United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Thursday, July 12, 2007
From: Mark Hayes

To:	R6 PolRep LA, Response and Prevention Branch	Sam Coleman, Superfund Division
	Debbie Dietrich, Office of Emergency Management	Ragan Broyles, Response and Prevention Branch

Subject: Continuation of Action
Chalmette Mercury Spill
2917 Corinne Street, Chalmette, LA
Latitude: 29.9408900
Longitude: -89.9450500

POLREP No.:	5	**Site #:**	
Reporting Period:	7/9/07 -7/12/07	**D.O. #:**	0701-007
Start Date:	6/29/2007	**Response Authority:**	CERCLA
Mob Date:	6/30/2007	**Response Type:**	Emergency
Demob Date:		**NPL Status:**	
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:		**Contract #**	EP-S6-07-01
RCRIS ID #:			

Site Description
On 27 June 2007, the Louisiana Department of Environmental Quality (LDEQ) contacted the EPA Region 6 hotline to report a mercury release at a home in Chalmette Louisiana. The EPA subsequently notified the National Response Center (NRC 840234) of the release. The release was originally reported to the LDEQ by the Children's Hospital of New Orleans, La. The residents' youngest child became ill a few weeks ago and was being treated at the Children's Hospital. After several examinations, the residents brought to the doctor's attention that they recently had found mercury within their home. The child was then tested for mercury poisoning, and tests indicated that the child had mercury levels approximately 40 - 70 times that of normal levels.

On 28 June, START-3 conducted an assessment of the residence. Initial air monitoring conducted by START-3 indicated levels of mercury in air of up to 60 micrograms per cubic meter (µg/m3). Based upon the START-3's report, EPA senior management was briefed on the situation. On the morning of 29 June, ERRS was verbally tasked to conduct a site walk that same day utilizing the OSC's warrant authority for emergency actions.

Current Activities
July 9, 2007: work resumed. During a venting cycle, the interior ambient air within the living areas of the house was measured; readings indicated a mercury vapor concentrations between 0.2 to 1.5 µg/m3. Perimeter monitoring and screening of personal items resumed. Second decontamination attempt of the house was completed. Personal items from garage and attic were removed and placed in the staging area for screening. Rooms are being sealed off to isolate contamination. After 2 of the 3 bedrooms were sealed and heated, mercury vapor was measured between 1 to 2 µg/m3, which indicates a 0.5 µg/m3 rise in one room and a reduction in mercury vapor in the other. After the rise in mercury vapor was observed, steps to reduce cross contamination are being implemented. Overnight site security was maintained.

July 10, 2007: work resumed. Initial interior air monitoring indicated mercury vapor at levels between 0.2 to 1.5 µg/m3; these areas of the house were being vented and some were being heated at the same time. One of the three bedrooms was sealed off for approximately 2 hours, and measured for mercury vapor; vapor was measure at 0.8 µg/m3, which was a 0.2 µg/m3 reduction from the previous reading. This was the same bedroom that was sealed off on July 8th and showed a 0.5 µg/m3 rise on July 9th, After isolating the living, dinning, and hallway areas from the rest of the house, the interior air contained mercury vapor at approximately 12 µg/m3. Later in the day, all of the bedrooms were isolated and sealed, too; mercury vapor was measured between 3 to 7 µg/m3, which indicate rise in mercury

contamination. The rise in concentrations, are believed to be the result of bringing contaminated air into the rooms during entry, but to eliminate possibilities, the base boards and floor were screened to locate any areas of contamination that may remain. In the bedroom that showed a rise then a reduction of mercury vapor, and during today's monitoring showed approximately a 10x increase in mercury vapor, areas along the baseboards contained mercury vapor between 1 to 1.5 µg/m3, and areas on the floor contained levels between 1 to 2 µg/m3. These areas were marked and re-decontaminated. The garage was decontaminated and sealed off. Perimeter monitoring and screening of personal items resumed. Overnight site security was maintained.

July 11, 2007: work resumed. Initial monitoring of 1 of the 3 bedrooms, showed mercury vapor at 0.8 µg/m3. This is the bedroom that the areas along the baseboards and floor were re-decontaminated; the room was sealed off and heated. Entry was made through the window to eliminate possible cross contamination from the remainder of the house. The mercury vapor in this room was approximately the same as the level measured on July 10th. The garage contained 1.4 µg/m3 of mercury vapor. One of the two bathrooms was sealed off and contained mercury vapor at 0.9 µg/m3. The remainder of the house was being vented and some areas were being heated at the same time; these areas contained mercury vapor between 0.5 to 1 µg/m3. The attic was visually assessed and screened for mercury contamination; no evidence of mercury contamination was observed. While in the attic, the interior of the air handler was monitored; readings indicated less than 1 µg/m3 of mercury vapor. The remaining 2 bedrooms' baseboards and floors were screened for mercury contamination; areas over 1 µg/m3 were marked and re-decontaminated. All of the baseboards and floors are planned to be screened to locate any residual contamination. During interior air monitoring, the refrigerator was monitored and showed mercury vapor at levels greater than 25 µg/m3; the refrigerator was removed and placed in the staging area. In addition to decontamination of the house, hard surface personal items are being decontaminated, too. Perimeter monitoring and screening of personal items resumed. Overnight site security was maintained, and part of the living areas (living, dinning, hallway, and both bathrooms) were sealed and heated overnight.

July 12, 2007: work resumed. Initial air monitoring indicated that the living and dinning rooms and the hallway contained approximately 7 µg/m3 of mercury vapor. The baseboards in these areas were scanned; areas were found greater than 140 µg/m3. The highest concentrations were observed from the front door along the Northern wall in the living room; this area is where a large amount of beaded elemental mercury was observed. The baseboards were removed. The bathrooms were monitored; one bathroom has mercury vapor at 0.5 µg/m3 and the other has concentrations at 5 µg/m3. The drains were open in the higher concentration bathroom, which could contribute to the elevated mercury vapor levels. The drains were monitored at an earlier date, and elevated mercury vapor were observed. The drains are sealed in the lower concentration bathroom. The 2 remaining bedrooms with elevated levels of mercury vapor were monitored; readings indicated that one of the rooms has mercury vapor concentration of 2.6 µg/m3, and the other room, which was being vented, has mercury vapor at 0.4 µg/m3. The baseboards were removed and the floor was being prepared for floor sealer in the bedroom with mercury vapor at 2.6 µg/m3. Perimeter monitoring and screening of personal items resumed; inclement weather slowed screening of personal items. Overnight site security was maintained, and all 3 bedrooms and the garage were sealed over night to allow vapors to develop. These rooms will be measured on July 13th.

Next Steps

Continue the heating-venting cycles, monitor the indoor air and re-assess the situation for process modifications. The drains, which have shown high levels of mercury vapors, will be treated with Hg decontamination agent. The screening, segregation, and deconning of the personal property will continue until completed.

Key Issues

Source of the mercury release has not been identified.

All members of the familiy except the daugther have elevated levels of mercury in their systems.

There is a heighten community concern most likely due to the mercury-contaminated residence being in the footprint of the Murphy Oil release. However, numerous analytical results of the materials from the Murphy Oil release indicated non-detects for mercury.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$200,000.00	$48,857.77	$151,142.23	75.57%
START-3	$46,000.00	$29,327.50	$16,672.50	36.24%

Intramural Costs				
Total Site Costs	$246,000.00	$78,185.27	$167,814.73	68.22%

* 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/chalmetteLAmercuryspill

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