

## 1.0 Overview:

During June 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 completing removal and restoration activities in Cell I3. Response actions associated with monitoring events were performed for the bank areas of the Upper ½ Mile Reach to address vegetation and erosion areas. Activities were also performed along the banks of the Upper ½ Mile Reach to address invasive vegetative species. In addition, the baseline monitoring well program associated with the Cell J1 Waterloo barrier wall was completed during the month of June.

Weekly status meetings were held on June 3, 10, 17, and 24, 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 June, soil and sediment removal activities were completed in Cell I3 to Work Plan limits. Toxic Substances Control Act (TSCA) material excavated from Cell I3 was transported by truck to Building 33X for stockpiling prior to transfer to the Building 71 On Plant Consolidation Area (OPCA). Non-TSCA material removed from the cell was direct loaded into trucks for transfer to the Hill 78 OPCA. In addition, transfer activities were initiated to transport non-TSCA material stockpiled in Building 33 to the Hill 78 OPCA. At the end of the week, response actions associated with the spring 2002 vegetation monitoring were initiated for plantings. Based on field observations from monitoring activities, tree locks were installed between the plantings and the outer protective guards to prevent the plant stems from rubbing against the outer guards.

To begin the second week of June, sediment removal was initiated at an upstream Cell I3 area to address the occurrence of non-aqueous phase liquid (NAPL). With Environmental Protection Agency (EPA) approval and oversight, a total of approximately 52 cy of NAPL-impacted sediment was removed from the upstream Cell I3 affected area. The excavated NAPL-impacted sediment was transported by truck to the Building 65 stockpile for staging prior to appropriate off site disposal. No NAPL was observed at the limits of removal following completion of excavation activities. A survey was then performed to record the limits Cell I3 NAPL removal area as well as completion of the Work Plan removal limits. Following EPA review of the survey, Cell I3 riverbed restoration activities were initiated. River bed restoration activities consisted of first placing a geotextile followed by a 2-inch layer of peat. The isolation sand layer (nominal 12-inches deep; up to 2-feet deep in NAPL removal areas) was then placed over the peat layer. 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. Restoration continued by placing rip rap along

the entire Cell I3 toe of bank to a minimum elevation of 974 feet above mean sea level (AMSL).

Response actions associated with the spring bank erosion monitoring activities were also initiated during the second week of April and included the removal of approximately 0.5 cy of eroded sediment from the river at the base of swale #11 in Cell I1. The excavated material was stockpiled at the top of the bank and will be disposed with the additional bank soil to be removed from the polygon associated with sample location RB-7.

The second week of June ended with completing the non-TSCA soil/sediment transfer of material stockpiled in Building 33-north to the Hill 78 OPCA. The soil/sediment was subject to a paint filter test prior to transfer to confirm that the material did not contain excess water.

During the third week of June, Cell I3 riverbed restoration activities were completed. As part of river restoration, habitat enhancement structures were also installed (with oversight by the Massachusetts Executive Office of Environment Affairs [EOEA]). One half of a vortex rock weir was installed from the south bank to the centerline cutoff wall, and a wing deflector structure was installed along the riverbank upstream of the vortex rock weir. A restoration survey was then performed for the completed Cell I3 riverbed restoration area to record final restored elevations.

During the fourth week of June, Cell I3 bank restoration activities were completed. Above the rip-rap erosion protection, the bank excavation areas were backfilled with soil and compacted. A 6-inch layer of topsoil was placed over the backfill, followed by placement of the herbaceous grass seed mix and erosion mats. In addition, restoration of a previously unidentified swale located at approximately mid-cell was completed by excavating and shaping the sides and bottom of the swale and installing a 12-inch-thick layer of rip rap on top of geotextile within the swale. For transition to the next 1.5 Mile Reach (to be performed by EPA), concrete "bin" blocks were installed at the downstream end of Cell I3 to form the base of the upstream cutoff wall for the next downstream cell. Following completion of a post-restoration final survey for Cell I3 (submitted to EPA), the dewatering pumps were removed and the cell was allowed to flood. Removal of the Cell I3 cutoff wall sheetpiles was then initiated.

Work tasks associated with the Cell J1 Waterloo barrier wall were also completed during June. Weekly monitoring activities were performed for the 3 monitoring wells (installed at the top of bank) and the recovery well (located in the river) associated with the Cell J1 Waterloo barrier wall. Following receipt of EPA's approval letter (dated June 14, 2002), monitoring of these wells was changed from weekly to monthly and was transferred to the Groundwater Management Area-1(GMA-1) program.

Sampling/monitoring activities completed during the month of June included collecting backfill samples for analysis. A general backfill sample was collected and submitted for laboratory analysis of PCBs. Also, isolation layer backfill samples were collected and

submitted for analysis of PCBs, VOCs, SVOCs, TPH, TOC, and inorganics. In addition, disposal characterization samples were collected from the Cell I3 NAPL-impacted material stockpiled in Bldg. 65 and submitted for analysis.

Air monitoring for particulate matter was conducted on a daily basis during June. The monthly PCB air monitoring event was performed June 10-11, 2002. Water column [PCB and total suspended solids (TSS)] monitoring was also continued during removal activities in the month of June.

During the month of June, 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 was used as temporary storage area for NAPL-impacted material prior to off-site disposal.

### **3.0 Sampling/test results received:**

Table 1 presents analytical results for a DNAPL sample collected from Cell I3.

Table 2 presents PCB sample results for general backfill material.

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 PCB, VOC, SVOC, VPH, TOC, and inorganic (metals) analytical results for isolation layer material to be used as backfill.

Table 5 presents ambient air monitoring results for particulate matter for June.

Table 6 presents ambient air monitoring results for PCBs for the June monitoring event conducted on June 10 and 11, 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. As shown on the figure, work tasks have been completed for Cell I3 (yellow) and are currently being performed in Cell J3 (green).

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 June, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in May 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 June, GE submitted the following documents:

- Letter regarding *Force Majeure – DNAPL in Cell I-3*, dated June 6, 2002;
- Draft letter regarding *Spring 2002 Vegetation Monitoring Report*, dated June 30, 2002;
- Submittal # 30 – General backfill sample results and rip rap gradation results;
- Submittal # 31 – Isolation layer backfill sample results;
- Analytical data table presenting *Historical Dioxin and Furan Data – Upper ½ Mile Reach/Newell Street Area Bank Soils*; and
- Analytical data table presenting Cell I3 DNAPL sample results.

## **6.0 Photo documentation of activities performed:**

- See attached Figure 1.

## **7.0 Brief description of work anticipated to be performed in July 2002:**

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

- Complete installation of cutoff walls to form Cell J3, dewater cell and perform baseline survey.
- Perform face grouting of the Waterloo barrier wall sheetpiles prior to initiating removal activities.
- Complete soil and sediment removal activities for Cell J3.
- Collect samples from Cell J3 riverbed as part of isolation layer monitoring program.
- Complete grouting of the joints for the Waterloo barrier wall.
- Initiate and complete restoration activities for Cell J3.

- Complete removal of bank soil near Cell I1 and Newell Street parking area ) associated with sample locations RB-7).
- Complete response actions associated with findings from the vegetation monitoring event.
- Complete response activities associated with findings from the erosion monitoring event.
- Maintain temporary stockpiles of material in Buildings 33-north, 33X, and 65 (non-TSCA, TSCA, and DNAPL-impacted material, respectively);
- Complete transfer of Cell I3 NAPL-impacted material (stockpiled at the Building 65 storage area) for off-site disposal; and
- Continue to conduct air monitoring and water column monitoring associated with response activities for the Upper ½-Mile Reach Removal Action.

## **8.0 Attachments to this report:**

Table 1 – Cell I3 DNAPL sample analytical results.

Table 2 – General backfill PCB sample results and rip rap gradation results.

Table 3A – Daily water column monitoring results.

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

Table 4 – Isolation layer backfill sample analytical results (PCB, VOC, SVOC, VPH, TOC and inorganics sample data).

Table 5 – Results of the June ambient air monitoring for particulate matter.

Table 6 – Results of the June ambient air monitoring for PCBs.

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

Exhibit B – Backfill sampling chart.

Figure 1 - Photo documentation.