

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Sycamore Point Mercury - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #6
Continuation of Emergency Removal Actions at Apache Trail
Sycamore Point Mercury

Woodstock, GA
Latitude: 34.1514970 Longitude: -84.5619190

To:
From: Kevin Eichinger, OSC
Date: 3/17/2015
Reporting Period: March 12, 2015 through March 17, 2015

1. Introduction

1.1 Background

Site Number:	B45R	Contract Number:	
D.O. Number:		Action Memo Date:	3/10/2015
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	2/18/2015	Start Date:	2/18/2015
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response to an uncontrolled release of elemental Mercury.

1.1.2 Site Description

See POLREP # 1

1.1.2.1 Location

See POLREP # 1

1.1.2.2 Description of Threat

See POLREP # 1

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP # 1

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Downsizing operations. All waste sample results will be in by Wednesday. Waste load-out is planned to occur on March 18th or March 19th with back fill and driveway base installation starting on Thursday or Friday and continuing through the weekend. The goal is to allow the property owners unrestricted access to the property starting on the weekend. Subcontractors will then install landscaping, repair the deck and restore the sections of the lower level living space that were demolished.

On March 12, met with the Cherokee County Department of Health on-site today. Coordinated with ATSDR on clearance levels and scenarios. Met with the property owner and discussed the project schedule. Property owner has secured alternative housing through March 21, 2015. Property owner is still working on taking custody of any elemental mercury that was removed from the property by the juveniles.

EPA and START completed clearance screening in both the upper and lower level living spaces on March 15, 2015. Drafted a clearance letter request to ATSDR and GA Public Health.

Response crews are currently removing contaminated soil and contaminated concrete. A new driveway will be installed and clean topsoil and sod will be installed in the soil excavation areas. The property owners will not reoccupy the residence until the exterior contamination has been removed. This work will be completed this week. The property owners plan to reoccupy the house on Saturday, March 21st.

On March 16, met with the juvenile involved in the initial release of the mercury. He took me to the area in wood behind the house where he buried additional mercury. Found three 16-fluid ounce glass jars filled with elemental mercury. Believe that all the mercury involved in the release has now be recovered.

March 12, 2015

Basement Removal Activities:

- Installed the floor leveler in the lower level living space. The floor leveler and heating and venting operations significantly reduced the mercury vapor levels in the lower level living space. Levels during heating averaged around 5000 ng/m3. Applied an epoxy sealer to the HVAC equipment room. Applied additional coats of epoxy sealer on the garage floor and walls. The garage is ready for clearance testing. Average screening levels in the garage were less than 1000 ng/m3.
- Heating and venting operations began at approximately 1700 hours in the lower level living space and will continue through the night. HVAC system is currently running during the heating/venting operation.

Upstairs Screening Levels and Removal Activities:

- Item removal was completed in the master bathroom, bedroom #1 and bedroom #2. Item removal operation is complete.
- ERRS crews completed three washes with the mercury removal solutions and a wet/dry vacuum with a squeegee attachment in the all remaining spaces in the upper level as well as identified hotspots. A fourth treatment was also completed using a mercury decontamination solution in all of these areas.
- The upper deck was successfully decontaminated. One hotspot area was retreated.
- Crews removed the exterior stair treads.
- Heating and venting operations began at approximately 1700 hours and will continue through the night. HVAC system is currently running during the heating/venting operation. Levels during heating averaged around 8000 ng/m3. These may be due to the remaining vapors from the numerous items that screened above 50,000 ng/m3 that were removed today.

Item Decontamination Activities:

- Moved bagged items from the upper level master bedroom, master bathroom, bedroom #1 and bedroom #2 into the heat tents for decontamination. Numerous items from these spaces screened greater than 50,000 ng/m3 and were disposed of unless they are deemed to be sentimental.
- Disposed of property identified by the property owner or items that exceeded 50,000 ng/m3.
- Approximately 650+ bags have been generated.
- Item removal operations has been completed.

Ma March 13, 2015

General Activities:

- Relocated PPE donning/doffing and staging areas in preparation for soil excavation and driveway removal.
- Decontaminated equipment that will be returned to the rental company.

Basement Removal Activities:

- Sealed the remaining walls in the lower level living space.
- Applied an epoxy sealer to the lower level closet that will not be tiled.
- Applied an epoxy sealer to remaining walls in the lower level.
- Sealed small remaining areas of the garage floor.
- Completed a test clearance screening. The average mercury vapor concentration in the lower levels were around 3000 - 4000 ng/m3. Consulted with Glenn Adams from Region 4 Superfund Technical Support Services Branch. Will install a temporary exhaust system in the basement to remove residual mercury vapor. Met with the property owner and discussed this option. She agreed to leave the unit running for 24 hours a day/7 days a week. OSC committed to returning in approximately 6 months to evaluate the mercury vapor concentrations and determine if temporary ventilation system needs to continue or can be removed.

Upstairs Screening Levels and Removal Activities:

- Completed decontamination and treatment operations in hotspot locations.
- Completed a test clearance screening. The average mercury vapor concentration in the lower levels was between 2700 and 3000 ng/m3.
- Heating and venting operations continued.

Item Decontamination Activities:

- Re-screened bagged items for release, continued heat treatment or disposal.
- Removed several of the lower level heat tents in preparation for soil excavation and driveway removal.

Road and Driveway Removal Activities:

- Decontaminated and treated the remaining road surface. Confirmation of decontamination

effectiveness was determined by a transfer test with footwear. Area was cleared when the footwear screened at less than 6000 ng/m3 after walking the area.

March 14, 2015

General Activities:

- Decontaminated additional equipment.

Basement Removal Activities:

- Installed the temporary exhaust fan.

Upstairs Screening Levels and Removal Activities:

- Completed decontamination and treatment operations in additional hot spot locations.
- Decontaminated and treated the rear deck.

Item Decontamination Activities:

- Re-screened bagged items for release, continued heat treatment or disposal.
- All items have been relocated to the upper level heat tents.

Road and Driveway Removal Activities:

- Decontaminated and treated the section of the driveway that was not sealed with the paint. The section with the paint will be removed due to the imbedded Hg contamination. This section will be removed after the soil excavation is complete. Confirmation of decontamination effectiveness was determined by a transfer test with foot wear. Area was cleared when the foot wear screened at less than 6000 ng/m3 after walking the area.

Soil Excavation Activities:

- Screened the property, as well as adjacent properties and areas along Apache Trail to determine the extent of the soil excavation. Screen indicated the need excavate soil in the front yard, ~1' on both side of the driveway, a 20' x 10' area in a gully where the drive drained to, and sections of soil along the roadway. These areas fail screening or have visible mercury contamination. Will remove up to six inches of soil and restore with clean soil and sod.
- Began hand digging in areas that will not be accessible by the mini-excavator.

Community Involvement Activities:

- Continued meeting with property owners to discuss the status of the project, schedule of work and listened to/addressed concerns.

March 15, 2015

EP EPA and START completed clearance screening in both the upper and lower level living spaces on March 15, 2015. The clearance screening was completed over a five hour period. Temperatures inside the house ranged between 65F and 70F.

Upper Level Living Space:

- Five-hour upper level average: 1904 ng/m3
- Bedroom #1 average: 1752 ng/m3
- Bedroom #2 average: 1551 ng/m3
- Master Bedroom average: 1819 ng/m3

Lower Level Living Space:

- Five-hour lower level average: 3159 ng/m3
- Bedroom #3 average: 2896 ng/m3
- Bedroom #4 average: 3005 ng/m3

There are no young children living in the residence. A young child occasionally visits. The property owners agreed that no young children will be permitted in the lower level living space until after EPA reevaluates the need for the exhaust fan. The property owners committed to running the exhaust fan. The exhaust fan is drawing air from the upper level living space down to the lower level living space through either open doors or vents in the walls that were installed as part of the project.

ERRS crews continued hand digging operations, assisted with personal item heat treatment and decontamination additional unneeded equipment.

March 16, 2015

Basement Removal Activities:

- Basement removal activities are complete.

Upstairs Screening Levels and Removal Activities:

- Upper level removal activities are complete.

Item Decontamination Activities:

- Continued heat treating personal property. Identified additional items for disposal. Released items

that tested less than 6000 ng/m3.

Road and Driveway Removal Activities:

- Road decontamination activities are complete. Confirmation of decontamination effectiveness was determined by a transfer test with foot wear. Area was cleared when the foot wear screened at less than 6000 ng/m3 after walking the area.
- Began removal of sections of the driveway that cannot be decontaminated.

Soil Excavation Activities:

- Completed soil excavation along both sides of the driveway, in the front yard and in a gully area where the driveway drained. Conducted confirmation mercury vapor screening in these areas. The only remain areas of soil excavation are the sections along Apache Trail and the area under the current soil stockpile.
- The area under the deck still had significant elemental mercury contamination. Removed the visible mercury, decontaminated the weir blocks that are supporting and deck and excavated roughly 6 inches of soil.

March 17, 2015

Item Decontamination Activities:

- Continued heat treating personal property. Identified additional items for disposal. Released items that tested less than 6000 ng/m3. Items that screen between 6000 ng/m3 and 10,000 ng/m3 or were deemed sentimental will be left with the property owner to continue heating and venting treatment. OSC will provide instruction to the property owner on how to handle the heating and venting once response crews demobilized from the site.

Road and Driveway Removal Activities:

- Removed the majority of the driveway that cannot be decontaminated.

Soil Excavation Activities:

- The area under the deck still had elemental mercury contamination. Removed additional elemental mercury from under the deck. Area will be back filled with a least six inches of clean soil.
- Excavated additional soil were the hole where the mercury was buried behind the house.
- Removed soil along the walkway from the lower level up to the upper level deck.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

624 Apache Trail
Woodstock, GA 30189

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Non RCRA Solid Waste	Solid	11 - 30 yard dumpsters 1 - 20 yard dumpster			Landfill
Non RCRA Soil	Solid	90 cubic yards			Landfill
RCRA Hazardous Mercury Contaminated Debris	Solid	4 cubic yard boxes 1 - 55 gallon drums			Landfill
Elemental Mercury	Solid	75 pounds		Reclamation	
Household Hazardous Waste	Solid/Liquid	5 - 55 gallon drums			Landfill/Incineration

2.2 Planning Section

2.2.1 Anticipated Activities

- Continue clean-up actions at contaminated homes
- Continue CIC coordination with community

2.2.1.1 Planned Response Activities

- Finish driveway removal.
- Excavate areas along Apache Trail that fail the mercury screening or has visible mercury contamination.
- Load out soil and ship for disposal. Soil is RCRA non-hazardous by TCLP. It will be sent to the Pine Bluff Landfill.

- Install crush and run driveway base.
- Back fill excavations with clean topsoil.
- Shipped off staged concrete and other debris off for disposal. It is RCRA non-hazardous by TCLP. Waste will be sent to the Pine Bluff Landfill.
- The response generated approximately five cubic yard of mercury contaminated soil and solidified decontamination solutions that failed TCLP or have visible contamination. This will be shipped to the EQ Michigan hazardous waste landfill in cubic yard boxes. Will arrange for shipment when waste profiling is complete.
- Contacted the EPA Region 4 RCRA Enforcement Branch to assured that their approval of the vendor being used for recycling of the recovered elemental mercury is complaint with the 2008 Mercury Export Ban Rule.

2.2.1.2 Next Steps

- Complete activities listed above.
- Restore the site.
- Replace essential property

2.2.2 Issues

- Approximately 27 fluid ounces of elemental mercury was been recovered to date. Property owner stated that 2 1/2 gallon containers of elemental mercury was believed to have been stored in the residence.
- The mercury contamination of the residence, surrounding lot and roadway is extensive.
- An additional 48 fluid ounces of elementary mercury was found buried behind the house.
- The amount of free elemental mercury found under the deck continues to be extensive.

2.3 Logistics Section

Logistical support is being provided by ERRS, START and Q-Solutions/EPA Warehouse contractors and EPA personnel.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

OSC Eichinger served as the Safety Officer with START and ERRS each providing an Assistant Safety Officer. Activities in the the Apache Trail residence require Level C personal protective equipment if ambient mercury vapor concentrations exceed 0.025 mg/m3. Level B personal protective equipment is required if ambient mercury vapor concentrations exceed 0.625 mg/m3.

2.5.2 Liaison Officer

OSC Eichinger coordinated with Local and State Response Partners.

2.5.3 Information Officer

EPA CIC's canvassed the surrounding homes to pass out a fact sheet and inform neighbors of future road cleanup operations later this week. OSC met with neighbors adjacent to the site to discuss the current plans and timeline. Surrounding community is very concerned about the situation.

3. Participating Entities

3.1 Unified Command

A unified command structure was established for this incident with the following agencies:

- US EPA
- Georgia Environmental Protection Division
- Georgia Department of Public Health

3.2 Cooperating Agencies

The following agencies are providing support:

- Cherokee County Schools
- American Red Cross
- Agency for Toxic Substance Disease Registry (ATSDR)

4. Personnel On Site

The following personnel were on-site at various times throughout this reporting period:

- EPA OSC - 1
- START - 0
- ERRS - 4

5. Definition of Terms

Abbreviations and acronyms are spelled out within the text of the Pollution Report. Definitions will be added to this section as necessary.

ATSDR - Agency for Toxic Substances Disease Registry
EPA - Environmental Protection Agency
OSC - On- Scene Coordinator
GA EPD - Georgia Environmental Protection Division
NCP - National Oil and Hazardous Substances Pollution Contingency Plan
NRC - National Response Center
CFR - Code of Federal Regulations
RP - Responsible Party
NOFI - Notice of Federal Interest
EMA - Emergency Management Agency
ERRS - Emergency Rapid Response Service
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
FPN - Federal Project Number
TCLP - Toxicity Characteristic Leaking Procedure
RCRA - Resource Conservation and Reclamation Act

6. Additional sources of information

6.1 Internet location of additional information/report

Documents, photographs, maps and other important/pertinent information can be found at <http://epaossc.org/sycamorepointmercury>.

6.2 Reporting Schedule

Pollution Reports (POLREP) will be drafted every three days. This schedule will change and be less frequent as the emergency response progresses. Please note that POLREP must be review and approved prior to publication, so there may be a delay.

7. Situational Reference Materials

Documents, photographs, maps and other important/pertinent information can be found at <http://epaossc.org/sycamorepointmercury>.