

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**\$250,000 EMERGENCY ACTION MEMORANDUM**

**Date:** December 11, 2009

**Subject:** Action Memorandum for a Removal Action at the Inverness Landing Mercury Spill site pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104

**From:** Karen Buerki, On-Scene Coordinator *KB*  
Emergency Response and Removal Branch

**Thru:** Matt Taylor, Chief  
Emergency Response Section

**To:** Site File  
Chris Masterson, REOC  
Clay James, ADEM  
Lisa Boynton, Regional Coordinator, EPA-HQ

## **I. Purpose**

The purpose of this memorandum is to document the decision to initiate emergency response actions described herein for the Inverness Landing Mercury Spill Site located at 3113 Inverness Lane, Birmingham, Shelby County, Alabama, pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104. Environmental Protection Agency (EPA) Region 4 delegation of authority may be found in "Delegation 14-2. Response, authority to obligate CERCLA funding in the amount of \$250,000 to initiate Removal Actions where site conditions constitute an emergency has been delegated to the On-Scene Coordinator (OSC)."

## **II. Site Information**

### **A. Site Description**

<b>Site Name:</b>	Inverness Landing Mercury Spill		
<b>Superfund Site ID (SSID):</b>	B454	<b>NRC Case No:</b>	925904
<b>CERCLIS No:</b>	ALN000410506	<b>Site Location:</b>	Birmingham, AL
<b>Lat/Long:</b>	33.4108160/-86.7021700	<b>NPL Status:</b>	Non-NPL
<b>Removal Start Date:</b>	12/05/09		



## **B. Background**

### **1. Removal Site Evaluation**

Telephone Duty Officer Ben Franco received a call from the Alabama State Health Department on December 2, 2009, reporting the discovery of mercury poisoning and a suspected spill in an apartment at 3113 Inverness Lane in Shelby County, Birmingham, Alabama.

OSC Karen Buerki and START contractor TN&A/OTIE were dispatched to evaluate the incident and take appropriate action. Initial assessment of the residence showed mercury vapor concentrations up to 8950 ng/m<sup>3</sup> in the living room and 256,000 ng/m<sup>3</sup> in the master bedroom walk-in closet. The residents reported that Pyramid Carpet Cleaning had steam cleaned their carpeting just before Thanksgiving. Based upon OSC Buerki's observations and monitoring results from both Jerome and Lumex mercury vapor analyzers, OSC Buerki determined that conditions at the Site meet criteria listed under 40 CFR Part 300.415 for initiation of an emergency removal action.

### **2. Physical Location and Site Characteristics**

The Site consists of a single family apartment. It is located at 3113 Inverness Lane in Shelby County, Birmingham, Alabama.

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

The material known on site is elemental mercury which is a CERCLA hazardous substance. At approximately 70 ° F it becomes a vapor which can travel through small openings to surrounding apartments and the environment. In its elemental form it may also be tracked on shoes and clothing.

## **III. Threats to Public Health, Welfare, or the Environment**

### **A. Nature of Actual or Threatened Release of Hazardous Substances, Pollutants or Contaminants**

Elemental mercury was spilled in a single family apartment and tracked throughout the residence. Residents have documented mercury poisoning and are continuing to be exposed to very high levels of mercury vapor.



**B. Applicable factors which were considered in determining the appropriateness of a removal action:**

x 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."

Elemental mercury is a hazardous substance. Elemental mercury was spilled in the residence and tracked throughout the residence. Residents are being exposed to very high levels of mercury vapor.

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

At this time there are no State mechanisms that are able to respond to this incident with the resources needed to assume the cleanup.

**IV. Selected Removal Action and Estimated Costs**

**A. Situation and Removal Activities to Date**

1. Current Situation

The weather has been partly cloudy and rainy with low temperatures in the 30s ° F and high temperatures in the 60s ° F. There has been no media activity.

2. Removal Activities to Date

a. Federal Government/Private Party

Based upon the amount and location of the elemental mercury, EPA and START and ERRS contractors have been activated to stabilize conditions at the Site. Emergency removal activities include, but are not limited to, the following:

- i. Preparation of a Health and Safety Plan
- ii. Assessment of the levels of mercury vapor in the residence.
- iii. Segregation of highly contaminated items for disposal.
- iv. Recovery of spilled elemental mercury.

- v. Heating, treating, and ventilation of contaminated items and surfaces, as necessary.
- vi. Completing an inventory items for disposal and providing reimbursement and relocation expenses, as necessary.
- vii. Providing analytical for disposal profiling.
- viii. Providing off-site disposal, treatment, or recycling of elemental mercury and mercury contaminated material, as necessary.
- ix. Performing demolition, as necessary, to remove free mercury and providing for restoration of the associated damage, as necessary.

b. State/Local

State OSC Clay James of the Alabama Department of Environmental Management (ADEM) requested EPA's assistance with the Site. ADEM and the Alabama State Health Department were the first responders.

3. Enforcement<sup>1</sup>

The PRP is the owner of the apartment complex. They cannot perform the proposed response promptly. There have been no enforcement actions initiated by EPA or the State.

**B. Planned Removal Actions**

1. Proposed Action Description

The specific tasks involved in the proposed response to the threats include:

- i. Preparation of a Health and Safety Plan
- ii. Assessment of the levels of mercury vapor in the apartment.

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<sup>1</sup> Enforcement strategy is not part of the Action Memo for purposes of NCP consistency.



- iii. Segregation of highly contaminated items for disposal.
- iv. Recovery of spilled elemental mercury.
- v. Heating, treating, and ventilation of contaminated items and surfaces, as necessary.
- vi. Completing an inventory items for disposal and providing reimbursement and relocation expenses, as necessary.
- vii. Providing analytical for disposal profiling.
- viii. Providing off-site disposal, treatment, or recycling of elemental mercury and mercury contaminated material, as necessary.
- ix. Performing demolition, as necessary, to remove free mercury and providing for restoration of the associated damage, as necessary.

Any off-site disposal will be in compliance with the CERCLA off-site disposal policy. The rationale for choosing the response action, supporting data for the decision, and the technical feasibility and probable effectiveness of the proposed action may be found in the logbook kept by the START contractor during the Removal Site Evaluation, the July 21, 2005, memorandum "Revised Mercury Removal Action Levels at ERRA Sites", and the OSC Mercury Field Operations Guide dated January 2008.

## 2. Contribution to Remedial Performance

The proposed actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action at the site.

## 3. ARARs

Removal actions conducted under CERCLA are required to attain ARARs to the extent practicable. In determining whether compliance with ARARs is practicable, the OSC may consider appropriate factors, including the urgency of the situation and the scope of the removal action to be conducted.

The Federal ARARs identified for the site include:

- \_x\_ RCRA Land Disposal Restrictions
- \_x\_ RCRA Treatment, Storage and Disposal
- \_x\_ RCRA Transportation
- \_X\_ DOT



\_x\_ OSHA

The State has not provided any ARARs.

#### 4. Project Schedule

The removal action is anticipated to be completed within two weeks of the Start Date listed in Section II of this document.

#### C. Estimated Costs<sup>3</sup>

##### Extramural Costs:

	<u>Ceiling</u>	<u>Costs to Date</u>
ERRS - WRS Compass .....	\$135,000	\$ ,
START - TN&A/OTIE .....	\$70,000	\$ ,
Extramural Contingency (20%) .....	<u>\$41,000</u>	<u>\$ ,</u>
<b>TOTAL, Extramural Costs .....</b>	<b>\$246,000</b>	<b>\$ ,</b>
<b>TOTAL REMOVAL PROJECT CEILING .....</b>	<b>\$246,000</b>	<b>\$ ,</b>

#### V. Expected Change in the Situation Should Action be Delayed or Not Taken

A delay in action or no action at this Site would increase the actual or potential threats to the public and the environment. The worst-case scenario is tracking of the elemental mercury to other residences.

#### VI. Outstanding Policy Issues

None

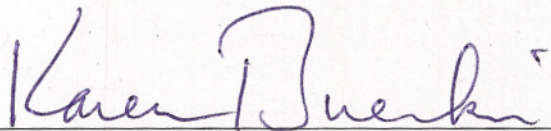
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<sup>3</sup> Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting 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.

## VII. Approval

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan. This decision is based on the administrative record for the site.

Conditions at the site meet the NCP section 300.415(b) criteria for a removal and through this document I am approving the proposed removal actions. The total project ceiling is \$246,000, of which, an estimated \$135,000 may be funded from the Regional removal advice of allowance.



Karen Buerki, OSC  
U.S. EPA, Region 4

12/11/09  
Date