

United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Monday, March 23, 2009

From: Earl Liverman

Subject: First and Final

Riggins City Hall Mercury Release
126 N. US Highway 95, Post Office Box 249, Riggins, ID
Latitude: 45.4217000
Longitude: -116.3144000

| | | | |
|--------------------------|-----------|----------------------------|----------------|
| POLREP No.: | 1 | Site #: | |
| Reporting Period: | | D.O. #: | |
| Start Date: | 3/16/2009 | Response Authority: | CERCLA |
| Mob Date: | 3/16/2009 | Response Type: | Emergency |
| Demob Date: | 3/19/2009 | NPL Status: | Non NPL |
| Completion Date: | 3/19/2009 | Incident Category: | Removal Action |
| CERCLIS ID #: | | Contract # | |
| RCRIS ID #: | | | |

Site Description

Riggins, Idaho County, is a point of origin for outdoor recreational activities in North Central Idaho. The community is situated deep in a canyon at the confluence of the Salmon River and the Little Salmon River, approximately 150 highway miles north of Boise, and 120 highway miles south-southeast of Lewiston. The elevation of Riggins is 1,821 feet above sea level, and the population is approximately 425.

On or about 10 March 2009, a breathalyzer was accidentally knocked off a shelf to the carpeted floor of the Idaho County Sheriff Substation Office located in the Riggins City Hall. A calibration/simulation device attached to the breathalyzer was damaged resulting in the release of approximately 2.3 milligrams of mercury. City Hall contains other community services, including the City Council Chamber, the City Clerk-Treasurer Office, and the Salmon River Public Library. The facility is served by a common heating/ventilation (HVAC) system.

This accident was reported on Monday, 16 March 2009. During the interim period, no cleanup was conducted and access to the spill site was minimally restricted. The Mayor of Riggins closed City Hall pending assessment and cleanup activities, and requested the assistance of EPA. In addition to EPA, the Idaho Department of Environmental Quality (IDEQ), and the Regional Response Team (RRT) responded in the incident. For several days, the spilled mercury remained on the carpet in the Sheriff Substation Office. The mercury volatilized due to warm interior building temperatures and the mercury vapors were spread throughout City Hall due to the HVAC system. Based the physical layout of City Hall and where near surface elevated mercury vapors were detected in the building, the spilled mercury was tracked outside of the Substation Office into a common hallway and was potentially tracked outside of the building to the environment. Public employees, including City Hall and County law enforcement personnel, were likely exposed to the elevated mercury vapor concentrations, along with potentially residents of widely varying ages and susceptibility incidental to visits to City Hall, including young and old alike visiting the library, elder residents receiving health care through special programs offered at City Hall, and other residents receiving tax assistance.

EPA conducted an assessment of City Hall using a Lumex Mercury Vapor Analyzer (Lumex) Monday evening, and identified several areas exceeding 1.0 microgram per cubic meter of air ($\mu\text{g}/\text{m}^3$), including the City Hall entry way, Substation Office, and entry to the Council Chamber. The elevated ambient mercury vapor concentrations ranged from 3 to 5 $\mu\text{g}/\text{m}^3$; near surface concentrations approached 8 to 10 $\mu\text{g}/\text{m}^3$; and bagged mercury-contaminated materials removed previously by the RRT including carpet and the HVAC filters had a head-space reading greater than 108 $\mu\text{g}/\text{m}^3$. The outside near surface entry to City Hall was also screened and no elevated mercury vapors were detected.

Current Activities

None.

Planned Removal Actions

The ATSDR proposed residential setting criteria of 1 µg/m³ was selected as a cleanup criteria because it is considered "safe and acceptable" for any structure after a spill, provided no visible mercury is present. This criteria was also chosen because of the public character of City Hall and the resulting broad spectrum of community residents and visitors, young and old alike, likely to use and visit the facility.

EPA (along with two START-3 personnel), a representative of IDEQ, and the RRT (Lewiston) arrived at the City Hall late Monday afternoon, 16 March 2009. The Lewiston RRT coordinated with the Coeur d'Alene RRT for delivery and use of a Lumex. EPA also arrived with a Lumex and Gilian air sampling pumps and sorbent tubes. The Mayor and Sheriff granted access to City Hall and the Sheriff Substation Office. The RRT removed the City Hall HVAC air filters, used a mercury vacuum to recover visible mercury from affected carpets, removed mercury-contaminated carpets from within the Substation Office, and removed the outside entry carpet mat to City Hall. The RRT returned to Lewiston late Monday evening.

Once the RRT removed visible mercury and suspected mercury-contaminated materials, EPA screened City Hall for mercury vapors using a Lumex. The ambient mercury vapor concentrations ranged from 3 to 5 µg/m³; near surface concentrations approached 8 to 10 µg/m³; and bagged mercury-contaminated materials such as carpet and the HVAC filters had a head-space reading greater than 108 µg/m³. Additional carpet and padding were removed from those areas with elevated near surface concentrations. Thereafter, the temperature at City Hall was raised to approximately 80° - 85° F and kept at this temperature for about 24 hours. Following this event, commercial concrete patch compounds were applied to a crack at the entry to the City Council Chamber, and a mercury cleaning solution (HGCS-102) was applied to exposed concrete floors where carpet and padding were removed. The facility was vented and restored to normal living conditions for several hours. Residual elevated vapors were detected in the vicinity of the Sheriff's evidence safe and upon closer inspection, mercury was discovered inside the safe. The safe could not be decontaminated and was removed for disposal. The Lumex was again used to screen for City Hall-wide mercury vapor concentrations and the data ranged from 0.105 to 0.320 µg/m³. The outside near surface entry to City Hall was again screened and no elevated mercury vapors were detected. Six Gilian air samplers were deployed and operated for approximately eight hours. EPA and START departed City Hall early Thursday morning, 19 March 2009. The confirmatory air sampling data was received Friday afternoon, 20 March 2009, and revealed no exceedances of the ATSDR proposed residential setting criteria of 1 µg/m³.

The decisions to remove and dispose of mercury-contaminated materials were made in consultation with the Mayor and the Idaho County Sheriff and deputies. In consultation with IDEQ, the mercury-contaminated materials, including carpets and padding, HVAC filters, and evidence safe, along with response personal protective clothing and supplies, were disposed of as a non-RCRA, non-DOT hazardous waste at a permitted disposal facility. The vacuum recovered mercury was disposed of at a permitted household hazardous waste collection facility.

Next Steps

None.

Key Issues

None.

Estimated Costs *

| | Budgeted | Total To Date | Remaining | % Remaining |
|-----------------------------|-------------|---------------|-------------|-------------|
| Extramural Costs | | | | |
| RST/START | \$19,000.00 | \$0.00 | \$19,000.00 | 100.00% |
| Intramural Costs | | | | |
| USEPA - Direct (Region, HQ) | \$22,800.00 | \$0.00 | \$22,800.00 | 100.00% |
| USEPA - InDirect | \$3,660.00 | \$0.00 | \$3,660.00 | 100.00% |
| Total Site Costs | | | | |
| | \$45,460.00 | \$0.00 | \$45,460.00 | 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.

response.epa.gov/RigginsCityHall

POLREP #1 Last Updated 3/31/2009