#### 1.0 Overview:

During April 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 sediment removal activities to address the presence of non-aqueous-phase liquid (NAPL) in Cell I2. Following completion of excavation activities, Cell I2 was restored and work efforts were then shifted to Cell I3 with the installation of sheetpiles. In addition, the monitoring well program associated with the Cell J1 Waterloo barrier wall was initiated during the month of April.

Weekly status meetings were held on April 1, 8, 22, and 29, 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 April, removal activities were completed in Cell I2 to address the presence of NAPL observed in the riverbed. Sediment removal was completed at the downstream NAPL area to a depth of 4 feet below the Work Plan removal limits (a total of 6 feet deep), and the residual NAPL was successfully removed. The impacted sediment removed from Cell I2 was transferred to the NAPL stockpile area located inside Bldg. 65. With Environmental Protection Agency (EPA) approval and oversight, a total of approximately 65 cubic yards (cy) of sediment were removed from the downstream Cell I2 area. The excavation was then backfilled to a depth of approximately 4 feet below original grade with 2-inch stone to address possible boil conditions. Removal work tasks were then shifted to the upstream area.

Sediment removal activities were initiated at the upstream NAPL area by excavating sediment an additional 2 feet below the Work Plan removal limits (a total of 4 feet deep). The excavated sediment was also transferred to the NAPL stockpile area in Bldg. 65. Following excavation to this depth, a gray fine sand layer appeared over approximately half of the excavation with residual NAPL remaining on the bottom of the excavation. To address the residual NAPL, seven soil borings were installed in this area to obtain information regarding the horizontal and vertical extent of the gray fine sand layer and NAPL. NAPL was observed in only one of the borings, and appeared to be present near the surface interval of the boring. Based on this information, additional sediment excavation was proposed to remove the residual NAPL.

During the second week of April, additional sediment removal was continued at the upstream area to address the residual NAPL. During removal activities, a NAPL-impacted sediment sample was collected from this area and submitted for laboratory analysis. Impacted sediment removal was completed by excavating an additional 2' – 4' below the previous elevation (a total of 6 - 8 feet deep) to successfully remove the NAPL. The gray fine layer was present over most of the excavation bottom following removal

activities. With EPA approval and oversight, a total of approximately 125 cy of sediment were removed from the upstream Cell I2 affected area. No NAPL was observed at the limits of removal following excavation activities. Following excavation activities, a survey was performed to record the upstream and downstream Cell J2 NAPL removal areas. The excavation was then backfilled to a depth of approximately 4 feet below original grade with 2-inch stone to address possible boil conditions. The second week of April ended with the initiation of Cell I2 riverbed restoration activities by installing a 2-inch thick peat layer over the bottom of the riverbed excavation.

During the third week of April, restoration activities were continued for Cell I2. The riverbed restoration was continued by placing a geotextile layer over the top of the peat layer. The isolation sand layer (nominal 12-inches deep; up to 3-feet deep in NAPL removal areas) was then placed over the geotextile fabric. 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. Based on discussions with EPA, the proposed tie-in-buffer located near the downstream portion of the cell was eliminated from the restoration and the armor cap (i.e., rip rap) was extended the full width of the river bottom over this area. Restoration continued by placing rip rap along the entire Cell I2 toe of bank to a minimum elevation of 974' AMSL. A restoration survey was performed for the Cell I2 riverbed area to record final restored elevations. Following completion of the riverbed restoration, the water generated from dewatering operations was pumped back into the river (with EPA approval) instead of being transferred to the on-site water handling system.

During the fourth week of April, Cell I2 bank restoration activities were completed. Further up the bank above the rip-rap erosion protection, the 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 swale #10 located on the Cell I2 downstream bank was completed by excavating to the required removal depth (i.e., 3-feet-deep at top of swale), shaping the sides and bottom of the swale, installing a 12-inch-thick layer of rip rap on top of geotextile over the bottom of the swale, and placing a check dam further up the swale. Following completion of a post-restoration final survey for Cell I2 (submitted to EPA), the dewatering pumps were removed and the cell was allowed to flood. Removal of the Cell I2 sheetpiles was then initiated.

Additional work activities at other locations of the ½ Mile Reach were also completed during April. Data loggers were installed (to record data for high flow events) in monitoring wells (monitoring activities to be reported in connection with GMA 1 activities) in the vicinity of the Cell G2 sheetpile barrier wall and a trial run of the loggers was performed.

Bank maintenance activities were also performed, including a bank reconnaissance walk [with representatives of the Executive Office of Environmental Affairs (EOEA)] along the Upper ½ Mile Reach to review the status of plantings following winter. In other cells,

bank maintenance activities were performed. Bank areas in Cells H2 and I1 were addressed by backfilling an animal hole to grade in Cell H2 and placing additional rip rap in a swale in Cell I1. In addition, to address settlement of the ground, rip rap was placed on the bank near the Bldg. 68 Area downstream headwall and along the Cell J1 Waterloo wall. In addition, topsoil was placed at the Cell J2 bank area where a former footbridge was located. Finally, at the request of EPA, asphalt was removed at the top of the bank near the downstream portion of Cell J1.

Work tasks associated with the Cell J1 Waterloo barrier wall were also continued during April. Development of 3 monitoring wells (installed at the top of bank) associated with the Cell J1 Waterloo barrier wall was completed. Following development of the wells, a weekly monitoring program of the recovery well and 3 monitoring wells was initiated.

To begin activities for Cell I3, the silt curtain in the Housatonic River was relocated downstream of current activities at the Lyman Street Bridge, installation of sheetpiles was initiated along the centerline of the river, and clearing activities were initiated (as necessary) for the Cell I3 bank area.

Sampling/monitoring activities completed during the month of April included collecting a NAPL-impacted sediment sample from the upstream Cell I2 area. In addition, disposal characterization samples were collected from the Cell I2 NAPL material stockpiled in Bldg. 65 and submitted for analysis. Air monitoring for particulate matter was conducted on a daily basis during April. The monthly PCB air monitoring event for April will be performed at the beginning of May. Water column [PCB and total suspended solids (TSS)] monitoring was also continued during removal activities in the month of April.

During the month of April, 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 a temporary storage area for NAPL-impacted material removed from Cell I2.

## 3.0 Sampling/test results received:

Tables 1A and 1B present the daily water column monitoring results for turbidity and the results of the water column samples collected for TSS and PCB analysis.

Table 2 presents analytical results for the NAPL-impacted sediment sample from Cell I2..

Table 3 presents ambient air monitoring results for particulate matter for April.

# 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 I2 (yellow), and are currently being performed in Cell I3 (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 April, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in March 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 April, GE submitted the following documents:

- Letter regarding *Force Majeure DNAPL in Cell I-2*, dated April 12, 2002.
- Spring 2002 planting chart for restored bank areas.
- Pre-excavation survey for potential removal area in Cell I1.
- Additional TOC laboratory data packages associated with the isolation layer cap.

## 6.0 Photo documentation of activities performed:

See attached Figure 1.

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

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

- Complete April air monitoring event for PCBs;
- Complete installation of Spring 2002 plantings as part of bank restoration activities.
- Complete Spring 2002 monitoring events for restored bank areas of the Upper ½ Mile Reach.
- Complete installation of cutoff wall sheetpile to form Cell I3;
- Initiate soil and sediment removal activities for Cell I3:

- Complete 4-week monitoring well program associated with Cell J1 Waterloo barrier wall, prepare summary report and submit to EPA;
- Continue operating high-flow event data loggers in wells in vicinity of Cell G2 sheetpile containment barrier (monitoring activities to be reported in connection with GMA 1 activities);
- Maintain temporary stockpiles of material in Buildings 33-north, 33X, and 65 (non-TSCA, TSCA, and DNAPL-impacted material, respectively);
- Complete transfer of Cell I2 DNAPL 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 1A – Daily water column monitoring results.

Table 1B – Water column samples for TSS and PCB analyses.

Table 2 – Cell I2 NAPL-impacted sediment analytical results.

Table 3 – Results of the April ambient air monitoring for particulate matter.

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

Exhibit B – Backfill sampling chart.

Figure 1 - Photo documentation.