United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Monday, September 24, 2007
From: Gary Moore

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

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

POLREP No.:	4	**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 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.

this 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 to seal the interior walls with a sealant paint product to reduce the influx of mercury vapor from within the walls and crawlspace and into the interior of the house. Additionally, the EPA will remove the baseboards and sheetrock behind the baseboards to access the 2X4 footing holding the framing. This area will be vacuumed using a mercury vacuum and sealed with epoxy paint. We believe these efforts will bring us to the desired cleanup goal of less than 1 ug/m3.

Next Steps

The next steps are to complete the activities identified in the planned removal actions section and subsequently conduct final clearence sampling the following week if levels with the Lumex read less than 1 ug/m3.

Key Issues

Significant source of mercury was located and removed on September 26 and 27.

Mercury cleanups in general are very difficult when you get down to the lower levels. Small droplets can cause a house to exceed the cleanup goal. We are very close to the cleanup goal and hopefully this final step will help us achieve it.

response.epa.gov/McalesterMercury