REGION 2
EDISON, NJ 08837

September 10, 2024

**ACTION MEMORANDUM – RV1**

**SUBJECT:** Confirmation of a Verbal Authorization Action Memorandum for a Time-Critical Removal Action ("RV1") at the Ulysses S. Grant Intermediate School, Historic Potteries Site, City of Trenton, Mercer County, New Jersey

**FROM:** Jonathan Byk, On-Scene Coordinator
Removal Action Branch

Byk, Jonathan Digitally signed by Byk, Jonathan Date: 2024.09.10 08:24:35 -04'00'

**THRU:** Joseph D. Rotola, Supervisor
Removal Action Branch

JOSEPH ROTOLA Digitally signed by JOSEPH ROTOLA Date: 2024.09.11 13:22:42 -04'00'

**TO:** Pat Evangelista, Director
Superfund and Emergency Management Division

## I. PURPOSE

The purpose of this Action Memorandum is to confirm a verbal authorization of funding granted by the Director of the Superfund and Emergency Management Division (SEMD) for a removal action being performed by the United States Environmental Protection Agency (EPA), Region 2, at the Historic Potteries Site (Site), located in City of Trenton, Mercer County, New Jersey.

On February 14, 2024, the SEMD Director verbally approved the first funding authorization for $1,300,000 of which $1,200,000 is from the Regional removal advice of allowance for mitigation contracting to mitigate the threat of exposure to lead in soil at the Ulysses S. Grant Intermediate School (Grant School or U.S. Grant School) through appropriate temporary dissociation measures. The removal action field work began on February 22, 2024, and is ongoing.

Conditions at the Site meet the criteria for a removal action under the Comprehensive Environmental Resource, Compensation, and Liability Act (CERCLA) and Section 300.415(b) of the National Contingency Plan (NCP), 40 C.F.R. §300.415(b).

The Site is not on the National Priorities List (NPL) but was proposed to the NPL on September 5, 2024. There are no nationally significant or precedent setting issues associated with this removal action.

## II. SITE CONDITIONS AND BACKGROUND

The Superfund Enterprise Management System identification number for this Site is NJN000203535.

### A. Site Description

#### 1. Removal Site Evaluation

The Site was discovered during a Removal Site Evaluation (RSE) of the L.H. Mitchell Site, a former small solder manufacturer, where elevated levels of lead were found in soil on residential properties in the surrounding neighborhood. The L.H. Mitchell Company operated for several decades in the late 20th century at 216 Klagg Avenue in the East Trenton neighborhood of Trenton, New Jersey. Between October 2018 and April 2019, EPA conducted assessment sampling at the L.H. Mitchell Site to determine if the former facility's operations had released lead into surrounding residential areas. Soil samples were collected from approximately 40 properties within a six-block radius of the former L.H. Mitchell facility.

EPA collected a total of 408 composite soil samples, including field duplicates, from 69 sampling locations throughout the sampling area. The analytical results indicated lead levels exceeded 400 milligram/kilogram (mg/kg), [1] the applicable EPA Removal Management Level (RML) at the time, in 291 of the 408 samples. Lead levels exceeded 1,200 mg/kg at 26 of the 33 properties sampled. Overall lead levels above the EPA RML were found at all properties sampled, except for one property located upwind that was sampled to establish background levels. Despite the discovery of elevated concentrations of lead in the East Trenton neighborhood, the RSE documented several reasons why the contamination was not attributable to the L.H. Mitchell facility (Attachment 1).

EPA determined that lead detected at residential properties in the vicinity of the L.H. Mitchell Site must be from other historic anthropogenic sources including, but not limited to, historic fill, leaded gasoline, lead-based paint, coal combustion, and potentially the pottery industry that was prevalent during the late 19th and early 20th century. Research into the historic potteries industry revealed that Trenton was a major industrial ceramic manufacturing center in the United States beginning in the 1850s. The industry in Trenton grew considerably throughout the remainder of the century and was at its peak between 1880 and 1920. According to historic resources, including the Potteries of Trenton Society ("POTS") online database and Sanborn Fire Insurance Maps ("Sanborns"), at least 78 pottery manufacturing locations existed throughout the City of Trenton (Figure 1). At least 30 locations that manufactured ceramics operated within the East Trenton neighborhood, of which at least five were large-scale operations with more than five kilns. Additional research indicated that lead was a common component of glazes used by historic potteries in the 19th century, such as those in Trenton. Furthermore, EPA reviewed several scientific journal articles that documented the potential for airborne lead emissions resulting from the firing of lead-glazed items in kilns, including significant releases of lead particles from uncontrolled kiln operations, including particles as small as 10 nanometers. Other studies have shown elevated blood

[1] On January 17, 2024, EPA released new guidance updating the RML for lead in residential soils: "Updated Residential Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities," which establishes an RML of 200 mg/kg, lowering it from the previous EPA residential RML of 400 mg/kg.

lead levels in those living nearby ceramics facilities and lead contaminated soil near ceramic facilities with levels decreasing as distance from the facility increases. A study conducted in a historically heavily industrialized city in the United Kingdom found elevated lead contamination in soil samples which researchers attributed the high lead levels primarily to the regions pottery industry.

This information prompted EPA to consult with the New Jersey Department of Environmental Protection (NJDEP). The focus of discussion was the possibility that the historically pervasive pottery operations in the area could be a unique source of lead deposition and loading to the soils of Trenton. On January 9, 2020, EPA received a referral (Attachment 2) from the NJDEP to conduct an Integrated Assessment ("IA") specifically related to the historical presence of pottery facilities and the lead contaminated soil identified in East Trenton. NJDEP also requested an assessment of six other areas of Trenton where significant historical pottery operations took place to determine if the East Trenton neighborhood alone or in combination with the six other areas qualifies for placement on the NPL and/or warrants a CERCLA removal action.

In response to the referral, EPA initiated an extensive attribution study as part of the IA. The study aimed to determine whether lead in soils discovered in the East Trenton area could be attributed to a release from the historic potteries. The attribution study included several specialized laboratory data analyses with assistance from the EPA Office of Research and Development (ORD) as well as the EPA Environmental Response Team. The attribution study sampling was conducted between October 2020 and July 2022. The soil sampling included both occupied and vacant residential properties in East Trenton that were previously assessed during the L.H. Mitchel Site investigation. Soil samples were also collected from other areas of Trenton where significant potteries historically operated, denoted HP001 through HP007 (Figure 1). The current study area for the IA consists of two main former pottery areas; HP001, which includes part of East Trenton and Top Road, and HP002, which encompasses the remaining portion of East Trenton.

As part of the attribution study 1,239 discrete soil samples and 84 composite samples were collected from residential properties, commercial properties, vacant lots, and parks. Analytical lead results for the discrete soil samples ranged from 3.52 to 50,900 mg/kg. Of the 298 samples from residential properties, 104 exceeded the 400 mg/kg lead threshold. For the composite soil samples lead levels ranged from 23.1 to 2,390 mg/kg. Notably, 34 of 84 composite soil samples exceeded 400 mg/kg for lead.

As described in a Technical Memo prepared by ORD and the Historic Potteries RSE (Attachment 1) multiple lines of evidence indicate the historic pottery industry significantly contributed to the elevated lead levels found in residential soil in East Trenton. The attribution study data indicate that the elevated lead levels primarily result from two sources: airborne releases during firing of ceramics in upwind kilns and leaching of lead from pottery sherds located in the soils. Although other sources have likely also contributed over time, including lead paint, leaded gasoline, coal combustion, and other localized industry (smelters, foundries, rubber facilities), the potteries appear to be the most significant contributor to the elevated lead levels.

As part of the ongoing IA, soil sampling and analysis of residential properties, parks, and schools within the Top Road and East Trenton neighborhoods was conducted throughout fall and early winter of 2023/2024. As the Site is considered for NPL listing, further assessment of occupied residential properties will continue in areas of Trenton where significant historical pottery operations took place.

Between October 2023 and January 2024, 1,028 composite samples were collected from 98 occupied residential properties, three parks (Breunig Avenue Park, Sonny Vereen Playground, Grant Avenue Playground), and two public schools (Darlene McKnight Elementary School and Grant School) within the East Trenton study area (Figure 2).

Analytical lead results for the composite soil samples from the 1,028 samples collected ranged from 10 to 7,760 mg/kg, with an average concentration of 580 mg/kg. Of these samples, 719 exceeded the recently updated EPA RML of 200 mg/kg (see FN1). Every property sampled except for one (HP001-P121, Darlene McKnight Elementary School), had at least one sample with a lead concentration above the 200 mg/kg RML. Furthermore, 161 samples from 70 properties sampled contained lead levels exceeding 1,000 mg/kg.

In January 2024, three heavily used community parks in East Trenton were assessed as part of the IA sampling effort: Sonny Vereen Playground, Breunig Avenue Park, and Grant Avenue Playground. All three parks showed elevated lead concentrations above the 200 mg/kg RML with varying levels of contamination. Sonny Vereen Playground had the highest lead levels, with concentrations generally increasing with depth and reaching a maximum of 3,080 mg/kg in the 18-24” interval. Breunig Avenue Park showed elevated levels of lead throughout the 0-24” soil interval, up to 757 mg/kg, with the highest concentrations in the 2-6" and 6-12" intervals. While Grant Avenue Playground had elevated levels up to 553 mg/kg, no surface concentrations exceeded 200 mg/kg. The average surface soil lead concentrations (in the 0-6" interval) were 369 mg/kg, 437 mg/kg, and 161 mg/kg for Sonny Vereen Playground, Breunig Avenue Park, and Grant Avenue Playground, respectively.

Additionally, 5-point composite samples were collected at two public school properties in East Trenton; the Darlene McKnight Elementary School located at 175 Girard Avenue, Trenton, NJ and the Grant School located 159 North Clinton Avenue, Trenton, NJ (Figure 2).

The Darlene McKnight Elementary School occupies three-quarters of a city block. However, as most of the property is covered with asphalt pavement, the risk of potential exposure to lead-contaminated soil is limited. The assessment focused on a small grassy area along Girard Avenue that contains several raised garden beds. A total of eleven composite soil samples were collected from three quadrants on the property, including the soil from the raised garden beds. Analytical results indicated that all samples were below the EPAs RML of 200 mg/kg for lead.

The Grant School property features a large athletic field, primarily consisting of bare soil, which serves as the main play area for students. The school grounds include several other grassy areas that are used as walkways and gathering areas before and after school hours. A total of 82 composite soil samples were collected from sixteen quadrants in the property. At all locations, EPA collected samples at the following five intervals in the upper two feet of soil within each boring: 0-2”, 2-6”, 6-12”, 12-18”s and 18- 24” below the ground surface. Lead levels exceeding the RML were detected in samples from all sixteen quadrants on the property, including the main play area and other areas where heavy foot traffic has created bare soil areas.

Lead was identified in surface soil at the school at concentrations as high as 653 mg/kg, posing a direct contact risk for students and staff. Generally, the greatest concentration of lead was detected within the top 6”of soil and appeared to decrease with depth. The vertical distribution pattern of lead in soil

indicates airborne deposition, with former local pottery industries suspected as the primary source. The average property-wide lead concentration in surface soil from 0-2" is 312 mg/kg. The average soil concentration in the top 2" of soil in the high use play areas is 224 mg/kg. Soil in the raised garden beds contained significantly lower levels of lead compared to the other decision units that were sampled, with an average of 92 mg/kg. Additionally, arsenic was detected above the RML in one quadrant adjacent to the building and the drip-line (the area within three feet of the building wall) composite sample.

This action memo (RV1) specifically addresses the threat of lead exposure at the Grant School. Additional removal actions are anticipated to address lead contaminated soil at residential properties and parks in East Trenton, and potentially other parts of the City. The removal action at the Grant School has been prioritized due to the risk of direct lead exposure to a large and sensitive population. This risk particularly affects students who may use the property every day during school, and young children in the area who use the property after school hours. The threat is primarily from human exposure by direct contact, ingestion, and inhalation of lead-contaminated soil. Gardening, landscaping, and soil agitation during maintenance activities by school faculty and staff may also increase the risk of exposure to lead. The threat is increased when bare soil is present, which is a condition observed widely across the school property. Foot traffic through the lead-contaminated soils may result in lead being tracked into indoor areas.

Attachment 3 includes figures showing the sampling locations and results at the Grant School. Attachment 4 contains with the laboratory result tables.

## 2. Physical location

The current Site boundaries encompass part of the East Trenton neighborhood where potteries historically operated within Trenton city limits, in Mercer County, New Jersey (Figure 2 and Figure 3). The Site as currently defined encompasses approximately 0.38 square miles of occupied residential properties and communal spaces such as schools and parks in East Trenton, south and north of North Clinton Avenue, north of the Assunpink Creek, east of Lincoln Avenue, and west of Plum Street. This removal action focuses specifically on the Grant School located at 159 North Clinton Avenue, Trenton, NJ bound by Perry Street to the north, North Clinton Avenue to the east, Monmouth Street to the south, and Southard Street to the west. The Site boundaries may expand as more assessment activities are conducted in all seven areas of Trenton where significant historical pottery operations took place.

## 3. Site characteristics

There are over 900 occupied housing units with a population greater than 1,800 people within the current Site boundaries in the East Trenton neighborhood. Most of the residences are single- or multi-family rowhomes with backyards, and renters are a large portion of the community. Many of the homes were constructed in the late 1800s and early 1900s. Most of the residential properties include bare soil and/or vegetated areas. In addition, there are many abandoned houses and vacant lots. A large portion of the population is Spanish-speaking, and the area has been identified as a community with environmental justice concerns. Within the current Site boundaries, using EPA's Environmental Justice Screening and Mapping Tool ("EJ Screen"), 10 of 13 environmental justice ("EJ") indexes and 8 of 13 supplemental EJ indexes exceed a 90$^{th}$ percentile.

The Assunpink Creek (Assunpink) is located 80 feet to the southeast of the Site. Hamilton Township begins on the other side of the creek. Available wind rose charts indicate that prevailing winds were from the north-northwest, northwest, west-northwest, west-southwest, and southwest while potteries were historically operating.

The United States Department of Agriculture's Natural Resources Conservation Service has classified the soil in the area as udorthents which indicates that the soils have been altered by excavating or filling. Due to its proximity to water, a likely scenario is that the area was filled and leveled out prior to development in the mid-1800s. Topographic maps are only available from year 1888 onward, so this could not be confirmed. The Assunpink Creek holds historical significance in American history due to its role in the Revolutionary War: The Second Battle of Trenton was fought along the Assunpink Creek on January 2, 1777, between American and British forces.

The area's development began in the mid-1700s primarily as an apple orchard (prior to the use of lead-arsenate pesticides) and as a site for grist mills along the Assunpink. Beginning in the 1850s, the pottery industry began to emerge with most of the potteries locating along the Delaware and Raritan Canal (D&R Canal) which separates East Trenton and Top Road. At the same time, rubber companies began to locate near and along the Assunpink. The residential neighborhood between the canal and creek was developed over the next 50 years to support the growing industries. The D&R Canal is currently owned and managed by the NJDEP Division of Parks and Forestry, State Park Service as a state park. The D&R Canal in Trenton is now a source of drinking water for more than one million residents of central New Jersey. The canal is managed by the New Jersey Water Supply Authority (NJWSA), which is responsible for maintaining the canal to ensure it can continue to function as a source of raw drinking water. The NJWSA pumps out about 75 million gallons of water a day from the canal's water transmission complex.

According to historic resources, including Sanborns, the property at 159 North Clinton Avenue was initially developed in 1855 with the construction of two buildings for the New Jersey State Normal School (Normal School), the state's first teacher training institution. Throughout the late 1800s, several additional buildings were erected to expand the campus. However, following the Normal School's relocation from downtown Trenton in 1929, these structures were eventually demolished in the 1930s.

In 1938, the current two-story red brick public school building was constructed on the property. Today, it operates as the Grant School, part of the Trenton Public School District. The school serves approximately 550 students in grades 4-6 (ages 8-12) and employs about 60 staff and faculty members. The school grounds feature a large green space that serves dual purposes: as an athletic field for students during school hours and as a recreational area for the community after hours. Additionally, several grassy areas provide walkways and gathering spaces for students before and after school.

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

Sampling and analysis conducted at the Grant School identified the presence of elevated concentrations lead in surficial soil throughout the property. Lead is a CERCLA hazardous substance as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and listed at 40 C.F.R. § 302.4. The statutory source for designation of lead as a hazardous substance under CERCLA is identified below.

The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9). Hazardous substances, pollutants, or contaminants present at the Site represent a threat to the public health and welfare as defined by Section 300.415(b)(2) of the National Contingency Plan (NCP), in that there is a potential human exposure at the Site via inhalation, ingestion, and/or direct human contact.

| Substances Identified | Maximum Concentration | Statutory Source for Designation as a Hazardous Substance |
|---|---|---|
| Lead | 653 mg/kg | Clean Water Act Section 307(a) |

**5. National Priorities List status**

The Site was proposed for inclusion on the NPL on September 5, 2024.

**6. Maps, pictures, and other graphic representations**

A site location and analytical results maps of the Grant School are included as Attachment 3. A copy of the analytical results tables from soil samples collected at Grant School are provided in Attachment 4.

## B. Other Actions to Date

**1. Previous actions**

The Site was referred to EPA by the NJDEP on January 9, 2020. There have been no other removal activities taken by other government or private parties at the Site prior to this request.

**2. Current actions**

EPA issued a Verbal Authorization for an Emergency Removal Action on February 15, 2024, to address lead contaminated surficial soil at the Grant School that poses a threat to public health and the environment. Further actions are planned to address lead-contaminated soil at residential properties and three parks in East Trenton, as well as other potential occupied residential properties and community spaces in other portions of Trenton.

On January 29, 2024, EPA notified the Trenton Public School District and the Mayor's office of the elevated detections of lead in surficial soil at the Grant School property. EPA recommended that the school district restrict access to all soil and grass areas on school property. EPA's Emergency Rapid Response Services (ERRS) contractor mobilized to the Grant School on February 22, 2024. On February 29, 2024, ERRS field technicians installed new wood slat snow fencing around all restricted areas previously enclosed by orange high-visibility fencing.

On March 11, 2024, a scope of work detailing the proposed temporary soil cover specifications for each impacted area was submitted to the Trenton Public School District for approval. The school district approved EPA's proposed plan on March 15, 2024, and on May 13, 2024, the ERRS subcontractor, Land

Tek, mobilized to the Grant School to begin installation of the temporary protective soil covers over lead impacted areas.

The scope of the work at the Grant School consists of the installation of temporary interim controls to protect the students and staff from contact with the lead impacted soil through the installation of artificial turf, soil, wood chips, and/or sod over high use play areas. The placement of clean cover materials over areas of lead-contaminated soil provided an effective barrier to mitigate potential lead exposure pathways. By capping the impacted soil, the contaminated soils are physically isolated. This prevents dispersion of contaminated particulates into the air, thereby eliminating inhalation exposure risks. The cover materials also create a stable buffer separating the contaminants from direct human contact, which blocks inadvertent ingestion pathways. The appropriate cover materials were selected in coordination with school administration so that the measures were appropriate for the use-specific requirements of each location.

From May 13 to June 28, 2024, the designated temporary soil covers were installed at each area of the school property (Figure 4). A geotextile fabric and six-inch mulch cover was installed over low foot traffic areas in the front of the school from May 13 to May 27, 2024. Four inches of clean soil and sod were installed around one high traffic area in the front of the school and around the basketball court area in the back of the school. The artificial turf field installation in the back of the school over the main athletic field was completed between May 20, 2024, and June 28, 2024.

## C. State and Local Authorities' role

### 1. State and local actions to date

On January 30, 2024, staff from Trenton Public School district installed temporary orange snow fencing along all grass areas at the Grant School to restrict access to lead impacted areas.

There are no current or ongoing removal activities being taken by government or private parties.

### 2. Potential for continued state/local response

Neither NJDEP nor the local government has the resources available to conduct a removal action at the Site. These organizations will act in a supporting role throughout the removal action.

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

Conditions at the Site that met the requirements of 40 CFR 300.415(b)(2) of the NCP for undertaking a CERCLA removal action include:

1) 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)];

2) 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)];

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

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

## A. Threats to Public Health or Welfare

EPA has identified conditions at the Site that meet the criteria in the NCP at 40 C.F.R. § 300.415(b)(2), which indicate that a removal action is warranted. Site conditions that correspond to factors that provide a basis for a removal action include:

### 1. 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)]

School faculty, students, and residents, especially young children, have potential direct contact exposure to lead through ingestion via their hands or soil-laden objects or through inhalation of airborne dust. Gardening, recreating, and frequent use of the grass and exposed soil areas may also increase the risk of exposure to lead. The Grant School property contains a large play area that is largely bare soil and several other vegetated areas that are used as walkways and gathering areas before and after school. The play area serves as recreational space for students during daily recess periods. The school grounds are open to the general public for unrestricted use after school dismissal and on the weekends.

Lead exposure poses a significant threat to human health, affecting individuals across all age groups, but particularly children and pregnant women. Lead can severely damage a child's developing brain and nervous system, potentially leading to lifelong challenges. Lead exposure can lower a child's IQ and diminish their ability to focus. In adults lead exposure can increase blood pressure and the risk of hypertension, potentially leading to cardiovascular problems. It can also impair kidney function and cause reproductive issues in both men and women. Pregnant women face additional risks, as lead exposure can hinder fetal growth and potentially result in premature birth.

### 2. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [40 C.F.R. § 300.415(b)(2)(iv)]

Analytical data indicate that elevated levels of lead are present in the top two feet of soil on school property at concentrations exceeding the residential RML. The soil can potentially become airborne and/or migrate when disturbed under dry conditions; and may migrate during heavy rain events.

**3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [40 C.F.R. § 300.415(b)(2)(v)]**

Weather conditions may cause hazardous substances to migrate or to be released particularly through surface water run-off from precipitation potentially entering the storm drains. Under dry conditions, the soil can potentially become airborne and/or migrate when disturbed, potentially impacting indoor residential areas and nearby residents.

**4. The availability of other appropriate federal or state response mechanisms to respond to the release [40 C.F.R. § 300.415(b)(2)(vii)]**

There are no other appropriate federal or state response mechanisms available to respond to the release. The State of New Jersey is not currently able to take timely and appropriate action to respond to the threat posed by the presence of hazardous substances at the Site. NJDEP has requested EPA's assistance to mitigate the threats posed by the conditions at Site.

## IV. ENDANGERMENT DETERMINATION

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

## V. EXEMPTION FROM STATUTORY LIMITS

### A. Consistency Exemption

**1. Continued response actions are otherwise appropriate and consistent with the remedial actions to be taken.**

The proposed response actions are appropriate and consistent with any remedial actions to be taken. The proposed removal actions are also appropriate because they quickly prevented direct human contact with any lead contaminated soils, as well as controlled potential offsite migration of contamination, achieving an expeditious elimination of potential exposure risks. The installation of temporary soil covers at the Grant School will not limit any conceivable future remedial action.

## VI. PROPOSED ACTIONS AND ESTIMATED COSTS

### B. Proposed Actions

**2. Proposed action description**

The scope of the work for the removal action at the Grant School includes installation of temporary fencing and signage to control access to lead impacted areas by students, school staff, and the public. Additional interim controls to dissociate the students and staff from the lead impacted soil will include

the placement of artificial turf, soil, wood chips, sod and/or comparable clean cover material over high use play areas so that normal school operations like recess and gym class may resume. The appropriate actions were selected in coordination with school administration so that the selected measures are appropriate for the use-specific requirements of each location. This is a temporary interim action intended to prevent direct contact and inhalation of lead contaminated soils until a permanent action can be taken to address the contaminated soils. The Site is currently being considered for listing on the NPL. If listed, the remedial program will determine an appropriate long-term remedy.

The following activities were or will be conducted to achieve the removal action objectives:

1) prepared Site Plans: Health and Safety Plan, Work Plan, Quality Assurance Project Plan, and Community Air Monitoring Plan;

2) obtained consent for access to the school property;

3) set up support areas: command post, break/security trailers, parking and staging areas;

4) conducted a landscape inventory of the property and documented existing conditions prior to removal activities;

5) removal of any debris and landscape as necessary to complete the removal action;

6) placed up to 6" of topsoil, woodchips, artificial turf or similar cover material on the areas identified with elevated lead concentrations within the surface soils;

7) implemented dust suppression measures to prevent the generation of dust during removal activities.

8) conducted perimeter air monitoring for particulates and community air sampling for lead during any earth moving activities to determine the effectiveness of dust suppression;

9) restoration of the impacted areas; and

10) demobilized following the completion of the removal and restoration action.

The final long-term future of the soil covers (including maintenance) will depend upon the NPL listing.

### 3. Contribution to remedial performance

The response measures documented in this Action Memorandum will address the immediate threat of exposure to lead at the school property. The action is consistent with the requirement of Section 104(a)(2) of CERCLA, 42 U.S.C. § 9604(a)(2), in that it will contribute to the efficient performance of any long-term remedial approach. The planned removal action would also be consistent with any future remedial action.

### 4. Applicable or Relevant and Appropriate Requirements ("ARARs")

ARARs within the scope of the project, including CERCLA, RCRA and Department of Transportation regulations that pertain to the transportation and disposal of contaminated materials, including hazardous substances and hazardous wastes, will be met to the extent practicable considering the exigencies of the situation.

### 5. Project Schedule

On February 22, 2024, EPA's ERRS contractor mobilized to the Grant School to begin the removal action. A subcontractor, hired by ERRS to install protective covers, commenced work on May 13, 2024. By June 28, 2024, the installation of covers was completed in all designated areas on school grounds. EPA maintained and repaired these covers for several months to ensure the establishment of the vegetative soil covers. The final maintenance schedule will be determined following the outcome of the NPL listing.

**Estimated Costs**

A summary of estimated costs for the action is presented below. A confidential independent government cost estimate is included as Attachment 5.

| Direct Extramural Costs | Total Funding Authorized and Requested |
|---|---|
| Regional Allowance Costs (Total clean-up contractor including labor, equipment, and materials including 20% contingency) | $1,200,000 |
| Other Extramural Costs (START V) | $100,000 |
| Subtotal, Extramural Costs | $1,300,000 |
| 20% Extramural Cost Contingency | $0 |
| Total Direct Extramural Costs | $1,300,000 |

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

Had the proposed actions described in this Action Memorandum not been implemented; the exposure threats posed by the lead would have persisted, and the public would have continued to come into direct contact with lead contaminated soil, which would have increased their risk of lead exposure.

## VIII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues associated with this Site at the present time.

## IX. ENFORCEMENT

Efforts are underway to identify potentially responsible parties (PRPs). The On-Scene Coordinator is working with the Office of Regional Counsel to evaluate potential viable PRPs to pursue for cost recovery. Due to the time critical nature of this action, EPA will undertake the removal work and

seek to recover costs from any viable PRPs at a future date.

**ENFORCEMENT COST ESTIMATE**

The total cost for this removal action, based on full-cost accounting practices that will be eligible for cost recovery, is estimated to be $1,958,413 and was calculated as follows:

| COST CATEGORY | AMOUNT |
|---|---|
| Direct Extramural Cost | $1,300,000 |
| Direct Intramural Cost | $75,000 |
| Subtotal Direct Costs | $1,375,000 |
| Indirect Costs (Indirect Regional Cost Rate 42.43%) | $583,413 |
| Estimated EPA Costs Eligible for Cost Recovery | $1,958,413 |

Note: Direct 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 direct costs, consistent with the full cost 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 costs from this estimate will affect the United States' right to cost recovery.

**X: RECOMMENDATION**

This decision document represents the selected removal action for the Grant School, part of the Historic Potteries Site, located in the City of Trenton, Mercer County, New Jersey. This document has been developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site.

The total project ceiling requested in this Action Memorandum is $1,300,000 of Direct Extramural Funds, of which $1,200,000 will funded from the Regional Removal Advice of Allowance. There are sufficient monies in the Advice of Allowance to fund the project.

Please indicate your formal authorization for the removal action at the Historic Potteries Site, as per current Delegation of Authority, by signing below.

Approved: Evangelista, Pat Digitally signed by Evangelista, Pat Date: 2024.09.18 09:13:04 -04'00' Date: September 18, 2024

Pat Evangelista, Director
Superfund and Emergency Management Division

Disapproved: _____ Date: _____

Pat Evangelista, Director
Superfund and Emergency Management Division

Upon Approval:

Cc: J.Prince, SEMD-DD
E.Wilson, SEMD-DD
J.Rotola, SEMD-RAB
D.Gaughan, SEMD-RAB
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