1.0 Overview:

During May 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 sheetpile removal and closing Cell I2, and forming Cell I3 and initiating excavation activities in that cell. Monitoring events were performed for the bank areas of the Upper ½ Mile Reach to evaluate the vegetation and to identify possible areas of erosion. Control activities were also performed along the banks of the ½ Mile Reach to address invasive vegetative species. In addition, the monitoring well program associated with the Cell J1 Waterloo barrier wall was continued during the month of May.

Weekly status meetings were held on May 6, 13, 20, and 28, 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 May, closure activities were continued for Cell I2 with removal of the cutoff sheetpile walls. Cutoff wall sheetpile installation for Cell I3 was also continued during this week. To end the week, a reconnaissance bank walk was performed (with certified arborist C.L. Frank) along the banks of the Upper ½ Mile Reach to review the status of invasive species following winter.

To begin the second week of May, installation of sheetpiles to form Cell I3 was completed. Cell I3 was formed along the south side of the river, on the upstream side of the Lyman Street Bridge, and was formed at approximately 400 feet in length (longer than the 300-foot length originally planned). Initially, the water in the cell was pumped down to within six inches of the bottom of the cell by pumping the water into the river. Additional preparatory activities were also completed this week, including the construction of a sand bag berm at the downstream cutoff wall of Cell I3. In anticipation of possible high water/flood events, the low lifting holes at the tops of the Cell I3 sheetpiles were sealed. In addition, an air monitoring station was relocated downstream of Cells I3/J3 and calibrated for the next monitoring event.

At the beginning of the second week, a substantial rainfall event occurred over the weekend of May 11-12. This produced an overtopping of Cell I3 on May 13 with river flows of approximately 780 cfs at the Coltsville gauging station. As a result, the dewatering system was shut off. Following receding of the river, the cell floodwater was then pumped back into the river (with Environmental Protection Agency (EPA) consent) since excavation activities had not been initiated. When the cell water depth reached 6 inches from the bottom, it was transferred to the on-site water handling system. A visual inspection of the cell was performed following the flood, with no significant impacts observed. After the cell was again dewatered, the Cell I3 toe-of-bank was evaluated to

determine the appropriate restoration type for erosion protection and some slight modifications were made to the planned erosion protection for the bank. In addition, it was determined that the rip-rap toe protection would extend the full length of the cell.

During the third week of May, the removal of sheetpiles for Cell I2 was completed. In addition, the Spring 2002 plantings were installed along the banks of the Upper ½ Mile Reach near Cells H1, H2, J1, and I1. As part of the planting installation, tree guards were installed around the canopy plantings and salt marsh hay (mulch) was installed at the base of both understory and canopy plantings. The plantings were then watered on a daily basis to aid their growth.

During the third week of May, the primary sump pump system was installed in Cell I3 and the cell was fully dewatered. After Cell I3 was dewatered, a baseline survey was performed to record existing elevations and soil and sediment excavation activities were then initiated. Material excavated from Cell I3 was transported by truck to Buildings 33 and 33X for stockpiling prior to final disposal in the appropriate On-Plant Consolidation Area (OPCA). During sediment removal activities, a small amount of DNAPL and sheen were observed on May 21, 2002, on the bottom of the excavation near the upstream portion of Cell I3. On the same date, GE verbally reported this observation to EPA, MDEP, and the NRC (the NRC issued Tracking Number 605579). In response to this observation, oil-absorbent pads were placed at the upstream pump intake for the water handling system that transferred the water to GE's on-site water treatment system. Excavation activities continued while observing for additional signs of DNAPL. Additionally, a temporary stockpile area (separate from the Cell I2 stockpile area) was constructed in Building 65 for DNAPL material removed from Cell I3. One truckload of DNAPL-impacted sediment from Cell I3 was transferred to this stockpile area in Building 65. Also on May 21, 2002, a small amount of NAPL and sheen were observed on the toe-of-bank near the Waterloo barrier wall in Cell J3. On the same date, GE verbally reported this observation (along with the Cell I3 observation) to the same agencies (the NRC issued Tracking Number 605579). In a follow-up call, the NRC and EPA Region I were contacted to clarify that the May 21, 2002 Cell J3 notification was a supplement to GE's prior notification regarding the observation of DNAPL and sheen in Cell J3 (Lyman Street parking area) on November 28, 2001 (report #587134). In response to this observation, it was verified that the oil-absorbent booms along the parking lot were in place and functional and oil-absorbent pads were used to soak up the NAPL. Subsequently, on May 28, GE verbally reported to EPA and MDEP that the finding of DNAPL in Cell I3 could potentially constitute a "force majeure" event under the Consent Decree.

During the fourth week of May, a vegetation inspection was performed on May 20-21, 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 (representing EOEA), AMEC Environmental (planting inventory), C.L. Frank (certified arborist), and GE performed the vegetation inspection. Plant survival was assessed by performing a stem count and inventory of

planted understory and canopy specimens. An invasive species evaluation was also performed by the certified arborist to assess the status of invasive species. Also, on May 22, 2002, a bank inspection was conducted as part of the monitoring program to identify areas of erosion within previously restored bank areas of the ½-Mile Reach. The erosion inspection was conducted with representatives from EPA, EOEA, Woodlot, and GE in attendance. Restored bank areas were observed for signs of erosion, slope stability, and rip-rap placement along the banks of restored cells. In addition, invasive species control activities were completed along the banks of the ½ Mile Reach to treat and remove undesirable species.

During the final week of May, river sediment and bank soil excavation activities were continued in Cell I3. During these removal activities, no signs of additional DNAPL were observed in the cell.

Work tasks associated with the Cell J1 Waterloo barrier wall were also continued during May. 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 completion of a 4-week program, the monitoring results were evaluated and summarized in a letter report (see Section 5.0) submitted to EPA.

Sampling/monitoring activities completed during the month of May included collecting NAPL samples from Cells I3 and J3. On May 21, 2002, a NAPL sample was collected from the base of the Waterloo wall in Cell J3 and submitted for laboratory analysis of PCBs. Also, a NAPL sample was collected from the bottom of the excavation in the upstream portion of Cell I3 on May 24, 2002 and submitted for analysis of PCBs, VOCs, and SVOCs. 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 May. The monthly PCB air monitoring event for April was performed May 22-23, 2002, and the May PCB air monitoring event was performed on May 30-31, 2002. Water column [PCB and total suspended solids (TSS)] monitoring was also continued during removal activities in the month of May.

During the month of May, 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 OPCA. In addition, Building 65 was used as temporary storage area for DNAPL-impacted material. At the beginning of May, Cell I2 DNAPL-impacted material was temporarily stockpiled in Building 65 and approximately 125 tons were subsequently transported off site for appropriate disposal. At the end of May, DNAPL-impacted material removed from Cell I3 was temporarily stockpiled in Building 65.

3.0 Sampling/test results received:

Table 1 presents PCB, VOC, and SVOC analytical results of the disposal characterization sampling of the Cell I2 NAPL-impacted sediment.

Table 2 presents TCLP analytical results of the disposal characterization sampling of the Cell I2 NAPL-impacted sediment.

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 ambient air monitoring results for particulate matter for May.

Table 5 presents ambient air monitoring results for PCBs for the April monitoring event conducted on May 22 and 23, 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 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 May, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in April 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 May, GE submitted the following documents:

- Memorandum regarding *Updated Evaluation of Upper ½ Mile Bank Soil Appendix IX+3 Data*, dated May 24, 2002; and

- Letter regarding *Cell J1 Monitoring Results and Proposed Modifications to Baseline Monitoring Program for Plant Site 1 Groundwater Management Area (GMA 1)*, dated May 30, 2002.

6.0 Photo documentation of activities performed:

- See attached Figure 1.

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

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

- Complete soil and sediment removal activities to Work Plan limits for Cell I3.
- Complete response activities to address DNAPL observed in Cell I3.
- Perform post-removal survey for Cell I3.
- Initiate and complete restoration activities for Cell I3.
- Complete monitoring well activities associated with the Cell J1 Waterloo barrier wall.
- Complete installation of arbor locks for tree plantings as part of vegetation response activities.
- Determine and implement response activities associated with findings from the bank vegetation and erosion monitoring events.
- Initiate transfer of stockpiled material from Buildings 33 and 33X to the OPCAs.
- 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 I3 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 1 – Cell I2 NAPL-impacted sediment disposal characterization analytical results (VOC, PCB, and SVOC data).

Table 2 – Cell I2 NAPL-impacted sediment disposal characterization analytical results (TCLP data).

Table 3A – Daily water column monitoring results.

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

Table 4 – Results of the May ambient air monitoring for particulate matter.

Table 5 – Results of the April monitoring event conducted on May 22 and 23, 2002 for PCBs.

Table 6 – Results of the May 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.