

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

**Date:** Thursday, January 24, 2008

**From:** Brian Kelly

**To:** Mick Hans, U.S. EPA

Tom Buss, Health Department

**Subject:** Initial / Final

Traverse City Mercury Spill  
Traverse City, MI  
Latitude: 44.7380000  
Longitude: -85.6110000

|                          |                       |                            |                |
|--------------------------|-----------------------|----------------------------|----------------|
| <b>POLREP No.:</b>       | 1                     | <b>Site #:</b>             | B5MW           |
| <b>Reporting Period:</b> | 01/22/2008-01/24/2008 | <b>D.O. #:</b>             |                |
| <b>Start Date:</b>       |                       | <b>Response Authority:</b> | CERCLA         |
| <b>Mob Date:</b>         | 1/22/2008             | <b>Response Type:</b>      | Emergency      |
| <b>Demob Date:</b>       |                       | <b>NPL Status:</b>         |                |
| <b>Completion Date:</b>  | 1/25/2008             | <b>Incident Category:</b>  | Removal Action |
| <b>CERCLIS ID #:</b>     |                       | <b>Contract #</b>          |                |
| <b>RCRIS ID #:</b>       |                       |                            |                |

#### Site Description

On January 22, 2008, residents of an apartment unit reported to Poison Control spilling a two-ounce container of elemental mercury. The residents immediately left the unit and called the Grand Traverse Metro Fire Department as instructed by Poison Control. The Metro Fire Department identified the spill and requested additional assistance from the Traverse City Fire Department who contacted the U.S. Environmental Protection Agency (U.S. EPA).

#### Current Activities

In the evening of January 22, U.S. EPA arrived on-scene and performed monitoring with a Lumex mercury vapor analyzer. U.S. EPA entered the apartment unit and identified a puddle of elemental mercury approximately two-inches in diameter with smaller beads radiating outwards. Mercury beads were visible in an area of approximately eight-foot by eight-foot. Mercury vapor readings in the 70 degree Fahrenheit (70F) apartment were between 50,000 – 75,000 ng/m<sup>3</sup> in the adult breathing space (The health department recommended occupancy level is less than 1,000 ng/m<sup>3</sup>).

U.S. EPA began cleanup of the elemental mercury on January 23, 2008, using a specialized vacuum designed for mercury removal. Household items above 10,000 ng/m<sup>3</sup> were removed for disposal along with a 10-foot by 10-foot area of carpeting. Mercury vapor readings in the adult breathing space after removal were under 1,000 ng/m<sup>3</sup> at an ambient temperature of 50F. Lumex readings 1-2 inches above the spill areas ranged between 800 ng/m<sup>3</sup> and 1,200 ng/m<sup>3</sup>.

U.S. EPA performed heating and venting operations to reduce mercury vapor concentrations in the apartment unit throughout the night of January 23-24, 2008. In the morning, venting was stopped and the ambient temperature was raised to 70F for a period of one hour. Mercury vapor readings in the adult breathing space ranged from 540 ng/m<sup>3</sup> to 740 ng/m<sup>3</sup>. At floor level, mercury vapor readings ranged from 1,200 ng/m<sup>3</sup> to 2,100 ng/m<sup>3</sup>.

U.S. EPA washed the spilled area with HGX and continued venting during the night of January 24. On January 25, following 7 hours of heating at 70F, all readings were below 1,000 ng/m<sup>3</sup>.

Following discussions with Michigan Department of Community Health and recommendations from U.S. EPA, the Grand Traverse County Health Department released the apartment.

#### Next Steps

None

#### Disposition of Wastes

| <b>Waste Stream</b>        | <b>Quantity</b> | <b>Manifest #</b> | <b>Disposal Facility</b>   |
|----------------------------|-----------------|-------------------|--|
| Mercury Contaminated Items | 200 lbs         |                   | CES Waters Landfill<br>11375 Shermans Road, Frederic, MI 49733       |
| Elemental Mercury          | 2 lbs           |                   | Mercury Waste Solutions<br>21211 Durand Avenue Union Grove, WI 53182 |

[response.epa.gov/traversecityhgspill](https://response.epa.gov/traversecityhgspill)