

1.0 Overview:

During August 2002, General Electric Company (GE) and its contractor Maxymillian Technologies Incorporated (MTI) continued work on the Upper ½ Mile Reach Removal Action. The primary river work included performing restoration activities in Cell J3. Part of the restoration of Cell J3 included completing activities associated with the Waterloo barrier wall. In addition, a vegetation monitoring event and habitat structure inspection were performed for the Upper ½ mile Reach during the month of August. By the end of August, the work on this Removal Action was largely completed, as discussed further below.

Weekly status meetings were held on August 13, 19, and 26, 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.

At the beginning of August, riverbed restoration activities were initiated at the downstream portion of Cell J3. Riverbed restoration activities began by backfilling the Waterloo sheetpile wall at the western end of the cell near the Lyman Street Bridge. A layer of geotextile was laid over the bottom of the river excavation, followed by installation of a 2-inch thick peat layer over the geotextile. The isolation sand layer was then placed over the peat layer. This isolation layer was nominally 12 inches deep, but up to 3 feet deep in non-aqueous-phase liquid (NAPL) removal areas, and up to 10-feet deep along the Waterloo wall. 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 by placing a 12-inch layer of rip-rap on top of the geogrid. Restoration continued by placing rip-rap up the bank to provide a 1-foot cover over the Waterloo wall. This process was continued in the upstream direction to complete the riverbed restoration. In addition, at the request of EPA, concrete blocks were installed in the riverbed at the downstream end of the cell for transition to the next 1½ Mile Reach Removal Action.

During the second week of August, a vegetation inspection was performed on August 12 and 13, 2002, as part of the monitoring program for plantings on restored bank areas of the Upper ½-Mile Reach. Representatives from Massachusetts Executive Office of Environmental Affairs (EOEA), Woodlot Alternatives (assisting EOEA), AMEC Environmental (planting inventory), C.L. Frank (certified arborist), and BBL performed the vegetation inspection. Plant survival was assessed by performing a stem count and inventory of planted understorey and canopy specimens and herbaceous cover. An invasive species evaluation was also performed by the certified arborist to assess the status of invasive species. In addition, on August 14, 2002, a habitat enhancement structure/armor cap inspection was performed and included a visual review of the habitat structures and armor cap installed along the ½ Mile Reach to assess habitat and the

stability of the structures, and to observe for areas of erosion. The habitat structure/armor cap inspection was performed with representatives from Woodlot (representing EOE), Army Corps of Engineers (ACOE), and BBL in attendance.

During the third week of August, the Cell J3 riverbed restoration was completed. To complete the river restoration, habitat enhancement structures were installed (with oversight by the EOE). The northern half of a vortex rock weir was installed from the north bank to the centerline cutoff wall to join the southern half installed in Cell I3. In addition, three boulder clusters were placed on the riverbed in groups of three, four and three boulders each. A post-restoration survey was then performed for the Cell J3 riverbed area to record final restored elevations. Following completion of the riverbed restoration, water treatment was discontinued and the water generated from dewatering operations was pumped back into the river (with EPA approval).

During the fourth week of August, closure activities were continued for Cell J3. The pumps and dewatering system were removed from the cell. Removal of the cutoff wall sheetpiles were initiated starting at the downstream end of the cell. Sheetpile removal continued through the end of the month and is expected to be completed in September. Sheetpiles removed from the cell were transferred to the decontamination pad for cleaning prior to removal from the site. In addition, general demobilization activities were performed for the 1/2 Mile Reach. MTI began removal of surplus material and equipment (also cleaned at the decontamination pad prior to removal from the site), and breakdown of the water handling system for the 1/2 Mile Reach.

In addition, during the fourth week, response actions were performed in association with the vegetation inspection and bank erosion monitoring. Thin herbaceous areas along the 1/2 Mile Reach identified during the vegetation inspection were top-dressed with topsoil (as necessary) and re-seeded. Additionally, in response to the bank erosion inspection, rip-rap was placed along the toe of the bank in Cell A near the Newell Street Bridge to address a previously identified area of erosion. Invasive species control activities were also performed along the banks of the 1/2 Mile Reach to treat and remove undesirable species.

Sampling/monitoring activities completed during the month of August included collecting samples from Cell J3 to provide baseline data for the isolation layer monitoring program. Following sediment excavation in Cell J3, sediment samples were collected for PCB analysis at the two isolation monitoring locations. After the isolation layer was installed, samples were collected for PCB and TOC analysis. Samples were collected from the roadway material stockpile for PCB analysis for disposal characterization. Samples were also collected from the Cell J3 NAPL-impacted material stockpiled in Building 65 and the Building 68 outside pad for disposal characterization analysis.

Air monitoring for particulate matter was conducted on a daily basis up to August 26, 2002 (when restoration activities were substantially completed). With EPA consent, the monthly PCB air monitoring event was not performed during August since removal

activities were not performed. Both the PCB and particulate air monitoring have been discontinued for the remainder of the project. Water column [PCB and total suspended solids (TSS)] monitoring was also continued during the month of August.

During the month of August, GE Buildings 33X and 33-north were used as temporary storage facilities for TSCA material and non-TSCA material, respectively, prior to final disposition at the appropriate OPCA. In addition, Building 65 and the Building 68 outside pad were used as a temporary storage area for NAPL-impacted material removed from Cell J3 prior to off-site disposal.

On August 30, 2002, GE sent EPA a letter noting that the substantial completion date for the Upper ½ Mile Reach Removal Action is September 6, 2002, with a few remaining activities, including completion of the sheetpile removal, final restoration of the Cell J3 bank area, various plantings on the river bank, and demobilization activities, to be completed in September.

Finally, during August, GE received a letter from EPA, dated August 26, 2002, regarding the total organic carbon (TOC) content in isolation layer material previously placed in the Upper ½ Mile Reach. That letter directed GE to submit a supplemental sampling plan within 14 days and thereafter to submit other information relating to TOC levels in the isolation layer material and their impact on PCB migration times through that layer.

3.0 Sampling/test results received:

Table 1 presents revised PCB, VOC, and SVOC sample results for NAPL collected from the upstream area in Cell J3.

Table 2 presents PCB, VOC, SVOC, and specific gravity sample results for NAPL collected from the downstream area in Cell J3.

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 Cell J3 PCB results for post-excavation sediment samples associated with isolation layer monitoring.

Table 5 presents roadway material stockpile sample results for PCBs.

Tables 6 through 8 present disposal characterization PCB, VOC, SVOC, and TCLP sample results for Cell J3 NAPL-impacted material stockpiled in Building 65.

Table 9 presents ambient air monitoring results for particulate matter for August.

Tables 10 through 12 present disposal characterization PCB, VOC, SVOC, and TCLP sample results for Cell J3 NAPL-impacted material stockpiled in Building 68 outside pad.

Tables 13 and 14 present baseline PCB and TOC sample results for Cell J3 isolation layer.

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. As shown on the figure, work tasks have been completed for all portions of the Upper ½ Mile Reach other than Cell J3 and are substantially complete in Cell J3.

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, information regarding 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 August, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in July 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 August, GE submitted the following documents:

- Letter regarding *Force Majeure-- NAPL in Cell J3*, dated August 2, 2002.
- Letter regarding *Applicability of Permit Exemption to Bank Soils Near Cell I-1*, dated August 28, 2002.
- Letter regarding *Substantial Project Completion Date*, dated August 30, 2002.
- Fall 2002 planting schedule for vegetation restoration.
- Table and figure of response actions for herbaceous cover as part of vegetation monitoring.

6.0 Photo documentation of activities performed:

- See attached Figure 1.

7.0 Description of work anticipated to be performed in September 2002:

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

- Complete final Cell J3 bank restoration activities.
- Perform Cell J3 bank restoration final survey.
- Complete removal of Cell J3 cutoff sheetpiles.
- Complete removal of water handling system for ½ Mile Reach.
- Perform general demobilization and cleanup activities for the ½ Mile Reach.
- Complete removal and restoration of bank soil at top of bank near Cell II and Newell Street parking area (polygon associated with sample location RB-7).
- Complete off site disposal of Cell J3 NAPL-impacted material stockpiled in Building 65 and Building 68 outside pad.
- Complete transfer of roadway stockpile material and material stockpiled in Buildings 33 (non-TSCA) and 33X (TSCA) to the appropriate OPCAs.
- Continue to conduct water column monitoring associated with Upper ½ Mile Reach Removal Action until completion of sheetpile removal.
- In accordance with EPA's August 26, 2002 letter regarding TOC levels in the isolation layer material, submit plan for additional sampling of isolation layer material for TOC, as well as collection of other site-specific data pertaining to modeling of PCB migration times through that layer.

8.0 Attachments to this report:

Table 1 – Revised PCB, VOC, and SVOC sample results for NAPL collected from upstream Cell J3.

Table 2 – PCB, VOC, SVOC, and specific gravity sample results for NAPL collected from downstream Cell J3.

Table 3A – Daily water column monitoring results.

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

Table 4 – Cell J3 sediment sample results for PCBs associated with isolation layer monitoring.

Table 5 – Roadway material stockpile sample results for PCBs.

Table 6 – Disposal characterization PCB sample results for Cell J3 NAPL-material stockpiled in Building 65

Table 7 – Disposal characterization VOC and SVOC sample results for Cell J3 NAPL-material stockpiled in Building 65.

Table 8 – Disposal characterization TCLP sample results for Cell J3 NAPL-material stockpiled in Building 65

Table 9 – Results of the August ambient air monitoring for particulate matter

Table 10 – Disposal characterization PCB sample results for Cell J3 NAPL-material stockpiled in Building 68 outside pad.

Table 11 – Disposal characterization VOC and SVOC sample results for Cell J3 NAPL-material stockpiled in Building 68 outside pad.

Table 12 – Disposal characterization TCLP sample results for Cell J3 NAPL-material stockpiled in Building 68 outside pad.

Table 13 – Baseline PCB and TOC results for Cell J3 isolation layer.

Table 14 – Baseline PCB and TOC results for Cell J3 isolation layer.

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

Exhibit B – Backfill sampling chart.

Figure 1 - Photo documentation.