

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Grafton Street Mercury Release - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I

Subject: **POLREP #2**
Grafton Street Mercury Response - Final PolRep
Grafton Street Mercury Release
01GP
Worcester, MA
Latitude: 42.2562350 Longitude: -71.7874870

To:
From: Catherine Young, OSC
Date: 4/5/2011
Reporting Period:

1. Introduction

1.1 Background

Site Number:	01GP	Contract Number:	EPW08061
D.O. Number:		Action Memo Date:	9/24/2010
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	9/24/2010	Start Date:	9/22/2010
Demob Date:	11/12/2010	Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Emergency Response-mercury release. Joint PRP and EPA lead for response and removal activities. EPA participated in a Uniformed Command with:

- Massachusetts Department of Environmental Protection (MassDEP)
- Worcester Emergency Management Agency (EMA)
- City of Worcester Public Health Dept
- City of Worcester Public School Dept Superintendent
- Massachusetts Department of Public Health (DPH)
- Massachusetts Department of Fire Services District Hazmat Team
- City of Worcester Fire Department

Significant Regional Response

- Regional START and ERRS contract assets mobilized.
- Regional Public Affairs and Community Involvement Coordinator.
- Emergency Planning and Response Branch personnel mobilized or supported.
- EPA Environmental Response Team (ERT) East & West personnel mobilized.
- US Coast Guard Atlantic Strike personnel mobilized.

1.1.2 Site Description

At 1745hrs on 22 September 2010, the EPA Phone Duty Officer received a call from MassDEP requesting assistance with a mercury release at an elementary school in Worcester, MA and possibly 6 privately owned residences.

MassDEP stated that on Tuesday, 21 September 2010, a student brought a pint sized jar of mercury into the elementary school and was seen showing it to a few of his classmates. The student and approximately four other students were handling and playing with the mercury and also allegedly pour some into the hands of a teacher who was not aware that it was mercury. The students were released from school during their normal schedule, potentially tracking mercury outside of the school property and into their homes. Administrative officials at the school became concerned the following morning after learning about the incident and realizing that the material was mercury. The school notified the local fire department. The Fire Department HazMat team, as well as the MassDEP responded to the scene and performed an initial evaluation.

Initial reports indicated that perimeter air monitoring of the school resulted in ambient air levels up to 40,000 nanograms/cubic meter of mercury. The residential source property of where the student lived who brought the mercury to the school is located a few streets away from the impacted school. Upon inspection of the driveway of the source property, droplets of mercury were observed on the ground and on a retaining wall. The City of Worcester has hired a cleanup contractor to initiate the clean up at the school. Cleanup of the source property is being conducted by EPA.

MassDEP has requested US EPA assistance for the evaluation of 6 privately owned residences, as well as the elementary school. OSC Young and START contractors have been deployed to the scene with monitoring equipment.

Media interest is anticipated to be high. EPA's Public Affairs office has been notified and is coordinating with the MassDEP Public Affairs office.

1.1.2.1 Location

Grafton St elementary school and immediately surrounding residential properties; 311 Grafton St, Worcester, MA 01604.

1.1.2.2 Description of Threat

Mercury exposure in elemental and vapor form via dermal and inhalation pathways to up to 236 school children, teachers and residents. Up to 179 residences potentially contaminated from source exposure at the school and source residence.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Initial readings at the school entrance were 40,000 ng/cubic meter. The screening of approximately 200 bags of student belongings indicated 179 potentially contaminated residential properties. These bags contained items with readings above 300ng/cubic meter. Bags with items between 300ng/cubic meter and 1,000ng/cubic meter were characterized as non-critical due to the agreed upon action levels. Screening of approximately 85 residences indicated 4 required cleanup with the remainder being cleared due to mercury levels below 1,000 ng/cubic meter. Four residences denied access and were referred to City of Worcester Public Health Dept who agreed to address the issue. Several residence at which EPA was not able to gain access to conduct air monitoring were transferred to MassDEP for follow up.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Incident Objectives:

- Provide analytical support to the school during the screening process for personal items potentially exposed to Hg. If concentration of personal items is above 300ng/m³, need to screen home of the student.
- Provide analytical support to the school for the screening of the school buses
- Obtain access agreements from the residents of potentially contaminated homes (personal items above 300ng/m³)
- Provide initial assessment of the extent of contamination at the residential properties
- Provide contamination removal services at residential properties where contamination has been confirmed (concentrations in home exceeds 1000 ng/m³)
- Disseminate information on mercury health risks in English and Spanish.
- Develop outreach materials for families impacted by mercury contamination.
- Develop plans and procedures to address personal possessions disposed due to contamination at the residential properties
- Conduct removal activities at the home where the source Hg had been stored and released

2.1.2 Response Actions to Date

Approximately 9 to 10 teams of 3 to 4 personnel consisting of available representatives from EPA, USCG, START, DEP, and the City of Worcester were deployed into the field to perform the initial screening at the residential properties.

- 81 homes cleared (no readings over 1000 ng/m³ anywhere in the home)
- 37 additional homes visited (no one home, denied access, etc.)
- 4 homes required some level and mercury abatement
- The source home where the Hg was originally stored and released required more extensive removal activities

Abatement consisted of:

- Extensive removal at the source home, including the excavation of contaminated soils in the yard, removal of carpet within the home, removal of clothing and other household items
- 1 drain replaced at 1 home
- Bags of clothing removed from 2 homes
- Overnight venting of a washing machine at 1 home

Other activities consisted of:

- Community involvement and public affairs support activities

- Assist Worcester Public Health/School officials with drafting letters to owners of bagged personal items
- Assist in a combined press releases
- Attend a City Council meeting and a public session with parents sponsored by the Superintendent to answer parents questions
- Community outreach, as necessary

Demobilization:

- Approximately half the on-site personnel at the end of the day on Sunday, 9/26/2010. Activities continued on-site through Monday, 9/27/2010, then demobilize site personnel. Final disposal of waste at the source property occurred on 11/12/2010. Continued to support activities off-site, mobilizing on-site for specific, scheduled activities with Worcester/MassDEP personnel from 9/28/2010 and on.

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

EPA coordinated with EPA's legal council to address issues with obtaining access from the property owners. The majority of properties are tenant occupied with the property owners living out of the immediate area. EPA's legal council approved access via tenant signed agreements due to the nature of the emergency.

Access to 85 residential properties for screening and cleanup was obtained. EPA was denied access to 4 residential properties. Initial work on identifying a PRP as defined by CERCLA is underway.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Mercury	Solid	10 Drums	004191067 FLE		Northland Envm
Mercury	Liquid	2 Drums	004191066 FLE		Northland Envm
Mercury	Mixed Debris	1 Roll Off	J5334		WM Turnkey Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

Response activities are complete

2.2.1.1 Planned Response Activities

Response activities are complete

2.2.1.2 Next Steps

Complete after action report

2.2.2 Issues

- PRP determination.
- No EPA role with bagged personal items screened and ready for release or disposal. The City of Worcester will handle reimbursement of disposed items.

2.3 Logistics Section

A Logistics Section Chief was assigned to handle purchasing of supplies for entry teams and to manage IMT location set up and relocation from the Grafton St school to the Worcester Emergency Management Agency location.

2.4 Finance Section

2.4.1 Narrative

See Documents section of this site for documentation. Initial estimates and Task Orders/TDD/IAGs authorized

START TDD: \$225,000
 ERRS TO: \$100,000
 USCG AST IAG: \$50,000
 USACE IAG: \$25,000

EPA Intramural: \$50,000
 REAC (IAG): \$25,000

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$100,000.00	\$36,119.00	\$63,881.00	63.88%
IAGs	\$75,000.00	\$7,851.00	\$67,149.00	89.53%
TAT/START	\$225,000.00	\$119,942.00	\$105,058.00	46.69%
REAC	\$25,000.00	\$25,000.00	\$0.00	0.00%
Intramural Costs				
USEPA - Direct	\$50,000.00	\$50,000.00	\$0.00	0.00%
Total Site Costs				
	\$475,000.00	\$238,912.00	\$236,088.00	49.70%

* 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

A Safety Officer was assigned and provided support to the entry teams.

2.6 Liaison Officer

Though a Liaison Officer wasn't assigned, significant liaison activity was undertaken by the IC, phone duty OSC and Environmental Unit Leader. Please see participating agencies list.

2.7 Information Officer

Significant Public Affairs and Community Involvement support was provided to this response. Two PIO and up to 6 CIC personnel were provided on site from 9/24-27. CIC also provided support during a public meeting hosted by the school to answer questions from parents regarding the response efforts. A Spanish interpreter was also provided by the EPA public affairs office to assist the the entry teams during the home investigations.

2.7.1 Public Information Officer

Following activities were completed:

- Interviews with Channel 5, WHDH (check call letters!)
- Press Releases with City of Worcester and MassDEP and MADPH

2.7.2 Community Involvement Coordinator

Following activities were completed:

- Fact Sheets for residents in English and Spanish
- Accompanied screening staff on visits to 85 residences

3. Participating Entities

3.1 Unified Command

Unified Command consisted of:

9/22 - 9/23/2010
 Worcester Fire Department
 Worcester Public School Dept
 Worcester Emergency Management Agency
 USEPA
 MassDEP

9/23 - 9/27/2010
 USEPA
 MassDEP
 Worcester Public Health Department
 Worcester Public School Dept

3.2 Cooperating Agencies

MA DPH
EPA-ERT
USCG Atlantic Strike Team
ATSDR
EPA Contractors: START, ERRS, REAC

4. Personnel On Site

9/22 - 9/27/2010 Approximate Maximum Daily Staffing, numbers varied:

USEPA - 43

- EPRB-7
- RSC-1
- PIO/CIC-7
- START-11
- ERRS-5
- ERT/REAC-5
- USCG AST-6

MassDEP - 6

Worcester City Public Health - 6

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

POLREP #2 Last Updated 2/12/2015