

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

Date: Thursday, December 13, 2007

From: Gary Moore

To: Ragan Broyles, Response and Prevention Scott Thompson, Oklahoma DEQ
Branch

Subject: McAlester Mercury
1012 N. G Street, McAlester, OK
Latitude: 34.9432000
Longitude: -95.7796000

POLREP No.:	5	Site #:	A6B4
Reporting Period:		D.O. #:	
Start Date:	8/13/2007	Response Authority:	CERCLA
Mob Date:	8/14/2007	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

On August 13, 2007, a representative from Country Home Health Inc. contacted the McAlester Fire Department to report seeing mercury in the home of an elderly patient in McAlester, Oklahoma. The Fire Chief contacted the National Response Center (#845467) to make a formal report after visiting the residence and observing free mercury on the floor inside the house.

Current Activities

On October 16, the EPA remobilized to conduct final clearance sampling and apply a spray epoxy sealant to an area of slightly elevated results. One of the tenants of the home had returned and moved items into the back bedroom. The tenant indicated that he had to leave where he was staying and had no other place to go. The tenant left the house so that we could complete our clearance sampling. The clearance samples were completed without incident and the site was demobilized.

On September 27, sections of the flooring were removed to gain access to the sill plate to complete the removal of the mercury located on September 26. After removing this mercury, the sill plate and cinder block footings were sealed with epoxy and the flooring repaired. Additionally, another coat of epoxy paint was painted on the flooring. The physical removal actions were completed on September 27. Final cleanup, disposal, and demobilization was completed on September 28.

On September 26, the EPA located a large source of mercury under the house near the crawlspace vent by the source bedroom. The mercury had flowed between the walls onto the sill plate. It is estimated that approximately 5 pounds of mercury was removed. The sill plate and beams were sealed with epoxy paint.

On September 24, the EPA remobilized its contractors to conduct additional cleanup activities associated with the project. The activities will include sealing the walls in the house with a sealant paint product along with removing sheetrock at the baseboard in the source room and sealing with epoxy paint. It is believed that small droplets of mercury may be caught under the 2X4 footing under the framing. We are in hopes that this final step will achieve the cleanup standard.

On September 19, the EPA mobilized its START Contractor to conduct final clearance sampling. The levels remained elevated above the 1 ug/m3 cleanup standard and EPA elected not to take final clearance sampling. The levels were up to approximately 1.7 ug/m3 within the house.

On September 9, EPA mobilized its START Contractor to conduct heating and venting operations to attempt to reduce the mercury vapor levels below 1 ug/m3. This operation was conducted from September 10 to 14. The home was allowed to equalize for several days before another attempt is made to conduct final clearance sampling.

On September 6, EPA mobilized its START Contractor to the home to conduct final clearance sampling. The levels in the house were elevated up to 7 ug/m³ using the Lumex Mercury Vapor Analyzer. As a result, EPA decided not to take final clearance samples at that time.

As of August 26, 2007, the EPA and its contractors have removed the free Mercury from within the room where the spill took place. It was also discovered that the Mercury had seeped through the wood flooring and onto the ground within the crawlspace of the house. The flooring at the spill location was removed and replaced and sealed. The flooring in the bathroom was also replaced and sealed. Additionally, holes in the kitchen floor were sealed and the floors in the pantry, dining, living, and 2nd bedroom were sealed with epoxy paint. The crawlspace and attic are being vented daily to help reduce the levels in the house to below 1 ug/m³.

On August 20, 2007, the EPA responded to the site to initiate the cleanup. The EPA responded with an EPA OSC, 6 ERRS Contractors, and 2 START Contractors.

On August 14, 2007, the Environmental Protection Agency (EPA) mobilized to investigate the reported release of mercury in the residence. The EPA verified this release and found that the levels were significantly above health based cleanup standards of 1 ug/m³. The results were as high as 80 ug/m³.

Planned Removal Actions

The EPA plans no further removal action on this residence.

Next Steps

The EPA is awaiting final clearance sample results. Preliminary data indicates that all but one sample was below the 1 ug/m³ threshold. We will await final results and validation prior to making final decisions on this property. It is likely that a risk management decision will need to be made if the result above 1 ug/m³ is accurate.

Key Issues

The exact quantity of mercury recovered is unknown as the disposal containers included debris with free mercury. It is estimated that approximately 14 pounds of mercury was recovered.

response.epa.gov/McalesterMercury