# United States Environmental Protection Agency Region V POLLUTION REPORT

Date: Wednesday, September 22, 2004

From: Steven Renninger

To: Rich Murawski, ORC Jim Smith, City
Danny Jones, City Duane Herth, City

Paul Weber, CFD Malcolm Adcock, CHD

Subject: POLREP #2

Herron Avenue Drum Site

3709 Herron Avenue, Cincinnati, OH

Latitude: 39.1558000 Longitude: -84.5531000

POLREP No.: 2 Site #: B56V

Reporting July 26, 2204 to September 20, **D.O.** #:

**Period:** 2004

Start Date: 7/6/2004

Response Authority:

Mob Date: 7/6/2004

Response Type: Time-Critical NPL Status: Non NPL

Completion Incident Category: Removal Action

Date:

CERCLIS ID #: OHN 000 508 879 Contract #

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 drum 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**

July 26, 2004 to September 22, 2004

Excavation of subsurface drums continues at the Herron Avenue site. On August 5, 2004 an additional geophysical survey was performed by Mundell & Associates using an EM-61. The new survey was completed due to the fact that vegetation on-site had been removed, allowing access to areas of the site that were previously inaccessible for geophysical survey. This allowed a more accurate survey of the site and the areas of potential buried drums to be removed. The survey indicated several new new anamolies, with a large anamoly being identified along the southeastern edge of the site (Grids 2, 3, and 4)

ERRS continued to excavate areas identified as potential buried drums. START marked the anomalies using GPS coordinates, and the areas were excavated until a clean clay layer was encountered. Thirty-one grids, approximately 20 meters by 20 meters were mapped for the excavation area. Seven grids had no anomalies identified in the grid. Twenty-two grids have been excavated and to date, 2,397 drums have been removed from these grids. Excavation is on-going in two grids. Once excavated, the waste is being stockpiled on-site. Roll-off boxes are loaded daily and staged at an alternate location owned by the City of Cincinnati. The boxes are then transported to the EQ Landfill in Belleville, Michigan. To date, 90 roll-off boxes have been sent off-site for disposal, totaling approximately 1,650 yd3 of waste.

START performed on-site and perimeter air monitoring for particulates and VOCs. No exceedances of established action levels have been recorded. Additionally, START collected two rounds of personnel and perimeter air sampling. Analytical data indicated no contaminants of concern in the air samples. START collected a post excavation soil sample in Grid #2. The sample was analyzed for TCLP metals and TCLP volatiles to document that the clean-up goal was achieved.

### **Planned Removal Actions**

- -Complete excavation in two remaining grids, Grid 16 and Grid 3,
- -Continue off-site disposal of stockpiled waste,
- -Continue periodic perimeter air monitoring until disposal is complete,
- -Continue biweekly project status meetings with the City of Cincinnati. The next meeting is scheduled for September 23, 2004.

# **Next Steps**

- -Complete excavation in two remaining grids, Grid 16 and Grid 3,
- -Continue off-site disposal of stockpiled waste,
- -Continue periodic perimeter air monitoring until disposal is complete,
- -Continue biweekly project status meetings with the City of Cincinnati. The next meeting is scheduled for September 23, 2004.

#### **Key Issues**

Due to the lack of space available at the Herron site, the City of Cincinnati identified an alternate location owned by the City to stage roll-off boxes pending disposal.

To date, a total of 2,397 drums have been shipped off site for proper disposal.

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