

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Monday, September 27, 2010

From: Karen Buerki, OSC

Subject: Final POLREP

Hokes Bluff Mercury Spill
3173 Aaron Way, Hokes Bluff, AL
Latitude: 34.0052200
Longitude: -85.9116200

POLREP No.:	2	Site #:	A4YY
Reporting Period:	5/02/2009 - 12/16/2009	D.O. #:	0703-S4-0032
Start Date:	5/2/2009	Response Authority:	CERCLA
Mob Date:	5/4/2009	Response Type:	Emergency
Demob Date:	12/16/2009	NPL Status:	Non NPL
Completion Date:	12/16/2009	Incident Category:	Removal Action
CERCLIS ID #:	ALN000410383	Contract #	EP-S4-0703
RCRIS ID #:			

Site Description

On the evening of May 2, 2009, Telephone Duty Officer David Dorian received NRC Report #904424 reporting a spill of elemental mercury onto the concrete floor of a detached residential garage. A one quart mason jar containing approximately eight pounds of elemental mercury had been stored in the garage. The jar was discovered broken on the floor. The homeowner contacted Poison Control and had attempted to recover the contents. The Etowah County Emergency Management Agency (EMA), Hokes Bluff Volunteer Fire Department, and the Alabama Department of Environmental Management (ADEM) responded to the incident. The responding ADEM SOSC, Josh Therrien, requested EPA assistance.

Current Activities

OSC Karen Buerki deployed with START contractor Tetra Tech support the following morning. OSC Buerki and START assessed the extent of contamination and need for further action. Mercury was discovered throughout the garage floor and some had released to the ground outside the garage. Mercury vapor readings using a Jerome Mercury Vapor Analyzer (MVA) recorded readings as high as 256,000 nanograms per cubic meter. Mercury had also been tracked into the home causing mercury vapor levels to exceed 1,000 nanograms per cubic meter. The homeowners insurance company was contacted regarding coverage, however, they were unable to respond and made no attempt to provide a response contractor. OSC Buerki hired ERRS Contractor WRS to perform the clean up.

The contents of the garage were removed, heated, and ventilated prior to screening. Contaminated items were placed into a rolloff box for disposal. Household hazardous waste items was segregated for lab packing. Visible mercury was recovered using a mercury vacuum and containerized for disposal. The concrete floor was then heat treated with a propane torch. Mercury was discovered under the framing of the garage walls necessitating demolition of a portion of two exterior walls and the interior bathroom walls. Repeated heat treatment and application of CS-102 did not adequately bring down the levels of mercury vapor so a concrete sealant was applied.

Visible mercury was also removed from the soil along the foundation of the garage on two sides. Mercury had penetrated the mortar of the foundation blocks necessitating removal of a portion of the foundation and floor on the two sides. Highly contaminated building materials (screened greater than 50,000 nanograms per cubic meter) and soil were containerized into drums for disposal. START collected confirmation samples of soil.

Contents of the rooms in the home that screened high were removed. The floors were vacuumed with a mercury vacuum and CS-102 was applied. START performed confirmation monitoring of the garage and home using a Lumex MVA, collecting readings every hour for an 8-hr period.

Disposal of decon water, debris failing TCLP for mercury, and waste elemental mercury took place on May 12, 2009. The rolloff box and drums of household hazardous waste were disposed of on June 4, 2009. Results from the confirmation soil samples exceeded clean up goals, therefore, additional soil was

removed and staged for later disposal. START also collected a second set of confirmation samples with results less than clean up goals.

Planned Removal Actions

OSC Buerki returned to the site on December 16, 2009, for disposal of the last mercury contaminated soil drum. No further removal action is necessary.

Next Steps

The homeowner is awaiting reimbursement for contaminated personal property that had to be disposed of which was not covered by their homeowner's insurance policy. Restoration of the garage was covered by their homeowner's insurance policy and was assumed by the homeowner.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Hazardous waste, liquid	2 drums	004300971 JJK	AERC
Hazardous waste, solid	2 drums	004300971 JJK	AERC
HHW, paint related material	1 drum	004677606 JJK	EQ Florida
HHW, aerosols	1 drum	004677606 JJK	EQ Florida
HHW, petroleum distillates	1 drum	004677606 JJK	EQ Florida
Ammunition	1 drum		Southern Ammunition Company
Hazardous waste, solid	2 drums	004677606 JJK	EQ Florida
HHW, antifreeze	1 drum	033572	EQ Florida
Debris, PPE, household items	1 rolloff box	10001	AW-Sand Valley Landfill
Hazardous waste, solid (soil)	1 drum	002676804 FLE	Allworth, LLC

response.epa.gov/hokesbluffmercury