

United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Tuesday, February 26, 2008

From: Greg Weigel

Subject: Initial

Emmitt High School Mercury Spill
721 W. 12th Street, Emmett, ID
Latitude: 43.8640200
Longitude: -116.5097400

POLREP No.:	1	Site #:	
Reporting Period:	02/23/2008 - 02/26/2008	D.O. #:	
Start Date:	2/24/2008	Response Authority:	CERCLA
Mob Date:	2/24/2008	Response Type:	Emergency
Demob Date:	2/26/2008	NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

On 2/15/08, a student at Emmett High School was doing an inventory of chemicals in the storage room of a chemistry lab when she reportedly noticed mercury beads on the floor. The spill was reported and the Caldwell Regional Response Team responded. Caldwell Regional Response Team reported that there were an unknown number of broken thermometers that were the likely source of the spilled mercury on the floor and counter. Visible mercury was cleaned up. Recovered mercury was secured, the building ventilated, and then returned to service. Caldwell RRT did not have access to mercury detection equipment.

While EPA was responding to a mercury spill at the St. Joseph's Catholic school in Boise on Saturday 2/23/08, it was discussed on a State Comm bridge call that there had been the spill at Emmett, and EPA was asked if they could conduct monitoring at the Emmett High School to confirm that the earlier cleanup was effective. EPA responded to Emmett High School the afternoon of 2/23/08 with EPA OSC and START contractor personnel. The school was not occupied except for a the school principal and school district superintendent. Upon entering the unused laboratory room adjacent to the storage room where the spill had occurred, EPA detected approximately 4,000 nanograms per cubic meter (ng/m3) of mercury in ambient air using a hand held mercury vapor analyzer. Upon entering the storage room concentrations in excess of 10,000 ng/m3 were detected. Ambient levels in the hallway directly outside of the impacted rooms were approximately 600 ng/m3 (the ATSDR established recommended threshold for residential occupancy is 1,000 ng/m3). EPA shut and sealed the doors to the impacted rooms and recommended that the HVAC system not be turned on until the situation is abated. The OSC activated the ERRS cleanup contractor.

On Sunday, 2/24/08, EPA OSC, START and ERRS contractor personnel responded for cleanup at Emmett High School after finishing at the St. Joseph's school in Boise. EPA removed contaminated articles from the storage room which were staged at a secured area outside. A thorough screening of the building was conducted and confirmed that the mercury contamination was limited to the storage room and the adjacent unused lab classroom. EPA determined that detectable mercury had not been tracked out of these rooms into the adjacent hallway or elsewhere in the school.

On 2/25/08 EPA and START screened shoes of personnel who had entered the storage room since the spill occurred and may have contacted the spilled mercury, including the student who originally discovered the spill and three teachers who subsequently entered the room. Elevated levels of mercury were detected in the headspace of a bag containing the shoes of the student and one of the teachers. EPA screened the vehicles of these individuals and found no elevated mercury. The home of the student was also screened. Mercury was detected at carpet level in the home at a few locations at a maximum of approximately 600 ng/m3. No significant levels of mercury was detected at breathing level ambient air. EPA also screened the vacuum cleaner that was used in the home. Elevated levels of mercury were detected from the dust bin of the vacuum. With the permission of the homeowner, EPA removed the dust

bin to dispose of its contents as contaminated material.

Mercury cleanup was conducted in the storage room and adjacent lab on 2/24 and 2/25/08, involving removing base boards along the floor. Small beads of mercury were found behind the base boards. Also, when turning the lights off in the room and using a flashlight, tiny droplets of mercury could be observed on the floor of the storage room. EPA cleaned up mercury in the storage room and lab using a mercury vacuum and mercury amalgamating material. EPA removed volatile chemicals from the storage room and then heated the two room to 90 to 95 degrees F and allowed them to remain at that temperature overnight. On the morning of 2/26/08, EPA again screened with the mercury vapor analyzer and found that levels had dropped substantially. Ambient concentrations in both rooms were approximately 200 to 300 ng/m3. Air samplers were set up in each of the rooms, an adjacent classroom and the hall outside of the rooms to collect four 8 hour air sample for confirmatory laboratory analysis. Additionally, EPA built a heating tent outside to heat contaminated articles that had been removed from the storage room, including microscopes and other laboratory equipment. Heating in the tent, to drive off any residual mercury, was done on 2/25 and 2/26. On 2/26, articles were screened to confirm that they were clean and re-staged inside the school building. A few articles with porous surfaces, such as cardboard boxes, did not come clean and will be disposed of, with the school's consent, as contaminated material.

Next Steps

EPA will demobilize from the Emmett school evening of 2/26/08. Preliminary laboratory results of air samples are expected afternoon of 2/27/08. EPA will transmit those verbal results to the school and Health Department. EPA will arrange for proper disposal of generated mercury contaminated waste and recovered elemental mercury.

response.epa.gov/EmmettHSmercuryspill