampling data which documented elevated levels of hazardous substances in soils. More specifically, soil sampling data confirmed that high concentrations of PCBs, lead, chromium, and arsenic are above EPA's Removal Management Levels, Toxic Substance Control Act (TSCA) standards, and the MassDEP's Standards for Soil

Remediation (See table below). In addition to the exceedance of state and federal standards as described above, the ATSDR ToxFAQs for PCBs, lead, chromium, and arsenic (Section III of this Action Memorandum) support EPA's endangerment determination.

Based on EPA's cumulative data, the contaminants of concern for this removal action are mainly PCBs and lead. EPA will therefore use its respective Removal Management Levels to initiate the cleanup and the MassDEP's Massachusetts Contingency Plan Method 1 S-1 standards as the target cleanup. Decisions for the hot spot depth excavations will be made, based on in-situ data and regulatory limits at the time of excavation.

Hazardous Substances	EPA PA/SI Highest Sample Concentration (mg/kg)	MassDEP Highest Sample Concentration (mg/kg)	EPA RMLs Residential (mg/kg)	MassDEP Standards for S1-Soil Remediation (mg/kg)	MassDEP IH Level (mg/kg)
PCBs	730	98	23	1	10
Lead	1,500	Not sampled	200	200	1,000

V. EXEMPTION FROM STATUTORY LIMITS

CERCLA Section 104(c) states that removal actions can exceed the 12-month and \$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 and be extended over the 12-month statutory limitation if:

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

PCBs and other contaminants in soils, pose an immediate direct threat and/or potential exposure. EPA is in the process of having signs installed which will inform residents of the hazardous substances on the Site, especially lead and PCBs. Further, under adverse weather conditions, exposed contaminated soil could potentially move off-site via wind, soil erosion and surface water runoff and pose a risk to the Neponset River and those who live, work, or walk near the Site.

As stated earlier, the Site is in a densely populated, mainly residential neighborhood. Approximately 31,258 residents, six schools, two nursing homes and seven childcare centers are

located within a one-mile radius of the Site. The Site also abuts the Neponset River, which is a sensitive ecosystem.

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

EPA's cumulated data demonstrates elevated levels of PCBs and metals (primarily lead) in the soils. The scope of the action memorandum is to excavate and dispose soil contaminated with the contaminants of concern, including PCBs and lead. For the target cleanup levels, EPA will use the PCB EPA Removal Management Level of 23 mg/kg and the MassDEP S-1 standard of 1mg/kg, and for lead the EPA Removal Management Level and the MassDEP S-1 of 200 mg/kg. If these measures are not implemented, there will be a continued threat to public health, welfare and the environment posed by Site conditions.

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

The state does not have adequate available resources to address the contamination. On October 5, 2022, due to limited state resources, MassDEP asked EPA to further investigate the Site and remove contaminated soils.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The action required to address the threats outlined in this action memorandum is given below. This proposed action will protect public health, welfare, and the environment by removing the hazardous substances from the Site. The proposed action, at a minimum, will remove PCB- and metal-contaminated soils along with other additional collocated hazardous substances to concentration levels that are relevant to the immediate land use.

This removal action will target removing contaminated soils that are detected above the EPA Removal Management Levels and MassDEP S1 standards for soil cleanup. Additional soil at deeper depths may be excavated at the discretion of the On-Scene Coordinator. The excavated areas remaining will be resampled, delineated with geotextile fabric and backfilled to grade with clean soil.

The specific removal activities will include the following:

- Walking the site to assess layout and determine required equipment, personnel and utilities;
- Developing and implementing a site-specific health and safety plan;
- Developing and implementing a community involvement plan;
- Developing a site-specific work plan providing estimates of materials, time and costs;
- Provisioning site security as necessary based on conditions;
- Mobilizing personnel and equipment;
- Delineating work zones and decontamination area;
- Coordinating cleanup activities with MassDEP, DCR and city;
- Performing air monitoring and implementing dust control and suppression for worker protection and public health, as needed;
- Excavating and segregating soils, and potentially sediments, contaminated with PCBs and metals;
- Installing a geotextile fabric and warning barrier across excavation area;
- Developing a traffic management plan for the transportation and disposal of hazardous soils/sediments and incoming clean soil;
- Transporting and disposing contaminated soil/sediments and/or other hazardous substances, at EPA approved disposal facilities;
- Treating surface water accumulated in excavated areas if necessary;
- Decontaminating onsite larger debris, and segregating hazard-free debris;
- Removing other hazardous substances discovered;
- Characterizing post excavated areas to verify that the soil remaining meets MassDEP Standards for Soil Remediation and EPA Removal Management Levels;
- Backfilling excavated areas to grade with clean fill;
- Repairing response-related damage;
- Demobilizing resources; and
- Referring Site to MassDEP for any long-term measures that may be required to address remaining risks, including post-removal site controls.

2. Community relations

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

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 not impede, any future responses. The Site is not proposed for the Superfund National Priorities List.

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. EPA will implement recycling practices including recycling of paper, plastic, metal debris, etc. And the use of alternative technologies regarding disposal options will be further examined as 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)

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:

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. To the extent water generated from the removal action needs to be discharged to the river, applicable discharge standards will be met.

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 Water Act Section 404(b), (40 C.F.R. Parts 230 and 231, 33 C.F.R. Parts 320-323, and 33 C.F.R. Part 332): No activity that adversely affects a wetland shall be permitted if a practicable alternative with lesser impacts is available. Controls discharge of dredged or fill material to

protect aquatic ecosystems. Although it is not anticipated that this action will impact any wetlands, any wetlands altered by the cleanup will be restored as required by regulatory standards.

Clean Water Act Federal Water Quality Criteria, Section 304(a), (40 C.F.R. 131.11): National Recommended Water Quality Criteria for chemicals for both the protection of human health and the protection of aquatic life; to be used as water quality monitoring standards for any work in or adjacent to wetlands or water bodies.

Floodplain Management and Protection of Wetlands, 44 C.F.R. Part 9: Regulations that set forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands). Prohibits activities that adversely affect a federally-regulated wetland unless there is no practicable alternative, and the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. Requires the avoidance of impacts associated with the occupancy and modification of federally-designated 100-year and 500-year floodplain. To the extent federal jurisdictional wetlands exist within the areas where the removal action will take place, actions will be taken to minimize impacts. The soil excavation is not anticipated to be conducted within the floodplain, but if any work is performed within the floodplain, actions will be taken to minimize any impacts.

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 generates 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.

To Be Considered:

Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Correction Facilities. EPA updated its residential soil lead risk numbers and regional removal management levels to

reduce childhood lead exposure. The information and recommendations apply to removal actions. Soil excavation and off-site disposal will remove lead present at concentrations that pose an unacceptable risk to hypothetical future resident children.

Massachusetts 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: 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 Action Memorandum for the Site, Massachusetts Page 11 of 13 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.

310 CMR 10.00: Wetlands Protection Regulations – standards for work within state wetland resource areas (including vegetated wetlands and 100-year floodplain) or buffer zone (200 feet from a waterway and 100 feet from a wetland). Under this requirement, available alternatives must be considered that minimize the extent of adverse impacts, and mitigation including restoration and/or replication is required.

314 CMR 4.05: Massachusetts Surface Water Quality Standards: These regulations limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained. This may pertain to both discharges to surface water as a result of removal activities and any on-site waters affected by site conditions. On-site discharges to surface waters and adjacent wetlands, shall meet these substantive discharge standards.

The On-Scene Coordinator will coordinate with state officials to identify additional state ARARs, if any. In accordance with the National Contingency Plan and EPA Guidance

Documents, the On-Scene Coordinator 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 start the time-critical removal action in the fall of 2024 and estimates that it will be complete within 24 months.

B. Estimated Costs

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$3,390,000
Interagency Agreement		\$0,000.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$700,000
Extramural Subtotal		\$4,090,000
Extramural Contingency	20%	\$818,000
TOTAL, REMOVAL ACTION CEILING		\$4,908,000

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 at the Site to remain unaddressed and will continue to release or threaten to release hazardous substances into the environment, which pose a threat to human health and the environment.

VIII. OUTSTANDING POLICY ISSUES

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

IX. ENFORCEMENT ... For Internal Distribution Only

See attached Confidential Enforcement Strategy.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$7,256,306. This figure reflects \$4,908,000 (extramural costs) + \$300,000 (EPA intramural costs) = \$5,208,000 X 1.3933.(regional indirect rate) = \$7,256,306².

X. RECOMMENDATION

This decision document represents the selected removal action for the Riverside Square PCB Site, Hyde Park (Boston), Suffolk County, 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)];

² Direct Costs include direct extramural costs \$ 4,908,000 and direct intramural costs \$300,000. 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 39.33% (effective January 11, 2024) x \$ 5,208,000 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.

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

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 \$4,908,000.

APPROVAL: _____

DATE: _____