

United States Environmental Protection Agency
Region 1
Office of Site Remediation and Restoration
One Congress Street, Boston, Massachusetts 02114-2023

Date: September 16, 2009
Subject: Pollution Report (POLREP) 2 and Final
Site: Lyman Street Area Removal Action Area (RAA), GE-Pittsfield/Housatonic River Site, Pittsfield, Massachusetts
From: Dean Tagliaferro, GE Team Leader, EPA New England
To: See Attached List
Response Authority: CERCLA Removal Action
Pollutant: Polychlorinated Biphenyls (PCBs) & other hazardous substances
Site ID No.: 0167
Phone Number: (617) 918-1282
Mobilization Date: August 5, 2002
Demobilization Date: June 13, 2008
Completion Date: September 14, 2009
Last POLREP: August, 8, 2002

I. Background:

On October 27, 2000, a Consent Decree (the "CD") executed by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (DEP), and several other government agencies was entered in the United States District Court for the District of Massachusetts. The CD requires (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soils, sediment, and groundwater in several areas at and near Pittsfield, Massachusetts that collectively comprise the GE-Pittsfield/Housatonic River Site.

The CD requires GE to investigate and, where necessary, perform response actions to address soil contamination at the 20 removal action areas (RAAs) within the GE-Pittsfield/Housatonic River Site. All activities completed by GE at the Lyman Street Area RAA were performed pursuant to a statement of work (SOW), which is Appendix E to the CD.

The Lyman Street Area RAA is an approximately 17.5 acre site located in Pittsfield, Massachusetts that is generally bounded by the banks of the Housatonic River to the south, East Street and several commercial properties to the north, the East Street Area 2-South RAA to the east, and Cove Street to the west. The Lyman Street Area RAA is considered one of the Former Oxbow Areas under the CD and consists of eight parcels. Lyman Street bisects the RAA into two distinct areas. The portion of the RAA east of Lyman Street consists of the GE-owned former Lyman Street parking lot, which was historically paved, and an undeveloped parcel owned by Western Massachusetts Electric Company that has high tension electricity transmission lines located on it. Former Oxbow Area D underlies the GE-owned former parking lot and Former Oxbow Area E is located within the Western Massachusetts Electric Company

property. The portion of the RAA located west of Lyman Street consists of six parcels that are a mix of commercial (with one “residential” sub-area) and recreational properties. This is also where Former Oxbow Area B is located.

Only the non-riverbank portion of these parcels is included in this RAA. The riverbank portions of these parcels are part of the Upper ½-Mile Reach Removal Action for the portion of the RAA east of Lyman Street and part of the 1 ½ Mile Reach Removal Action for the portion of the RAA west of Lyman Street.

This RAA consists of land within three former oxbows (Oxbows B, D and E) or low-lying areas associated with the Housatonic River. Rechannelization and straightening of the Housatonic River in the early 1940s separated these oxbows and low-lying areas from the active course of the river. The oxbows and low-lying areas were subsequently filled with various material and by a variety of sources (including GE), resulting in the current surface elevations and topography.

Groundwater and non aqueous phase liquids (NAPL) within the Lyman Street Area RAA are being addressed under Groundwater Management Area # 1 pursuant to the CD and SOW and are not part of this POLREP.

In March 2002, GE submitted a Pre-Design Investigation Work Plan that required the collection of soil samples at a frequency dictated by Appendix E of the CD. This Work Plan was conditionally approved by EPA on July 2, 2002. Pursuant to this plan (and several subsequent supplemental pre-design sampling documents), starting in August 2002, GE collected and analyzed soil samples for total PCBs and non-PCB contaminants consisting of the contaminants listed in Appendix IX of 40 CFR Part 264 plus the following three additional contaminants: benzidine, chloroethylvinyl ether, and 1,2-diphenylhydrazine (Appendix IX +3 contaminants).

For additional details, see the initial Lyman Street Area POLREP dated August 8, 2002 or the GE-Pittsfield/Housatonic River Site website (www.epa.gov/region1/ge).

II. Actions Since the last POLREP:

GE submitted sample results in pre-design investigation reports dated April 23, August 18, and October 23, 2003. Based on the soil-related Performance Standards contained in the CD and SOW, and the analytical data from the sampling events, GE conducted technical removal design/removal action (RD/RA) evaluations using spatial averaging protocols specified in the CD for both PCBs and Appendix IX + 3 contaminants. These evaluations concluded that the existing soil conditions did not satisfy the applicable soil-related Performance Standards for all but one parcel. Therefore, response actions, including soil removal and an engineered barrier installation, were necessary to achieve these Performance Standards at the parcels as described below.

GE proposed response actions to meet the soil-related Performance Standards in RD/RA work plans, supplements, and addenda dated March 2004, January 28, 2005, May 2005, September 2005 and April 4, 2006. These Performance Standards are based upon the existing use of a property: that is, commercial, recreational, or residential.

For properties not meeting residential standards, the CD requires either an Environmental Restriction and Easement (ERE) or a “Conditional Solution” be implemented on each such property. EREs are deeded environmental land use restrictions that prohibit certain uses. Conditional Solutions apply where a private property owner refuses an ERE. Conditional Solutions place obligations on GE to perform additional response actions to allow legally permissible future uses (changing from commercial to residential use, for example).

The soil-related Performance Standards for PCBs at given depth intervals are as follows:

Commercial/industrial properties (with EREs):

0-1 feet 25 ppm; 1-6 feet 200 ppm; and 0-15 feet 100 ppm

Commercial/industrial properties (with Conditional Solutions):

0-1 feet 25 ppm; 0-3 feet 25 ppm; 1-6 feet 200 ppm; and 0-15 feet 100 ppm

Recreational properties (with EREs):

0-1 feet 10 ppm; 1-3 feet 15 ppm; and 0-15 feet 100 ppm

Recreational properties (with Conditional Solutions):

0-1 feet 10 ppm; 0-3 feet 10 ppm; and 0-15 feet 100 ppm

Residential properties

0-1 feet 2 ppm; 1-X feet 2 ppm, where X is defined as the maximum depth at which PCBs were detected (up to a maximum depth of 15 feet)

In addition, for the southern portion of Parcel I9-8-1 (the GE-owned Lyman Street parking lot), the CD and SOW specified a remedy consisting of a vegetated engineered barrier. Therefore, concentration based Performance Standards do not apply to this area.

The soil-related Performance Standards for non-PCB contaminants are described in the SOW and in GE’s Final Completion Report.

Also, on parcel I9-8-1, GE was required to conduct Natural Resource Restoration/Enhancement Activities (NRR/EA) subject to oversight and approval by the Natural Resource Trustees (the “Trustees”). These activities consisted of the planting of an herbaceous native grassland community on the surface of the engineered barrier on the southern portion of Parcel I9-8-1 and

also on the unpaved northern portion of I9-8-1. In addition, GE was required to install one bluebird box on Parcel I9-8-1.

Following the investigations that were conducted at each of the eight parcels in the RAA, soil was removed from seven parcels, a vegetated engineered barrier (1-ft minimum thickness) was installed on one parcel, and restoration work was conducted at seven parcels such that the applicable Performance Standard for each parcel was met. One parcel (I9-4-202) did not require any active remediation to meet the soil-related Performance Standards. An air monitoring program was conducted during the removal phase of the construction process. Active remediation and restoration activities were generally performed between August and September 2006 for parcels west of Lyman Street and from May through November 2007 for parcels east of Lyman Street. Minor restoration activities, including reseeded the GE-owned Lyman Street parking lot, continued until June 13, 2008, when final restoration activities (excluding post-removal site control activities) were completed.

Following is a list of the parcels in the RAA with the applicable use designation, along with a description of the remediation work conducted on the parcel following the investigation.

Parcels west of Lyman Street

- I9-4-14: Recreational and Commercial with a Conditional Solution. Remediation included soil removal.
- I9-4-19: Recreational and Commercial with a Conditional Solution. Remediation included soil removal.
- I9-4-25: Recreational and Commercial with a Conditional Solution. Remediation included soil removal.
- I9-4-201 (Excluding sub-area adjacent to a Day Care Center): Commercial with a Conditional Solution. Remediation included soil removal.
- I9-4-201 (Sub Area 201A; which is an area adjacent to a Day Care Center): Residential. Remediation included soil removal.
- I9-4-202: Commercial with a Conditional Solution. No active remediation was required to meet Performance Standards.
- I9-4-203: Recreational and Commercial with a Conditional Solution. Remediation included soil removal.

Parcels east of Lyman Street

- I9-8-1 (southern portion): Presumptive engineered barrier remedy, with ERE. Remediation included soil removal and engineered barrier installation. Restoration included an NRR/EA component as described above.

- I9-8-1 (northern portion): Recreational with an ERE. Remediation included soil removal. Restoration included an NRR/EA component as described above.
- I9-8-2: Recreational with a Conditional Solution. Remediation included soil removal.

The Trustees provided GE a Certificate of Completion of Installation of Restoration Work letter dated September 2, 2008 certifying that the NRR/EA Restoration Work components at this RAA were installed in accordance with the CD.

By cover letter dated August 27, 2009, GE submitted a Final Completion Report for the Lyman Street Area RAA and certified that all actions required by the CD (excluding post-removal site control activities) were completed and that the soil-related Performance Standards were attained. By letter dated September 10, 2009 to EPA, Massachusetts DEP concurred that GE had completed all actions required by the CD (excluding post-removal site control activities). On September 14, 2009 EPA issued GE a Certificate of Completion for the Lyman Street RAA and transmitted the Certificate of Completion to GE along with an approval letter for GE's Final Completion Report.

III. Disposition of Waste

Under the CD, GE may dispose of non-RCRA hazardous waste with average PCB concentrations less than 50 ppm into the Hill 78 On-Plant Consolidation Area ("OPCA"). Material with average concentrations greater than 50 ppm PCBs and/or RCRA hazardous waste may be disposed at the Building 71 OPCA. Disposal of material into the Hill 78 and Building 71 OPCAs are subject to size limitations on the OPCAs imposed by the CD, as revised by the 4th Modification. Once the size limitations of the OPCAs have been achieved and the OPCAs have been permanently capped, no further material can be placed into the OPCAs. Free liquids, free product, intact drums and capacitors, asbestos-containing material, and other equipment that contains liquid PCBs within its internal components, must be disposed of appropriately at an off-site disposal facility.

The total quantity of soil removed from the RAA was 4,090 cubic yards. The soil was disposed of at the following locations: Building 71 OPCA (1,235 cubic yards); Hill 78 OPCA (395 cubic yards); and, at a TSCA-regulated landfill in Model City, New York (2,460 cubic yards). The material sent to Model City, NY was suitable for placement into the Building 71 OPCA; however, the Building 71 OPCA reached capacity and was closed in 2007.

The total area encompassed by the engineered barrier is approximately 133,500 square feet (approximately 3 acres).

For additional details, see the Lyman Street Area Final Completion Report, August 2009, available at the GE-Pittsfield/Housatonic River Site website (www.epa.gov/region1/ge).

IV. Financial:

Not applicable. PRP-lead removal action.

V. Future Activities:

- Monitor GE's post-removal site control activities. GE will be conducting post-removal site control activities according to an approved plan contained in GE's Final Completion Report.
- Monitor GE's groundwater management and NAPL recovery activities. These activities will be conducted under a separate removal action associated with Groundwater Management Area #1.

POLREP DISTRIBUTION LIST

**Date and POLREP#: September 16, 2009, POLREP #2 & FINAL
Project: Lyman Street Area Removal Action Area (GE/Housatonic Site)**

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