

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
LaFayette High School Mercury Release - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Final POLREP
LaFayette High School Mercury Release
B4C9
LaFayette, GA
Latitude: 34.7200781 Longitude: -85.2578307

To: Matt Taylor, USEPA R4 ERRB

From: Matthew Huyser, OSC

Date: 4/4/2011

Reporting Period: 11/14/2010 - 11/23/2010

1. Introduction

1.1 Background

Site Number:	B4C9	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/12/2010	Start Date:	11/12/2010
Demob Date:	11/14/2010	Completion Date:	11/23/2010
CERCLIS ID:	GAN000410628	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency

1.1.2 Site Description

See Initial POLREP dated 11/16/2010.

1.1.2.1 Location

The school is a one-story high school building with a student population of approximately 800. The facility is located outside of downtown LaFayette in a semi-rural neighborhood. Mercury has impacted a bus, the band room, the assembly hall, a bathroom, two classrooms, one mobile unit, and three janitor's closets.

1.1.2.2 Description of Threat

Mercury is a CERCLA hazardous substance that can be harmful to humans if ingested or inhaled; it readily vaporizes at room temperature and can easily be transported between locations where it can cross-contaminate indoor spaces or personal belongings. According to ATSDR ToxFAQs (March 2001): "Exposure to very high levels of metallic mercury vapor can cause brain, kidney, and lung damage and may seriously harm a developing fetus. Exposure to mercury vapor concentrations high enough to produce such serious effects might also cause coughing, chest pains, nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation. Exposure to lower levels of airborne mercury for prolonged periods of time would produce more subtle effects, such as irritability, sleep disturbances, excessive shyness, tremors, coordination problems, changes in vision or hearing, and memory problems."

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On the afternoon of 11/12/2010, OSC Huyser and Walker County School staff measured for mercury vapor on the bottoms of shoes of approximately 115 students (students that had utilized the affected classrooms) and approximately 95 staff. Eight pairs of shoes (four students and four staff) with mercury vapor readings in excess of 1000 ng/m³ were removed, bagged, and placed in the sun to measure the confined area vapor levels.

After the school had been vacated for the day, EPA conducted an initial screening of mercury vapor readings in several areas of the school to assess the level of potential contamination and later expanded the assessment to include all rooms of the high school as well as a school bus. On 11/12/2010 and 11/13/2010, EPA visited five residences whose occupants (students or faculty) may have come in close

contact with the mercury. The results of these efforts are presented in the Operations section of the Initial POLREP.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On the afternoon of 11/12/2010, OSC Huyser and Walker County School staff measured for mercury vapor on the bottoms of shoes of approximately 115 students (students that had utilized the affected classrooms) and approximately 95 staff. Eight pairs of shoes (four students and four staff) with mercury vapor readings in excess of 1000 ng/m³ were removed, bagged, and placed in the sun to measure the confined area vapor levels.

After the school had been vacated for the day, EPA conducted an initial screening of mercury vapor readings in several areas of the school to assess the level of potential contamination; the assessment was later expanded on 11/14/2010 to include all rooms of the school as well as a school bus.

After the initial assessment on 11/13/2010, OSC Huyser determined that Mobile Unit #2, Room 707, and 700 Boys Bathroom would have to be remediated for ongoing mercury vapor issues, in addition to disposal of the confiscated items in Room 604 storage closet (confiscated items consisted of book bags, mercury jars, shoes, a vacuum cleaner, and other cleaning supplies). OSC Buerki assumed control of the response on 11/14/2010, replacing OSC Huyser. Assessment activities were expanded to include all rooms of the school and the following locations were added to the list of places that would have to be remediated: the Band Room, the Assembly Hall, two Janitor's Closets, the Janitor's Break/Wash Room, and a school bus.

2.1.2 Response Actions to Date

EPA mobilized heating and ventilation equipment from the EPA R4 G2 warehouse on 11/13/2010; Walker County Schools mobilized ventilation equipment to the site as well. Initial heating of Mobile Unit #2 and the residence on McLemore Street began on 11/13/2010.

Walker County Schools hired response contractor, Clean Harbors, to perform the recommended remediation activities. The impacted rooms and school bus were quarantined from use during the school week from 11/15/2010 to 11/19/2010 and cleanup activities were conducted from 11/19/2010 to 11/22/2010.

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

OSC Huyser visited Lafayette High School on 11/23/2010 to inspect the progress of cleanup efforts and confirm that remediation measures used by contractors were successful. Overall, the rooms that were inspected showed no sign that elemental mercury remained and remediation efforts appeared to have been sufficient. The following table details the data that was collected:

Location	Concentration (ng/m ³)	Information
Band Room	<900 all areas	All areas, including breathing zone and previously known hotspots on the floor, showed concentrations below 900 ng/m ³ with no peaks
700 Hall Boy's Bathroom	<900 breathing zone Peak of 2000 at floor drain and 3000 at foot of partition	Breathing zone levels remained below 900 ng/m ³ ; peaks were found immediately above the floor drain and near the foot of a partition, but these levels are below the personal property limit of 5000-10,000 ng/m ³ and well below the value of >50,000 ng/m ³ found before cleanup was initiated
Room 707	<800 breathing zone Peak of 4000 at floor near release point	Breathing zone levels remained below 800 ng/m ³ ; one peak of 4000 ng/m ³ was found on the floor in the back corner where a release point was believed to be, but it falls below the personal property limit of 5000-10,000 ng/m ³ and below a value of 14,000 ng/m ³ found before cleanup was initiated
Mobile Unit #2	<1000 breathing zone Peak of 2000 at small scrap of leftover carpet	Breathing zone levels remained below 1000 ng/m ³ ; one peak of 2000 ng/m ³ was found at a small scrap of carpet that would be removed before new flooring was installed
Cafeteria Janitor's Closet	5000 breathing zone <1000 near brooms/mops	Breathing zone levels were initially found above 5000 ng/m ³ but levels found at broom heads and mop heads were below 1000 ng/m ³ . The ventilation fan was found to be off; levels dropped below 1000 ng/m ³ after 30 minutes when the fan was turned on. OSC Huyser advised that the fan be left on indefinitely to ventilate the room
600 Hall Janitor's Closet	<1000 breathing zone Peak of 8000 at floor drain	Breathing zone levels remained below 1000 ng/m ³ ; a peak of 8000 was found at the floor drain but there is no reason to believe that it could cause cross-contamination and is well below the value of >50,000 ng/m ³ that was found before cleanup was initiated

2.2 Planning Section

2.2.1 Anticipated Activities

No further activities are anticipated.

2.2.1.1 Planned Response Activities

- Perform comprehensive assessment of mercury vapor and potential mercury sources; (COMPLETE)
- Segregate highly contaminated items for disposal (COMPLETE);
- Recover spilled elemental mercury, if found (COMPLETE);
- Heat and ventilate contaminated items, surfaces, and rooms, as necessary (COMPLETE);
- Perform for analytical sampling of materials for disposal (COMPLETE);
- Arrange for off-site disposal, treatment, and/or recycling of elemental mercury and mercury contaminated material (COMPLETE); and,
- Perform demolition, as necessary, to remove free mercury (COMPLETE).

2.2.1.2 Next Steps

n/a

2.2.2 Issues

A residential cleanup level of <1000 ng/m3 was used over an 8-hour time interval to clear the residence for reoccupation.

2.3 Logistics Section

N/A

2.4 Finance Section

2.4.1 Narrative

Walker County Schools hired response contractor, Clean Harbors, to perform the cleanup. EPA utilized START contractor Tetra Tech for initial response, assessment, and activity reporting.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
START	\$10,000.00	\$0.00	\$10,000.00	100.00%
Intramural Costs				
Total Site Costs	\$10,000.00	\$0.00	\$10,000.00	100.00%

* 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

N/A

2.6 Liaison Officer

N/A

2.7 Information Officer

2.7.1 Public Information Officer

Walker County Schools has issued a press release regarding the activities that have been conducted and where to obtain health-related information. Walker County Schools has coordinated with the Walker County Health Department to provide a telephone number to the public that will reach the Health Department to address questions or concerns from the public.

2.7.2 Community Involvement Coordinator

N/A

3. Participating Entities

3.1 Unified Command

N/A

3.2 Cooperating Agencies

EPA

LaFayette Housing Authority

Walker County Schools

4. Personnel On Site

EPA (1)

START (3)

Walker County Schools (5)

LaFayette Housing Authority (1)

5. Definition of Terms

N/A

6. Additional sources of information

6.1 Internet location of additional information/report

N/A

6.2 Reporting Schedule

N/A

7. Situational Reference Materials

N/A

POLREP #2 Last Updated 4/5/2011