



GE-004  
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6821

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

February 9, 2000



SDMS DocID 6821

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 - January 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 January 2000 Monthly Report.

Please call with any questions.

Yours truly,

*William A. Home / 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. Home, 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

# 6821  
# 0034499

## **1.0 Background:**

Progress continued on the Upper ½ Mile Reach Removal Action through January 2000. Maxymillian Technologies continues with removal and restoration activities in Cell C. Progress in the latter few weeks of January has been hindered by equipment freeze-ups associated with extreme cold temperatures and significant snow storms. In addition, a pocket of dense non-aqueous-phase liquid (DNAPL) was observed on January 24, 2000 emanating from sediment in a small portion of Cell C. This area is within the sheetpile cell and is further contained by sand bag barriers. Weekly status meetings were held on 1/3, 1/10, 1/18 and 1/31.

## **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 January, GE's Bldg. 33X was approved by EPA to be used as a temporary storage facility for TSCA and non-TSCA material (in addition to Bldg. 65).

Following the preparation of the temporary stockpile area in Bldg.33X, removal and restoration activities began in Cell C. Activities included the following general sequence of events:

- Sheetpiling installation;
- De-watering;
- Layout of excavation limits;
- Surveying of existing elevations;
- Sediment and bank soil removal;
- Excavation of additional bank soils and sediment material in the upstream part of Cell C to address the unstable conditions in the area;
- Verification of excavation limits;
- Grouting the source control sheetpile in Cell C;
- Restoration activities including fabric, sand, fabric/geogrid, and rock;
- Verification of placement limits; and,
- Containment and collection of DNAPL in Cell C.

During the excavation activities in Cell C that began on January 6, 2000, an oil sheen was observed within the sheetpiled area. Additional oil absorbent booms and pads were deployed and GE promptly reported this observation to MDEP, EPA, EPA Region 1 Spill Response, and the National Response Center (NRC). A release tracking number (516308) was issued from the NRC. MDEP did not issue a new release notification number and the sheen had dissipated within 24 hours.

## 2.0 Chronological description of the tasks performed (continued):

On January 24, 2000 when DNAPL was observed in the downstream (west) end of Cell C, a second notification was made to MDEP, EPA, EPA Region 1 Spill Response, and the NRC. A release tracking number (517665) was issued from the NRC. MDEP did not issue a new release notification number. GE immediately deployed a number of oil absorbent booms/pads and began constructing sandbag berms/barriers to isolate and contain the DNAPL from other areas of the excavation to the extent practicable.

In Cell C, adjacent to the source control sheetpiling, an estimated additional 150 cubic yards (cy) of river sediment was removed at GE's discretion due to the appearance of the material at the removal depth specified in the Work Plan. In a 200 foot by 10 foot area, approximately 2 feet of sediment was removed (as discussed on site with EPA). In the upstream part of the same cell, saturated fine sands and silts were visibly "boiling" from the bottom of the excavation and laterally out of the sloughing north bank in this area, thereby creating an unsafe, "quick" condition. An evaluation of this area determined that over-excavation of the sediments and decreasing the slope of the adjacent north bank would likely correct the unstable condition. This approach was attempted and was successful. This resulted in an additional 300 cy of sediment and bank soil material being removed in order to control water in the unstable excavation.

Sheetpiling installation activities were completed in Cell D on January 17, 2000. De-watering efforts began on January 19, 2000. These efforts were significantly hindered by snow and ice that had formed in the quiescent cell. The flushing of the source control sheetpile joints is 95 % complete in Cell D. Excavation was planned to begin on or about January 26, 2000 but has been temporarily delayed due to the presence of DNAPL in Cell C. The subsequent effect of delaying the excavation in Cell D has prohibited the completion of grouting operations in this cell (note the sheetpiling needs to be permanently sealed prior to restoration activities).

Flushing operations are 100% complete in Cell C. Grouting activities are approximately 65 % complete in Cell C (150 ft).

As previously discussed, DNAPL was observed on January 24, 2000 in a small area of the downstream (west) end of Cell C. The area is within the sheetpile cell and isolated from the river. After the Agency notification process was complete and the area was contained and isolated to the extent practicable from the ongoing restoration activities, the oil was sampled. Analytical testing indicated that it is made up of coal tar constituents. No PCBs were detected. The test results are attached to this report. Manual DNAPL recovery has been conducted on a daily basis and as of January 31, 2000 approximately 66 gallons of oil had been recovered (note as of February 7, 2000 approximately 210 gallons of oil had been recovered).

## **2.0 Chronological description of the tasks performed (continued):**

On January 28, 2000 GE conducted additional excavation of the DNAPL area to a depth of 4 feet in accordance with the ½ Mile Removal Action Work Plan. This deeper excavation helped in the DNAPL recovery operations and in further investigating the potential source. GE continues to work closely with the EPA and MDEP to evaluate this area.

## **3.0 Number of samples collected:**

In the month of January, particulate air monitoring results were collected from January 3 through January 31 and PCB air monitoring results were collected on January 12 through January 13. The available results are attached to this report (refer to Table 1A for particulate results and Table 1B for PCB results). Water column monitoring for total suspended solids (TSS) was conducted on a daily basis. Water column PCB samples were collected once every 2 weeks. The TSS and PCB results received to date for the month of January and results from December 1999 that were not available for the January 10, 2000 report, are attached to this report (Table 1C and 1D).

Physical and analytical test results for a new material source for the isolation layer (sand) were submitted and approved by the EPA. These results are included in Table 2. Additionally the physical gradation results from the 12-inch rock was submitted and approved by the EPA. The analytical results from the testing of the coal DNAPL are attached to this report in Table 3. Table 4 includes the results from sampling the effluent for priority pollutants from cell C de-watering activities.

## **4.0 Diagrams associated with the tasks performed:**

A diagram labeled as Exhibit A shows the location of the Cells (A, B, C, D and E) and is attached to this report for reference. Additionally, Exhibit B shows the area where the DNAPL was observed and the location of containment barriers/berms that were constructed.

## **5.0 Identification of any reports received and prepared:**

During the month of January, meeting summaries from various status meetings were submitted to the EPA, MDEP and EOE. Additionally, construction material specifications as referenced in Section 3.0 were submitted to the EPA, MDEP, and EOE.

A revised estimated project planning timetable for the entire project was submitted to EPA on January 7, 2000 for informational purposes only.

For work completed in December 1999, the monthly reports required by the Consent Decree and the ½ Mile River Removal Action Work Plan were submitted on January 7, 2000 and January 10, 2000 respectively.

**6.0 Photo documentation of activities performed:** See attached Figure 1

**7.0 Brief description of activities to be performed in February 2000:**

Throughout the upcoming weeks in the month of February, the following activities are estimated to take place:

- A DNAPL investigation program is anticipated to be developed, submitted to the EPA for review and approval, and implemented by GE.
- The results of this investigation will be evaluated.
- Communication between GE, EPA and MDEP will continue on a regular basis to provide updates on the DNAPL situation and discuss various alternatives for collection and containment.
- Restoration activities in Cell C will be advanced downstream. The limits of this work will be determined from the results of the DNAPL investigation program.
- Removal and restoration activities in Cell D will be delayed pending the results from the DNAPL investigation program.
- Flushing and sealing/grouting activities for the East Street Area 2 source control sheetpile will be delayed pending the results of the DNAPL investigation program.
- Air and water column monitoring will continue.

**8.0 Attachments to this report:**

- Table 1A - Water column monitoring TSS results;
- Table 1B - Water column monitoring PCB results;
- Table 1C - Particulate air monitoring results;
- Table 1D - PCB air monitoring results;
- Table 2 - Backfill soil sampling results;
- Table 3 - DNAPL sampling results;
- Table 4 - Cell C de-watering, effluent sampling results (priority pollutants);
- Exhibit A - Diagram to show the locations of cells within the upstream part of the Upper ½ Mile Reach Removal Action;
- Exhibit B - Sketch to show the location of the observed DNAPL; and,
- Figure 1 - Photo documentation sheet.

TABLE 1A

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

JANUARY 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) <sup>13</sup>			Sample ID	Total PCB Concentration <sup>14</sup> (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	1/3/00	2.2	3.0	61	4	1	1	---	---	---	---
Downstream of Lyman St. Bridge	1/3/00	2.5	3.0	71	1	1	1	---	---	---	---
Upstream of Newell St. Bridge	1/4/00	2.4	4.0	80	2	1	2	---	---	---	---
Downstream of Lyman St. Bridge	1/4/00	2.7	4.0	82	2	1	1	---	---	---	---
Upstream of Newell St. Bridge	1/5/00	3.4	1.0	190	15	5	14	---	---	---	---
Downstream of Lyman St. Bridge	1/5/00	3.7	1.0	203	17	6	11	---	---	---	---
Upstream of Newell St. Bridge	1/6/00	2.7	0.0	98	3	2	3	---	---	---	---
Downstream of Lyman St. Bridge	1/6/00	3.0	0.0	106	4	2	3	---	---	---	---
Upstream of Newell St. Bridge	1/7/00	2.5	0.0	86	2	1	2	HR-1-7-00-U1	0.0791	ND(0.0266)	2.6
Downstream of Lyman St. Bridge	1/7/00	2.9	0.0	87	3	1	2	HR-1-7-00-D1	0.0850 [0.0822]	0.0729 [ND(0.0250)]	4.1 [3.3]
Upstream of Newell St. Bridge	1/10/00	2.4	2.0	73	6	1	3	---	---	---	---
Downstream of Lyman St. Bridge	1/10/00	2.7	2.0	81	2	1	2	---	---	---	---
Upstream of Newell St. Bridge	1/11/00	3.5	2.0	---	7	2	5	---	---	---	---
Downstream of Lyman St. Bridge	1/11/00	3.8	2.0	---	9	2	6	---	---	---	---
Upstream of Newell St. Bridge	1/12/00	3.2	2.0	179	12	2	3	---	---	---	---
Downstream of Lyman St. Bridge	1/12/00	3.5	2.0	209	9	2	4	---	---	---	---
Upstream of Newell St. Bridge	1/13/00	2.7	1.0	128	2	1	2	---	---	---	---
Downstream of Lyman St. Bridge	1/13/00	3.1	1.0	135	3	1	2	---	---	---	---
Upstream of Newell St. Bridge	1/14/00	2.4	1.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/14/00	2.8	1.0	NS	NS	NS	NS	---	---	---	---

TABLE 1A

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

JANUARY 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) <sup>13</sup>			Sample ID	Total PCB Concentration <sup>14</sup> (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	1/17/00	2.2	0.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/17/00	2.8	0.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/18/00	2.2	0.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/18/00	2.8	0.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/19/00	2.2	0.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/19/00	2.8	0.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/20/00	2.2	0.0	NS	NS	NS	NS	HR-1-20-00-U1	ND (0.0250)	ND(0.0250)	1.3
Downstream of Lyman St. Bridge	1/20/00	2.8	0.0	NS	NS	NS	NS	HR-1-20-00-D1	ND (0.0250)	ND(0.0250)	1.8
Upstream of Newell St. Bridge	1/21/00	2.2	0.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/21/00	2.8	0.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/24/00	2.0	0.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/24/00	2.6	0.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/25/00	1.8	2.0	NS	10	4	6	---	---	---	---
Downstream of Lyman St. Bridge	1/25/00	2.4	2.0	NS	4	2	2	---	---	---	---
Upstream of Newell St. Bridge	1/26/00	2.0	1.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/26/00	2.6	1.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/27/00	2.5	1.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/27/00	3.0	1.0	NS	NS	NS	NS	---	---	---	---
Upstream of Newell St. Bridge	1/28/00	2.4	1.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/28/00	3.0	1.0	NS	NS	NS	NS	---	---	---	---

TABLE 1A

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

JANUARY 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) <sup>13</sup>			Sample ID	Total PCB Concentration <sup>14</sup> (ug/l)	Filtered PCB Concentration (ug/l)	TSS (mg/l)
					High	Low	Daily Composite				
Upstream of Newell St. Bridge	1/31/00	2.5	2.0	NS	NS	NS	NS	---	---	---	---
Downstream of Lyman St. Bridge	1/31/00	3.2	2.0	NS	NS	NS	NS	---	---	---	---

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. [ ] - Duplicate sample result
13. Turbidity Action Level = Turbidity downstream ≤ Turbidity upstream + 50 ntu
14. PCB Action Level = PCBs downstream ≤ PCBs upstream + 5 ug/l
15. NS - Not sampled due to frozen river conditions.



TABLE 1B

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

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

Sample ID	Location	Date Collected	Aroclor 1016, 1221, & 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	TSS
HR-12-21-99-U1	Upstream of Newell St. Bridge	12/21/99	ND(0.0000250)	ND(0.0000250)	0.0000280 PE	0.000115 AF	ND(0.0000250)	0.000143	7.5
HR-12-21-99-U1 (FILTERED)	Upstream of Newell St. Bridge	12/21/99	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	---
HR-12-21-99-D1	Downstream of Lyman St. Bridge	12/21/99	ND(0.0000250)	0.0000279 PD	ND(0.0000250)	0.000173 AF	0.0000469	0.000248	6.3
HR-12-21-99-D1 (FILTERED)	Downstream of Lyman St. Bridge	12/21/99	ND(0.0000250)	0.0000356 PD	ND(0.0000250)	0.0000258 AF	ND(0.0000250)	0.0000614	---
HR-1-7-00-U1	Upstream of Newell St. Bridge	1/7/00	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	0.0000791	ND(0.0000250)	0.0000791	2.6
HR-1-7-00-U1 (FILTERED)	Upstream of Newell St. Bridge	1/7/00	ND(0.0000266)	ND(0.0000266)	ND(0.0000266)	ND(0.0000266)	ND(0.0000266)	ND(0.0000266)	---
HR-1-7-00-D1	Downstream of Lyman St. Bridge	1/7/00	ND(0.0000250) [ND(0.0000250)]	ND(0.0000250) [ND(0.0000250)]	ND(0.0000250) [ND(0.0000250)]	0.0000850 [0.0000822]	ND(0.0000250) [ND(0.0000250)]	0.0000850 [0.0000822]	4.1 [3.3]
HR-1-7-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	1/7/00	ND(0.0000250) [ND(0.0000250)]	0.0000729 PD [ND(0.0000250)]	ND(0.0000250) [ND(0.0000250)]	ND(0.0000250) [ND(0.0000250)]	ND(0.0000250) [ND(0.0000250)]	0.0000729 [ND(0.0000250)]	--- [---]
HR-1-20-00-U1	Upstream of Newell St. Bridge	1/20/00	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	1.3
HR-1-20-00-U1 (FILTERED)	Upstream of Newell St. Bridge	1/20/00	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	---
HR-1-20-00-D1	Downstream of Lyman St. Bridge	1/20/00	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	1.8
HR-1-20-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	1/20/00	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. 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.
6. 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.
7. Blind duplicate results are presented in brackets.

**MONTH OF JANUARY, 2000**

Date	Sampler Location	Average Site Concentration (mg/m <sup>3</sup> )	BM1 <sup>1</sup> (mg/m <sup>3</sup> )	Average Period (Hours:Min)	Predominant Wind Direction
01/03/2000 <sup>1</sup>	AM2 (south side of river)				
01/04/2000 <sup>1</sup>	AM2 (south side of river)				
01/05/2000	AM2 (south side of river)	0.006	0.004	9:00	WNW
01/06/2000	AM2 (south side of river)	0.010	0.009	9:15	S
01/07/2000	AM2 (south side of river)	0.020	0.024	10:00	Variable
01/10/2000	AM2 (south side of river)	0.009	0.014	8:00	ESE
01/11/2000	AM2 (south side of river)	0.010	0.011	6:15 <sup>2</sup>	SW
01/12/2000	AM2 (south side of river)	0.007	0.006	9:15	WNW
01/13/2000 <sup>1</sup>	AM2 (south side of river)				
01/14/2000	AM2 (south side of river)	0.008	0.006	10:00	WNW
01/17/2000	AM2 (south side of river)	0.013	0.008	7:45	NW
01/18/2000	AM2 (south side of river)	0.015	0.010	8:15	NNW
01/19/2000	AM2 (south side of river)	0.012	0.009	9:30	NW
01/20/2000 <sup>1</sup>	AM2 (south side of river)				
01/21/2000	AM2 (south side of river)	0.016	0.013	7:00	WNW
01/24/2000	AM2 (south side of river)	0.023	0.023	10:00	NW
01/25/2000 <sup>1</sup>	AM2 (south side of river)				
01/26/2000 <sup>1</sup>	AM2 (south side of river)				
01/27/2000	AM2 (south side of river)	0.015	0.009	9:15	WNW
01/28/2000	AM2 (south side of river)	0.011	0.006	10:15	WNW
01/31/2000 <sup>1</sup>	AM2 (south side of river)				
Notification Level		0.120			

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

AM-2: Air monitoring location near tennis courts within Lakewood Park, southeast bank.

<sup>1</sup> Sampling was not performed due to precipitation/threat of precipitation.

<sup>2</sup> Sampling period was shortened due to precipitation/threat of precipitation.

**JANUARY 2000 PCB AMBIENT AIR CONCENTRATIONS  
1/2 MILE REMOVAL ACTION  
PITTSFIELD, MASSACHUSETTS  
TABLE 1D**

<b>Date</b>	<b>BM-1 ug/m<sup>3</sup></b>	<b>AM-1 ug/m<sup>3</sup></b>	<b>AM-2 ug/m<sup>3</sup></b>	<b>AM-3 ug/m<sup>3</sup></b>	<b>AM-3 co-located ug/m<sup>3</sup></b>	<b>AM-4 ug/m<sup>3</sup></b>
01/12 - 01/13/00	ND (0.0003)	0.0005	0.0004	0.0014	0.0015	0.0014
Notification Level	0.05	0.05	0.05	0.05	0.05	0.05

Notes:

ND: Non detect

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

AM-1: Air monitoring location east of Bldg. 64V, near current work/staging area, northeast bank.

AM-2: Air monitoring location near tennis courts within Lakewood Park, southeast bank.

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 formerly known as F.W. Webb.

TABLE 2

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

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

<b>Sample ID:</b>	<b>BSG-BF-1</b>
<b>Date Collected:</b>	<b>01/05/00</b>
<b>PCBs</b>	
None Detected	ND(0.0545) [ND(0.0558)]
<b>Volatile Organics</b>	
Acetone	ND(0.011) [0.015]
<b>Semivolatile Organics</b>	
None Detected	--
<b>Total Petroleum Hydrocarbons</b>	
None Detected	ND(100) [ND(100)]
<b>Furans</b>	
None Detected	--
<b>Dioxins</b>	
None Detected	--
<b>Inorganics</b>	
Beryllium	0.180 [ND(0.160)]
Lead	5.60 [3.80]
Nickel	9.60 [ND(6.60)]
Zinc	30.0 [20.0]

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc..
2. PCB and Total Petroleum Hydrocarbons (TPH) analyses were performed by Northeast Analytical Services, Inc..
3. Appendix IX+3 constituents (excluding herbicides and pesticides) analyses were performed by CT&E Environmental Services, Inc..
4. ND - Analyte was not detected. The number in parentheses is the associated quantitation limit for volatiles and semivolatiles and the associated detection limit for other constituents.
5. Blind duplicate results are presented in brackets.
6. Only those constituents detected in at least one sample are summarized.

TABLE 3

**GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS**

**DNAPL DATA  
RECEIVED DURING JANUARY 2000  
UPPER 1/2 MILE REACH**

(Results are presented in parts per million, ppm)

Sample ID:	HR-DNAPL-1
Date Collected:	01/24/00
<b>PCBs</b>	
None Detected	--
<b>Volatile Organics</b>	
Benzene	3400
Ethylbenzene	10000
Styrene	1000
Toluene	10000
Xylenes (total)	9300
<b>Semivolatile Organics</b>	
2-Methylnaphthalene	26000
Acenaphthene	3100
Acenaphthylene	18000
Anthracene	6600
Benzo(a)anthracene	3400
Benzo(a)pyrene	6400
Benzo(b)fluoranthene	1900
Benzo(k)fluoranthene	2100
Chrysene	6300
Fluoranthene	8600
Fluorene	12000
Naphthalene	67000
Phenanthrene	25000
Pyrene	25000

Notes:

- 1) Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to Adirondack Environmental Services, Inc. for analysis of PCBs, volatile organics and semivolatile organics.
- 2) Only those constituents detected in at least one sample are summarized.

TABLE 4

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

PRIORITY POLLUTANT SAMPLE DATA RECEIVED DURING JANUARY 2000  
UPPER 1/2 MILE REACH

(Results are presented parts per million, ppm)

Parameter	Sample ID: Date Collected:	HR-EFF-PP-2 01/11/00
<b>PCBs</b>		
Aroclor-1242		ND(0.0000250)
Aroclor-1248		0.00884 PE
Aroclor-1254		ND(0.0000250)
Aroclor-1260		0.0252 AG
Total PCBs		0.0340
<b>PCBs-Filtered</b>		
Aroclor-1242		0.000618 PD
Aroclor-1248		ND(0.0000250)
Aroclor-1254		0.0000461 PF
Aroclor-1260		ND(0.0000250)
Total PCBs		0.000664
<b>Volatile Organics</b>		
Benzene		0.129
Ethylbenzene		0.193
Toluene		0.194
<b>Semivolatile Organics</b>		
Acenaphthene		0.0439
Acenaphthylene		0.0160
Fluorene		0.0118
Naphthalene		0.983
Phenanthrene		0.0148
<b>Metals</b>		
Chromium		0.012
Copper		0.033
Lead		0.060
Zinc		0.052

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of filtered and unfiltered PCBs, Volatile Organics, Semivolatile Organics, Metals, Cyanide and Phenolics.
2. ND(0.10) - Analyte was not detected. The value in parentheses is the associated detection limit.
3. AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
4. PD - Aroclor 1254 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1254 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
5. 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.
6. 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.
7. Only those constituents detected in at least one sample are summarized.

EXHIBIT A  
UPPER 1/2 MILE REACH REMOVAL ACTION  
LOCATION OF CELLS A, B, C, D and E FOR THE UPSTREAM SECTION

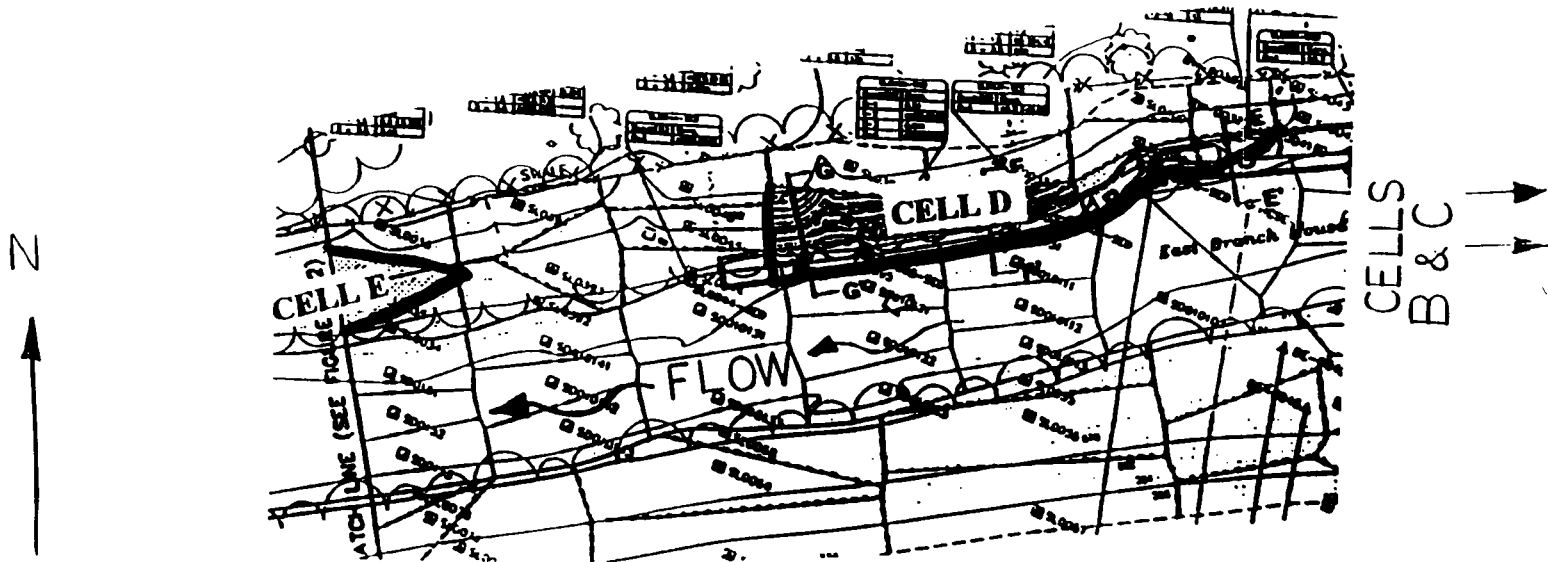
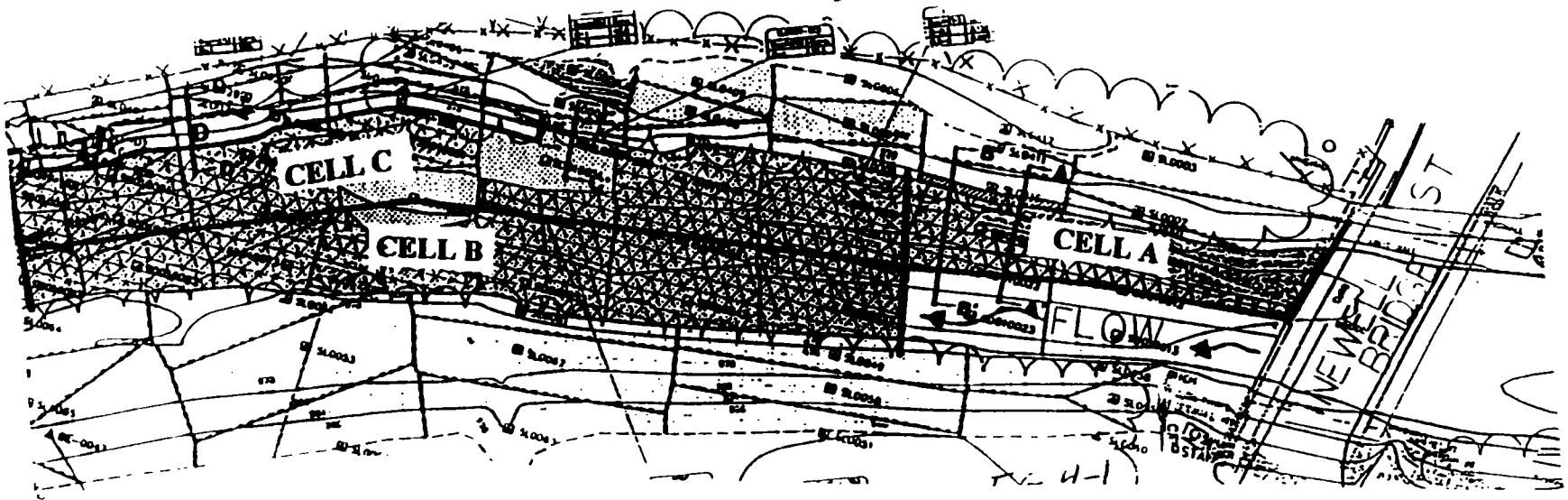
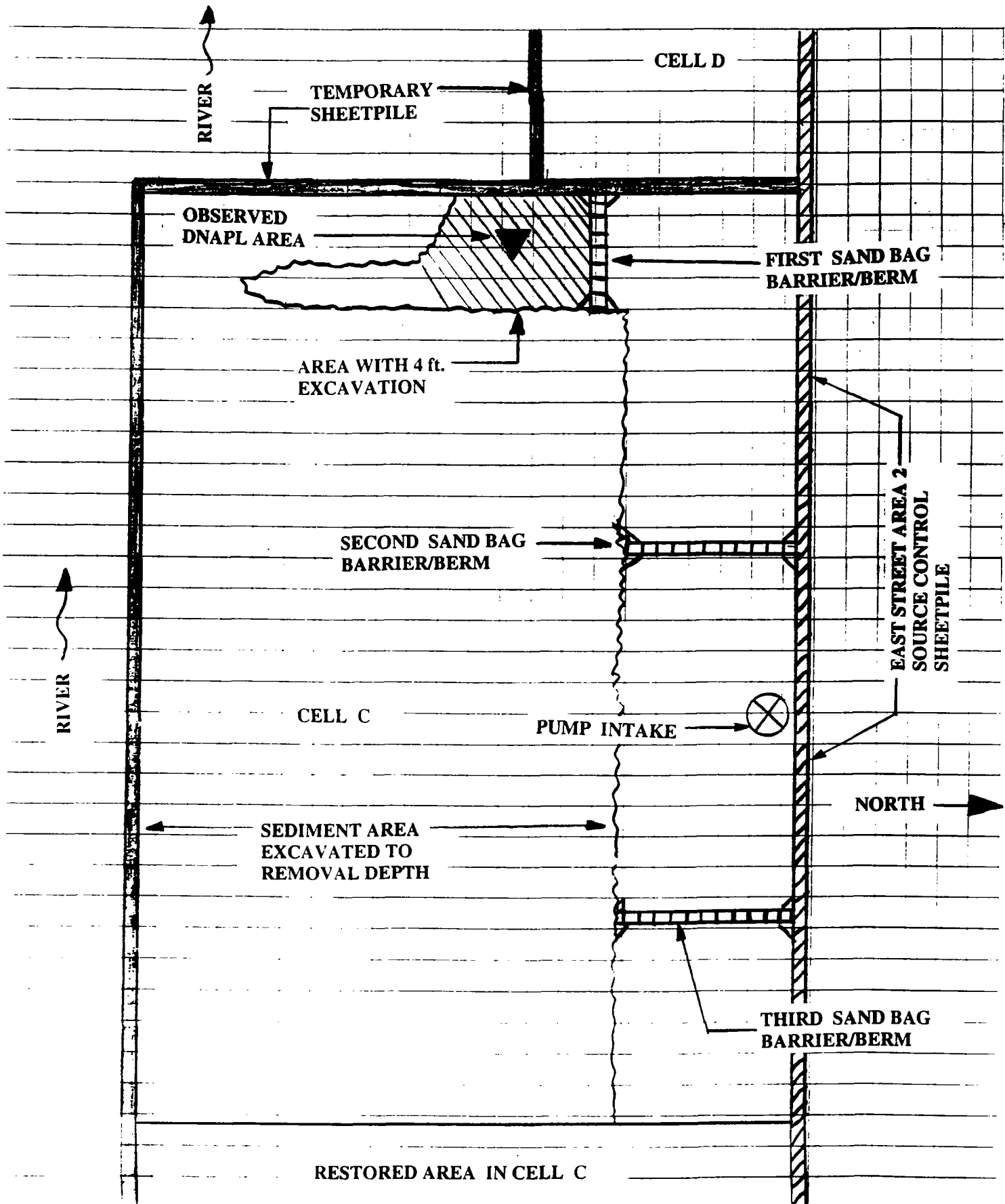


EXHIBIT B SKETCH OF THE OBSERVED DNAPL LOCATION





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

**PHOTO NUMBER: 1**

**PHOTO LOCATION:** Cell C  
Looking east towards Newell Street Bridge.

**PHOTO DESCRIPTION:**  
Excavation in cell C. Bank removal at the east end.  
Additional excavation completed along the source  
control sheetpile.

**PHOTO DATE:** 01/21/00



**PHOTO NUMBER: 2**

**PHOTO LOCATION:**  
Looking at the north bank, upstream end of cell C

**PHOTO DESCRIPTION:** Unstable conditions  
where saturated fine sand, silt, and ground water  
are "boiling" up from the sediment excavation

**PHOTO DATE:** 01/24/00



**PHOTO NUMBER: 3**

**PHOTO LOCATION:**  
Looking east (upstream) along the  
source control sheetpiles in cell C

**PHOTO DESCRIPTION:** Sandbag barriers/  
berms isolating the DNAPL area from others  
areas in cell C.

**PHOTO DATE:** 01/31/00

