

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: POLREP #1
Initial POLREP
Oregon City Mercury Spill

Oregon City, OR
Latitude: 45.3582359 Longitude: -122.6034892

To:
From: Richard Franklin, On-Scene Coordinator
Date: 3/31/2011
Reporting Period:

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Emergency
Response Lead: PRP	Incident Category: Removal Assessment
NPL Status: Non NPL	Operable Unit:
Mobilization Date: 3/29/2011	Start Date: 3/29/2011
Demob Date:	Completion Date:
CERCLIS ID: 10KH	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

Emergency Response and Removal Assessment

1.1.2 Site Description

On March 24, 2011, EPA received a report of a potential mercury spill in a driveway outside a vacant rental home in a historic residential area of Oregon City, Clackamas County, Oregon, a suburb of Portland. A prospective renter of the home who visited the property observed what appeared to be visible beads of mercury and called the Clackamas County Fire Department. The City of Gresham Hazmat Team #3 and Clackamas Fire Dept. responded to the incident and stabilized the site. During the response, the Operations Manager of Oregon City coordinated response efforts with Oregon Department of Environmental Quality (ODEQ) and the potentially responsible party (PRP), a non-resident homeowner who lives in Santa Fe, New Mexico. ODEQ also contacted the home owner, who then hired a contractor to respond to the site. Although the contractor later reported the mercury removed, Oregon City officials inspected the site, observed the presence of what appeared to be significant amounts of mercury on the ground, and reported this to ODEQ. On March 29, 2011, ODEQ reported that the cleanup was not complete, that mercury was still visible at the site, and requested EPA's assistance in assessing the site. EPA mobilized OSC Franklin and the EPA START-3 response contractors to the site on March 29-30 to conduct an investigation and site assessment.

1.1.2.1 Location

The site is located at 909 Washington Street, Oregon City, Clackamas County, Oregon. The spill site is located in a small, limited area at a house in a historic residential neighborhood, one of the oldest in Oregon, and is a short distance (less than 1/2 mile) from the Willamette River.

1.1.2.2 Description of Threat

There is a threat of exposure to mercury to the public from a spill of an unknown amount of mercury (initially estimated at 1 - 2 tablespoons) at the site. Mercury spilled onto soil and a driveway immediately adjacent to the house's detached garage, and areas outside the vacant house at this address. There are two storm drains at the site, one directly in the spill area and one in the adjacent alleyway. These drain to a city storm drain on Washington Street. Immediately adjacent to the site, and in very close proximity, is another

residence, which houses a family of six, including two adults and 4 children. The house and the adjacent neighbor's home is divided by a narrow, common city alleyway which also allows access to a church and church parking lot and neighboring homes to the rear or north/northwest. The mercury has migrated onto the neighbor's property and driveway (see below). Washington Street to the south is a moderately busy neighborhood thoroughfare in Oregon City. The primary threat is to the family living immediately adjacent to the spill, recent potential renters who have visited the property, persons from the adjacent church driving on/using the alleyway between the church parking lot and Washington Street, and vagrants or homeless persons who have been reported in the area and at the property.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On March 30, 2011, EPA conducted air monitoring at the site and adjacent property using two Lumex mercury vapor analyzers. Free beads of elemental mercury were observed over a wide area directly in front of the house's detached garage, but were concentrated in a distinct area approximately 4 foot by 4 foot in extent. Mercury vapors were detected along the ground south/southeast of the garage and near the northwest corner of the house at 1000 ng/m3. Mercury beads and vapors up to 1000 ng/m3 were also observed in the house's basement directly adjacent to a new boiler, and mercury vapors were detected in a nearby basement floor drain and one further away. Mercury was detected nowhere else in the basement or first floor of the house. Mercury vapors were also detected in only one location at low levels(100 ng/m3) on a walkway leading along the outside of the house from the basement door. No mercury vapors were detected along the other 3 sides of the house, or the house's backyard.

Along the alleyway and drive dividing the two homes, mercury vapor levels were observed to be from 100 to 200 ng/m3. No mercury vapors were detected in the front portion of the alleyway drive near Washington Street, or the sewer drain on Washington Street. Similarly, no mercury vapors were detected in a storm drain in the middle of the drive near the garage. None of the area of the drive or adjacent church parking lot beyond the rear of the property was evaluated, although mercury vapors were detected at low levels (100 ng/m3) on the drive at the property's rear edge.

On the concrete pad and driveway in front of the adjacent home's detached garage (911 Washington St.), mercury vapors were detected from the surface of the concrete and expansion joints from 400 to 6500 ng/m3. Mercury vapors inside this garage were detected along tire tracks at levels from 200 ng/m3 to 1200 ng/m3.

It is apparent that mercury contamination is localized in a relatively small area, and at the current time is not known to have migrated to other public areas. The local hazmat team has secured the site from further migration by placing a large tarp over the main area of concern and placed sandbags around it. The city also blockaded the rear access to the drive, and placed warning cones around the site. EPA also placed danger signed tape around the spill area.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

Initial response actions and stabilization of the site were taken by the Gresham Hazmat Team #3, Clackamas County Fire District #1, and Oregon City Operations department. The property owner hired IRS Environmental to respond to the site and conduct clean-up activities. These were deemed to be inadequate by response agencies. Subsequent assessment activities were undertaken by EPA and the EPA START-3 contractor using two lumex mercury vapor analyzers. ODEQ has also visited the site and is the current lead for removal oversight activities.

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

The property owner and PRP is a Mrs. Nancy Roberts of Santa Fe, NM.

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

ODEQ and EPA have advised the PRP to hire an appropriate environmental clean-up contractor to mitigate the site. At present time, such a contractor has not been identified.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

Spill of a elemental mercury onto oil and into an open environment at a house in a historic residential neighborhood. The mercury has migrated onto an adjacent neighbor's property and into a city alleyway used by residents and potentially members of an adjacent church, thereby potentially exposing the neighboring family, recent potential renters who have visited the property, and persons either driving through or walking down the alleyway. There is also a threat of exposure to mercury vapors to persons entering the basement near the boiler.

At the current time, no contractor has been hired to mitigate the spill, although the state and EPA are working to get this issue resolved quickly.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

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.