

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

**Date:** Sunday, November 27, 2005

**From:** Daniel Garvey

**Subject:** 1st and Final POLREP

Hickory Street Mercury Site  
4840 Hickory Street, Omaha, NE  
Latitude: 41.2494000  
Longitude: -95.9897000

<b>POLREP No.:</b>	1	<b>Site #:</b>	A77W
<b>Reporting Period:</b>	August 1-17, 2005	<b>D.O. #:</b>	
<b>Start Date:</b>	8/1/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	8/1/2005	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>	8/17/2005	<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>	8/17/2005	<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	NEN000705006	<b>Contract #:</b>	
<b>RCRIS ID #:</b>			

#### **Site Description**

The Region 7 EPA spill phone operator received a phone call on August 1st, 2005 concerning a mercury spill at a residential location. The homeowners were performing home renovations on July 29th and discovered visible mercury beads in a basement closet. The homeowners contacted poison control and the Nebraska Department of Health and Human Services. Sara Morgan, Nebraska Department of Health and Human Services responded to the residence on August 1st and obtained initial Lumex readings. Ms. Morgan measured high levels of mercury throughout the residential home. Ms. Morgan then initiated contact with the EPA spill line. OSC Daniel Garvey and OSC in training Adam Ruiz responded to the location at 1415 on August 1, 2005. Upon arrival, Garvey and Ruiz queried the home owners concerning the origin and history of the mercury spill. The home owners stated that the property had just been sold to them on Monday, July 25th and supplied contact information for the previous owner. The previous homeowner had passed away a year ago and his son, Jim Link had taken possession of the home.

The homeowners explained that while Mr. John Herren was removing shelving from a basement closet, Mrs. Lisa Herren was operating a shop vacuum and noticed beads of mercury on the concrete floor. Immediately Mrs. Herren contacted the poison control and the Nebraska Department of Health and Human Services who advised the homeowners to vent the house and to collect the visible mercury in a jar utilizing an eye dropper and duct tape. The homeowners were also advised to temporarily relocate due to their three children, ages 2, 7 and 9. The homeowners commented that the children had been relocated, however, Mr. and Mrs. Herren had remained in the home over the weekend.

#### **Current Activities**

Upon their arrival on August 1, 2005, OSC Garvey entered the home wearing Level C personal protective equipment including an air purifying respirator (APR) and confirmed the mercury release. Upon inspection, the spill had occurred beneath a gas meter. Due to the history of mercury being contained in gas meters and/or regulators, information was recorded on the meter for possible further inquiry from the gas company. Initial readings from the Lumex were approximately 30,000 nano grams per cubic meter (ng/m<sup>3</sup>) in the area where the spill was discovered.

The EPA conducted clean-up activities from August 1-17, 2005. A U-Haul truck was rented by EPA in an attempt to heat and vent many mercury contaminated personal items that had been removed from the house. Some personal items were eventually discarded with the property owner's permission.

All visible mercury was removed from the residence utilizing a mercury vacuum. The basement floors exhibited significant cracking that occurred due to the age of the home. This situation resulted in a need for EPA to caulk and then apply a two-part epoxy on the concrete floors to reduce any lingering mercury vapors. During all phases of the clean-up, calculated heating and cooling cycles were implemented, utilizing a RAM fan after heating the effected areas with a torpedo heater.

#### **Planned Removal Actions**

The EPA's Emergency Rapid Response Services (ERRS) contractor was activated by OSC Garvey, utilizing his warrant authority. The contractor is needed to assist in removing all of the mercury beads located in the basement of the home. Also, personal possessions will likely need to be bagged and removed from the home for treatment and possible disposal.

Also, other treatment technologies will likely be needed. For example, applying a special two-part epoxy on concrete areas to reduce future inhalation of any mercury vapors.

The EPA's Superfund Technical Assistance Response Team (START) was also activated by OSC Garvey to monitor mercury vapors and to perform other technical duties.

### **Next Steps**

The property owners were in communication with Denise Jordan-Izaguirre, Agency for Toxic Substances Disease Registry (ATSDR) concerning having their three children medically tested for mercury poisoning. Also, general discussions were conducted, concerning mercury related health issues pertaining to the future occupancy of the home.

It should be noted that during the time period of the clean-up activities, the property owners voluntarily re-located. However, during the work days, the husband would usually be at the site property (outside of the building), assisting the work crews by answering questions concerning personal items or building characteristics.

OSCs Garvey and Ruiz visited the Metropolitan Utility District (MUD) to inquire about the mercury gas regulator located in the basement and possible mercury connection. Mr. Dennis Kozol, MUD assisted the OSCs by commenting that the residential neighborhood where the mercury spill had occurred had historically been a low gas volume area where mercury containing gas regulators had not been utilized.

### **Key Issues**

A complete listing of all of the mercury contaminated personal items that were discarded during the clean-up process, with the property owner's permission, was eventually provided to the owners. OSC Garvey mailed the property owners the complete START report that detailed all of EPA's actions to date.

Also, OSC Garvey provided the property owners with the analytical results from the 8-hour pumps that had been placed throughout the home to confirm that the mercury vapors were low enough to allow occupancy. These final levels were concurred with by EPA and Denise Jordan-Izaguirre (ATSDR) as being safe for future occupancy.

Finally, the OSCs did obtain a copy of the homeowner's insurance policy and provided the information to EPA's Regional Counsel for possible cost recovery.

### **Disposition of Wastes**

A 20 cubic-yard roll-off box, filled with mercury contaminated solid waste was accumulated during the work activities and sampled before eventually disposing the waste into the Loess Hills Sanitary Landfill in Malvern, Iowa.

The glass jar containing elemental mercury was taken to a local household hazardous waste collection center and properly disposed of as a final step.

[response.epa.gov/HickoryStreetMercury](http://response.epa.gov/HickoryStreetMercury)