

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Wednesday, July 4, 2007

From: Mark Hayes

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

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

POLREP No.:	3	Site #:	
Reporting Period:	7/4/2007	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 ($\mu\text{g}/\text{m}^3$). 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 the same day utilizing the OSC's warrant authority for emergency actions.

Current Activities

July 2, 2007: work resumed. Again, the initial air monitoring detected mercury vapor over $140 \mu\text{g}/\text{m}^3$ throughout the house. ERRS completed removal of furniture and personal property; items continued to be bagged and/or wrapped in plastic and placed in the staging area. ERRS continued to vent house and they began vacuuming the floors and washing the walls with HgCS-102. HgCS-102 is a specialized liquid-cleaning solution that aids the removal of mercury contamination by way of sulfur amalgam formation. START-3 continued monitoring of mercury vapor around the perimeter of the staging area, and after lunch, they made a second entry into the house to monitor the air; mercury vapor levels were observed between 4 to $25 \mu\text{g}/\text{m}^3$. A roll-off box for waste disposal was received. EPA maintained site security over night.

July 3, 2007: work resumed. The initial air monitoring indicated a reduction of mercury vapor; mercury vapor was observed around $4 \mu\text{g}/\text{m}^3$ throughout the living area of the house. In the garage, a basket of dirty cloths and the washing machine had mercury vapor at levels of $28 \mu\text{g}/\text{m}^3$ and over $40 \mu\text{g}/\text{m}^3$, respectively. The dirty clothes were bagged and along with the washing machine were placed in the staging area. After the clothes and washing machine were removed from the garage, START-3 monitored the garage and screened personal items; mercury vapor levels approximately between 0.5 to $3 \mu\text{g}/\text{m}^3$. ERRS continued to vacuum and washing the walls and they began washing the floors. START-3 continued perimeter monitoring and began screening and segregating hard surface items (i.e. wood dressers and tables). A conex box was received and is being used to store non-contaminated items. Contaminated items remain in staging area for further decontamination and monitoring. At the end

of the day, ERRS completed vacuuming of the floors; 2 of the 3 bedrooms and the hallway were washed completely. EPA maintained site security and the house was vented over night. The residents received the test results for the remaining family members, and all but the teenage daughter have elevated levels of mercury in their systems.

July 4, 2007: work resumed. The initial air monitoring indicated a rise from the previous initial readings. Mercury vapor levels were between 5 to 11 µg/m³ in the living areas, approximately 4 µg/m³ in the garage, and 10 µg/m³ in the attic. ERRS completed washing of the floor and walls with the HgCs-102, and began the heating and venting process. START-3 continued perimeter monitoring and screening segregation of items. ERRS began disposing of contaminated items that were deemed unrecoverable (i.e. beds, couches, cloth chairs, and other items made of porous materials). Item screening and segregation was stopped due inclement weather. After the house was heated, START-3 made a second entry into the house for air monitoring. Mercury vapor levels were observed around 30 to 40 µg/m³. EPA maintained site security over night and plans to vent house after heating cycle to have house ready for air monitoring first thing in the morning.

Planned Removal Actions

Once the inside cleaning of the house is completed, the EPA recommended heating and venting cycle will be implemented. The house will be heated to over 85° F and maintained for at least 8 hrs. After 8 hrs, the house will be vented for at least 2 hrs. Once the heating and venting process is complete the house will be closed up for at least 1 hr, the interior air will be monitored for mercury vapor and compared to a clean-up level of 1 µg/m³. If the clean-up level is achieved, an air sample(s) will be taken and analyzed at a laboratory. If the clean-up level is not met, specific rooms will be carefully monitored and specific areas re-cleaned if necessary, and the recommended heating and venting process will continue until the clean-up level is achieved.

Next Steps

Continue to heat and vent the house and screen and segregate personal property.

Key Issues

Source of the mercury release has not been identified.

All members of the family except the daughter 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	\$8,478.56	\$191,521.44	95.76%
START-3	\$46,000.00	\$16,514.00	\$29,486.00	64.10%
Intramural Costs				
Total Site Costs	\$246,000.00	\$24,992.56	\$221,007.44	89.84%

* 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.

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