SDMS: 287035

08-0061

Corporate Environmental Programs
General Electric Company
100 Woodlawn Avenue, Pittsfield, MA 01201

July 10, 2000

Mr. Dean Tagliaferro
US Environmental Protection Agency
One Congress Street, Suite 1100
Boston, MA 02114-2023

Ms. Susan Steenstrup
Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

Re: Upper 1/2-Mile Reach of Housatonic River Removal Action
Monthly Report – June 2000

Dear Mr. Tagliaferro and Ms. Steenstrup:

In accordance with the approved Removal Action Work Plan - Upper 1/2 Mile Reach of Housatonic River, enclosed please find the June 2000 Monthly Report.

Please call with any questions.

Yours truly,

William A Horne /for

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

cc: J.R. Bieke, Esquire, Shea & Gardner
M.T. Carroll, GE
T. Conway, EPA
R. Goff, ACE
W.A. Horne, GE
H. Inglis, EPA
J.H. Maxymillian, Maxymillian Technologies
S. Messur, BBL
K.C. Mitkevicius, USACE
T. O'Brien, MA EOEA
B. Olson, EPA
A.J. Thomas, Esquire, GE
A. Weinberg, DEP

1.0 Overview:

During June 2000, GE and its contractor Maxymillian Technologies Incorporated (MTI) continued work on the Upper ½ Mile Reach Removal Action. This work included completion of removal and restoration activities in the upstream portion of Cell G-1, while continuing to address the dense non-aqueous-phase liquid (DNAPL) observed in the downstream portion of Cell G-1. Progress throughout the month of June was slowed by significant amounts of rainfall and by investigations of the lateral and vertical extent of the DNAPL encountered in the downstream portion of Cell G-1. GE has initiated a DNAPL investigation program in the sediment and bank areas in that portion of Cell G-1 and was designing a barrier containment system for submission to the EPA as the month ended.

In addition to the delays caused by investigating the DNAPL, precipitation in the month of June was considerably above normal (over 11 inches in a month that averages approximately 4.25 inches). A 5-10 year flood event was experienced on June 7 which overtopped the sheetpile and caused considerable erosion damage to the bank area adjacent to the upstream sheetpile cutoff wall in Cell G-1. Work in Cell G-1 was further hindered by discharges of stormwater from the oil/water separator bypass Outfall 05B into the downstream part of Cell G-1 where the DNAPL was observed. Specifically, during frequent and severe thunderstorms (at least six times in June), the bypass flow from this 30-inch diameter pipe flowed at high volumes for a short duration directly into Cell G-1, thereby impeding the work in this area. As a result, EPA approved a plan for the temporary redirection of the permitted stormwater flow from the normal bypass sump to the river, without discharging into Cell G-1.

During the month of June, based on the PCB analytical results from the DNAPL in Cell G-1 and an estimate of the observed volume of DNAPL in that cell, GE calculated that the PCB's in the DNAPL might exceed the reportable quantity (RQ) of one pound in a 24-hour period. Hence, as a precautionary matter GE reported to the National Response Center (NRC), EPA and MDEP a possible release of PCB's in excess of the RQ even though the DNAPL was fully contained within the sheetpile of Cell G-1. The NRC issued a tracking number 530819 for this release. MDEP did not issue a tracking number.

Weekly status meetings were held on June 7, 14, 21 and 28. Additional meetings between EPA and GE were held throughout the month of June to evaluate the results of the borings, agree on locations for additional borings/piezometers, and discuss conceptual plans for a proposal to address the DNAPL in this area.

2.0 Chronological description of the tasks performed:

Refer to the diagram (Exhibit A) referenced in Section 4.0 and attached to this report for an orientation of the sheetpile cells and their respective locations. In the month of June, GE Buildings 33, 33X and 65 were used as temporary storage facilities for TSCA and non-TSCA material.

The month of June started by beginning the sediment/bank excavation in Cell G-1. Based on observed conditions, GE implemented use of a 500,000 gallon holding tank for storage of water removed from Cell G-1 prior to the transfer of the water to the Building 64G water treatment facility. This tank had been successfully used on a project to facilitate the separation of DNAPL from the water prior to water treatment.

Excavation in the downstream part of the Cell G-1 was stopped after pockets of DNAPL were observed upon removal of an additional 1 foot of material over a 40-ft. by 20-ft. area. On June 2, GE orally reported the finding of DNAPL in Cell G-1 as a potential "force majeure" under Consent Decree to EPA and MDEP, and also reported a potential release of PCBs in excess of the RQ for PCBs (as discussed above). GE then began installing borings as part of the approved DNAPL investigation program. This work was interrupted when a significant flood event (5-year to 10-year flood recurrence interval) was experienced on June 7, when over 3 inches of rain fell in less than 24 hours. This event caused the floodwaters to overtop the sheetpile and caused a scour breach in the bank near the upstream sheetpile cutoff. GE, in consultation with EPA, took appropriate precautionary measures during this event and no sheens were visible on water leaving Cell G-1. Also on June 7, GE orally reported this event as a potential "force majeure" to EPA and MDEP. After the floodwaters receded on June 9, approximately 25 feet of sheetpile were installed further into the north bank along the upstream cutoff wall in Cell G-1 to further isolate Cell G-1 from the river and to allow the scour hole caused by the severe flood and high water to be restored. After the Cell was de-watered again, the DNAPL investigation continued.

Ultimately, as part of the investigation to determine the lateral and vertical extent of the DNAPL in the downstream part of Cell G-1, a total of 28 borings in Cell G-l and 4 additional borings in bank of Cell G-2 were installed. Select samples were sent off-site for PCB analysis. Results indicated isolated pockets of DNAPL, with high concentrations of PCBs, in front of, adjacent to, and downstream of, the Outfall 05B.

In addition, as mentioned above, stormwater bypass flow from Outfall 05B discharged several times during heavy rains directly into the downstream portion of Cell G-1, disrupting the work. Hence, GE implemented a plan, with EPA approval, for the temporary redirection of permitted stormwater bypass flow from the Outfall 05B to the river. This plan included installing a 12", 6,000 gallon per minute (gpm) pump to bypass water from the overflow sump in 64W, and installing a 36" pipe to redirect

flow from the existing outfall pipe to the river (pipe was raised approximately 1.5 ft from the existing invert). This stormwater redirection plan was successfully tested during additional severe thunderstorms.

Following this testing, restoration efforts in the upstream portion of Cell G-1 resumed. GE installed a sheetpile cut-off wall to isolate the upstream portion (160 LF) of the Cell from the downstream (DNAPL) portion. Sediment removal and restoration activities in the upstream portion of Cell G-1 were completed on June 29, including placement of three habitat enhancement boulders in that portion of the river.

Due to the observation of DNAPL impacted sediments in the downstream portion of Cell G-1, GE also installed, with EPA approval 3 piezometers along the bank area in Cell G-1. The first reading in these piezometers was conducted on June 30, and showed no measurable amounts of DNAPL. This trend of recording no measurable DNAPL continued into the beginning of July. The month of June ended with GE and EPA discussing the results of all borings (including analytical data) from the DNAPL investigation and the design of a remedial plan to address this area.

To support this design, on June 30, GE installed 4 borings in the bank areas along Cells G-1 and G-2' to locate the depth to glacial till. This information will be used, in part, to design the proposed barrier system for the DNAPL observed in Cell G-1. Also on June 30, a sediment sample was obtained in the upstream portion of Cell G-1 for use in monitoring the long-term effectiveness of the isolation cap.

Additional work conducted in June included completing tree removal, clearing operations, and field survey layout along the south bank (247, 249, and 261 Newell Street) adjacent to Cells F-1 and F-2. Also approximately 280 LF of sheetpile was installed for the next downstream cells (centerline sheetpile adjacent to Cells F-2 and G-2).

Finally in June, GE continued to monitor coal-tar DNAPL from the newly installed 6-inch-diameter coal-tar DNAPL recovery well. No measurable amounts of coal-tar DNAPL/water mixture were collected from that well. EPA approved reducing the monitoring frequency to once per month for this well.

3.0 Number of samples collected:

Water column monitoring for total suspended solids (TSS) was conducted on a daily basis. Water column PCB samples were collected once every 2 weeks on June 9 and 22, 2000. The TSS and PCB results received to date for the month of June are attached to this report (Table 1 and 2).

Table 3 presents a summary of analytical results for select samples from soil borings associated with the DNAPL investigation in Cell G-1. Table 4 includes similar results for select samples from borings in Cell G-2.

Table 5 includes a summary of the analytical data from the DNAPL sample obtained from Cell G-1. These results were used to provide the precautionary release notification on June 2 for possibly exceeding the RQ of one pound of PCBs in a 24-hour period.

Table 6 summarizes the analytical results from sampling of the isolation layer material obtained from the Busheka Sand and Gravel and used during the restoration work.

In the month of June, particulate air monitoring was conducted from June 1 to June 30. PCB air monitoring was conducted on June 15 and 16. The results are attached to this report (Tables 7 and 8).

Table 9 includes analytical results for samples of sediment obtained from the frac tanks. This material will be disposed of off site.

Table 10 includes the initial measurements in the three piezometers installed along the bank area in Cell G-1.

4.0 Diagrams associated with the tasks performed:

A diagram labeled as Exhibit A shows the location of the Cells (A, B, C, D, E, F, and G) 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 placed volume of backfill materials, the analytical and physical testing frequencies required by the Work Plan, and the testing that has been performed to date.

5.0 Identification of any reports received and prepared:

During the month of June, meeting summaries from various weekly project status meetings were submitted to EPA, MDEP and EOEA. Also for work completed in May 2000, the monthly reports required by the Consent Decree and the Upper ½ Mile Reach Removal Action Work Plan were both submitted on June 9.

In addition, in June, GE submitted the following:

- Letter of June 5 providing written report regarding the finding of DNAPL in Cell F-1 (as potential reportable release in excess of RQ) and measures taken in response to it.
- Letter of June 9 following up on GE's "force majeure" notification for DNAPL found in Cell G-1.
- Letter of June 16 following up on GE's "force majeure" notification for the June 7 flood event.
- Letter of June 22 providing written report regarding the finding of DNAPL in Cell G-1 (as potential reportable release in excess of RQ) and measures taken in response to it.
- Letter of June 22 documenting verbal agreement between GE and EPA on the plan for temporary redirection of stormwater from Outfall 05B.
- Preliminary results from the DNAPL investigation program.
- Construction details for the rock W-weir to be built in Cell G-2 and F-2.
- Material specifications for isolation material and soil backfill.

6.0 Photo documentation of activities performed: See attached Figure 1

7.0 Brief description of activities to be performed in July 2000:

Throughout the upcoming weeks in the month of July, the following activities are anticipated to take place:

- Complete removal of the sheetpile from the restored/upstream section of Cell G-1.
- Complete excavation and restoration work along the south side of the bank near Cells F-1 and F-2.
- Complete the final sheetpile barrier design and submit proposed remediation plan to address the DNAPL observed in the downstream portion of Cell G-1.
- Implement the remediation plan for DNAPL in Cell G-1 after EPA approval.

- Complete removal and restoration activities in the remaining part of Cell G-1.
- Begin excavation in Cell F-2 (south side).
- Maintain temporary stockpile in Bldg. 33, 33X and 65 (TSCA and non-TSCA).
- Conduct air and water column monitoring.

Note that the finding of DNAPL in Cell G-1 and associated response actions have delayed progress of the work in Cell G-1 and on the overall Upper ½ Mile Reach Removal Action. The significant flood event on June 7 that overtopped the sheetpiles further compounded such delays. It is possible that these events, by themselves or in combination with other past events (e.g., the prior finding of coal-tar DNAPL in Cell C and associated response actions) and/or unanticipated future events, could cause a delay in the final completion date for the Upper ½ Mile Reach Removal Action beyond the date required under the Consent Decree.

8.0 Attachments to this report:

- Tables 1 and 2 - Water column monitoring TSS and PCB results;
- Table 3 - Analytical results for select samples from soil borings in Cell G-1.
- Table 4 - Analytical results for select samples from soil borings in Cell G-2.
- Table 5 - Analytical results from DNAPL obtained in Cell G-1.
- Table 6 - Analytical results from isolation material used in the restoration.
- Table 7 and 8 - Particulate and PCB air monitoring results.
- Table 9 - Includes analytical results for sediment samples from the frac tanks.
- Table 10 – Includes measurements for the 3 DNAPL piezometers in Cell G-1
- Exhibit A - Diagram to show the locations of cells within the upstream part of the Upper ½ Mile Reach Removal Action.
- Exhibit B – Backfill quantity summary chart.
- Figure 1 - Photo documentation.

TABLE 1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

JUNE 2000

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

Location	Date	Water Depth (ft)	Water Temp. (°C)	Flow (cfs)	Turbidity (ntu) [13]			Sample ID	Total PCB Concentration [14] (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	5/30/2000	2.4	14.0	---	24	1	6	---	---	---	---
Downstream of Lyman St. Bridge	5/30/2000	3.1	14.0	---	13	3	6	---	---	---	---
Upstream of Newell St. Bridge	5/31/2000	2.3	14.0	---	13	1	2	---	---	---	---
Downstream of Lyman St. Bridge	5/31/2000	2.9	14.0	---	11	1	3	---	---	---	---
Upstream of Newell St. Bridge	6/1/2000	2.0	14.0	---	12	1	3	---	---	---	---
Downstream of Lyman St. Bridge	6/1/2000	2.9	14.0	---	12	1	2	---	---	---	---
Upstream of Newell St. Bridge	6/2/2000	1.7	17.0	68	424	2	39	---	---	---	---
Downstream of Lyman St. Bridge	6/2/2000	2.7	17.0	71	15	2	4	---	---	---	---
Upstream of Newell St. Bridge	6/5/2000	2.7	15.0	---	9	3	9	---	---	---	---
Downstream of Lyman St. Bridge	6/5/2000	3.5	15.0	---	5	3	6	---	---	---	---
Upstream of Newell St. Bridge	6/6/2000	2.6	13.0	---	24	3	11	---	---	---	---
Downstream of Lyman St. Bridge	6/6/2000	3.4	13.0	---	39	3	15	---	---	---	---
Upstream of Newell St. Bridge	6/7/2000	8.0+	NS	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/7/2000	9.0+	NS	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/8/2000	7.0+	NS	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/8/2000	8.0+	NS	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/9/2000	3.4	15.0	297	NS	NS	NS	HR-6-9-00-U1	ND(0.0250)	ND(0.0250)	11.1
Downstream of Lyman St. Bridge	6/9/2000	3.6	15.0	301	NS	NS	NS	HR-6-9-00-D1	0.134	ND(0.0250)	12.3
Upstream of Newell St. Bridge	6/12/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/12/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/13/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/13/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/14/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/14/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/15/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/15/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/16/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/16/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/19/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/19/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/20/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/20/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/21/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/21/2000	---	---	---	NS	NS	NS	---	---	---	---

TABLE 1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

JUNE 2000

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

Location	Date	Water Depth (ft)	Water Temp. (°C)	Flow (cfs)	Turbidity (ntu) [13]			Sample ID	Total PCB Concentration [14] (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	6/22/2000	2.9	18.0	---	8	3	4	HR-6-22-U1	NR	NR	NR
Downstream of Lyman St. Bridge	6/22/2000	3.7	18.0	---	5	3	4	HR-6-22-D1	NR	NR	NR
Upstream of Newell St. Bridge	6/23/2000	2.7	18.0	---	3	1	3	---	---	---	---
Downstream of Lyman St. Bridge	6/23/2000	3.5	18.0	---	4	1	2	---	---	---	---
Upstream of Newell St. Bridge	6/26/2000	---	---	---	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	6/26/2000	---	---	---	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	6/27/2000	3.0	17.0	---	237	8	12	---	---	---	---
Downstream of Lyman St. Bridge	6/27/2000	---	17.0	---	10	4	6	---	---	---	---
Upstream of Newell St. Bridge	6/28/2000	2.6	18.0	---	21	2	14	---	---	---	---
Downstream of Lyman St. Bridge	6/28/2000	---	18.0	---	8	2	6	---	---	---	---
Upstream of Newell St. Bridge	6/29/2000	2.4	20	---	11	2	5	---	---	---	---
Downstream of Lyman St. Bridge	6/29/2000	3.1	20	---	6	2	4	---	---	---	---
Upstream of Newell St. Bridge	6/30/2000	2.4	20	133	7	2	7	---	---	---	---
Downstream of Lyman St. Bridge	6/30/2000	3.2	21	127	5	2	5	---	---	---	---

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. NS - Not sampled due to frozen river conditions or high flow.

TABLE 2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER PCB/TSS/TURBIDITY MONITORING DURING CONSTRUCTION
DATA RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in parts per million, ppm)

Sample ID	Location	Date Collected	Aroclor 1016 & 1232	Aroclor 1221	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	TSS
HR-5-25-00-U1	Upstream of Newell St. Bridge	5/25/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	0.0000736 AF	0.0000473	0.000121	34.7
HR-5-25-00-D1	Downstream of Lyman St. Bridge	5/25/2000	ND(0.000250)	ND(0.000250)	ND(0.000250)	0.000553 PE	ND(0.000250)	0.00378 AG	0.00433	59.7
HR-5-25-00-U1 (FILTERED)	Upstream of Newell St. Bridge	5/25/2000	ND(0.0000250)	ND(0.0000250)	0.0000739 PD	ND(0.0000250)	0.0000257 AF	ND(0.0000250)	0.0000996	--
HR-5-25-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	5/25/2000	ND(0.0000250)	0.0000338 PB	ND(0.0000250)	0.0000320 PE	ND(0.0000250)	ND(0.0000250)	0.0000658	--
HR-6-9-00-U1	Upstream of Newell St. Bridge	6/9/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	11.1
HR-6-9-00-D1	Downstream of Lyman St. Bridge	6/9/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	0.0000832 AF	0.0000508	0.000134	12.3
HR-6-9-00-U1 (FILTERED)	Upstream of Newell St. Bridge	6/9/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	--
HR-6-9-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	6/9/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	--

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. --- - Not analyzed.
4. AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
5. AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
6. PB - Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
7. PD - Aroclor 1242 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1242 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
8. PE - Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

Table 3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

DNAPL SEDIMENT SAMPLING
PCB DATA RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Depth (feet)	Date Collected	Aroclor 1016, 1221, & 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	TOC
HR-G1-SB-19	8-10	6/14/2000	ND(105)	ND(105)	ND(105)	ND(105)	2080	2080	---
	10-12	6/14/2000	ND(3.06)	ND(3.06)	ND(3.06)	ND(3.06)	84.6	84.6	---
HR-G1-SB-20	2-4	6/14/2000	ND(0.721)	ND(0.721)	1.32 PE	ND(0.721)	11.2 AG	12.5	---
	6-8	6/14/2000	ND(0.0537) [ND(0.0526)]	0.0605 PD [0.0898 PD]	ND(0.0537) [ND(0.0526)]	ND(0.0537) [ND(0.0526)]	0.0602 AG [0.0690 AG]	0.121 [0.159]	--- [---]
HR-G1-SB-21	2-4	6/14/2000	ND(0.0575)	ND(0.0575)	0.382 PE	ND(0.0575)	0.586 AG	0.968	---
	8-10	6/14/2000	ND(162)	ND(162)	ND(162)	ND(162)	4200	4200	---
HR-G1-SB-22	2-4	6/14/2000	ND(0.0534)	ND(0.0534)	ND(0.0534)	ND(0.0534)	0.191	0.191	---
HR-G1-SB-24	2-4	6/23/2000	ND(7.0)	ND(7.0)	ND(7.0)	ND(7.0)	99	99	---
	4-6	6/23/2000	ND(0.36)	ND(0.36)	ND(0.36)	ND(0.36)	3.6	3.6	---
	6-8	6/23/2000	ND(180)	890	ND(180)	ND(180)	7500	8400	---
	8-10	6/23/2000	ND(1.8)	3.7	ND(1.8)	ND(1.8)	40	44	---
	10-12	6/23/2000	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)	0.56	0.56	---
	12-14	6/23/2000	ND(0.45)	0.43 J	ND(0.45)	ND(0.45)	4.6	5.0	---
	14-16	6/23/2000	ND(19)	15 J	ND(19)	ND(19)	620	640	---
HR-G1-SB-26	8-10	6/23/2000	ND(0.39)	0.35 J	ND(0.39)	ND(0.39)	3.3	3.7	---
	10-12	6/23/2000	ND(0.036) [ND(0.036)]	ND(0.036) [ND(0.036)]	ND(0.036) [ND(0.036)]	ND(0.036) [ND(0.036)]	0.14 [0.12]	0.14 [0.12]	--- [---]
	12-14	6/23/2000	ND(0.037)	0.043	ND(0.037)	ND(0.037)	0.59	0.63	---
HR-GB-SB-27	0-2	6/23/2000	ND(200)	170 J	ND(200)	ND(200)	8500	8700	---
	2-4	6/23/2000	ND(43)	ND(43)	ND(43)	ND(43)	1800	1800	---
HR-G1-SED-CAP-1	composite	6/23/2000	ND(0.43)	0.37 J	ND(0.43)	ND(0.43)	20	20	4500

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. or CT&E Environmental Services, Inc. for analysis of PCBs and Total Organic Carbon (TOC).
2. ND - Analyte was not detected. The value in parentheses is the associated detection limit.
3. Field duplicate results are presented in brackets.
4. PE - Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
5. AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
6. PD - Aroclor 1242 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1242 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
7. --- - Not analyzed.
8. J - Indicates an estimated value less than the practical quantitation limit (PQL).

Table 4

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER SOIL SAMPLING
PCB DATA RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Depth (feet)	Date Collected	Aroclor 1016, 1232, 1242, 1248, & 1254	Aroclor 1221	Aroclor 1260	Total PCBs
HR-G2-SB-1	4-6	6/16/2000	ND(1.78)	ND(1.78)	41.8	41.8
HR-G2-SB-2	6-8	6/16/2000	ND(2.48) [ND(1.80)]	ND(2.48) [ND(1.80)]	53.0 [48.3]	53.0 [48.3]
HR-G2-SB-4	12-14.5	6/16/2000	ND(0.0619)	0.198 PB	ND(0.0619)	0.198

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The value in parentheses is the associated detection limit.
3. Field duplicate results are presented in brackets.
4. PB - Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

TABLE 5

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

DNAPL FROM CELL SAMPLE DATA
RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in parts per million, ppm)

Sample ID: / Date Collected:	HR-DNAPL-CELL-G1 05/30/00
Volatile Organics	
Chlorobenzene	266
PCBs	
Aroclor 1260	449000
Total PCBs	449000
Semivolatile Organics	
1,2,4-Trichlorobenzene	152000

Notes:

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

TABLE 6

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

BACKFILL SOIL SAMPLING
PCB DATA RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Date Collected	Aroclor 1016, 1221, 1232, 1242, 1248, 1254, & 1260	Total PCBs
BSG-BF-3	6/2/2000	ND(0.0527)	ND(0.0527)
BSG-BF-4	6/2/2000	ND(0.0512) [ND(0.0536)]	ND(0.0512) [ND(0.0536)]

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The value in parentheses is the associated detection limit.
3. Field duplicate results are presented in brackets.

TABLE 7

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

JUNE 2000 AMBIENT AIR DATA
UPPER 1/2 MILE REACH

Date	Sampler Location	Average Site Concentration (mg/m^3)	BM1 (mg/m^3)	Average Period (Hours:Min)	Predominant Wind Direction
6/1/2000	AM2 (south side of river)	0.029	0.035	10:00	W, WNW
6/2/2000	AM2 (south side of river)	NA[1]	0.028	---	SW
6/5/00[2]	AM2 (south side of river)				
6/6/00[2]	AM2 (south side of river)				
6/7/2000	AM2 (south side of river)	0.008	0.002	9:15	WNW
6/8/2000	AM2 (south side of river)	0.011	0.018	10:00	SSW
6/9/2000	AM4 (south side of river)	0.018	0.031	9:45	W
6/12/00[2]	AM4 (south side of river)				
6/13/2000	AM4 (south side of river)	0.008	0.012	8:15[3]	E
6/14/00[2]	AM4 (south side of river)				
6/15/00[2]	AM4 (south side of river)				
6/16/2000	AM4 (south side of river)	0.031	0.042	10:00	SSW
6/19/2000	AM4 (south side of river)	0.004	0.008	8:30	NW, NNW
6/20/2000	AM4 (south side of river)	0.006	0.009	9:30	NW, NNW
6/21/2000	AM4 (south side of river)	0.012	0.018	10:00	SSW
6/22/2000	AM4 (south side of river)	0.013	0.019	9:15	SW
6/23/2000	AM4 (south side of river)	0.006	0.011	9:45	WNW
6/26/2000	AM4 (south side of river)	0.051	0.052	3:45[3]	SW
6/27/00[2]	AM4 (south side of river)				
6/28/2000	AM4 (south side of river)	0.006	0.010	9:15	W
6/29/2000	AM4 (south side of river)	0.007	0.011	9:15	ESE, SE
6/30/2000	AM4 (south side of river)	0.010	0.012	9:30	WNW
Notification Level		0.120			

Notes:
BM-1: Background monitoring location west of Bldg. 42.
AM-2: Air monitoring location near tennis courts within Lakewood Park, southeast bank.
AM-4: Air monitoring location behind the former F.W. Webb building on Newell Street.

[1] Data was lost due to instrument failure due to rain.

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

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

TABLE 8

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

JUNE 2000 PCB AMBIENT AIR CONCENTRATIONS
UPPER 1/2 MILE REACH

Date	BM-1 ug/m^3	AM-3 ug/m^3	AM-3 co-located ug/m^3	AM-4 ug/m^3	AM-5 ug/m^3	AM-6 ug/m^3
6/15 - 6/16/00	0.0114	0.0485	0.0492	0.0123	0.0143	0.0075
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-3: Air monitoring location north bank, north of Bldg. 64W. This location is also a co-located site.
AM-4: Air monitoring location south bank, at 261 Newell St. behind building fomerly known as F.W. Webb.
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.

TABLE 9

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

PILED SEDIMENT FROM TANK CLEANOUT
PCB DATA RECEIVED DURING JUNE 2000
UPPER 1/2 MILE REACH
(Results are presented in dry-weight parts per million, ppm)

Sample ID	Date Collected	Aroclor 1016, 1221, 1232, 1242, 1248, & 1254	Aroclor 1260	Total PCBs
TANK-SED-1	5/31/2000	ND(0.0641)	17.1	17.1
TANK-SED-2	5/31/2000	ND(0.0642)	15.1	15.1
TANK-SED-3	5/31/2000	ND(1.41)	24.6	24.6
TANK-SED-4	5/31/2000	ND(1.20)	9.63	9.63
TANK-SED-5	5/31/2000	ND(1.29) [ND(1.21)]	9.14 [10.3]	9.14 [10.3]
TANK-SED-6	5/31/2000	ND(1.27)	10.5	10.5
TANK-SED-7	5/31/2000	ND(3.16)	71.3	71.3
TANK-SED-8	5/31/2000	ND(0.635)	11.6	11.6
TANK-SED-9	5/31/2000	ND(1.39)	21.8	21.8

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The value in parentheses is the associated detection limit.
3. Field duplicate results are presented in brackets.

Table 10

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

UPPER 1/2-MILE REACH OF HOUSATONIC RIVER

PIEZOMETER MONITORING RESULTS - JUNE 2000

Piezometer ID.	Date	Ground Elevation (Feet AMSL)	Measuring Point Elevation (Feet AMSL)	Depth to Water (Feet below MP)	Depth to NAPL (Feet below MP)	NAPL Thickness (Feet)	Groundwater Elevation (Feet AMSL)
G1-PZ1	6/30/2000	978.29	979.91	10.46	ND	0.00	969.45
G1-PZ2	6/30/2000	978.65	980.27	10.89	ND	0.00	969.38
G1-PZ3	6/30/2000	977.79	979.41	10.31	ND	0.00	969.10

Notes:

1. Piezometers were installed by Blasland, Bouck & Lee, Incorporated on June 28, 2000, utilizing an AMS Power Probe direct push rig.
2. Piezometers were constructed with 1-inch inside diameter PVC screens and risers.
3. NAPL - Non-Aqueous Phase Liquid.
4. ND - No NAPL was observed.

EXHIBIT B

General Electric Company
Pittsfield, Massacusetts

Revision Date: 30-Jun-00

1/2-Mile Removal Action Backfill Tracking Log

Material	Testing Required	Frequency (per ___ cy)	Submittal from MTI No.	Submittal from MTI Date	Submittal to EPA No.	Submittal to EPA Date	Sample Date	Number of Samples	Quantity Approved for Placement	Quantity Placed (cy)	Comments
Soil Backfill/Granular Fill (Brown's Pit)	Grain Size	2000	13/13A	11/17 & 11/18/99	8	12/1/1999	11/16/1999	1	1000	700	
	PCBs	500	NA	NA	8A	12/15/1999	12/8/1999	2			
			NA	NA	14	5/31/2000	5/18/2000	2			
	VOCs	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6			
	SVOCs	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6			Samples Collected as part of Allendale School Project
	Metals	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6			
	TPH	2000	NA	NA	8A	12/15/1999	12/1/1999	3			
Isolation Layer (Pittsfield Sand & Gravel)	Grain Size	500	12	11/17/1999	Letter	11/19/1999	11/1/1999	1	1000	667	
			12C	3/30/2000	Letter	4/20/2000	3/24/2000	1			
	TOC	500	12	11/17/1999	Letter	11/19/1999	11/2/1999	1			
			12C	3/30/2000	Letter	4/20/2000	3/30/2000	1			
	PCBs	500	NA	NA	Letter	11/19/1999	9/20/1999	4			Samples collected as part of off-site residential fill program
			NA	NA	7	12/1/1999	11/19/1999	2			
			NA	NA	Letter	4/20/2000	3/29/2000	2			
	VOCs	2000	NA	NA	Letter	11/19/1999	9/20/1999	4			
	SVOCs	2000	NA	NA	Letter	11/19/1999	9/20/1999	4			Samples collected as part of off-site residential fill program
	Metals	2000	NA	NA	Letter	11/19/1999	9/20/1999	4			
	TPH	2000	NA	NA	7	12/1/1999	11/19/1999	2			
Isolation Layer (Bushika Sand & Gravel)	Grain Size	500	12A	1/3/2000	Letter	1/6/2000	12/28/1999	1	1000	655	
			12B	1/24/2000	11	2/14/2000	1/19/2000	1			
			12D	5/8/2000	13	5/19/2000	5/2/2000	1			
	TOC	500	12A	1/3/2000	Letter	1/6/2000	12/28/1999	1			
			12B	1/24/2000	11	2/14/2000	1/19/2000	1			
			12D	5/8/2000	13	5/19/2000	5/2/2000	1			
	PCBs	500	NA	NA	10	1/14/2000	1/5/2000	2			
			NA	NA	11	2/14/2000	2/2/2000	2			
			12D	5/8/2000	13A	6/28/2000	6/2/2000	2			
	VOCs	2000	NA	NA	10	1/14/2000	1/5/2000	2			
	SVOCs	2000	NA	NA	10	1/14/2000	1/5/2000	2			
	Metals	2000	NA	NA	10	1/14/2000	1/5/2000	2			
	TPH	2000	NA	NA	10	1/14/2000	1/5/2000	2			
			NA	NA	11	2/14/2000	2/2/2000	2			
Rip-Rap (9")	Grain Size	2000	15A	11/30/1999	Letter	12/1/1999	11/23/1999	1	2000	1008	
Rip-Rap (12")	Grain Size	2000	18	1/4/2000	Letter	1/6/2000	12/29/1999	1	2000	120	
Topsoil (Woodmont)	Organic Content	500	11/14	11/16 & 11/17/99	9	12/15/1999	11/8/1999	2	500	170	
	pH	500	11/14	11/16 & 11/17/99	9	12/15/1999	11/8/1999	2			
	PCBs	500	NA	NA	9	12/15/1999	12/8/1999	4			
	VOCs	2000	NA	NA	9	12/15/1999	8/24/1999	4			
	SVOCs	2000	NA	NA	9	12/15/1999	8/24/1999	4			Samples collected as part of off-site residential fill program
	Metals	2000	NA	NA	9	12/15/1999	8/24/1999	4			
	TPH	2000	NA	NA	9	12/15/1999	12/8/1999	2			

Notes:
Granular Fill and Soil Backfill have been combined as the same material
Quantities placed include Cells A, B, C, D, DNAPL, E+A23+A46+A69

½ MILE RIVER REMOVAL ACTION
MONTHLY PROGRESS REPORT
JUNE, 2000
FIGURE 1 PHOTO DOCUMENTATION

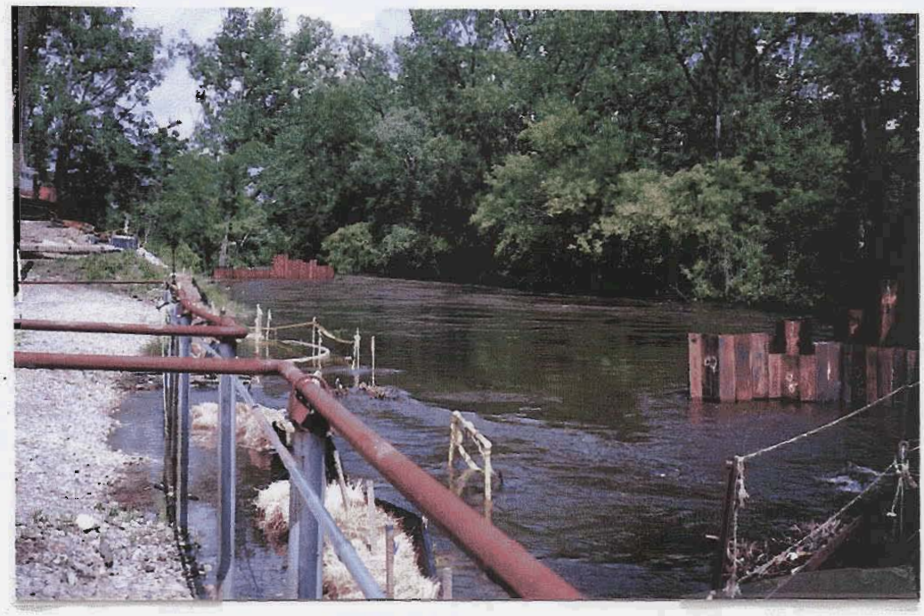

PHOTO NUMBER: 1

PHOTO LOCATION: Cell G-1
North side of river looking upstream (east).

PHOTO DESCRIPTION: Flood conditions during peak flow period.

PHOTO DATE: 06/07/00

PHOTO NUMBER: 2

PHOTO LOCATION: Cell G-1
North side of river looking upstream (east).

PHOTO DESCRIPTION: Cell subdivided. Restoration work continues in the upstream portion. 36" pipe installed to redirect stormwater.

PHOTO DATE: 06/28/00

PHOTO NUMBER: 3

PHOTO LOCATION: Upstream - Cell G-1.
North side of the river looking upstream

PHOTO DESCRIPTION
Upstream portion of Cell G-1
Restoration activities complete in cell.

PHOTO DATE: 06/30/00

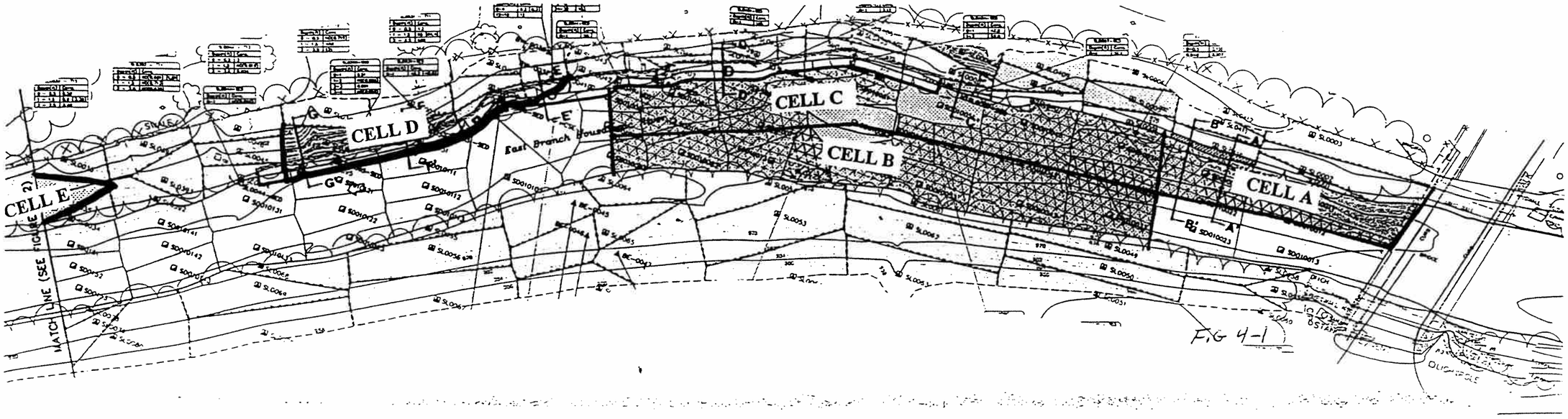

EXHIBIT A

UPPER ½ MILE REACH REMOVAL ACTION