

United States Environmental Protection Agency
Region I
POLLUTION REPORT

Date: Friday, May 19, 2006

From: Leslie Sims

Subject: Progress Report

Whitman Cistern Site

401 South Street (Lots 1 and 2), Whitman, MA

Latitude: 42.0825000

Longitude: -70.9231000

POLREP No.:	2	Site #:	01CY
Reporting Period:	3/9/2006 - 5/19/2006	D.O. #:	
Start Date:	12/8/2005	Response Authority:	CERCLA
Mob Date:	12/8/2005	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	MAN000104188	Contract #	68-W-03-037
RCRIS ID #:			

Site Description

The Site is an empty lot located south of 401 South Avenue in Whitman, MA. The Site consists of approximately 19 acres, roughly triangular in shape, and is designated by the Town of Whitman Tax Assessor's Office as Maps 6 and 7, Block 75, and Lots 1 and 2. The geographic coordinates of the site, as measured from its approximate center, are 42° 04' 57" N latitude and 70° 55' 23" W longitude. The Site consists of an open grassy area near South Avenue and wooded/wetland areas farther southwest from the road. The Site is bordered to the west by railroad tracks, beyond which is the Shumatuscant River, and to the north by South Avenue and several businesses. An eastern tributary of the Shumatuscant River, known as Beech Hill Brook, generally defines the site boundary to the east and south; across the Brook, there are residences and businesses. The northern portion of the site is an open, graveled area. A small shopping complex and residence abuts the site to the northwest. Access to the site can be obtained west of the store through the northwest section of the site.

Elevated levels of polycyclic aromatic hydrocarbons (PAHs) and mercury in surface soils and sludge pose a direct contact threat to nearby human populations. It has been reported that children from the neighborhood frequented the Site regularly and had been known to use it for dirt biking and other recreational activities. The parcel of land comprising the site is located 50 feet from South Avenue. Nearby properties in the area consists of mixed residential and business.

On 26 April 2005, under the supervision of the Lead On-Scene Coordinator (OSC,) EPA's contractor, Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) completed a preliminary assessment/site investigation (PA/SI) at the Site and collected a total of 13 surface soil samples, 13 subsurface soil samples, five sludge samples (collected from the cistern), and 11 surface water samples (collected from a tributary Brook to the Shumatuscant River). The surface soil, subsurface soil, and sludge samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls (PCBs), and metals. The surface water samples were analyzed for SVOCs and metals. Seven piles of soil were present on the site during the April 2005 Site PA/SI. Four of these piles are indigenous to the site and are believed to have been created during past construction work at the site. Wooded areas located throughout the Site include areas of wetland vegetation with channels leading to the Brook. A cistern, buried in a grass-covered mound at the southeast edge of the cleared area, contained standing water, sludge, and sediment materials contaminated with elevated levels of PAHs and mercury.

Current Activities

On 9 March 2006, ERRS mobilized to the Site to collect sludge samples from each of the three cisterns. A waste stream profile was generated based on the disposal characterization of these samples.

On 16 March 2006, START conducted an extent-of-contamination survey which included the collection of surface soil samples for SVOCs and Resource Conservation and Recovery Act (RCRA) metals from the northern portion of the site (Area 2), and along the fenced western property line (Area 3). Additionally, five sediment samples were collected at the tributary Beech Hill Brook (Area 1) and submitted for SVOCs, RCRA metals, and total mercury analyses. Results from START's sampling effort indicated the presence of PAHs above the Massachusetts Contingency Plan (MCP) S1 standard at Area 3, and PAHs and lead above the MCP S1 standard at Area 2.

On 4 April 2006, based on the analytical results from the March 2006 survey, the extent-of-contamination survey grid was expanded to encompass a larger area (approximately 70,000 sqft). Composite surface soil samples were collected and submitted for SVOCs and RCRA metals analyses. Results from the sampling effort indicated the presence of PAHs above MCP S1 standards at the southeastern and southwestern portions of the grid.

On 11 April 2006, ERRS initiated removal activities at Areas 3 and 4. Removal activities included the transfer of approximately 10,000 gallons of hazardous sludge/liquids (i.e., mercury and lead) from the cisterns into on Site weir tanks, structural demolition of the cisterns, excavation of approximately 12,000 cubic feet (ft³) of PAH-contaminated soils and backfilling of all open excavations with clean fill material. All waste streams were staged on Site pending approval of associated waste disposal profiles.

On 8 May 2006, following the discovery of subsurface debris in a swale located at the southwestern portion of the Site (Area 5), ERRS and START conducted an extent-of-contamination survey at this area. As part of the survey, a total of 11 test pits were excavated to a depth of 3 ft bgs. The samples collected from this effort were submitted to an ERRS-contracted laboratory for PAHs and RCRA 8 metals analyses. The results from that sampling effort indicated eight PAH compounds, arsenic, barium, and lead contaminants above MCP S1 standards.

On 9 May 2006, following the profile approval of all staged/containerized waste streams, ERRS began T&D of the PAH-contaminated soils and remaining lead and mercury-contaminated liquids.

As of 19 May 2006, a total of 33 dump trucks of PAH-contaminated soils and 3 vacuum trucks of contaminated sludge/liquids have been transported off site for disposal.

Planned Removal Actions

EPA is conducting this on-going removal action as a fund-lead action. The proposed actions are protecting public health, welfare, and the environment by removing the hazardous substances, contaminated surface soils, and contaminated sludge from the Site.

Next Steps

Planned removal activities include, but are not limited to, the following:

Continue T&D of remaining staged contaminated soils; excavate and dispose of contaminated soils identified as above MCP S1 standards at Area 2; excavate and dispose of contaminated soils identified as above MCP S1 standards at Area 5; cap in-place contaminated soils which may remain at depth or which cannot otherwise be excavated; backfill excavated areas with clean fill material; and conduct site restoration activities.

Key Issues

On 8 May 2006, during removal activities at Area 3, ERRS observed debris in a swale and protruding from a soil mound located at Area 5. Test pit samples, collected from the area, indicated PAHs and RCRA metals (i.e., arsenic, barium, and lead) above MCP S1 standards for these contaminants.

Disposition of Wastes

To date (May 19, 2006), approximately 1000 tons of contaminated soils and 10,000 gallons of contaminated sludge/liquids have been transported off site for disposal at EPA-approved facilities (See below Manifest Data).

Waste Stream	Quantity	Manifest #	Disposal Facility
RQ, Hazardous Waste, Liquid, N.O.S., (Lead), (Mercury), 9, 3082, PG III, (D009), (D007)	2,800 gallons	93180	Clean Harbors of Braintree, Inc., 1 Hill Avenue, Braintree, MA 02184
RQ, Hazardous Waste, Liquid, N.O.S., (Lead),	2,668	93184	Clean Harbors of Braintree,

(Mercury), 9, 3082, PG III, (D009), (D007)	gallons		Inc., 1 Hill Avenue, Braintree, MA 02184
Polycyclic Aromatic Hydrocarbons (PAH)-contaminated Soil	30 tons	00001	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00002	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00003	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00004	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00005	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00006	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00007	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00008	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00009	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00010	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00011	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00012	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00013	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00014	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00015	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00016	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
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PAH-contaminated Soil	30 tons	00018	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903

PAH-contaminated Soil	30 tons	00019	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
RQ, Hazardous Waste, Liquid, N.O.S., (Lead), (Mercury), 9, 3082, PG III, (D009,D007)	4,000 gallons	95276	Clean Harbors of Braintree, Inc., 1 Hill Avenue, Braintree, MA 02184
PAH-contaminated Soil	30 tons	00020	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00021	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00022	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00034	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00023	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00024	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00025	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00026	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00027	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00028	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00029	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00030	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00031	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903
PAH-contaminated Soil	30 tons	00032	Aggregate Recycling Corporation, 106 Dow Highway, Elliot, ME 03903