

1.0 Overview:

During February 2002, General Electric Company (GE) and its contractor Maxymillian Technologies Incorporated (MTI) continued work on the Upper ½ Mile Reach Removal Action. The primary work included completing final bank and river restoration activities for Cell J1 and completing removal work tasks and initiating restoration work tasks for Cell J2.

Weekly status meetings were held on February 4, 11, 20, and 25, 2002.

2.0 Chronological description of the tasks performed:

Refer to the figure (Exhibit A) referenced in Section 4.0 and attached to this report for an orientation of the sheetpile cells and their respective locations. Cell J1 was divided into upstream and downstream areas separated by a sewer siphon pipeline crossing at mid-cell. Cell J2 is immediately downstream of Cell J1.

Restoration activities for the Cell J1 riverbed were continued from January and completed during the first week of February. For the river restoration, a geotextile layer was installed over the bottom of the excavation area. The isolation sand layer was then placed over the geotextile fabric to depth ranges of 3 to 6 feet with a nominal depth of 4 feet. Following placement of the isolation sand layer, another layer of geotextile and a layer of geogrid were installed. The stone armor layer consisting of 12 inches of rip-rap was then installed on top of the geogrid. To complete the river restoration, the northern half of the vortex rock weir was installed and five habitat enhancement boulders were placed within the cell (with oversight by the Massachusetts Executive Office of Environment Affairs [EOEA]). Additional rip-rap was placed along the centerline sheetpile wall between Cells I1 and J1 to match the elevation of the restored armor layers in the two cells.

During the second week of February, restoration activities were completed for the Cell J1 bank area. Bank restoration activities included placing rip-rap at the toe-of-the-bank to the design elevation and at 1:1 bank slope areas. Above the rip-rap, the excavation areas were backfilled with soil and compacted. A 6-inch layer of topsoil was placed over the backfill, followed by placement of grass seed and erosion control mats. As part of the final Cell J1 bank restoration, GE restored two downstream swales (#8 and #9) in accordance with Work Plan specifications by excavating the swales, placing geotextile liner over the liner on the bottom of the swales, and then placing 12-inch rip-rap over the geotextile liner within the swale. With EPA and EOEA approval, two additional upstream swales (#6 and #7) were restored in a similar manner to the adjacent restored bank area (e.g., topsoil, grass seed, erosion control mats) since the pipes that previously discharged to these swales have been plugged and abandoned.

Additional activities were performed in conjunction with river restoration activities, including completing the installation of the DNAPL observation well located on the outside face of the Waterloo source control barrier wall (i.e., river side) in the upstream Cell J1 riverbed. This installation included placement of a screened inner well and surrounding stone/sand pack within the outer casing of the well. Restoration activities were also completed for the Cell J1 sewer crossing, including injection grouting below the sewer crossing. Riverbed restoration activities were completed by placing a 12-inch layer of rip-rap over the sewer crossing as part of the armor cap. Following completion of a post-restoration final survey for Cell J1, the dewatering pumps were removed and the cell was allowed to fill with water. The cutoff wall sheetpiles were removed from the river, cleaned at the top of the bank, and stockpiled.

During the third week of February, removal work tasks were continued (from December 2001) for Cell J2. During sediment removal activities, small droplets of NAPL and a sheen were observed on February 19, 2001, near the downstream cutoff sheetpile wall in Cell J2. On the same date, GE verbally reported this observation to EPA, MDEP, and the NRC (the NRC issued Tracking Number 594429). In response to this observation, oil-absorbent pads were placed at the pump intake for the water handling system that transferred the water to GE's on-site water treatment system. At the request of EPA and the U.S. Army Corps of Engineers, an additional 1-foot-deep excavation was completed over an approximately 20' x 40' area in Cell J2 to address a potential NAPL-impacted area. With EPA approval and oversight, approximately 25 cubic yards (cy) of sediment were removed from the Cell J2 affected area. No NAPL was observed during excavation activities or at the limits of removal following excavation activities. Excavated sediment from the Cell J2 affected area was transported to the TSCA stockpile at Bldg. 33X. Following excavation activities, a survey was performed to record the Cell J2 affected removal area in addition to the Work Plan removal limits.

During the fourth week of February, restoration work tasks were initiated in Cell J2. After removal activities were complete, restoration efforts began in the upstream river portion of Cell J2. Restoration included first placing a geotextile layer over the bottom of the excavation area. The isolation sand layer was then placed over the geotextile fabric (12 to 24 inches in depth). Following placement of the isolation sand layer, another layer of geotextile and a layer of geogrid were installed. The stone armor layer was then installed, placing a 12-inch layer of rip-rap on top of the geogrid. This process was continued downstream to complete the Cell J2 riverbed restoration.

Sampling/monitoring activities completed during the month of February included in-situ isolation layer sand sampling, sampling of the isolation layer backfill at the source, waste characterization sampling, air monitoring, and water column monitoring. Isolation layer sand samples were collected from the Cell J1 monitoring location and submitted for analysis of PCBs and total organic carbon (TOC). Isolation layer samples representing

the 1-year monitoring event were collected from the Cell G3 monitoring location and submitted for analysis of TOC and PCBs. In addition, isolation layer backfill samples were collected from the backfill source location and submitted for PCB, TOC, and gradation analysis. Waste characterization samples were collected from 3 drums and submitted for analysis of PCBs. Waste characterization samples were also collected from DNAPL-impacted sediment removed from Cell J1 and stockpiled in Bldgs 65.

Air monitoring for particulate matter was conducted on a daily basis during February. The monthly PCB air monitoring event was conducted on February 15 and 16, 2002. Water column [PCB and total suspended solids (TSS)] monitoring was also continued during removal activities in the month of February.

During the month of February, GE Buildings 33X and 33-north were used as temporary storage facilities for Toxic Substances Control Act (TSCA) material and non-TSCA material, respectively, prior to final disposition at the appropriate On-Plant Consolidation Area (OPCA). In addition, Building 65 was used as temporary storage area for DNAPL-impacted material removed from Cell J1.

3.0 Sampling/test results received:

Table 1 presents Cells G1 and G2 isolation layer TOC sample results for the 1-year isolation layer monitoring event for these cells.

Table 2 presents baseline PCB and TOC sample results from the Cell J1 isolation layer.

Tables 3A and 3B present the daily water column monitoring results for turbidity and the results of the water column samples collected for TSS and PCB analysis.

Table 4 presents isolation sand backfill PCB and TOC results for samples collected at the source (Bushika Sand and Gravel).

Table 5 presents general backfill PCB results for samples collected at the source (Dalton Hardwood/Brown's Pit).

Table 6 presents disposal characterization PCB sample results for unknown drums.

Table 7 presents the results of the February air monitoring for particulate matter.

Table 8 presents ambient air monitoring results for PCBs for monitoring event conducted on February 15 and 16, 2002.

4.0 Diagrams associated with the tasks performed:

A figure presented as Exhibit A shows the location and the progress of work for Cells H, I, and J along the Upper ½ Mile Reach and is attached to this report for reference.

A summary chart (Exhibit B) has been developed to assist in tracking the analytical and physical testing requirements of the various sources of backfill (e.g., isolation material, soil back fill, riprap rock, etc.). Exhibit B includes the source, type and quantity of backfill materials used, information for the analytical and physical testing required by the Work Plan, and the source backfill sampling that has been performed to date.

5.0 Identification of reports received and prepared:

During the month of February, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in January 2002, the monthly reports required by the Consent Decree and the Upper ½-Mile Reach Removal Action Work Plan were both submitted. In addition, during February, GE submitted the following documents:

- Analytical sample results for PCBs from isolation layer sand (Submittal #27A);
- Analytical sample results for PCBs from general backfill (Submittal #28);
- Analytical sample results for PCBs, TOC, and gradation analysis from isolation layer sand (Submittal #29);
- Letter regarding *Revised Estimated Project Timetable for Upper ½ Mile Reach*, dated February 7, 2002;
- Cell J1 DNAPL observation well cross-section; and
- Cells I3/J3 sheetpile calculations and sheetpile inventory from MTI.

6.0 Photo documentation of activities performed:

- See attached Figure 1.

7.0 Brief description of work to be performed in March 2002:

For the next reporting period, the following activities are anticipated to be performed:

- Complete installation of aquatic habitat enhancement boulders in Cell J2.
- Complete bank restoration activities for Cell J2.
- Perform Cell J2 final restoration survey.

- Initiate sediment and bank soil removal and restoration activities for Cell I2.
- Begin installation of sheetpiles for Cells I3/J3.
- Following response from EPA, install monitoring wells associated with Cell J1 Waterloo source control barrier wall.
- Complete Cell J1 non-removal bank area restoration.
- Complete off-site disposal of Cell J1 DNAPL material stockpiled at the Building 65 stockpile area.
- Maintain temporary stockpiles of material in Buildings 33-north, 33X, and 65 (non-TSCA, TSCA, and DNAPL-impacted material, respectively); and
- Continue to conduct air monitoring and water column monitoring associated with response activities for the Upper ½-Mile Reach.

8.0 Attachments to this report:

Table 1 – Cells G1 and G2 1-year isolation layer monitoring TOC sample results.

Table 2 – Cell J1 baseline isolation layer PCB and TOC sample results.

Table 3A – Daily water column monitoring turbidity results.

Table 3B – Water column samples for TSS and PCB analyses.

Table 4 – Backfill isolation layer sand PCB and TOC results for samples collected at the source (Bushika Sand and Gravel).

Table 5 – General backfill PCB results for samples collected at the source (Dalton Hardwood/Brown's Pit).

Table 6 – Disposal characterization PCB sample results for unknown drums.

Table 7 – Results of the February ambient air monitoring for particulate matter.

Table 8 - Ambient air monitoring results for PCBs for event conducted in February.

Exhibit A – Figure showing the progress of work within the Upper ½-Mile Reach

Exhibit B – Backfill quantity and sample summary chart.

Figure 1 - Photo documentation