

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

**Date:** Thursday, December 13, 2007

**From:** Heath Smith

**Subject:** FIRST AND FINAL POLREP

Mercury Wilson Manor  
16102 Wilson Manor Drive, Chesterfield, MO  
Latitude: 38.6390100  
Longitude: -90.5856200

<b>POLREP No.:</b>	1	<b>Site #:</b>	07ZZ
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	4/6/2007	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>		<b>Response Type:</b>	Emergency
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>	4/9/2007	<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	MON000705783	<b>Contract #:</b>	
<b>RCRIS ID #:</b>			

**Site Description**

On April 6, 2007, the U.S. Environmental Protection Agency (EPA) responded, at the request of the Missouri Department of Natural Resources (MDNR), to 16102 Wilson Manor Drive, Chesterfield, Missouri, due to the report of a mercury release.

The resident broke a small mercury thermometer on a main level hardwood floor near the kitchen of the home on April 4, 2007. The resident attempted to remove the mercury at that time.

Upon initial entry into the house, EPA observed mercury vapor levels that ranged from 1,001 nanograms per cubic meter (ng/m<sup>3</sup>) in the basement of the home to 5,033 ng/m<sup>3</sup> at approximately 1 foot above the spill area. EPA utilized a Lumex® model RA915+ portable mercury vapor analyzer (MVA) was utilized to perform the air monitoring.

EPA identified two brooms to have been contaminated during the initial cleanup by the resident. The brooms were removed from the house.

The home was vented using fans and blowers through opened windows. After one hour, the windows were shut and the furnace was turned up and ran for approximately 30 minutes. MVA readings were again recorded throughout the house. The MVA indicated a mercury vapor concentration of approximately 700 to 900 ng/m<sup>3</sup> in the living spaces and a concentration of approximately 1,300 ng/m<sup>3</sup> near the spill area. The vapor levels did not warrant evacuation overnight.

EPA recommended the resident heat and vent the house at least 5 times per day and control foot traffic in the area of the spill until the morning of April 9, 2007. EPA also suggested that some carpeting on a stairwell to the second level of the home be removed due to potential residual contamination.

On April 9, 2007, EPA and MDNR returned to the home. The resident indicated they heated and vented as much as possible during the previous days. The resident also placed a lamp over the spill area to help volatilize any micro-beads of mercury that may have been present. The carpet on the stairwell had been removed. MVA readings of 212 ng/m<sup>3</sup> to 383 ng/m<sup>3</sup> were recorded throughout the living areas of the house. A reading of 509 ng/m<sup>3</sup> was recorded one foot above the spill area.

Due to the limited quantity of mercury spilled and satisfactory mercury vapor readings on the follow-up visit, MDNR and EPA onsite representatives concurred that no further action was warranted by either agency. The resident was advised that any additional heating and venting would continue to reduce mercury vapor.

**Current Activities**

No further action is anticipated for this site.

## **Planned Removal Actions**

No further removal is warranted regarding the broken thermometer and subsequent mercury release.

## **Next Steps**

There are no future actions planned at this site.

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