



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

TS.

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| State: | Washington Co. |
| Site ID#: | MON000705027 |
| Priority: | 2.0 |
| Other: | |

N.B.

A78K

ACTION MEMORANDUM AMENDMENT THREE

SUBJECT: Request for a Project Ceiling Increase for the Time-Critical Removal Action at the Washington County Lead District – Old Mines Site in Washington County, Missouri

FROM: James O. Silver, On-Scene Coordinator *JS for JS*
Emergency Response & Removal Branch

THRU: Scott Hayes, Chief *Scott Hayes*
Emergency Response & Removal Branch

TO: Cecilia Tapia, Director
Superfund Division

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|---|---------------|
| CERCLIS ID# | MON000705027 |
| Site ID# | A78K |
| Category of Removal | Time Critical |
| Nationally Significant/Precedent Setting: | No |

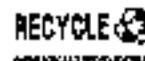
I. PURPOSE

The purpose of this Action Memorandum Amendment is to request and document approval of a funding increase for the ongoing removal action described herein for the Washington County Lead District – Old Mines Site (Old Mine Site). This Action Memorandum Amendment seeks to increase the funding ceiling so the response action can continue at the Old Mines Site. This proposed action continues to satisfy the criteria for removal actions under Section 300.415(b)(2) of the National Contingency Plan (NCP) and continues to meet the emergency criteria for exemption of Section 104(c)(1) of CERCLA, 42 U.S.C. § 9604(c)(1) from the statutory limits of removal actions. The primary objective of this removal action is to eliminate or reduce potential ingestion exposure due to the presence of lead and other heavy metals in drinking water and in the soils. To date more than 600 residential properties have had soil and drinking water sampled. Of these, 38 were found to have yard soils contaminated with lead above the action limit of 1,200 parts per million (ppm), and 89 drinking water wells contaminated above the action level of 15 parts per billion (ppb). Approximately 400 properties remain to be sampled. This project ceiling increase request will allow for the sampling of

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SUPERFUND RECORDS



residential property soils and drinking water to be completed, complete the removal of contaminated yard soils, and provide drinking water to affected households.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

Since the previous ceiling increase, EPA has sampled the soil and drinking water at over 100 homes. Excavation and backfilling of 20 properties have been completed and work is in progress on an additional five properties. Furnishing bottled water to residences where lead in the drinking water exceeds the 15 ppb limit continues, with 89 such properties identified thus far.

Almost 400 houses still need to have the soil and drinking water sampled. Additional time-critical removals are expected to be found, and more residences will require that bottled water be provided. Excavation of the contaminated soil will continue and the additional funding will allow for the excavations to proceed and the additional bottled water be provided.

Without additional funding, excavation of contaminated soil cannot proceed and bottled water will cease to be furnished to residents. In addition, further sampling of potentially contaminated yards and wells will not continue. Residents in the Old Mines Area will continue to be exposed to high lead concentrations which could lead to the adverse health effects described in the previous Action Memoranda.

2. Physical Location and Site Characteristics

See previously approved Action Memorandum.

3. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant, or Contaminant

See previously approved Action Memorandum.

4. NPL Status

See previously approved Action Memorandum.

5. Supporting Documentation

All relevant documents regarding the contamination at the site are included in the site's Administrative Record.

B. Other Actions to Date

To date approximately 600 residential properties have had soil and drinking water sampled, 20 properties have had the contaminated yard soils replaced, and bottled water has been offered to 89 households.

C. State and Local Authorities' Roles

See previously approved Action Memorandum.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES, ENDANGERMENT DETERMINATION, PROPOSED ACTIONS, AND ESTIMATED COSTS

See previously approved Action Memorandum.

IV. ENDANGERMENT DETERMINATION

The actual release of a hazardous substance at this site—if not addressed by implementing the response action selected in this Action Memorandum—presents an imminent and substantial endangerment to the health of the public that comes in contact with the site and to public welfare and the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Site conditions continue to meet the emergency exemption criteria specified in the previous Action Memorandum request for a 12 month and \$2 million exemption.

VI. PROPOSED ACTIONS AND ESTIMATED COST

Following are the actions for which the increase in the ceiling will be used, without the proposed increase these actions cannot continue:

A. Proposed Actions

1. An EPA toxicological analysis has determined the appropriate Removal Action Level (RAL) for the drinking water to be 15 ppb for lead and 5 ppb for cadmium. These RALs are equivalent to the Maximum Contamination Levels for these contaminants. Any residence where the drinking water exceeds 15 ppb for lead will be provided an alternative source of drinking water if, through sampling and analysis, EPA suspects contaminated water was the result of groundwater contamination.

2. Soil/Waste Excavation, Remove, and Replacement

a. This soil removal action will cover those residences or child high use areas where there is known to be a child 72 months of age or younger with an Elevated Blood Lead Level (EBLL) greater than 10 micrograms per deciliter ($\mu\text{g}/\text{dl}$). EPA will excavate and remove all soils and/or wastes from properties where a composite sample exceeds a concentration of 400 ppm lead and the area is a high-use area for children 72 months of age or younger with an EBLL greater than 10 $\mu\text{g}/\text{dl}$.

b. Properties with soil concentrations exceeding 1,200 ppm will be excavated to a minimum depth of 12 inches. The excavation will be conducted with excavating machinery such as skid loaders, bulldozers, excavators, backhoes, and hand tools. If soils at a depth of 12 inches exceed 1,200 ppm, excavation may continue in 6- to 12-inch lifts until the soil concentrations fall below 1,200 ppm, or EPA may choose to place a warning barrier. The purpose of this warning barrier is to alert homeowners to the existence of high levels of lead. At a property where one cell or area exceeds 1,200 ppm, all cells at that property that exceed 400 ppm will be excavated.

c. After removing the soils from the affected area or areas and placing the warning barriers where required, the excavated soils will be replaced with clean soils. Clean soils are soils that have been analyzed for lead and results indicate that the lead concentration is below 240 ppm and all other hazardous substances, pollutants, or contaminants are below residential soil screening levels determined by EPA or by referring to the Region 9 Preliminary Remediation Goal tables found at <http://www.epa.gov/Region9/waste/sfund/prg/index.htm>.

d. Garden soils in any yard exceeding 400 ppm lead (based on discrete samples) will be excavated to a minimum depth of 24 inches. If soils at a depth of 24 inches exceed 1,200 ppm, excavation will continue in 6 to 12 inch lifts until the soil concentrations fall below 1,200 ppm or EPA decides to cease excavation and place a warning barrier.

B. Estimated Costs

The costs associated with this removal action are estimated as follows:

Extramural Costs:

| | Current Ceiling | Proposed Increase | Proposed Ceiling |
|-------------------------------|--------------------|----------------------|---------------------|
| ERRS | \$ 1,509,114 | 1,499,643 | \$3,008,757 |
| START Contractor | 481,287 | 276,640 | 757,927 |
| Contingency | <u>343,080</u> | <u>355,256</u> | <u>698,336</u> |
| Total Removal Project Ceiling | \$2,333,481 | \$2,131,539 | \$4,465,020 |

The EPA direct and indirect costs, although cost recoverable, do not count toward the total removal project ceiling for this removal action.

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

Delayed action will continue to potentially expose residents, particularly children, to contaminated soils and drinking water exceeding the federal action levels.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

See the Confidential Enforcement Addendum for this site. For NCP consistency purposes, it is not a part of this Action Memorandum Amendment.

X. RECOMMENDATION

This decision document represents the approved removal action for the contaminated soils and drinking water at the Washington County Lead District – Old Mines Site. The removal action was 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.

Conditions at the site meet NCP Section 300.415(b) criteria for a removal action and the CERCLA Section 104(e) emergency exemption, and I recommend your approval of the \$2,131,539 ceiling increase to allow the removal response to continue. The total project ceiling, if approved, will be \$4,465,020.

Approved:


 Cecilia Tapia
 Director
 Superfund Division

2/14/07
 Date