



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

NOV 29 2012

ACTION MEMORANDUM

SUBJECT: Request for a Project Ceiling Increase for the Removal Action at the Callahan Property, a subsite, of the Ellisville Site, Wildwood, St Louis County, Missouri

FROM: *for* Laura Price, Remedial Project Manager
Special Emphasis Remedial Branch *Dave Drake*

THRU: Scott Hayes, Chief
Emergency Response and Removal Branch *SH*

TO: Cecilia Tapia, Director
Superfund Division

Site ID: 0708

I. PURPOSE

The purpose of this Action Memorandum is to request and document a funding increase for the ongoing removal action described herein for the Callahan Property (Site), located at 210 Strecker Road, Wildwood, MO. This Action Memorandum Amendment seeks to increase the funding ceiling so the response action can continue at the site. This funding increase will allow for the ongoing excavation activities to continue to remove impacted soils.

The specific actions to be undertaken at the site to eliminate or reduce potential threats to human health and the environment include the excavation, transportation, and disposal of soils containing hazardous substances. This project ceiling increase satisfies the criteria for removal actions under section 300.415 (b)(2) of the National Contingency Plan (NCP). The proposed actions are necessary to complete the excavation of contaminated soils and to eliminate potential exposure to groundwater.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#: MOD980633010

Category of Removal: Time Critical

Nationally Significant/Precedent Setting: No

30246848



Superfund

A. Site Description

1. Removal Site Evaluation

See previously approved Action Memorandum attached.

2. Physical Location

See previously approved Action Memorandum attached.

3. Site Characteristics

See previously approved Action Memorandum attached.

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

See previously approved Action Memorandum attached.

5. National Priorities List (NPL) Status

This Site is currently listed on the National Priorities List and there are currently no plans to address this waste during a remedial action.

6. Maps, pictures, and other graphic representations

Pictures of the site are attached.

B. OTHER ACTIONS TO DATE

To date, approximately 600 cubic yards have been removed from the site.

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

See previously approved Action Memorandum attached.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions described in this action memorandum amendment, may continue to present an imminent and substantial endangerment to public health or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

Response actions included under this Action Memorandum Amendment include excavation of soils contaminated with lead, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in soils that exceed the Regional Screening Levels (RSL) Summary Table April 2012. All visibly stained and/or odorous soils with high photo ionization detector (PID) readings will be excavated and removed from the Site. Once this is completed, soil samples will be submitted for analysis to ensure that most or all contaminants above RSLs have been excavated and removed from the Site. Once the analytical results confirm that levels are below RSLs, the excavated area will be backfilled to original grade with clean material. The adjusted estimated volume of soil to be removed is 4,500 cubic yards.

In addition, the U.S. Environmental Protection Agency shall collect soil samples from the excavated soils to conduct the Toxicity Characteristic Leaching Procedure (TCLP) analysis. Soils that exceed the TCLP limits for lead and other metals will be treated with an appropriate chemical and re-sampled until the levels are below appropriate TCLP limits.

Excavated areas will be backfilled with soil material matching the pre-removal grade. The backfilled areas will then be revegetated by planting some trees and grass to prevent erosion and to restore the property to pre-response condition.

2. Action/cleanup level

To the extent practicable, soils above the EPA's RSL Summary Table April 2012 will be excavated, treated if TCLP analysis fails and disposed of at an acceptable soil repository.

3. Contribution to Remedial Performance

Based upon information currently available, no long-term remedial actions are anticipated. The proposed actions will mitigate the threat posed by hazardous substances released or threatened to be released at the Site.

4. Engineering Evaluation/Cost Analysis (EE/CA)

Since this is a time-critical removal action, an EE/CA was not developed for this action.

5. Applicable relevant and appropriate requirements (ARARs)

See previously approved Action Memorandum attached.

6. Project Schedule

Response activities are anticipated to continue with the additional funding made available by the signing of this Action Memorandum Amendment. It is expected that soil excavation will take four weeks to complete as opposed to the original two week completion date.

B. Estimated Costs

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

Extramural Costs:

	Current Ceiling	Proposed Increase	Proposed Ceiling
Removal Costs	\$127,125	\$334,262	\$461,387
20 Percent Contingency	<u>25,425</u>	<u>66,852</u>	<u>92,277</u>
Removal Ceiling	\$152,550	\$401,114	\$553,664

EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

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

Delayed action will continue to threaten the public health or welfare or the environment, and in particular will continue to expose current and future residences to the contaminated soils exceeding federal action levels.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

The total costs for this removal action based on full cost accounting practices that will be eligible for cost recovery are estimated to be \$765,268.

	Current Ceiling	Proposed Increase	Proposed Ceiling
Direct Extramural Costs	\$152,550	\$401,114	\$553,664
Direct Intramural Costs	10,000	10,000	20,000
Indirect Costs (33.40 Percent)	<u>44,734</u>	<u>146,870</u>	<u>191,604</u>
Total Project Costs	\$207,284	\$557,984	\$765,268

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 total costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal action for the contaminated soils and drinking water at the 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 I recommend your approval of this proposed removal action. The removal ceiling, if approved, will be \$553,664. This amount comes from the Regional Removal Allowance.

Approved:

Cecilia Tapia
Cecilia Tapia, Director
Superfund-Division

11/29/12
Date

Attachments













UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

SEP 13 2012

ACTION MEMORANDUM

SUBJECT: Request for Approval of Time-Critical Removal Action, Callahan Property, a Subsite of the Ellisville Site, Wildwood, St. Louis County, Missouri

FROM: *for* Laura Price, Remedial Project Manager
Special Emphasis Remedial Branch

THRU: Cecilia Tapia, Director
Superfund Division

TO: Karl Brooks
Regional Administrator

Site ID#: 0708

I. PURPOSE

The purpose of this Action Memorandum is to request funding and document approval of the proposed time-critical removal action for the Callahan property (Site) located at 210 Strecker Road, Wildwood, Missouri.

The specific actions to be undertaken at the Site to eliminate or reduce potential threats to human health and the environment include the excavation, transportation and disposal of soils containing hazardous substances..

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

CERCLIS ID#: MOD980633010

Category of Removal: Time Critical

Nationally Significant/Precedent Setting: No



1. Removal Site evaluation

In August 1980, an eyewitness reported drums being buried near a barn at the Site. On December 14, 1981, the U. S. Environmental Protection Agency and Missouri Department of Natural Resources (MDNR) initiated an emergency removal action to excavate the drums. The removal action was completed February 18, 1982, and involved removal of 1,205 drums from the Site. Of the 1,205 drums, 613 contained hazardous materials.

The EPA conducted a Remedial Investigation for the Ellisville Site during 1981 to 1983; the work was documented in a report dated September 21, 1983. Field activities included the collection of seven soil samples and two surface water samples. Soil results exceeded health-based screening levels at two locations; surface water results were nondetect. In 1985, the EPA selected a remedial action to be performed at the Site, a subsite of the Ellisville National Priorities List (NPL) site, which included stabilization of soils in the former drum burial area and removal of a plastic cover, blocks and gravel and fencing remaining from the 1981-82 drum removal.

A Phase II Environmental Assessment was completed in 1999. During this investigation, five composite samples were collected and analyzed for dioxin, polychlorinated biphenyls (PCBs), pesticides and metals. All sample results were nondetect. A magnetic survey was also conducted during this investigation that showed no evidence of buried metal drums.

A site removal evaluation was tasked by the EPA and conducted by MDNR and the Superfund Technical Assessment and Response Team on January 31, 2005, to determine if any residual soil contamination remained at the Site at concentrations that would warrant further response. A total of 29 soil and 5 sediment samples were collected in early 2005. All samples were analyzed for base neutral/acid extractables, pesticides/herbicides, PCBs, 8 Resource Conservation and Recovery Act (RCRA) metals and dioxin. Results exceeded health-based screening levels for a number of hazardous substances at several locations.

The EPA conducted an expanded Site review in 2011, which was documented in the "Site Reassessment Report for an Expanded Site Review," dated June 2012. A total of 34 soil samples were collected. Dioxin, 8 RCRA metals, PCBs, semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs) were analyzed on one or more of the samples. Results exceeded the EPA's April 2012 Regional Screening Level (RSL) Summary Table for soil at soil borings SB-25 (lead), SB-26 (bis-[2-ethylhexyl]phthalate), SB-27 (lead), SB-44 (benzo[a]anthracene, benzo[b]fluoranthene, ethylbenzene) and ditch grab #1 (arochlor 1248).

2. Physical location

The Site is located at 210 Strecker Road in the city of Wildwood, Missouri. The area immediately surrounding the Site is composed of single-family, detached residential dwellings. The Site is located in St. Louis County and the population is 992,408 according to the 2009 census. The counties that surround St. Louis County are Saint Charles, Franklin and Jefferson.

3. Site characteristics

Site features include a small pond and barn. The small pond receives drainage from the northern portion of the parcel and is located above the former drum burial area (fill area). The terrain slopes downward to the south from Strecker Road forming two drainage ways (below fill area) that intersect an intermittent Caulks Creek tributary near the southernmost property boundary.

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

Benzo(a)anthracene, benzo(b)fluoranthene, bis-(2-ethylhexyl)phthalate, chromium, 1,2-dichloroethane, ethylbenzene, indeno(1,2,3-cd)pyrene, lead, methylene chloride, oxirane, polychlorinated biphenyl (1254), and tetrachloroethene have been detected in soils at the Site. These contaminants are listed as hazardous substances pursuant to 40 CFR § 302.4. As such, these contaminants are "hazardous substances" as defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601(14).

5. NPL status

This Site is currently listed on the NPL, and there are currently no plans to address this waste during a remedial action.

6. Maps, pictures, and other graphic representations

A map of the Site is included as Attachment 1.

B. Other Actions to Date

1. Previous actions

See section II.A.1 above.

2. Current actions

There are no ongoing response actions, and no other governmental agencies are responding to the Site.

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

Section 300.415(b) of the National Contingency Plan (NCP) provides that the EPA may conduct a removal action when it determines that there is a threat to human health or welfare or the environment based on one or more of the eight factors listed in section 300.415(b). The factors that justify a removal action at the Site are outlined as follows:

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

The Site is located within 50 feet of a residence located in a residential neighborhood. If the soils were to be brought to the surface, perhaps during a future housing development, the chances of these hazardous substances spreading across an area could expose current and future residents to these contaminants.

300.415(b)(2)(ii) – Actual or potential contamination of drinking water supplies or sensitive ecosystems.

The EPA placed a monitoring well in the area where the contaminants were identified. Results from a single sampling event were nondetect; however, there is some concern because the Site is underlain with karst topography, which is not sufficient to determine if contamination has/has not migrated to the groundwater. The proposed action will eliminate or mitigate the possibility of potential leaching of these contaminants into the local groundwater system.

300.415(b)(2)(v) – Weather conditions that may cause hazardous substances, pollutants or contaminants to migrate or be released.

Contaminated soils at the Site may migrate from its current buried location in the future. The contaminated soil is currently buried between a pond and the top of a drainage way that empties into Caulks Creek, a major creek that runs through multiple subdivisions. Since the waste is buried at shallow depths, it is possible heavy rains could cause the hillside to become unstable, releasing the buried waste into the drainage way.

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

No other federal or state authorities exist which will allow response actions to be taken at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions described in this action memorandum amendment, may continue to present an imminent and substantial endangerment to public health or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Response actions in this Action Memorandum include excavation of soils contaminated with lead, VOCs and SVOCs soils that exceed the April 2012 RSL Summary Table. All visibly stained and/or odorous soils with high photoionization detector readings will be excavated and

removed from the Site. Once this is completed, soil samples from the base of the excavation will be submitted for analysis to ensure that most or all contaminants above RSLs have been excavated and removed from the Site. Once the analytical results confirm that levels are below RSLs, the excavated area will be backfilled to original grade with clean material. The estimated volume of soil to be removed is 1,000 cubic yards.

In addition, the EPA shall collect soil samples from the excavated soils to conduct the Toxicity Characteristic Leaching Procedure (TCLP) analysis. Soils that exceed the TCLP limits for lead and other metals will be treated with an appropriate chemical and resampled until the levels are below appropriate TCLP limits.

Excavated areas will be backfilled with soil material matching the preremoval grade. The backfilled areas will then be revegetated by planting some trees and grass to prevent erosion and restore the property to preresponse condition.

2. Action/cleanup level

To the extent practicable, soils above the EPA's April 2012 RSL Summary Table will be excavated, treated if TCLP analysis fails and disposed of at an acceptable soil repository.

3. Contribution to remedial performance

Based upon information currently available, no long-term remedial actions are anticipated. The proposed actions will mitigate the threat posed by hazardous substances released or threatened to be released at the Site.

4. Engineering Evaluation/Cost Analysis

Since this is a time-critical removal action, an Engineering Evaluation/Cost Analysis was not developed.

5. Applicable or relevant and appropriate requirements

Section 300.415(j) of the NCP provides that fund-financed removal actions under section 104 of and removal actions pursuant to CERCLA section 106 shall, to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements under federal environmental or state environmental facility siting laws. The following specific applicable or relevant and appropriate requirements have been identified for this action:

Federal

- Subtitle D of the RCRA, section 1008; section 4001, *et seq.*; 42 U.S.C. § 6941, *et seq.*; state or regional solid waste plans and implementing federal and state regulations.
- Occupational Safety and Health Act, 29 CFR part 1910 will be applicable to all actions.

- Subtitle C of RCRA, 42 U.S.C. section 6901, *et seq.*; 40 CFR part 260, *et seq.* and implementing federal and state regulations for contaminated soils that exhibit the characteristic of toxicity and are considered RCRA hazardous waste. Any lead-bearing wastes exceeding the TCLP regulatory threshold will undergo treatment in accordance with the requirements of RCRA.
- 40 CFR part 122, section 122.26, National Pollution Discharge Elimination System's storm water discharge regulations may be relevant and appropriate for management of storm water runoff from the repository.
- 49 CFR parts 107 and 171-177, Department of Transportation hazardous material transportation regulations may be relevant and appropriate for transportation of the contaminated soils to the landfill.

State

- 10 CSR 10, section 6.010 and 6.170, ambient air quality for particulates and lead particulate matter beyond a point source. If needed, the EPA will use dust suppression activities such as watering to prevent dust migration.
- 10 CSR 20-010, construction and operating permits. Not required for CERCLA actions conducted on-site.
- 10 CSR 20-6.200, storm water discharge. The EPA will minimize storm water runoff, particularly in the area of excavation. Any storm water discharge related to the excavation will meet state standards to the extent possible.
- 10 CSR 24-3.010 reporting hazardous spills to the state. Hazardous material releases will be reported to the state as required.
- 10 CSR 80-5.010 (2), solid waste landfill acceptance of waste for which designed. The EPA will work with MDNR officials to obtain the proper landfill acceptance for potential waste streams that are generated.

6. Project schedule

Response activities are anticipated to begin within 30 days of the signing of this Action Memorandum. It is expected that soil excavation and regrading will take two weeks to complete.

B. Estimated Costs

Extramural Costs	\$127,125
20 Percent Contingency	<u>25,425</u>
Removal Ceiling	\$152,550

EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.

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

Delayed action will result in a continued threat to public health, or welfare, or the environment, and in particular will continue to expose current and future residences to the contaminated soils exceeding federal action levels.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

The total costs for this removal action, based on full-cost accounting practices that will be eligible for cost recovery, are estimated to be \$207,284.

Direct Extramural Costs	\$152,550
Direct Intramural Costs	10,000
Indirect Costs (27.52 percent)	44,734
Total Costs	\$207,284

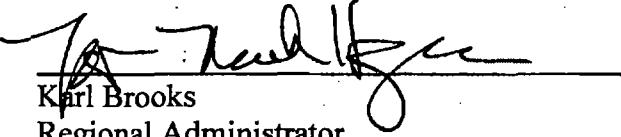
Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost-accounting methodology effective October 2, 2000. These estimates do not include prejudgment 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.

IX. RECOMMENDATION

This decision document represents the selected removal action for the contaminated soils and drinking water at the 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 I recommend your approval of this proposed removal action. The removal ceiling, if approved, will be \$152,550. This amount comes from the Regional Removal Allowance.

Approved:


Karl Brooks
Regional Administrator

Date

9/13/12

Attachments



Callahan Subsite of the NPL Ellisville Site

Google

