

**United States Environmental Protection Agency
Region X
POLLUTION REPORT**

Date: Wednesday, April 18, 2007

From: Kathy Parker

To: Dan Opalski, EPA Region 10 (POLREP List) Chris Field, EPA Region 10 (POLREP List)
Cliff Villa, EPA Region 10

Subject: Initiation of Action
Yakima Mercury Release
1013 S. 6th Street, Yakima, WA
Latitude: 46.5899000
Longitude: -120.4945000

POLREP No.:	1	Site #:	10FE
Reporting Period:	4/16/07 - 4/18/07	D.O. #:	
Start Date:	4/16/2007	Response Authority:	CERCLA
Mob Date:	4/16/2007	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

On Sunday, April 15, 2007 EPA R10 ER Duty Officer was notified of Mercury release at a residential property within the city limits of Yakima. Apparently, approximately 8 months ago a one liter bottle of mercury was either found or provided to two youths, 12 and 16 years old, at the residence. The youths and at least four other children in the neighborhood played with the mercury over the ensuing period. The 16-year-old was admitted to a hospital in Seattle late last week, being diagnosed with mercury poisoning. The Yakima Fire Department, Yakima Health District and Washington Department of Ecology responded to the spill. With the assistance of a response contractor, Ecology cleaned up visible mercury along the uncontrolled access street and sidewalk. Spilled mercury was thought to still be in the fenced yard and the home and concern exists over other potential areas of significantly hazardous contamination, including other homes, schools, vehicles, etc. Although the fire department made a preliminary inquiry in the neighborhood, it was not comprehensive or conclusive. EPA assistance was requested to lend technical advise and possible cleanup. OSC Kathy Parker and two EPA START3 contractors were dispatched early Monday morning. Additional resources including an OSC - Greg Weigel, 2 STARTS and 4 ERRS contactors were mobilized to determine the extent of contamination and address remaining unsecured contamination. Mercury vapor screening found high levels of mercury in the home of the boy suffering from mercury poisoning and in the neighboring home. Hot spots were identified in the yards of the two homes, and adjacent sidewalk. EPA initiated additional assessment and cleanup.

Current Activities

Monday, April 16, 2007

U.S. Environmental Protection Agency Region 10 (EPA) mobilized two On-Scene Coordinators, a Public Information Officer and two START-3 contractors, to the site. EPA entered into Unified Command with Yakima Health District and Washington Department of Ecology. START-3 conducted initial assessment of the mercury contamination inside the home and elsewhere on the property using the Lumex Mercury Vapor Analyzer (MVA) and the InnoveX XRF (XRF). Mercury vapor concentrations were highest inside the boy's bedroom, but there were high mercury vapor concentrations throughout the home. No visible mercury was identified. Additionally, hotspots were identified on front yard of the property. Yakima Health District began interviewing neighborhood residents to identify the source and spread of the contamination.

Tuesday, April 17, 2007

Four ERRS contractor arrived on site and 2 additional START-3 contractors, making 4 total START-3 personnel. 2 EPA OSCs and 1 EPA PIO remained on site. ERRS removed items from the highly contaminated boys' bedroom, removed and bagged articles and removed the carpeting and bedding,

which were covered and staged in the yard. ERRS spread powdered sulfur on the floor to amalgamate any free mercury and vacuumed that up. ERRS then installed a negative air fan with mercury filter, sealed up the house and turned up the heat in order to drive off any residual mercury. The negative air fan and high heat were left to run overnight. Utilizing information obtained from the Yakima Health District interviews, 2 OSCs and 2 START-3 conducted mercury vapor screening, using the Lumex Mercury Vapor Analyzer, in four additional nearby homes. High mercury concentrations were identified in one home, next door to the primary contaminated home. The other three homes did not have mercury concentrations at levels of concern. START-3 began planning for soil sampling activities and on-site analysis using the Lumex MVA with soil attachment and Innovex XRF.

Wednesday, April 18, 2007

Unified Command continued with EPA, Washington Department of Ecology and Yakima Health District. START-3 collected soil samples from 90 locations in the yard at 1013 S. 6th Street. Locations were based on a grid pattern in the front yard, where the kids were reported to have played with and spilled mercury. START-3 began analyzing samples using the Lumex MVA with soil attachment, after screening with the XRF. A percentage of soil samples will be sent as splits for laboratory confirmation of total mercury in soil. ERRS removed contaminated carpeting, bedding and other articles from the second contaminated home, at 1011 1/2 S. 6th Street. They were bagged and staged outside. ERRS constructed a tent with vizqueen where mildly contaminated articles will be heated to drive off mercury to levels where it will be safe to return property to the owners.

Planned Removal Actions

- Continue to address residual contamination in the two houses by heating and ventilating until concentrations are below the cleanup level.
- Remove and replace or clean household plumbing traps where mercury has accumulated.
- Continue to heat mildly contaminated articles in the heating tent until concentrations are below the cleanup goal.
- Inventory and remove heavily contaminated articles for appropriate disposal.
- Complete soil sample collection and field analysis using Lumex and XRF to determine contaminated areas in the two residential yards that require cleanup.
- Remove contaminated soils that exceed the clean up level.
- Clean up or remove contaminated sidewalk areas.

Next Steps

- Follow up with schools the boys attended for possible additional screening.

Key Issues

- Determine final cleanup level for soils in consultation with Washington Department of Ecology.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$50,000.00	\$8,565.00	\$41,435.00	82.87%
RST/START	\$40,000.00	\$20,000.00	\$20,000.00	50.00%
Intramural Costs				
Total Site Costs	\$90,000.00	\$28,565.00	\$61,435.00	68.26%

* 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.

response.epa.gov/YakimaMercuryRelease