50MS: 158741

08-0062

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

September 8, 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 – August 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 August 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. 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 August 2000, GE and its contractor Maxymillian Technologies Incorporated (MTI) continued work on the Upper ¹/₂ Mile Reach Removal Action. This work included completing the EPA-approved dense non-aqueous-phase liquid (DNAPL) remediation plan in the downstream section of Cell G-1 and a 25-ft. section in the upstream portion of Cell G-2.

Progress throughout the month of August focused on installing a 105 ft. section of Waterloo sheetpile adjacent to the above referenced portions of Cells G-1 and G-2 as a source control measure under the EPA-approved DNAPL remediation plan. The installation of this permanent barrier system, encompassing two concrete headwalls, was completed on August 30, and as the month ended, sheetpile removal activities were beginning, followed by starting the sheetpile installation for Cell F-2.

On August 7, 2000, a thin rainbow-colored oil sheen along with pockets of DNAPL were observed in the upstream portion of Cell G-2. This was in an area that had not been previously reported. GE promptly reported this observation to the National Response Center (NRC), EPA and MDEP. The NRC issued a tracking number 537924 for this release. MDEP did not issue a tracking number.

Weekly status meetings were held on August 2, 9, 16, 23, and 30. Additional meetings between EPA and GE were held throughout the month of August to discuss progress on the DNAPL remediation effort in Cells G-1 and G-2.

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 August, GE Buildings 33, 33X and 65 were used as temporary storage facilities for TSCA and non-TSCA material.

At the beginning of the month of August, GE was completing the installation of a permanent sheetpile barrier system proposed along the north bank, which included both headwalls (and corresponding Outfalls 05A and 05B). Once this wall was installed, excavation activities began and lasted roughly 8 days. Approximately 300 CY of DNAPL-impacted sediments were removed from the newly reconfigured Cell G-1/G-2. All observed DNAPL and DNAPL-impacted sediments were removed from this cell and no DNAPL recovery system was required. This material was temporarily stockpiled in Bldgs. 65 and 33X, sampled to determine proper disposal characterization and will disposed of off site.

After completing the excavation in Cells G-1/G-2, MTI subcontractor C-3 completed the final flushing and sealing/grouting of the Waterloo sheetpile joints. Once sealed, the cell was restored to the existing elevation, verified following the appropriate survey procedures, and de-watering efforts were discontinued on August 30.

The three outfalls (005, 05A, and 05B) that had been diverted to avoid discharging into the cell were extended beyond the newly installed Waterloo sheetpile wall. Additionally the oil/water separator 64-W was restored to its existing operating condition. The 10" and 12" bypass pumps were disassembled and the 36" dia. pipe and 24" pipe plug were removed.

At the end of August, GE began placing TSCA material from the ¹/₂ Mile Reach in the Building 71 OPCA. In addition, during August, GE removed, for off-site disposal, the final remaining sediment associated with the coal-tar DNAPL remediation in Cells C and D. GE also continued to monitor coal-tar DNAPL from the 6-inch-diameter coal-tar DNAPL recovery well. In August, no measurable amounts of coal-tar DNAPL/water mixture were collected from that well. Monitoring coal-tar DNAPL will continue on a monthly basis.

Finally, during August, Blasland, Bouck & Lee (on GE's behalf) initiated a caged mussel study to evaluate the impacts of the construction/remediation work. Mussels collected from the Connecticut River were install in the Housatonic River on August 8, 2000, at three locations (four cages per location). These locations are upstream of the Newell Street bridge; downstream of the Lyman Street bridge; and upstream of the Dawes Avenue bridge. On August 21, after approximately 2 weeks, a total of 12 samples were collected (four at each location and submitted for analysis of PCBs and percent lipids (whole body samples minus the shell). This study will be continued with additional sampling events in September.

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 August 3, 17, and 31 2000. The TSS and PCB results received to date for the month of August are attached to this report (Tables 1A and 1B).

Upper ¹/₂-Mile Reach Removal Action Monthly Progress Report: August 2000 Page 3

Tables 2, 3, and 4 present a summary of analytical results, including PCB, VOC, SVOC, and TOC data for select samples from DNAPL-impacted sediments temporarily stockpiled in Bldgs. 65 and 33X, which are associated with the DNAPL remediation plan in Cell G-1/G-2. This material will be disposed of off site in September. Note that Table 2 also includes the analytical results from two sediment samples (one in Cell G-1 and one in Cell G-2) collected for future cap monitoring purposes.

In the month of August, particulate air monitoring was conducted from August 1 to August 31. PCB air monitoring was conducted on August 8-9. The results are attached to this report (Tables 5 and 6).

Table 7 includes analytical results for PCBs from the caged mussel study.

Table 8 includes the results from monthly monitoring of the coal-tar DNAPL recovery well.

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 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 any reports received and prepared:

During the month of August, meeting summaries from various weekly project status meetings were submitted to EPA, MDEP and EOEA. Also, for work completed in July 2000, the monthly reports required by the Consent Decree and the Upper ¹/₂ Mile Reach Removal Action. Work Plan were both submitted on August 9.

In addition, in August, GE submitted the following:

• Letter of August 18, 2000, requesting approval for an additional temporary storage area in Bldg. 33-North for TSCA and non-TSCA material..

- Letter of August 31, 2000, providing a revised version of the 'W' rock weir construction plan.
- Letter of August 31, 2000, responding to EPA's recommendation for additional DNAPL investigations.

6.0 Photo documentation of activities performed: See attached Figure 1

7.0 Brief description of work to be performed in September 2000:

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

- Remove existing sheetpile from Cell G-1/G-2.
- Complete placing TSCA material that has been temporarily stored in Buildings 65 and 33X in the Building 71 OPCA.
- Install upstream and downstream cutoff walls for Cell F-2 and de-water the cell.
- Complete the excavation and restoration activities in Cell F-2 (south side).
- Begin removal and restoration activities in Cell G-2 (north side).
- Maintain temporary stockpiles of material in Buildings 33, 33X, and 65 (TSCA and non-TSCA).
- Continue monitoring coal-tar DNAPL recovery well.
- Continue caged mussel study.
- Conduct air and water column monitoring.

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8.0 Attachments to this report:

- Tables 1A and 1B Water column monitoring TSS and PCB results.
- Tables 2, 3 and 4 Analytical results for PCB, TOC, VOC, SVOC, inorganics and oil/grease parameters from stockpiled soil and sediment samples removed during the DNAPL remediation plan in Cell G-1/G-2.
- Table 5 and 6 Particulate and PCB air monitoring results.
- Table 7 Results from the caged mussel study.
- Table 8 Monitoring results from the coal-tar DNAPL recovery well.
- Exhibit A Diagram to show the locations of cells within the upstream part of the Upper ¹/₂ Mile Reach Removal Action.
- Exhibit B Backfill quantity summary chart.
- Figure 1 Photo documentation.

TABLE 1A

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

AUGUST 2000

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

Location	Date	Water	Water	Flow	T	urbidity	(ntu) ¹²	Sample ID	Total PCB	Filtered PCB	TSS
		Depth	Temp.				Daily		Concentration ¹³	Concentration	
		(ft)	(°C)	(cfs)	High	Low	Composite		(ug/l)	(ug/l)	(mg/l)
Upstream of Newell St. Bridge	8/1/2000	2.3	18		2	1	2			(-8/-/	(IIIG/I)
Downstream of Lyman St. Bridge	8/1/2000	3.3	18	`	2	1	2				
Upstream of Newell St. Bridge	8/2/2000	2.0	19		3	2	2	***	~		
Downstream of Lyman St. Bridge	8/2/2000	2.9	19		3	2	· 2				
Upstream of Newell St. Bridge	8/3/2000	1.7	20	95	4	2	3	HR-8-3-00-111	0.0301	ND(0.0250)	4.20
Downstream of Lyman St. Bridge	8/3/2000	2.8	20	94	3	2	3	HR-8-3-00-D1	0.0301	ND(0.0250)	4.20
Upstream of Newell St. Bridge	8/4/2000	3.2	19		39	4	11		0.0000	ND(0.0230)	2.10
Downstream of Lyman St. Bridge	8/4/2000	4.0	19		7	4	7				
Upstream of Newell St. Bridge	8/7/2000	2.9	19		5	3	4				
Downstream of Lyman St. Bridge	8/7/2000	3.8	19		6	3	5				
Upstream of Newell St. Bridge	8/8/2000	2.7	19		3	2	2				
Downstream of Lyman St. Bridge	8/8/2000	3.5	19		3	$\frac{1}{2}$	2				
Upstream of Newell St. Bridge	8/9/2000	1.7	19		4	2					
Downstream of Lyman St. Bridge	8/9/2000	2.8	19		3	1	2		***		
Upstream of Newell St. Bridge	8/10/2000	1.8	19		3		2		~~~	***	
Downstream of Lyman St. Bridge	8/10/2000	2.9	19		3	2	2				
Upstream of Newell St. Bridge	8/11/2000	1.7	19		7	2	. 5				
Downstream of Lyman St. Bridge	8/11/2000	2.8	19		Δ	2	3				
Upstream of Newell St. Bridge	8/14/2000	2.8	19			2			***		
Downstream of Lyman St. Bridge	8/14/2000	37	10		20	2	/ 0				
Upstream of Newell St. Bridge	8/15/2000	3.8	20		20	4	0				
Downstream of Lyman St. Bridge	8/15/2000	4.7	20		12	5	14 18				

TABLE 1A

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

AUGUST 2000

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

Location	Date	Water	Water	Flow	Т	urbidity	(ntu) ¹²	Sample ID	Total PCB	Filtered PCB	727T
		Depth	Temp.				Daily		Concentration ¹³	Concentration	100
		(ft)	(°C)	(cfs)	High	Low	Composite		(ug/l)	(ucfl)	(1)
Upstream of Newell St. Bridge	8/16/2000	3.2	20		38	6	16		(ug/1)	(ug/1)	(mg/I)
Downstream of Lyman St. Bridge	8/16/2000	4.1	20		51	ğ	13				
Upstream of Newell St. Bridge	8/17/2000	2.7	20		5	2	<u></u>	HP.8 17 00 UI		0.884	***
Downstream of Lyman St. Bridge	8/17/2000	3.8	20		3	2		HP 8 17 00 D1	0.40	0.776	10.5
Upstream of Newell St. Bridge	8/18/2000	2.2	20					111-0-17-00-171	5.09	0.734	11.3
Downstream of Lyman St. Bridge	8/18/2000	3.2	20								
Upstream of Newell St. Bridge	8/21/2000	1.8	15		3	2	3				
Downstream of Lyman St. Bridge	8/21/2000	2.8	15		6	2	1				
Upstream of Newell St. Bridge	8/22/2000	1.7	19		3	2					
Downstream of Lyman St. Bridge	8/22/2000	2.7	19		4	2	3				
Upstream of Newell St. Bridge	8/23/2000	1.8	18		4	2					
Downstream of Lyman St. Bridge	8/23/2000	2.6	18		- 4	2	4				
Upstream of Newell St. Bridge	8/24/2000	2.5	16	170		- 3					
Downstream of Lyman St. Bridge	8/24/2000	3.4	16	172	6	2	0				
Upstream of Newell St. Bridge	8/25/2000	2.0	17	1/2	2				***		
Downstream of Lyman St. Bridge	8/25/2000	3.0	17		2	2	3				
Upstream of Newell St. Bridge	8/28/2000	15	17		2	$\frac{2}{2}$	3		*	*	
Downstream of Lyman St. Bridge	8/28/2000	26	17		2	2	2				
Upstream of Newell St. Bridge	8/29/2000	15	19		$-\frac{3}{2}$	-2	2				
Downstream of Lyman St. Bridge	8/29/2000	2.5	10		3	2	2				
Upstream of Newell St. Bridge	8/30/2000	1.1	10	52			2	***	***		
Downstream of Lyman St. Bridge	8/30/2000	2.5	10	52	3	2	2	HR-8-30-00-U1	NR	NR	NR
and a symul of Diluge	0.00/2000	4.5	10	52	3	2	2	HR-8-30-00-D1	NR	NR	NR

TABLE 1A

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

AUGUST 2000

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

Location	Date	Water	Water	Flow	Turbidity (ntu) ¹²		Sample ID	Total PCB	Filtered PCB	TSS	
		Depth	Temp.				Daily		Concentration ¹³	Concentration	150
		(ft)	(°C)	(cfs)	High	Low	Composite		(ug/l)	(ug/l)	(mg/l)
Opstream of Newell St. Bridge	8/31/2000	1.4	19		3	2	2				(111g)(1)
Downstream of Lyman St. Bridge	8/31/2000	2.5	19		3	2	2				

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.

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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 \leq PCBs upstream + 5 ug/l

TABLE 1B

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

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

		Date	Aroclor 1016, 1221.				
Sample ID	Location	Collected	1232, 1242, & 1248	Aroclor 1254	Aroclor 1260	Total PCBs	TSS
HR-7-20-00-U1	Upstream of Newell St. Bridge	7/20/2000	ND(0.0000250)	0.0000365 AF	ND(0.0000250)	0.0000365 AF	3.15
HR-7-20-00-D1	Downstream of Lyman St. Bridge	7/20/2000	ND(0.0000250)	0.0000531 AF	0.000113	0.000166	1.10
			[ND(0.0000250)]	[0.0000628 AF]	[0.000128]	[0.000191]	[1.40]
HR-7-20-00-U1 (FILTERED)	Upstream of Newell St. Bridge	7/20/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	
HR-7-20-00-D1 (FITLERED)	Downstream of Lyman St. Bridge	7/20/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	
			[ND(0.0000250)]	[ND(0.0000250)]	[ND(0.0000250)]	[ND(0.0000250)]	
HR-8-3-00-U1	Upstream of Newell St. Bridge	8/3/2000	ND(0.0000250)	0.0000301 AF	ND(0.0000250)	0.0000301 AF	4 20
HR-8-3-00-D1	Downstream of Lyman St. Bridge	8/3/2000	ND(0.0000250)	0.0000426 AF	0.0000380	0.0000806	2 10
HR-8-3-00-U1 (FILTERED)	Upstream of Newell St. Bridge	8/3/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	
HR-8-3-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	8/3/2000	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	ND(0.0000250)	
HR-8-17-00-U1	Upstream of Newell St. Bridge	8/17/2000	ND(0.0000250)	0.00580	0.000657	0.00646	10.5
HR-8-17-00-D1	Downstream of Lyman St. Bridge	8/17/2000	ND(0.0000250)	0.00474	0.000946	0.00569	11.3
HR-8-17-00-U1 (FILTERED)	Upstream of Newell St. Bridge	8/17/2000	ND(0.0000250)	0.000776 AF	ND(0.0000250)	0.00305 0.000776 AF	11.5
HR-8-17-00-D1 (FILTERED)	Downstream of Lyman St. Bridge	8/17/2000	ND(0.0000250)	0.000734 AF	ND(0.0000250)	0.000734 AF	

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. Blind duplicate results are presented in brackets.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

CELLS G1 AND G2 REMOVAL ACTION SEDIMENT SAMPLING PCB/TOC DATA RECEIVED DURING AUGUST 2000 UPPER 1/2 MILE REACH (Results are presented in dry-weight parts per million, ppm)

	Date	Aroclor 1016, 1232,		r	1	-
Sample ID	Collected	1242, 1248, & 1254	Aroclor 1221	Aroclor 1260	Total DCPa	TOG
HR-33X-SD-1	8/18/2000	ND(10.5)	ND(10.5)	202		100
HR-33X-SD-2	8/18/2000	ND(9.98)	ND(0.08)	292	292	
HR-33X-SD-3	8/18/2000	ND(1.03)	ND(1.02)	224	224	
HR-33X-SD-4	8/18/2000	ND(4 94)	ND(1.03)	39.1	39.1	
HR-65-SD-1	8/17/2000	ND(18.0)	ND(4.94)	112	112	
HR-65-SD-2	8/17/2000	ND(18.0)	ND(18.0)	612	612	
UP 65 SD 2	8/17/2000	ND(18.2)	ND(18.2)	561	561	
nk-03-5D-3	8/17/2000	ND(22.7)	ND(22.7)	644	644	
HR-65-SD-4	8/17/2000	ND(22.1)	ND(22.1)	703	703	
HR-65-SD-5	8/17/2000	ND(22.2)	ND(22.2)	726	705	
HR-65-SD-6	8/17/2000	ND(48.4)	ND(48.4)	1650	/20	
HR-65-SD-7	8/17/2000	ND(28.3) [ND(28.6)]	ND(28.3) [ND(28.6)]	1050	1650	
HR-65-SD-8	8/17/2000	ND(23.6)	ND(28.5) [ND(28.0)]	830[7/3]	856 [775]	
HR-65-SD-9	8/17/2000	ND(21.8)	ND(23.0)	736	736	
HP-65-SD 10	8/17/2000	ND(21.8)	ND(21.8)	545	545	
	0/1//2000	ND(12.0)	ND(12.0)	304	304	
IR-02-SED-CAP-1	8/17/2000	ND(0.0534)	0.632 AB	1.09	1 72	ND(1220)
HK-GI-SED-CAP-2	8/17/2000	ND(0.645)	ND(0.645)	19.0	19.0	ND(1250)

Notes:

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 Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of PCBs. Select samples were analyzed for Total Organic Carbons (TOC) as indicated.

2. AB - Aroclor 1221 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

3. ND - Analyte was not detected. The value in parentheses is the associated detection limit.

4. Field duplicate results are presented in brackets.

5. --- - Not analyzed.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

CELLS G1 AND G2 REMOVAL ACTION SEDIMENT SAMPLING VOC, SVOC, AND CONVENTIONAL PARAMETER DATA RECEIVED DURING AUGUST 2000 UPPER 1/2 MILE REACH (Results are presented in dry-weight parts per million, ppm)

Parameter	Sample ID: Date Collected:	HR-33X_SD-C1 8/18/2000	HR-65-SD-C1 8/17/2000
Volatile Organic	S		
1,2,3-Trichlorobe	enzene	2.90	88.8
1,2,4-Trichlorobe	enzene	9.43	436
1,2-Dichlorobenz	ene	ND(0.540)	1 42
1,3-Dichlorobenz	ene	ND(0.540)	1 24
1,4-Dichlorobenz	ene	ND(0.540)	11 1
Chlorobenzene		ND(0.540)	2.78
Semivolatile Org	anics		2.70
Hexachlorobenze	ne	ND(0.352)	0.762
Conventional Pa	rameters		0.702
Oil & Grease		182	174

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of volatiles (VOC), semivolatiles (SVOC), oil & grease, paint filter liquids test, and TCLP parameters excluding pesticides and herbicides.

2. Only those constituents detected in at least one sample are summarized.

3. Refer to Table 13-4 for a summary of paint filter liquids and TCLP data.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

CELLS G1 AND G2 REMOVAL ACTION SEDIMENT SAMPLING TCLP SAMPLE DATA RECEIVED DURING AUGUST 2000 UPPER 1/2 MILE REACH (Results are presented in parts per million, ppm)

Sample ID Date Collected	TCLP Maximum Concentrations	_ HR-33X-SD-C1 8/18/2000	HR-65-SD-C1 8/17/2000
Citi i			
Chlorobenzene	100	ND(0.00500)	0.0870
Semivolatile Organics			
None Detected			
Inorganics			
Barium	100	0.176	0 549
Conventional Parameters			0.549
Paint Filter Liquids Test		No Free Liquids	No Free Liquids

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of volatiles, semivolatiles, oil & grease, paint filter liquids test, and TCLP parameters excluding pesticides and herbicides.

2. Only those constituents detected in at least one sample are summarized.

3. Refer to Table 13-3 for a summary of volatile, semivolatile and oil & grease data.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

AUGUST 2000 PARTICULATE 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
8/1/2000	AM4 (south side of river)	0.004	0.006	5:45 ¹	ENE
8/2/2000	AM4 (south side of river)	0.045	0.045	7:00 ¹	SSW, SW
8/3/2000	AM4 (south side of river)	0.042	0.047	6:30 ¹	SW
8/4/2000	AM4 (south side of river)	0.006	0.009	11:15	NW
8/7/00 ²	AM4 (south side of river)				
8/8/2000	AM4 (south side of river)	0.021	0.025	10:15	W, WNW
8/9/00 ²	AM4 (south side of river)				
8/10/2000	AM4 (south side of river)	0.012	0.014	10:30	WNW
8/11/2000	AM4 (south side of river)	0.007	0.012	9:15	ESE
8/14/00 ²	AM4 (south side of river)				
8/15/2000	AM4 (south side of river)	0.005	0.009	8:45	WNW, W
8/16/00 ²	AM4 (south side of river)				
8/17/2000	AM4 (south side of river)	0.005	0.006	10:30	WNW, W
8/18/2000	AM4 (south side of river)	0.006	0.010	9:30	WSW, SW
8/21/2000	AM4 (south side of river)	0.002	0.007	9:15	NNW. N
8/22/2000	AM4 (south side of river)	0.003	0.009	9:45	SW
8/23/2000	AM4 (south side of river)	0.018	0.021	8:00 ¹	S. SSW
8/24/2000	AM4 (south side of river)	0.025	0.025	9:30	WNW
8/25/2000	AM4 (south side of river)	0.006	0.012	9:45	NNW. N
8/28/2000	AM4 (south side of river)	0.017	0.016	10:00	E. ESE
8/29/2000	AM4 (south side of river)	0.012	0.016	9:30	ESE
8/30/2000	AM4 (south side of river)	0.009	0.018	10:00	S
8/31/2000	AM4 (south side of river)	0.026	0.026	10:15	SSW
Notification				Ī	
Level		0.120			

Notes:

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

AM-4: Air monitoring location behind the former F.W. Webb building on Newell Street.

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

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

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

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

Date	BM-1 ug/m3	AM-3 ug/m3	AM-3 co-located ug/m3	AM-4 ug/m3	AM-5 ug/m3	AM-6 ug/m3
8/8 - 8/9/00	0.0107	0.0474	0.0423	0.0168	0.0179	0.0158
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.

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AM-6: Air monitoring location south bank, north edge of GE Newell St. parking area.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

HOUSATONIC RIVER CAGED MUSSEL STUDY CONTROL SAMPLES PCB AND % LIPID DATA RECEIVED DURING AUGUST 2000 **UPPER 1/2 MILE REACH** (Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor 1016, 1232, 1242, 1248, & 1254	Aroclor 1221	Aroclor 1260	Total PCPa	Percent
HRCM-3	8/7/2000	ND(0.0518)	NID(0.0510)		Total PCDS	Lipids (%)
HRCM-4	8/7/2000	ND(0.0514)	ND(0.0518)	ND(0.0518)	ND(0.0518)	0.324
L	<u> </u>	LIND(0.0514)	<u>ND(0.0514)</u>	ND(0.0514)	ND(0.0514)	0.491

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical Services, Inc. for analysis of PCBs and percent lipids...

2. Control samples HRCM-3 and HRCM-4 were collected and submitted for analysis prior to placement of mussels in the Housatonic River.

3. ND - Analyte was not detected. The value in parentheses is the associated detection limit.

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GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

UPPER 1/2-MILE REACH OF HOUSATONIC RIVER

DNAPL MONITORING RESULTS - AUGUST 2000

Date	Depth to	Depth to	Total Depth	DNAPL	DNAPL
	Water (Feet	DNAPL (Feet	(Feet below	Thickness	Removal
	below MP)	below MP)	MP)	(Feet)	(Liters)
8/11/2000	7.50	22.50	22.70	0.20	0.00

Notes:

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- 1. Measurement collected from coal tar DNAPL recovery well installed near oil/water separator 64X.
- 2. DNAPL Dense Non-Aqueous Phase Liquid.

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3. DNAPL removal is not conducted if the observed DNAPL thickness is less than 0.25 feet.

EXHIBIT B

General Electric Company Pittsfield, Massacusetts

Revision Date:

1/2-Mile Removal Action Backfill Tracking Log

31-Aug-00

	Testing	Frequency	Subr	mittal from MTI	Subm	ittal to EPA	Sample	Number of	Quantity Approved	Quantity	
Material	Required	(per cy)	No.	Date	No.	Date	Date	Samples	for Placement	Placed (cv)	Comments
Soil Backfill/Granular Fill	Grain Size	2000	13/13A	11/17 & 11/18/99	8	12/1/1999	11/16/1999	1	1000	700	
(Brown's Pit)	PCBs	500	NA	NA	8A	12/15/1999	12/8/1999	2	1		
			NA	NA	14	5/31/2000	5/18/2000	2	1		
	VOCs	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6	1		
	SVOCs	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6	1		Samples Collected as part of
	Metals	2000	NA	NA	8A	12/15/1999	7/21-7/28/99	6			Allendale School Project
<u> </u>	TPH	2000	NA	NA	8A	12/15/1999	12/1/1999	3			
Isolation Layer	Grain Size	500	12	11/17/1999	Letter	11/19/1999	11/1/1999	1	1000	667	
(Pittsfield Sand & Gravel)	Gran Gilo		12C	3/30/2000	Letter	4/20/2000	3/24/2000	1	1		
	тос	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	1		
	DCP	500	NA	NA	Letter	11/19/1999	9/20/1999	4	-		Samples collected as part of off-
	FCDS	500	NA	NA	7	12/1/1999	11/19/1999	2	1		alle residential nit program
			NA	NA	Letter	4/20/2000	3/29/2000	2	1		
	VOCs	2000	NA	NA	Letter	11/19/1999	9/20/1999	4	-		
	SVOCs	2000	NA	NA	Letter	11/19/1999	9/20/1999	4	1		Samples collected as part of off-
	Metals	2000	NA	NA	Letter	11/19/1999	9/20/1999	4	-		site residential fill program
	TPH	2000	NA	NA	7	12/1/1999	11/19/1999	2	1		
Isolation Layer			12A	1/3/2000	Letter	1/6/2000	12/28/1999	1	1000	655	
(Bushika Sand & Gravel)	Grain Size	500	12B	1/24/2000	11	2/14/2000	1/19/2000	1	1		
		12D	5/8/2000	13	5/19/2000	5/2/2000	1				
			12A	1/3/2000	Letter	1/6/2000	12/28/1999	1	1		
	TOC	500	12B	1/24/2000	11	2/14/2000	1/19/2000	1	1		
			12D	5/8/2000	13	5/19/2000	5/2/2000	1	1		
	PCBs	500	NA	NA	10	1/14/2000	1/5/2000	2	1	ŀ	
		000	NA	NA	11	2/14/2000	2/2/2000	2	1		
			12D	5/8/2000	13A	6/28/2000	6/2/2000	2	1		
	VOCs	2000	NA	NA	10	1/14/2000	1/5/2000	2		l	
	SVOCs	2000	NA	NA	10	1/14/2000	1/5/2000	2	1		
	Metals	2000	NA	NA	10	1/14/2000	1/5/2000	2]		
		1	NA	NA	10	1/14/2000	1/5/2000	2			
	TPH	2000	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	Organic Content	500	11/14	11/16 & 11/17/99	9	12/15/1999	11/8/1999	2	500	170	
(Woodmont)	рН	500	11/14	11/16 & 11/17/99	9	12/15/1999	11/8/1999	2	1		
	PCBs	500	NA	NA	9	12/15/1999	12/8/1999	4	1		
	VOCs	2000	NA	NA	9	12/15/1999	8/24/1999	4	1		Samples collected as part of off-
	SVOCs	2000	NA	NA	9	12/15/1999	8/24/1999	4	1		site residential fill program
	Metals	2000	NA	NA	9	12/15/1999	8/24/1999	4	1		
L	TPH	2000	NA	NA	9	12/15/1999	12/8/1999	2	1		

Notes:

Granular Fill and Soil Backfill have been combined as the same material Quantities placed include Cells A, B, C, D, DNAPL, E, and F-1

¹/₂ MILE RIVER REMOVAL ACTION MONTHLY PROGRESS REPORT AUGUST, 2000 FIGURE 1 PHOTO DOCUMENTATION

PHOTO NUMBER: 1

PHOTO LOCATION: Cell G-1/G-2. North side of river looking upstream (east).

PHOTO DESCRIPTION: Installation of Waterloo sheetpile complete. Beginning sediment excavation.

PHOTO DATE: 08/08/00

PHOTO NUMBER: 2

PHOTO LOCATION: Cell G-1/G-2 Between outfalls 05A and 05B looking upstream.

PHOTO DESCRIPTION: Sediment excavation compete at the upstream and center portions of the cell.

PHOTO DATE: 08/15/00

2 1: Cell G-1/G-2 ad 05B looking unstand

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PHOTO NUMBER: 3

PHOTO LOCATION: North bank. Cell G-1 looking upstream.

PHOTO DESCRIPTION Sediment and bank restoration complete. 2 out of 3 outfall extension installed.

PHOTO DATE: 08/30/00



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EXHIBIT A UPPER ½ MILE REACH REMOVAL ACTION



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