

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Saturday, August 15, 2009

From: Rick Jardine

Subject: Initial POLREP

Brenau University Mercury Spill

615 Washington ST. SE, Gainesville, GA

Latitude: 34.3026389

Longitude: -83.8213889

POLREP No.:	1	Site #:	B422
Reporting Period:	14AUG09	D.O. #:	
Start Date:	8/14/2009	Response Authority:	CERCLA
Mob Date:	8/14/2009	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

A new faculty member preparing his college science room for the start of a new school year unknowingly removed a mercury-containing device along with worthless debris. He staged the combined debris in a garbage pen outside of the building. Other alert facility personnel identified mercury leaking from the staged debris and immediately took efforts to stabilize the site and conduct proper notifications. Subsequently, custodial staff identified mercury beads on the floor of the 2nd story lab and storage closet.

Current Activities

EPA and START consultant TTEMI arrived on scene during the late afternoon of Friday 14AUG09. Upon arrival OSC Jardine was received by Brenau's John Keller. Mr Keller maintained responsible charge of the site.

Mr Keller had retained response contractor EQ to assist with mitigation. EQ had begun stabilization efforts but had briefly suspended activity, per EPA request, until EPA could conduct a survey. Prior to the EPA survey, no air monitoring had been conducted.

EQ's response stabilization effort included activity such as conducting visual survey and personnel interview to determine source areas, applying mercurb to amalgamize free product, placing potentially contaminated debris into suitable containers, and sweeping up amalgamized mercury beads and expired mercurb.

Stabilization efforts were sufficient, but not thorough, due to limited resources on hand.

EPA conducted air monitoring with a Lumex mercury vapor analyzer to determine appropriate response action and provide guidance regarding responder safety. Breathing zone readings of suspect areas exceeded EPA Region 4 guidance action value for industrial use 25 ug/m3. Breathing zone readings throughout the 2nd floor hallway exceeded the same values; however, there was no separation of air flow through the hallway. Readings from within individual rooms with closed doors indicated presence of airborne mercury at much lower concentrations. Floor-level readings of contaminated areas and traffic pattern leading from the lab closet to the garbage pen also exceeded the same guidance value for industrial use. The traffic pattern included tiled, carpeted, and concrete surfaces. EPA could not conclude from the survey whether the floor was also contaminated or whether mercury vapors were accumulating along the floor due to high vapor density.

After EQ stabilized the site and removed free mercury to the greatest extent practical, Mr Keller barricaded the contaminated room. OSC Jardine and Mr Keller identified objectives, agreed upon a strategy including time lines, and discussed potential tactics for future response activity.

Planned Removal Actions

The objectives for successful completion of the response to this mercury release are to remove all free mercury from the site, reduce residual mercury from contaminated surfaces, ensure safety of responders, staff, and students by conducting appropriate air monitoring, and to provide for appropriate disposal of all response-related debris.

The overall strategy for this site is for Brenau to immediately limit human exposures by refusing access to contaminated areas to all but response personnel, and rally a more robust environmental response team no later than Tuesday 18AUG09. EPA will provide limited oversight of activity including air monitoring for mercury vapors.

If Brenau is unable to continue with appropriate response activity by 0800 EDT on Wednesday 19AUG09 EPA will proceed with response.

Clean-up tactics discussed during the closing meeting between OSC Jardine and Mr Keller included vacuuming all suspect contaminated source areas using a merc-vac, carefully removing floor tile and vinyl base at spill locations in room 22 (including the closet) and revacuuming, applying chemical agents to assist in residual mercury removal from nonporous floor surfaces, and controlled heating & venting of contaminated building space. Any removed materials should be appropriately containerized at the removal location to minimize migration of mercury along egress corridor.

The above tactics could either be conducted sequentially without interruption, or allowing for air-monitoring between tactical application to gauge whether sequential operations are necessary.

Should porous surfaces (i.e. carpet) be determined to contain residual contamination, those surfaces may be removed and treated/disposed as appropriate.

Next Steps

Mr Keller intends to brief the Brenau Executive Board regarding the situation and proposed remedies, mount a robust removal operation, and communicate status with OSC Jardine NLT late Monday 17AUG09.

response.epa.gov/BrenauUniversityMercurySpill