

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Friday, November 19, 2004

From: Steven Renninger

To: Rich Murawski, ORC
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Subject: Final POLREP
Herron Avenue Drum Site
3709 Herron Avenue, Cincinnati, OH
Latitude: 39.1558000
Longitude: -84.5531000

POLREP No.: 3	Site #: B56V
Reporting Period: September 23, 2004 to November 18, 2004	D.O. #:
Start Date: 7/6/2004	Response Authority: CERCLA
Mob Date: 7/6/2004	Response Type: Time-Critical
Demob Date: 11/15/2004	NPL Status: Non NPL
Completion Date: 11/15/2004	Incident Category: Removal Action
CERCLIS ID #: OHN 000 508 879	Contract #: 68-S5-03-06-0025
RCRIS ID #:	

Site Description

The Herron Avenue Drum Site (Herron) consists of approximately 4 acres of land that has been developed for residential housing in Hamilton County, Cincinnati, Ohio. The Site consists of twenty parcels located along the southern portion of Herron Avenue, and is bordered to the east by the West Fork of Mill Creek, to the west by Cass Avenue, and to the south by Dreman Avenue. The Herron Avenue Site is surrounded by an area of residential properties of the north, west, and south perimeters. The West Fork of Mill Creek and a public playground are located along the eastern perimeter.

Numerous environmental investigations were performed at the Site between 1995-2003. These investigations uncovered several potential environmental concerns at the Herron Site including surface and partially buried drums as well as possible lead contamination. In November 2002, South Cumminsville Community for Better Housing, Inc., purchased the Site for the purpose of developing 20 residential lots. The City of Cincinnati received an easement to install public storm sewers at the Site on October 24, 2002. Two 55-gallon drums with unknown contents (liquid/sludge) were encountered during excavation activities associated with the Herron Avenue sanitary sewer construction project on March 18, 2003. Construction activities were halted with approximately 75 feet of sewer line remaining to be laid to finish the project. A geophysical survey conducted by a City of Cincinnati contractor identified numerous subsurface anomalies across the site.

In July, 2003, the City of Cincinnati requested U.S. EPA assistance in conducting a potential time-critical removal action at the Herron site. The City of Cincinnati noted drums in various stages of deterioration were found along with what appeared to be paint, petroleum, solvent, and foundry sand waste

On July 1, 2003, U.S. EPA performed test trenching at four locations on the City of Cincinnati right-of-way portion of the Site. Three of four test trenching locations identified subsurface drums as the geophysical anomalies, the fourth location revealed tires as the anomaly. Foundry sand was encountered at all U.S. EPA test trench locations to a depth of 10-15' below ground surface. Subsurface drums were noted to be in a deteriorated condition with contents leaking to the surrounding soil and sand. Drum waste contents were noted as liquid solvent, paint, black tar, and debris. Partially buried drums were documented along a 200' area of the creek bank.

U.S. EPA sample results of the foundry sand encountered in the test trenches indicated the presence of total lead at concentrations of up to 446 ppm. Two drums had flashpoints low enough to be considered ignitable waste streams. Drum sample D-7 contained acetone (14,000 ppm), ethylbenzene (21,000 ppm), methyl ethyl ketone (16,000 ppm), toluene (120,000 ppm), and xylenes (73,000 ppm). The concentration of methyl ethyl ketone (16,000 ppm) exceeded the TCLP regulatory limit of 200 ppm.

In September, 2003 an Action Memo was signed authorizing U.S. EPA removal activities at the Herron Avenue site. On July 6, 2004, U.S. EPA, START (TTEMI) and ERRS (EQM) contractor mobilized personnel and equipment to the site to initiate the removal action. Thirty-one removal grids (20 meters by 20 meters) were established.

Current Activities

Excavation of subsurface drums at the Herron Avenue Site is complete. ERRS continued to excavate areas identified as potential buried drums. START marked the anomalies using GPS coordinates. Anomalies were identified and investigated in 24 of 31 grids. No anomalies were identified in the remaining seven grids. The geophysical survey completed in August 2004, identified areas of potentially buried drums to a depth of approximately 15 feet below ground surface (bgs). During the excavation activities, large pockets of drums were found buried between 15 and 25 feet bgs. These areas were not previously identified by the geophysical survey. Drums at deeper levels were excavated and removed. Five test trenches were excavated in grids 10, 11, and 12 to determine if all drums buried to a depth of 15 feet bgs were removed. Excavation and test trenching was completed on October 21, 2004. A total of 3,350 drums were removed from the Herron Avenue Site.

A total of 218 roll-off boxes were loaded with excavated material from the site, totaling approximately 3,925 yd³ of waste. All boxes were transported to an EQ landfill in Belleville, Michigan or Detroit, Michigan.

START performed on-site and perimeter air monitoring for particulates and VOCs until excavation and disposal activities were completed. No exceedances of established action levels were recorded. START collected two post excavation soil samples, in Grid #2 and Grid # 11. The samples were analyzed for TCLP metals and TCLP volatiles to document that the clean-up goals were achieved.

Once all excavation activities were completed, the City of Cincinnati began supplying clean backfill for a 6-inch soil cap at the Herron Avenue Site. The City of Cincinnati provided approximately 3,500 yd³ of backfill from October 26, 2004 to November 8, 2004. ERRS graded the backfill across the site until November 8, 2004.

Additional backfilling may be completed by the City of Cincinnati in the future.

U.S. EPA and City of Cincinnati representatives attended a South Cummins Community Council meeting on November 8, 2004 to present information about the site and answer questions from residents. In addition, two representatives from the Ohio Department of Health attended the meeting to address the residents health concerns.

Planned Removal Actions

All equipment and personnel were demobilized from the site during the week on November 8, 2004.

Next Steps

- None

Key Issues

To date, a total of 3,350 drums have been shipped off site for proper disposal.

Disposition of Wastes

Wastestream: Nonhazardous waste

Quantity: 318 rolloff boxes (3,925 yd³)

Disposal Option: Landfill

Disposal Facility: Michigan Disposal(EQ), Belleville, Michigan