08-0074
SDMS: 28 7044

November 14, 2001

Mr. Dean Tagliaferro
US Environmental Protection Agency
c/o Roy Weston, Inc.
One Lyman Street
Pittsfield, MA 01201

Ms. J. Lyn Cutler
Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

Re: Upper ½-Mile Reach of Housatonic River Removal Action (GECD800)
Monthly Report – October 2001

Dear Mr. Tagliaferro and Ms. Cutler:

In accordance with the approved Removal Action Work Plan – Upper ½ Mile Reach of Housatonic River, enclosed please find the October 2001 Monthly Report.

Please call me with any questions.

Yours truly,

Andrew T. Silfer, P.E.
Senior Technical Manager

ATS/dmn
Enclosures

cc: J. R. Bieke, Esquire, Shea & Gardner
M. T. Carroll, GE
R. Goff, ACE
R. Howell, EPA
H. Inglis, EPA
D. Jamros, Weston
J. H. Maxymillian Technologies
T. B. McKinsey, BBL
R. McLaren, Esquire, GE
S. Messur, BBL
K. C. Mitkevicius, USACE
T. O'Brien, MA EOEA
B. Olson, EPA
S. Steenstrup, DEP
A. Weinberg, DEP

1.0 Overview:

During October 2001, General Electric Company (GE) and its contractor Maxymillian Technologies Incorporated (MTI) continued work on the Upper ½ Mile Reach Removal Action. This work included completing removal and restoration activities for Cell I1. In addition, removal activities were completed for Cell J1 to the limits specified in the Work Plan. However, dense non-aqueous-phase liquid (DNAPL) was observed in two locations in that cell, and as a result actions were commenced to address the DNAPL and cell restoration activities were not initiated. The Lyman Street Bridge water line relocation activities were also substantially completed during the month of October. Although these Lyman Street Bridge activities are not part of the Upper ½ Mile Reach Removal Action as described in the Work Plan, they were undertaken to facilitate work in the Upper ½ Mile Reach in the vicinity of the bridge.

Weekly status meetings were held on October 1, 9, 15, 22 and 29. No work was performed on October 8, 2001 due to the Columbus Day holiday.

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. During the month of October 2001, 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 On-Plant Consolidation Areas (OPCAs).

During the first week of October, removal activities were completed for Cell I1. TSCA material was removed by excavating the material from the cell and loading trucks on the north (GE) side of the river. TSCA-sediment and soil removed from the cell were transported by truck to Building 33X for temporary stockpiling prior to transfer to the Building 71 OPCA. Non-TSCA materials were excavated in a similar manner and transferred to Building 33-north for temporary stockpiling prior to transfer to the Hill 78 OPCA. Following completion of soil and sediment excavation activities, a post-removal survey was performed to record removal elevations. The first week ended with the initiation of restoration activities for Cell I1.

During the second week of October, river and bank restoration activities were completed for Cell I1. 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 a nominal depth of 12 to 24 inches. 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, which consisted of placing a minimum of 12-inches of rip-rap on top of the geogrid. To complete the river restoration, one-half of a vortex rock weir and a habitat enhancement boulder was installed (with oversight by the Massachusetts

Executive Office of Environment Affairs [EOEA]). Bank restoration activities for Cell I1 included placing rip-rap, backfilling excavation areas, and placing topsoil and grass seed. Rip–rap was placed at the toe-of-the-bank to the design elevation and at greater than 1:1 bank slope areas. In addition, as part of the Cell I1 bank restoration activities, GE restored a swale (Swale No. 11) by excavating the swale, placing a geotextile liner over the bottom of the swale, and then placing 12-inch rip-rap in the swale. Further up the bank 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 mats to complete the bank restoration activities. A post-restoration final survey was then completed for Cell I1.

During the third week of October, work efforts were shifted to Cell J1. The cutoff sheetpile wall installation was completed for Cell J1 this week. Cell J1 was formed slightly shorter than the approximate 300-foot length originally planned due to the reach limitations of the crane located on the north bank (similar to Cell I1). Cell J2 will be longer to account for this difference. Following installation of the Cell J1 cutoff sheetpile walls, the primary sump pump system was installed and the cell was dewatered by pumping the cell water over the sheetpile wall and into the river. When the remaining water depth was approximately 6-inches, the water was transferred to the on-site water handling system for treatment. After Cell J1 was dewatered, a baseline survey was performed to record existing elevations.

During the fourth week of October, Cell J1 sediment and soil removal activities were initiated. During sediment removal activities on October 22, 2001, a sheen and DNAPL was observed within the contained cell, in the downstream part of Cell J1. This observation was verbally reported to the Environmental Protection Agency (EPA), Massachusetts Department of Environmental Protection (MDEP), and the National Response Center (NRC) on the same date (the NRC issued Tracking Number 583966). Response actions included berming the area around the DNAPL and placing oil booms at the pump intake for the water handling system. On October 26, a sample of this DNAPL was collected and submitted for laboratory analysis for polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). On the same date, GE verbally notified EPA and MDEP that the finding of DNAPL in Cell J1 could potentially constitute a force majeure event under the Consent Decree.

Following the initial observation of DNAPL in the downstream part of Cell J1, sediment removal activities continued in the remainder of the cell while observing for the potential presence of additional DNAPL and sheens. Soil and sediment removal activities (to the Work Plan limits) in Cell J1 were completed during the last week of October.

On October 31, 2001, during continuing excavation activities, an additional area of DNAPL, in the upstream portion of Cell J-1, was observed. This observation was

verbally reported to EPA, MDEP, and NRC on the same date (the NRC issued Tracking Number 584824). Excavation of the DNAPL-impacted sediment was promptly initiated and continues in November. Saturated NAPL-impacted soils were staged at the Building 68 dewatering pad and unsaturated NAPL-impacted materials were staged at the Building 65 stockpile.

During sediment excavation activities in Cell J1, a sewer siphon pipeline was encountered at the bottom of the excavation near midcell (the same sewer pipeline that was encountered in Cell I1). Sediment was removed up to the edge of the wooden forms on both sides of the concrete encasement surrounding the pipeline.

In addition, during sediment removal activities, a concrete pier (~6'x6'x6') located near mid-cell (approximately 15 feet upstream of the sewer siphon line) was encountered and removed. The pier was demolished into small pieces with a wrecking ball, and the resulting debris was removed from the cell and transferred to Bldg. 33X for stockpiling. Following removal of the concrete cap, six wooden piles remained and were removed to the surface of the excavation bottom.

The Fall 2001 planting activities were completed in October. Approximately 400 understory and 400 canopy plantings were installed along the restored banks of the Upper ½ Mile Reach. In addition to the plantings in the Cell H and Building 68 areas, supplemental plantings were installed in areas that had reduced inventories due to herbivore and herbicide damage. Installation of tree guards and mulch to minimize herbivore damage and promote growth was initiated after completion of the planting activities.

GE also continued vegetation clearing activities at the Cells I and J bank areas and continued installation of the centerline sheetpile cutoff wall for Cells I2 and J2.

Air monitoring for particulate matter was conducted on a daily basis. The monthly PCB air monitoring event was conducted on October 23.

Water column (PCB and TSS) monitoring was also continued during removal activities in the month of October.

Lyman Street Bridge Water Line Relocation Activities

The Lyman Street Bridge water line relocation activities were substantially completed during October. The activities included excavating the north and south sides of the Lyman Street Bridge, disconnecting and removing the existing water line, installing the new water line, and backfilling the excavations. Soil removed from the north side was transferred to Building 33-X for stockpiling prior to consolidation at the Building 71 OPCA, and clean backfill material from an off-site source was placed into the excavation.

Soil removed from the south side was temporarily staged next to the road adjacent to a clean soil pile that had been brought in from an off-site source for use as backfill. Some of the soil in that area was sampled. The results (see Table 8) indicated that the soil sampled included soil removed from the south side of the bridge (which had apparently been inadvertently mixed with the clean soil by the Contractor). (This conclusion was confirmed by recent re-sampling of the off-site source (General Sand and Stone), which verified that it has no detectable levels of PCBs.) Based on pre-excavation sampling, a portion of the soil removed from the south side of the bridge had been placed into the excavation. The remainder of the staged material that was sampled after excavation was transferred to Building 33-X for stockpiling prior to consolidation at the Hill 78 OPCA. Additional clean soil material was then brought in from the off-site source to complete the backfilling of the excavation.

3.0 Sampling/test results received:

Table 1 presents the Total Organic Carbon (TOC), percent moisture, and dry density results from peat and isolation layers sand sampling.

Table 2 presents the waste characterization sample results from drum sampling of debris material removed from Cell I1.

Table 3 presents the Cell J1 (downstream) DNAPL sample results.

Tables 4A and 4B present the daily water column monitoring results for turbidity and the results of the water column samples collected for total suspended solids (TSS) and PCB analysis.

Table 5 presents the supplemental isolation sand (mixed) TOC sample results.

Table 6 presents the results of the October air monitoring for particulate matter.

Table 7 presents ambient air monitoring results for PCBs for monitoring event conducted on October 23.

Table 8 presents the analytical results for the Lyman Street Bridge water line soil sample (discussed above).

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 volume of backfill materials used, the analytical and physical testing frequencies required by the Work Plan, and the testing that has been performed to date.

5.0 Identification of reports received and prepared:

During the month of October, meeting summaries from the weekly project status meetings were submitted. Also, for work completed in September 2001, the monthly reports required by the Consent Decree and the Upper ½-Mile Reach Removal Action Work Plan were both submitted. In addition, during October, GE submitted the following documents:

- Letter regarding *GE Response to EOEA Comments on Spring 2001 Vegetation Inspection*, dated October 5, 2001;
- Revised herbaceous seed mixture composition;
- Revised fall 2001 planting schedule; and
- Revised Standard Operating Procedure (SOP) (from Northeast Analytical) for performing TOC analysis.

6.0 Photo documentation of activities performed:

- See attached Figure 1.

7.0 Brief description of work to be performed in November 2001:

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

- Develop and implement a plan to remove and/or address DNAPL encountered in Cell J1;
- Initiate bank and sediment removal and restoration activities in Cell J2;
- Complete relocation activities for the Lyman Street Bridge water line;
- Maintain temporary stockpiles of material in Buildings 33-north, 33X, and 65 (non-TSCA, TSCA, and NAPL-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 – Peat and Sand Testing Results
Table 2 – Waste Characterization and Cell I1 debris
Table 3 – Cell J1 (downstream) NAPL sample results
Table 4A – Daily water column monitoring results
Table 4B – Water column samples collected for total suspended solids (TSS) and PCB analysis
Table 5 - Supplemental isolation sand TOC sample results
Table 6 – Results of the October air monitoring for particulate matter
Table 7 – Ambient air monitoring results for PCBs for monitoring event conducted on October 23.
Table 8 – Lyman Street Bridge water line soil sample
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

PRELIMINARY ANALYTICAL DATA
SUBJECT TO VERIFICATION

TABLE 1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER UPPER 1/2 MILE REACH
BUSHIKA SAND AND PEAT SAMPLING
DATA RECEIVED DURING OCTOBER 2001

Parameter / Sample ID: / Date Collected:	BSG-SAND-TOC-1 10/03/01	BSG-SAND-TOC-2 10/03/01	BSG-SAND-TOC-3 10/03/01	BSG-SAND-TOC-4 10/03/01	Run
Total Organic Carbon (mg/Kg)	868 [1020]	275	211	1060	1
Total Organic Carbon (mg/Kg)	689 [1180]	327	172	886	2
Total Organic Carbon (mg/Kg)	648 [1040]	287	182	952	3
Total Organic Carbon (mg/Kg)	735 [1080]	296	189	965	Average

Parameter / Sample ID: / Date Collected:	BSG-SAND-TOC-5 10/03/01	BSG-PEAT-TOC-1 10/03/01	BSG-PEAT-TOC-2 10/03/01	BSG-PEAT-TOC-3 10/03/01	Run
Total Organic Carbon (mg/Kg)	992	682000	459000	765000	1
Total Organic Carbon (mg/Kg)	1040	1350000	692000	667000	2
Total Organic Carbon (mg/Kg)	1040	332000	596000	711000	3
Total Organic Carbon (mg/Kg)	NA	760000	NA	NA	4
Total Organic Carbon (mg/Kg)	1020	780000	582000	714000	Average

Parameter / Sample ID: / Date Collected:	BSG-PEAT-DMC-1 10/03/01	BSG-PEAT-DMC-2 10/03/01	BSG-SAND-DMC-1 10/03/01	BSG-SAND-DMC-2 10/03/01
Percent Moisture (%)	57.1	47.6	9.04	6.52
Dry Density (g/mL)	0.1058	0.1474	1.099	1.033

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to Northeast Analytical Services, Inc. for analysis of total organic carbon, bulk density and percent moisture.

TABLE 2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER UPPER 1/2 MILE REACH
CELL I1 DRUM SAMPLING
TCLP SAMPLE DATA RECEIVED DURING OCTOBER 2001

(Results are presented in parts per million, ppm)

Parameter / Sample ID / Date Collected	TCLP Maximum Concentrations	HR-21602-1 10/5/01
Inorganics		
Cadmium	1	ND(0.0200)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmenta Services, Inc. for analysis TCLP constituents excluding pesticides and herbicides.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. Only those constituents detected are summarized.

TABLE 3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER UPPER 1/2 MILE REACH
CELL J1 (Downstream) NAPL SAMPLING
DATA RECEIVED DURING OCTOBER 2001

(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	J1-NAPL-L1 10/26/01
Volatile Organics	
Chlorobenzene	1200
PCBs	
Aroclor-1260	83000
Total PCBs	83000
Semivolatile Organics	
1,2,4-Trichlorobenzene	41000
1,2-Dichlorobenzene	520
1,3-Dichlorobenzene	1300
1,4-Dichlorobenzene	21000
2-Methylnaphthalene	240
Acenaphthene	8200
Acenaphthylene	760
Anthracene	5000
Benzo(a)anthracene	3200
Benzo(a)pyrene	2500
Benzo(b)fluoranthene	1700
Benzo(g,h,i)perylene	910
Benzo(k)fluoranthene	430
Chrysene	2200
Dibenzo(a,h)anthracene	320
Dibenzofuran	540
Fluoranthene	6200
Fluorene	5400
Indeno(1,2,3-cd)pyrene	690
Naphthalene	550
Phenanthrene	22000
Pyrene	14000

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to Northeast Analytical Services, Inc. for analysis of PCBs, volatiles and semivolatiles.
2. Only detected constituents are summarized.

TABLE 4A

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

OCTOBER 2001

UPPER 1/2 MILE REACH REMOVAL ACTION
HOUSATONIC RIVER PCB/TSS/TURBIDITY MONITORING DURING CONSTRUCTION

Location	Date	Water Depth (ft)	Water Temp. (°C)	Estimated Flow [14] (cfs)	Turbidity (ntu) [12]			Sample ID	Total PCB Concentration [13] (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	10/1/2001	1.3	6	30	6	3	4	---	---	---	---
Downstream of Lyman St. Bridge	10/1/2001	2.3	6		7	3	5	---	---	---	---
Upstream of Newell St. Bridge	10/2/2001	1.3	9	40	6	3	4	---	---	---	---
Downstream of Lyman St. Bridge	10/2/2001	2.3	9		5	3	4	---	---	---	---
Upstream of Newell St. Bridge	10/3/2001	1.6	7	56	3	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/3/2001	2.6	7		4	2	4	---	---	---	---
Upstream of Newell St. Bridge	10/4/2001	1.6	11	58	4	2	4	---	---	---	---
Downstream of Lyman St. Bridge	10/4/2001	2.7	11		5	2	5	---	---	---	---
Upstream of Newell St. Bridge	10/5/2001	1.6	7	45	4	2	4	---	---	---	---
Downstream of Lyman St. Bridge	10/5/2001	2.7	7		5	3	5	---	---	---	---
Upstream of Newell St. Bridge	10/8/2001	1.4	4	29	4	3	3	---	---	---	---
Downstream of Lyman St. Bridge	10/8/2001	2.4	4		6	2	4	---	---	---	---
Upstream of Newell St. Bridge	10/9/2001	1.3	3	26	4	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/9/2001	2.3	3		3	2	5	---	---	---	---
Upstream of Newell St. Bridge	10/10/200	1.3	5	25	3	3	3	---	---	---	---
Downstream of Lyman St. Bridge	10/10/200	2.3	5		3	2	5	---	---	---	---
Upstream of Newell St. Bridge	10/11/200	1.3	6	25	4	3	3	HR-10-11-01-U1	0.0857	ND(0.0250)	2.50
Downstream of Lyman St. Bridge	10/11/200	2.3	6		4	2	3	HR-10-11-01-D1	0.203	0.0386	1.60
Upstream of Newell St. Bridge	10/12/200	1.2	6	23	4	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/12/200	2.3	6		2	2	3	---	---	---	---
Upstream of Newell St. Bridge	10/15/200	1.6	10	43	8	4	6	---	---	---	---
Downstream of Lyman St. Bridge	10/15/200	2.8	10		6	3	5	---	---	---	---
Upstream of Newell St. Bridge	10/16/200	1.5	11	39	4	2	4	---	---	---	---
Downstream of Lyman St. Bridge	10/16/200	2.6	11		5	3	4	---	---	---	---
Upstream of Newell St. Bridge	10/17/200	1.5	8	41	5	3	4	---	---	---	---
Downstream of Lyman St. Bridge	10/17/200	2.6	8		3	2	4	---	---	---	---

TABLE 4A

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

OCTOBER 2001

UPPER 1/2 MILE REACH REMOVAL ACTION
HOUSATONIC RIVER PCB/TSS/TURBIDITY MONITORING DURING CONSTRUCTION

Location	Date	Water Depth (ft)	Water Temp. (°C)	Estimated Flow [14] (cfs)	Turbidity (ntu) [12]			Sample ID	Total PCB Concentration [13] (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	10/18/200	1.5	6	41	3	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/18/200	2.6	6		3	2	2	---	---	---	---
Upstream of Newell St. Bridge	10/19/200	1.5	6	42	3	2	2	---	---	---	---
Downstream of Lyman St. Bridge	10/19/200	2.6	6		5	2	3	---	---	---	---
Upstream of Newell St. Bridge	10/22/200	1.5	7	47	6	3	5	---	---	---	---
Downstream of Lyman St. Bridge	10/22/200	2.6	7		5	3	5	---	---	---	---
Upstream of Newell St. Bridge	10/23/200	1.5	5	45	4	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/23/200	2.6	5		5	2	6	---	---	---	---
Upstream of Newell St. Bridge	10/24/200	1.6	9	48	3	2	4	---	---	---	---
Downstream of Lyman St. Bridge	10/24/200	2.7	9		3	2	4	---	---	---	---
Upstream of Newell St. Bridge	10/25/200	1.6	9	52	3	2	3	HR-10-25-01-U1	NR	NR	NR
Downstream of Lyman St. Bridge	10/25/200	2.7	9		4	2	2	HR-10-25-01-D1	NR	NR	NR
Upstream of Newell St. Bridge	10/26/200	1.6	7	48	3	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/26/200	2.7	7		3	2	2	---	---	---	---
Upstream of Newell St. Bridge	10/29/200	1.4	4	31	4	2	3	---	---	---	---
Downstream of Lyman St. Bridge	10/29/200	2.5	4		5	3	3	---	---	---	---
Upstream of Newell St. Bridge	10/30/200	1.4	5	35	7	2	4	---	---	---	---
Downstream of Lyman St. Bridge	10/30/200	2.5	5		6	3	3	---	---	---	---
Upstream of Newell St. Bridge	10/31/200	1.4	1	35	3	2	2	---	---	---	---
Downstream of Lyman St. Bridge	10/31/200	2.5	1		3	2	2	---	---	---	---

TABLE 4A

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

OCTOBER 2001

UPPER 1/2 MILE REACH REMOVAL ACTION
HOUSATONIC RIVER PCB/TSS/TURBIDITY MONITORING DURING CONSTRUCTION

Location	Date	Water Depth (ft)	Water Temp. (°C)	Estimated Flow [14] (cfs)	Turbidity (ntu) [12]			Sample ID	Total PCB Concentration [13] (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				

Notes:

1. PCB and TSS samples were collected by Blasland, Bouck & Lee, Inc. and analyzed by Northeast Analytical, Inc.
2. Water depth taken at sampling point (i.e. middle of river).
3. ft - Feet
4. °C - degrees Celsius
5. cfs - cubic feet per second
6. ntu - nephelometric turbidity units
7. --- - No data obtained
8. ND(0.25) - Compound was analyzed for but not detected at the quantitation limit indicated in parentheses.
9. NR - Not yet reported
10. ug/l - micrograms per liter
11. mg/l - milligrams per liter
12. Turbidity Action Level = Turbidity downstream ≤ Turbidity upstream + 50 ntu
13. PCB Action Level = PCBs downstream ≤ PCBs upstream + 5 ug/l
14. Flow data was obtained from the USGS Station 01197000 in Coltsville, MA at approximately midday. (Flow data is provisional and may be subject to revision).

TABLE 4B

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER - UPPER 1/2 MILE REACH
HOUSATONIC RIVER PCB/TSS MONITORING DURING CONSTRUCTION
DATA RECEIVED DURING OCTOBER 2001

(Results are presented in parts per million, ppm)

Sample ID	Location	Date Collected	Aroclor 1016, 1221, 1232,1242, & 1248	Aroclor 1254	Aroclor 1260	Total PCBs	TSS
HR-9-27-01-U1	Upstream of Newell St. Bridge	9/27/01	ND(0.0000250)	0.000111 AF	0.0000276	0.000139	25.8
HR-9-27-01-D1	Downstream of Lyman St. Bridge	9/27/01	ND(0.0000250)	0.0000874 AF	0.0000409	0.000129	7.20
HR-9-27-01-U1 (FILTERED)	Upstream of Newell St. Bridge	9/27/01	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	--
HR-9-27-01-D1 (FILTERED)	Downstream of Lyman St. Bridge	9/27/01	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	--
HR-10-11-01-U1	Upstream of Newell St. Bridge	10/11/01	ND(0.0000250)	0.0000857 AF	ND(0.0000250)	0.0000857	2.50
HR-10-11-01-D1	Downstream of Lyman St. Bridge	10/11/01	ND(0.0000250)	0.000162 AF	0.0000415	0.000203	1.60
HR-10-11-01-U1 (FILTERED)	Upstream of Newell St. Bridge	10/11/01	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	--
HR-10-11-01-D1 (FILTERED)	Downstream of Lyman St. Bridge	10/11/01	ND(0.0000250)	0.0000386 AF	ND(0.0000250)	0.0000386	--

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of filtered and unfiltered PCBs and Total Suspended Solids (TSS).
2. ND(0.10) - Analyte was not detected. The value in parentheses is the associated detection limit.
3. AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
4. --- - Not analyzed.

TABLE 5

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER UPPER 1/2 MILE REACH
BUSHIKA TOC SAMPLING PROGRAM
DATA RECEIVED DURING OCTOBER 2001

Parameter / Sample ID: / Date Collected:	BUSHIKA-TOC-2 10/26/01	Run
Total Organic Carbon (mg/Kg)	36500	1
Total Organic Carbon (mg/Kg)	28800	2
Total Organic Carbon (mg/Kg)	22400	3
Total Organic Carbon (mg/Kg)	29200	Average

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to Northeast Analytical Services, Inc. for analysis of total organic carbon.

TABLE 6

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER - UPPER 1/2 MILE REACH
AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING OCTOBER 2001

Date	Sampler Location	Average Site Concentration (mg/m^3)	BM-1 (mg/m^3)	Average Period (Hours:Min)	Predominant Wind Direction
10/01/01	AM-6 (south side of river)	0.003	0.007	10:15	NNW
10/02/01	AM-6 (south side of river)	0.018	0.028	11:15	WNW
10/03/01	AM-6 (south side of river)	0.018	0.029	10:15	WSW, SW
10/04/01	AM-6 (south side of river)	0.076	0.051	11:15	SW
10/05/01	AM-6 (south side of river)	0.026	0.041	11:00	SW
10/08/01	AM-6 (south side of river)	0.005	0.002	16:00	NW, WNW
10/09/01	AM-6 (south side of river)	0.008	0.008	10:45	WSW
10/10/01	AM-6 (south side of river)	0.010	0.011	7:45	WSW
10/11/01	AM-6 (south side of river)	0.020	0.016	11:00	SW
10/12/01	AM-6 (south side of river)	0.026	0.024	11:45	SW
10/15/01	AM-6 (south side of river)	0.008	0.008	6:45[1]	WNW
10/16/01	AM-6 (south side of river)	0.010	0.010	10:00	SE, ESE
10/17/01[2]	AM-6 (south side of river)	NA	NA	NA	NA
10/18/01	AM-6 (south side of river)	0.007	0.003	11:00	WNW, NW
10/19/01	AM-6 (south side of river)	0.013	0.012	11:15	SW, SSW
10/22/01	AM-6 (south side of river)	0.013	0.012	11:00	WNW
10/23/01	AM-6 (south side of river)	0.015	0.013	6:45[1]	ESE, SSE, S
10/24/01[2]	AM-6 (south side of river)	NA	NA	NA	NA
10/25/01[2]	AM-6 (south side of river)	NA	NA	NA	NA
10/26/01	AM-6 (south side of river)	0.006	0.004	12:30	WSW, W
Notification Level		0.120			

BM-1: Background monitoring location west of Bldg. 42.

AM-6: Air monitoring location in the GE parking lot located off of Newell Street.

[1] Sampling period was shortened due to precipitation/threat of precipitation.

[2] Sampling was not performed due to precipitation/threat of precipitation.

TABLE 7

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER - UPPER 1/2 MILE REACH
AMBIENT AIR PCB DATA RECEIVED DURING OCTOBER 2001

Date	BM-1 ug/m^3	AM-5 ug/m^3	AM-5 co-located ug/m^3	AM-6 ug/m^3	AM-7 ug/m^3	AM-8 ug/m^3
10/23 - 10/24/01	0.0098	0.016	0.0163	0.0047	0.0047	0.0027
Notification Level	0.05	0.05	0.05	0.05	0.05	0.05

Notes:
BM-1: Background monitoring location west of Bldg. 42.
AM-5: Air monitoring location north bank, east of Bldg. 63.
AM-6: Air monitoring location south bank, north edge of GE Newell St. parking area.
AM-7: Air monitoring location north bank, south end of GE Lyman St. Parking Lot.
AM-8: Air monitoring location south bank, corner of Hathaway and Sackett Streets.

TABLE 8

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER UPPER 1/2 MILE REACH
LYMAN STREET BRIDGE WATER LINE SAMPLING
DATA RECEIVED DURING OCTOBER 2001

(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	LSWL-BF-S1 10/25/01
Volatile Organics	
None Detected	--
PCBs	
Aroclor-1254	7.47
Aroclor-1260	1.08
Total PCBs	8.55
Semivolatile Organics	
Benzo(a)pyrene	0.466
Benzo(b)fluoranthene	0.520
Benzo(g,h,i)perylene	0.400
Fluoranthene	0.407
Phenanthrene	0.543
Pyrene	1.03
Inorganics	
Barium	29.8
Chromium	14.2
Lead	20.4
Mercury	0.0411
Conventional Parameters	
Total Petroleum Hydrocarbons	114

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to Northeast Analytical Services, Inc. for analysis of PCBs, volatiles. semivolatiles, metals and total petroleum hydrocarbons.
2. Only detected constituents are summarized.

EXHIBIT B

General Electric Company
Pittsfield, Massacusetts

Revision Date: November 1, 2001

1/2-Mile Removal Action Backfill Tracking Log

Material	Testing Required	Frequency (per ___ cy)	Submittal from MTI		Submittal to EPA		Sample Date	Number of Samples	Quantity Approved for Placement	Quantity Placed (cy)	Comments
			No.	Date	No.	Date					
Isolation Layer (Pittsfield Sand & Gravel)	Grain Size	500	12	11/17/99	Letter	11/19/99	11/01/99	1	1000	770	
			12C	03/30/00	Letter	04/20/00	03/24/00	1			
	TOC	500	12	11/17/99	Letter	11/19/99	11/02/99	1			
			12C	03/30/00	Letter	04/20/00	03/30/00	1			
	PCBs	500	NA	NA	Letter	11/19/99	09/20/99	4			Samples collected as part of off-site residential fill program
			NA	NA	7	12/01/99	11/19/99	2			
			NA	NA	Letter	04/20/00	03/29/00	2			
	VOCs	2000	NA	NA	Letter	11/19/99	09/20/99	4			Samples collected as part of off-site residential fill program
	SVOCs	2000	NA	NA	Letter	11/19/99	09/20/99	4			
	Metals	2000	NA	NA	Letter	11/19/99	09/20/99	4			
	TPH	2000	NA	NA	7	12/01/99	11/19/99	2			
Isolation Layer (Bushika Sand & Gravel)	Grain Size	500	12A	01/03/00	Letter	01/06/00	12/28/99	1	4000	3947	
			12B	01/24/00	11	02/14/00	01/19/00	1			
			12D	05/08/00	13	05/19/00	05/02/00	1			
			12E	09/11/00	14	09/27/00	09/07/00	1			
			12F	09/29/00	17	10/04/00	09/26/00	1			
			12G	11/30/00	20	12/06/00	10/20/00	1			
			12H	03/08/01	21	03/14/01	03/05/01	1			
			12I	06/19/01	Letter	06/27/01	06/12/01	1			MTI Subs. 12I and 12J included with Submittal No. 24 to EPA.
			12J	07/05/01	Letter	07/09/01	06/20/01	1			Submittal 12J supplements 12I.
	TOC	500	12A	01/03/00	Letter	01/06/00	12/28/99	1			
			12B	01/24/00	11	02/14/00	01/19/00	1			
			12D	05/08/00	13	05/19/00	05/02/00	1			
			12E	09/11/00	14	09/27/00	09/06/00	1			
			12F	09/29/00	17	10/04/00	09/26/00	1			
			12G	11/30/00	20	12/06/00	10/20/00	1			
			12H	03/08/01	21	03/14/01	03/05/01	1			
			12I	06/19/01	Letter	06/27/01	06/12/01	1			MTI Subs. 12I and 12J included with Submittal No. 24 to EPA.
			12J	07/05/01	Letter	07/09/01	06/20/01	1			Submittal 12J supplements 12I.
			NA	NA	Letter	09/24/01	09/20/01	3			Supplement to 12I and 12J.
		250	NA	NA	Letter	10/31/01	10/26/01	3			For next frequency interval (250 CY).
	PCBs	500	NA	NA	10	01/14/00	01/05/00	2			
			NA	NA	11	02/14/00	02/02/00	2			
			NA	NA	13A	06/28/00	06/02/00	2			
			NA	NA	16A	10/04/00	09/26/00	3			
			NA	NA	18A	10/05/00	09/28/00	2			
			NA	NA	20A	01/09/01	12/05/00	2			
			NA	NA	21A	04/04/01	03/19/01	2			
			NA	NA	24	08/23/01	07/23/01	1			
	VOCs	2000	NA	NA	10	01/14/00	01/05/00	2			
			NA	NA	18A	10/05/00	09/28/00	2			
	SVOCs	2000	NA	NA	10	01/14/00	01/05/00	2			
			NA	NA	18A	10/05/00	09/28/00	2			
	Metals	2000	NA	NA	10	01/14/00	01/05/00	2			
			NA	NA	18A	10/05/00	09/28/00	2			
	TPH	2000	NA	NA	10	01/14/00	01/05/00	2			
			NA	NA	11	02/14/00	02/02/00	2			
			NA	NA	18A	10/05/00	09/28/00	2			
Rip-Rap (9")	Grain Size	2000	15A	11/30/99	Letter	12/01/99	11/23/99	1	4000	2887	
			15B	10/04/00	19	10/11/00	09/28/00	1			
Rip-Rap (12")	Grain Size	2000	18	01/04/00	Letter	01/06/00	12/29/99	1	2000	1020	

Notes:
Quantities placed include Cells A, B, C, D, DNAPL, E, F, G, H and I1.
NA = Not Applicable
TBD = To be determined

EXHIBIT B

General Electric Company
Pittsfield, Massacusetts

Revision Date: November 1, 2001

1/2-Mile Removal Action Backfill Tracking Log

Material	Testing Required	Frequency (per ___ cy)	Submittal from MTI		Submittal to EPA		Sample Date	Number of Samples	Quantity Approved for Placement	Quantity Placed (cy)	Comments
			No.	Date	No.	Date					
Soil Backfill/Granular Fill (Brown's Pit)	Grain Size	2000	13/13A	11/17 & 11/18/99	8	12/01/99	11/16/99	1	2000	2221	
	PCBs	500	NA	NA	8A	12/15/99	12/08/99	2			
			NA	NA	14	05/31/00	05/18/00	2			
			NA	NA	22	03/14/01	02/28/01	2			
			NA	NA	24	08/23/01	07/23/01	1			
	VOCs	2000	NA	NA	8A	12/15/99	7/21-7/28/99	6			Samples Collected as part of Allendale School Project
	SVOCs	2000	NA	NA	8A	12/15/99	7/21-7/28/99	6			
	Metals	2000	NA	NA	8A	12/15/99	7/21-7/28/99	6			
	TPH	2000	NA	NA	8A	12/15/99	12/01/99	3			
Topsoil (Woodmont)	TOC	500	11/14	11/16 & 11/17/99	9	12/15/99	11/08/99	2	500	509	
	pH	500	11/14	11/16 & 11/17/99	9	12/15/99	11/08/99	2			
	PCBs	500	NA	NA	9	12/15/99	12/08/99	4			*Samples collected as part of off-site residential fill program
	VOCs	2000	NA	NA	9	12/15/99	08/24/99	4			*
	SVOCs	2000	NA	NA	9	12/15/99	08/24/99	4			*
	Metals	2000	NA	NA	9	12/15/99	08/24/99	4			*
	TPH	2000	NA	NA	9	12/15/99	12/08/99	2			*
Topsoil (Lahey's)	TOC	500	11A	05/09/01	23	05/15/01	04/30/01	1	500	133	
	pH	500	11A	05/09/01	23	05/15/01	04/30/01	1			
	PCBs	500	NA	NA	23	05/15/01	04/11/01	3			
	VOCs	2000	NA	NA	23	05/15/01	04/11/01	3			
	SVOCs	2000	NA	NA	23	05/15/01	04/11/01	3			
	Metals	2000	NA	NA	23	05/15/01	04/11/01	3			
	TPH	2000	NA	NA	23	05/15/01	04/11/01	3			

Notes:
Granular Fill and Soil Backfill have been combined as the same material
Quantities placed include Cells A, B, C, D, DNAPL, E, F, G, H and I1.
NA = Not Applicable
TBD = To be determined