

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Shirway Court Mercury Spill - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Initiation of Emergency Response Actions
Shirway Court Mercury Spill
B4A8
Lexington, SC
Latitude: 33.9580150 Longitude: -81.1985970

To:
From: Jose Negron, On Scene Coordinator
Date: 7/2/2010
Reporting Period: 0700 7/2/2010 through 0700 7/3/2010

1. Introduction

1.1 Background

Site Number:	B4A8	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	7/2/2010	Start Date:	7/2/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	SCDHEC
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

This is a response to a mercury spill in a residential home reported to the EPA national response center on July 1, 2010. The incident was reported by the South Carolina Department of Health and Environmental Control (SCDHEC). SCDHEC collected initial mercury readings in the residence, confirming the mercury spill.

1.1.2 Site Description

Single family manufactured residence located within the City Limits of the City Of Lexington, South Carolina. Residence is located in a residential neighborhood comprised of single family homes and mobile homes. The reported source of the mercury is from an old blood pressure monitor.

1.1.2.1 Location

The site is located at 159 Shirway Court in Lexington, South Carolina. The latitude for the site is 33.957661, and the longitude is -81.198990.

1.1.2.2 Description of Threat

The mobile home is currently occupied by the homeowner, her 22 years old and 5 months pregnant, a 20 year old male, and a 13 years old female. Initial readings taken by SCDHEC with a Lumex mercury vapor analyzer were 50 ug/m3 at the front door, 220 ug/m3 at the point of release in the 13 year old girl's bedroom, and 35 ug/m3 under the mobile home. Elemental mercury was observed under the carpet in the bedroom of the 13 year old girl. The residences will be staying elsewhere while mitigation efforts take place at their home.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA coordinated with SCDHEC to determine the extent of threat in the residence.

2.1.2 Response Actions to Date

- START coordinated with SCDHEC to perform a baseline mercury vapor air level reading inside the

home. START entered the home with a Jerome 431X and SCDHEC followed with a Lumex.

- Mercury vapors detected in the home ranged from non-detect to 456 ug/m3 with the Jerome 431X and from 2.3 ug/m3 to 50 ug/m3 with the Lumex, at which point the Lumex maxed out and could not read any higher.
- Three family vehicles were tested for mercury along the floor boards. The maximum level detected with the Lumex was 0.171 ug/m3.
- Items collected from locations with high concentrations of mercury vapors were contained in plastic bags and placed outside in the sun to allow mercury to vaporize from the items. Items lower than 10 ug/m3 were released to the residences.
- ERRS began the decontamination process after readings were obtained. Mercury was collected from the 13 year old girl's bedroom using a HEPA vacuum, while other areas of the home were heated to allow for vapors to escape.
- After vacuuming the affected bedroom, ERRS applied HgX along the floor board of the room and adjoining closet.
- The carpet, carpet pad, mattress, box spring, comforter, and several other items were removed for disposal.
- Once the heating process was complete, the home was allowed to ventilate in an effort to reduce the mercury concentrations throughout the home.

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

N/A.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

ERRS will continue mercury recovery and mitigation operations in the residence. Contaminated items will be collected and shipped to an approved disposal facility.

The CDC and the SC Poison Control center were informed of the situation of the Holtzhauer family. Each family member will receive medical attention to determine their exposure while living in the contaminated residence. In addition to the family, faily pets will also be taken to a veterinarian to determine their mercury exposure.

2.2.1.1 Planned Response Activities

- START will take mercury readings first thing in the morning after the house has been left to ventilate overnight to allow for mercury vapors to escape.
- After mercury readings are taken, ERRS will continue to bag items from the home and allow these items to sit in the sun for mercury to vaporize.
- START will collect mercury readings from the head space of each bag to determine which items can be salvaged and which are too contaminated to return to the home.
- ERRS will continue the heating and ventilation process within the home.

2.2.1.2 Next Steps

Continue heating and ventilation.
Remove contaminated wood flooring.
Remove carpet from other rooms.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$195,000.00	\$5,000.00	\$190,000.00	97.44%

START	\$50,000.00	\$2,000.00	\$48,000.00	96.00%
Intramural Costs				
USEPA - Direct	\$50,000.00	\$2,000.00	\$48,000.00	96.00%
Total Site Costs				
	\$295,000.00	\$9,000.00	\$286,000.00	96.95%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

The START PM and ERRS PM are responsible for safety measures taken at the site. A site specific HASP is available on site should any safety concerns arise.

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

EPA will continue to work with SCDHEC to ensure the family receives medical attention.

4. Personnel On Site

EPA - 2
 START - 2
 ERRS - 4

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

EPA will continue to post POLREPS regarding site activities and progress at www.epaosc.org/ShirwayCourtMercury.

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.