

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Saturday, August 11, 2007

From: Brian Kelly

To: Guy St. Germain, WUP Health Department Mary Schafer, DEQ
Rosita Clarke-Moreno, U.S. EPA

Subject: Emergency Removal
Lake Linden
1000 Hiltunen Street, Lake Linden, MI
Latitude: 47.1960000
Longitude: -88.4050000

POLREP No.:	2	Site #:	B5KY
Reporting Period:		D.O. #:	
Start Date:	7/25/2007	Response Authority:	CERCLA
Mob Date:	7/25/2007	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The Site is located in the Lake Linden Recreational Park (LLRP), bordered by the Lake Linden Campgrounds, tennis courts, swimming beach, and playground in a mixed residential and commercial area. There are two areas of the Site; Area 1 is adjacent to the swimming beach and is primarily lead contaminated, Area 2 is adjacent to the boat dock and is primarily arsenic contaminated. The specific cause of the lead and arsenic is unknown, but is believed to be mining related. LLRP was the previous location of a chemical leachate facility and other processing facilities operated by Calumet and Hecla Mining Company (C&H). C&H used Torch Lake (Lake Linden is the name of the Village, where as the adjacent water body is Torch Lake) as a dump for waste material.

In June 2007, questions regarding a clay-like material along a shoreline in the Village of Lake Linden, Michigan were brought to the attention of State and Local officials.

On June 21, 2007, Michigan Department of Environmental Quality (MDEQ) sampled surface sludge found along the shoreline. When sample results were available on July 25 showing 78,000 mg/kg lead and 12 mg/kg polychlorinated biphenyls (PCBs), MDEQ, Michigan Department of Community Health, and Western Upper Peninsula District Health Department contacted U.S. EPA for assistance.

Current Activities

Between July 26 and August 1, U.S. EPA sampled a ½ mile area of the shoreline to determine the extent of contamination. These results along with recent x-ray fluorescence (XRF) screening show the lead confined to an approximately 200x200-foot area and another 3x200-foot area of arsenic. No PCBs were found during this sampling event.

On August 2, due to the potential exposure to the public including children, campers, and beachgoers, U.S. EPA initiated an Emergency Removal Action to address direct contact threats.

On August 7, the Great Lakes National Program Office's "Mud Puppy" vessel took eight 6-inch Ponar samples to define sediment contamination for the removal action. The Mud Puppy also collected 10-foot core samples for further study. Results showed lead above direct contact in one location near the shore. PCB were found below the DCC of four parts per million.

On August 9, DEQ Director Steven Chester visited the site.

Excavated of Area 1 is 90% complete.

Planned Removal Actions

- 1) Complete excavation of Area 1 on August 12,
- 2) Excavate Area 2 between August 13 and 15,
- 3) Sample waste stock piles for disposal,
- 4) Backfill Area 1 at least 18-inches,
- 5) Backfill and cap Area 2, and
- 6) Arrange for disposal.

Key Issues

The Emergency Removal Action will address direct contact threats. Lead 18-inches below surface, under the LLRP cover, or extending below the sediments of the lake will not be addressed.

response.epa.gov/lakelinden