

United States Environmental Protection Agency
EPA New England
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December 09, 2003

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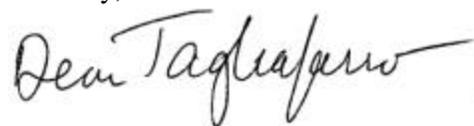
RE: November 2003 Monthly Report
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site

Enclosed please find the November 2003 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,



Dean Tagliaferro
1.5 Mile Reach Removal Action Project Manager

1. Overview

During November 2003, the Environmental Protection Agency (EPA), the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc., and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included backfilling activities and the installation of cellular geoweb in Cell 13W. In addition, in support of the EPA, GE's contractors completed the demolition of the houses on Parcels I8-10-2 and I8-10-3. Also, re-grading of these lots for additional parking and access to the river was performed.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the sheetpile cells and their respective locations.

By the end of October 2003, the construction of the west riverbank retaining wall was completed and backfilling activities in Cell 13W were underway. However, due to heavy rainfall during the last days of October, several stop logs were removed from the temporary dam and the entire Cell 13 was flooded. Once water levels in the river subsided, the stop logs were re-installed and the dewatering of Cell 13 was initiated. During the first week of November, the dewatering of Cell 13 continued. The river water directly downstream of the dam in previously remediated areas was pumped back over the dam and water in areas within Cell 13 was pumped downstream of the Elm Street Bridge.

Upon completion of the dewatering, backfilling activities above elevation 975 were completed in Cell 13W. Installation of Common Fill above elevation 975 was completed. Four riprap drainage swales were constructed on the Cell 13W riverbank to ensure proper water drainage from the parking lot of Parcel I8-24-1. In areas of the west riverbank above the riprap in Cell 13 where the proposed final slope was steeper than 2V:1H, cellular geoweb was installed. The cellular geoweb was secured into the riverbank with rebar, one stake per 3 square feet. Upon completion of the geoweb installation topsoil, herbaceous seed mix and biodegradable erosion control blankets were placed on both the east and west riverbanks of Cell 13. The Survey Subcontractor completed the post restoration verification survey of Cells 13E and 13W.

Additional tree clearing outside of remediation limits was performed on the Cell 13E riverbank. Additional trees were selected to be removed due to the damage done to the roots during the riverbank excavation activities in Cell 13E.

Miscellaneous site clean up, equipment and water treatment system maintenance activities continued during the first week in November. Decontamination of the flat sheetpile from the Cell 13 separation wall continued. Repairs were made to the temporary access ramp leading into Cell 13W by placing additional 18-inch riprap onto the ramp.

During the second week of November, modifications were made to the restraint system of the 54-inch pipe. Additional bands were added to the 54-inch pipe and two H-piles were installed on the riverbank to assist with future relocations of the pipe to the west side of the river channel.

Repairs to the 54-inch pipe effluent energy dissipater were completed by installing additional bin blocks, metal sheeting and riprap.

A new timber mat temporary ramp was constructed over the 54-inch pipe to allow access to Cell 13E from the west side of the river. Two H-piles were driven through the holes in the timber mats to hold the ramp in place.

Work associated with required adjustments to the storm water energy dissipater located on the west riverbank directly downstream of the Elm Street Bridge was initiated. Additional bin blocks, sheetpile and cement were installed. Modifications were made to divert the outfall storm water upstream to an already remediated area to assist in dewatering of the future Cell 14W located in the first 600 feet of Phase II. The next phase of remedial work will be done in the first 600 feet of riverbed and riverbank immediately downstream of the Elm Street Bridge. The 600-foot length of the riverbed and riverbank will be divided into four working zones, Cells 14 east and west (14E and 14W) and Cells 15 east and west (15E and 15W).

Also, during the second week in November, in support of the EPA, GE's contractors completed the repaving of a portion of the parking lot on Parcel I8-24-4, to allow for additional parking on the parcel. This additional parking area was repaved to compensate for an area on Parcel I8-24-4 that will be utilized as an access road for future work in the first 600 feet of Phase II.

Also, miscellaneous site clean up and equipment maintenance activities continued during the second week in November. Decontamination of the flat sheetpile from the Cell 13 separation wall continued. Maintenance and cleaning of the trash rack for the temporary dam was completed. An air bubbling system was installed at the upstream end of the temporary dam to prevent freezing and ice formation around the stop logs.

During the third week of November, required adjustments to the storm water energy dissipater located on the west riverbank directly downstream of the Elm Street Bridge were completed.

The 54-inch pipes were relocated to the west side of the river channel as follows: The temporary dam stop logs were removed and Cell 13 was flooded. Both slide gates were then closed preventing river water from flowing through both of the pipes. The pipes were dewatered by pumping the water out through the 4-inch valves installed in the pipe. Next, the pipes were moved to the west side of the river and attached to the restraint system. The gates on the pipes were opened to allow the river water to flow through them, the stop logs were reinstalled in the temporary dam and the dewatering process of the areas downstream of the temporary dam was initiated. Collars were installed around the pipes securing the two pipes together. H-piles were also installed between the pipes at the locations where the additional collars were installed for extra reinforcement.

The Survey Subcontractor delineated and staked out the remediation limits on the riverbanks in Cells 14 and 15. Also, the surveyors staked out the location of the retaining walls on the east riverbank in Cells 14 and 15.

Also during the third week in November, in support of the EPA, GE's contractors completed the demolition of two houses on Parcels I8-10-2 and I8-10-3. All the demolition debris (200cy) was transported to Hill 78 OPCA. The two parcels were purchased by the EPA and given to the City of Pittsfield. These parcels will be utilized as additional parking for businesses located on 50-60 Elm Street while remediation activities occur on these properties. Upon completion of the demolition activities EPA's contractors initiated the re-grading of the area for additional parking and access to the river.

Also, miscellaneous site clean up and equipment maintenance activities continued during the third week in November.

During the last week in November, the regrading of Parcels I8-10-2 and I8-10-3 continued. Construction activities associated with building an access ramp into the river for the 600 feet below the Elm Street Bridge (Phase II) were initiated on the west riverbank of Cell 13.

In preparation of remediation of 600 feet below the Elm Street Bridge, GE's contractors paved an approximate 22,000 square foot area on GE's property in the 60's complex. EPA will use this area as an outside contaminated material stockpile management area. Also, GE's contractors completed the installation of temporary fencing on Parcels I8-10-2 and I8-10-3 and along the temporary access road on Parcel I8-24-1.

Since there were no excavation activities during the month of November, the water treatment system did not treat any water. Therefore the monthly sampling of the water treatment system for the month of November was not necessary. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring was performed on a daily basis. Due to high winds and high precipitation during the month of November, the monthly PCB air-monitoring event was not performed. Surface water sampling for total suspended solids (TSS) and PCBs was performed on November 05 and November 19, 2003. Sampling of Structural Fill for Phase II for chemical parameters was performed on November 14, 2003. PCB wipe samples were collected on the decontaminated sheetpile at a frequency of one sample for every ten sheets. Also, PCB wipe samples were collected on decontaminated equipment.

In-situ disposal characterization sampling of riverbanks within the remediation areas in Cells 14W, 15E and 15W in the first 600 feet of Phase II was completed. Six eight-point composite samples were collected on November 24, and November 25, 2003 for future offsite disposal. The samples were collected to be analyzed for PCBs, TPH and TCLP.

Geotechnical samples were collected for Structural Fill. The results of the geotechnical testing are not included in the monthly report but are contained in other submittals and are available upon request.

For the month of November a total of twenty-five truckloads (200cy) of non-TSCA material were generated during the demolition activities on Parcel I8-10-2 and I8-10-3.

GE's contractor performed the transfer of the demolition debris from Parcel I8-10-2 and I8-10-3 to the Hill 78 OPCA on November 18, 2003. (See Table 2 for a summary of material transported to the OPCA in November 2003 and Table 3 for a summary of material transported to the OPCAs for the project through November 2003).

The transfer of the water treatment system modutank sediment materials from the Building 63 stockpile management area to the CWM Chemical Services, Model City, N.Y. for landfilling was completed on November 18, 2003. (See Table 4 for a summary of material transported to the CWM Chemical Services, Model City, N.Y. during the month of November 2003).

The utility companies, Western Mass Electric and Verizon Telephone Company, initiated the utility relocation work required on Elm Street and High Street to perform Phase II remediation activities.

The vibration monitoring activities continued on parcel I8-24-1. Two monitoring locations were established in the active work area, one to monitor the Elm Street Bridge and the other to monitor Harry's Supermarket parking lot. (See Figure 1 for the locations of the Vibration Monitors).

Traffic control was conducted on Lyman Street and High Street during the month of November.

Dust control procedures continued for access roads, parking areas, and material storage areas. In addition, staged backfill materials were covered to prevent the generation of dust.

Stockpile management area activities continued throughout the month of November. Daily inspections, operation and maintenance activities were performed within Buildings 63, 65 and 68.

3. Sampling/test results received

Analytical results for backfill materials are summarized in Table 5. This includes the sampling results for Topsoil samples collected on October 13, 2003; results for Structural Fill samples collected on November 14, 2003 are not yet available. The results of the daily particulate air monitoring program are summarized in Table 6. Table 7 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on October 16, 2003 and November 05, 2003 are presented in Table 8. PCB and TSS results for water monitoring samples collected on November 19, 2003 are not yet available. Table 9 contains PCB data associated with the decontaminated equipment and sheetpile confirmatory wipe samples. Table 10 presents the analytical data associated with the eight-point composite disposal characterization samples collected from the Cell 13 NAPL-impacted sediment stockpile in Building 68 on October 23, 2003. Data associated with in-situ disposal characterization sampling of riverbanks within the remediation areas in Cells 14W, 15E and 15W performed on November 24, and November 25, 2003 are not yet available.

4. Diagrams associated with the tasks performed

Figure 1 is a map of Phase I and the beginning of Phase II and includes layout of all excavation cells, temporary dam, lot parcel identification numbers, water monitoring locations, vibration

monitoring locations, access road locations, fence line location, the water treatment system pad location, the effluent discharge location, and the utility trench location.

5. Reports received and prepared

Weston received a vibration monitoring summary report for the period of November 03, 2003 to December 02, 2003 from Vibra-Tech, Inc. During this period, two seismographs were set up on Parcel I8-24-1, approximately 100 feet apart from one another. One unit was set up to monitor the Elm Street Bridge and the other unit was set up to monitor the Harry's Supermarket parking lot. Both units were set up to collect data on the continuous seismic mode. Activities occurring near the two monitoring locations during this period included normal background activities, backfilling activities, fence installation and general construction activities. The maximum ground vibration level measured was 1.72 inches per second (ips), which was a single time occurrence. The next highest reading was 0.77 ips. All readings during this period comply with project specifications.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in December 2003

- Complete fencing and tree clearing activities in the first 600-foot stretch of the riverbanks directly downstream of Elm Street Bridge.
- Complete utility relocation activities on the riverbanks from Elm Street Bridge to Dawes Avenue Bridge.
- Transport of the Cell 13 NAPL-impacted materials to approved off-site disposal facilities.
- Perform the installation of the anchored sheetpile wall in Cell 14E riverbank.
- Complete the in-situ disposal characterization sampling of riverbanks within the remediation areas in Cell 14E.
- Continue stockpile management activities at Buildings 63, 65 and 68.

- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), and backfill material sampling (as needed).
- Initiate vibration monitoring activities of the crib wall and the building on Parcel I8-10-5.

8. Attachments to this report

Table 1. Quantity of Bank and Sediment Material Excavated to Date

Table 2. Quantity of Material Transferred to OPCAs During the Month of November

Table 3. Quantity of Material Transferred to OPCAs to Date

Table 4. Quantity of NAPL-Impacted Material Transferred to CWM Chemical Services, Model City, N.Y. During the Month of November

Table 5. Backfill Material Testing Results

Table 6. Daily Air Monitoring Results

Table 7. Daily Water Column Turbidity Monitoring Results

Table 8. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results

Table 9. Equipment and Sheetpile Confirmatory Wipe Sample Results

Table 10. NAPL-Impacted from cell 13 Analytical Results

Figure 1- Phase I Site Plan

Photodocumentation

**Table 1 - Quantity of Bank and Sediment Material Excavated to Date
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

		Approximate Quantity of Bank and Sediment Material Excavated to Date			
Date	Location	non-TSCA	TSCA	NAPL impacted	Total
09/26/02 to 10/02/02	Cell 1A	101	0	53	154
10/02/02 to 10/04/02	Cell 1B	60	0	110	170
10/18/02 to 10/29/02	Cell 2	874	175	0	1,049
11/11/02 to 11/15/02	Cell 3	183	0	200	383
11/18/02 to 11/25/02	Cell 4	2,283	198	0	2,481
12/03/02 to 12/10/02	Cell 5	1,629	369	0	1,998
01/07/03 to 01/15/03	Cell 6	832	658	0	1,490
01/10/03 to 01/29/03	Cell 6A	2,611	68	0	2,679
02/03/03 to 02/10/03	Cell 7&7A	1,114	636	0	1,750
02/20/03 to 02/24/03	Cell 5A	899	0	0	899
02/25/03 to 03/07/03	Cell 8&8A	1,245	90	0	1,335
03/14/03 to 03/18/03	Cell 9	603	307	0	910
03/27/03 to 04/07/03	Cell 10&10A	1,730	133	0	1,863
04/14/03 to 04/16/03	Cell 12	668	1,354	0	2,022
04/30/03 to 05/09/03	Cell 11	1,713	341	10	2,064
05/27/03 to 06/12/03	Cell 11A	957	166	462	1,585
06/25/03 to 07/18/03	Cell 12A	1,656	805	656	3,117
09/04/03 to 10/22/03	Cell 13	3,580	298	1,129	5,007
	Total	22,738	5,598	2,620	30,956

Note:

All quantities determined by pre- and post- excavation surveying.

**Table 2 - Quantity of Material Transferred to OPCAs During the Month of November
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

		Approximate Quantity Transported to OPCAs	
Date	# of truckloads	Hill 78 (non-TSCA)	Bldg. 71 (TSCA)
Bank Soil and Sediment			
11/18/2003	25	200	0
Monthly totals	25	200 (1)	0

Note:

All quantities are in compacted or "in-place" cubic yards.

(1) Estimated at 8 cy per truck.

* - # of trucks of demolition debris from Parcels I8-10-2 and I8-10-3

**Table 3 - Quantity of Material Transferred to OPCAs to Date
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

Date	Location	Approximate Quantity Transported to OPCAs	
		Hill 78 (non-TSCA)	Bldg. 71 (TSCA)
Site Preparation Activities			
09/11/02	Building 65 Stockpile Management Area	225	
Bank Soil and Sediment			
12/05/02 to 12/19/02	Stockpile Management Area/Excavation Cells	4,718 (1)	910 (1)
02/11/03 to 02/28/03	Stockpile Management Area/Excavation Cells	5,137 (2)	539 (2)
03/03/03 to 03/14/03	Stockpile Management Area/Excavation Cells	1,749 (2)	1,353 (2)
04/07/03 to 04/18/03	Stockpile Management Area/Excavation Cells	2,710 (3)	1,698 (3)
04/07/03 to 04/18/03	Stockpile Management Area/Cleanup Material	370 (3)	40 (3)
05/12/03 to 05/14/03	Stockpile Management Area/Excavation Cells	1,826 (3)	0
05/12/03 to 05/14/03	Stockpile Management Area/Cleanup Material	220 (3)	0
06/11/03 to 06/12/03	Stockpile Management Area/Excavation Cells	0	704 (3)
06/16/03 to 06/17/03	Stockpile Management Area/Excavation Cells	712 (3)	0
06/16/03 to 06/17/03	Stockpile Management Area/Cleanup Material	146 (3)	0
07/07/03 to 07/11/03	Stockpile Management Area/Excavation Cells	1,188 (3)	748 (3)
09/15/03 to 09/30/03	Stockpile Management Area/Excavation Cells	2,090 (3)	308 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Excavation Cells	1,623 (3)	33 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Cleanup Material	181 (3)	0
11/18/03	Demolition Debris from Parcels I8-10-2 and I8-10-3	200 (4)	0
Project Totals		23,095	6,333

Note:

- All quantities are in compacted or "in-place" cubic yards.
- (1) Estimated at 14cy per truck, loaded with excavator.
 - (2) Estimated at 11cy per truck due to loading out frozen material.
 - (3) Estimated at 11cy per truck, loaded with front end loader.
 - (4) Estimated at 8cy per truck

**Table 4 - Quantity of Material Transported to CWM Chemical Services, Model City, N.Y.
 During the Month of November
 November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
 Pittsfield, MA**

(Results are reported in tons)

Date Shipped	Manifest Doc. Number	Manifest	Net Weight (Tons) (1)
11/18/03	00024	NYB9725724	29.47
11/18/03	00025	NYB9725706	7.96
Total of Material Disposed			37.43

Notes:

(1) Net weights established at the disposal facility

**Table 5 - Backfill Material Testing Results
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in part per million, ppm)

Sample ID	H2-OT000055-0-3C13-1	H2-OT000055-0-3C13-2	Regulatory Limits (2)
Sample type	Topsoil	Topsoil (1)	
Date Collected	10/13/2003	10/13/2003	
Analyte			
APP IX SEMIVOLATILES			
FLUORANTHENE	---	0.022 J	1000
PYRENE	---	0.041 J	700
APP IX VOLATILES			
2-BUTANONE	---	0.022	0.3
ACETONE	---	0.17	3
METALS			
ANTIMONY		1.3	10
ARSENIC	---	5.9	30
BARIUM	---	94.0	1000
BERYLLIUM	---	0.80	0.7
CADMIUM	---	0.47	30
CHROMIUM	---	15.4	1000
COBALT	---	13.2	500
COPPER	---	18.3	1000
LEAD	---	20.0	300
MERCURY	---	0.069	20
NICKEL	---	20.9	300
SELENIUM		2.2	400
THALLIUM		0.68	8
TIN	---	2.0	10
VANADIUM	---	20.9	400
ZINC	---	109	2500
PCBS			
PCB, TOTAL	ND	ND	0.1*
ORGANIC			
PETROLEUM HYDROCARBON (TPH)	ND	ND	200*

Notes:

Only detected constituents are summarized

ND - not detected

--- not sampled

(1) - Material Rejected, Beryllium content failed to meet 0.7 ppm S-1 Limit. None of this material was used on the project

(2) - Massachusetts contingency plan S-1 limits

* - Project specific acceptable levels for backfill

**Table 6 - Daily Air Monitoring Results
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

Date Collected	Sample Location	Average Site Concentration (mg/m³)	Average Period (Hours)
11/3/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA
11/4/2003	Upwind	0.003	20
	Downwind	0.006	20
	Background	0.005	20
11/5/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA
11/6/2003	Upwind	0.028	7
	Downwind	0.002	7
	Background	0.002	4
11/7/2003	Upwind	0.029	7
	Downwind	0.001	7
	Background	0.009	23
11/10/2003	Upwind	0.005	7
	Downwind	0.000	6
	Background	0.000	6
11/11/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA
11/12/2003	Upwind	0.044	4
	Downwind	0.027	4
	Background	0.020	4
11/13/2003	Upwind	0.024	6
	Downwind	0.000	6
	Background	0.000	6
11/14/2003	Upwind	--	--
	Downwind	0.012	6
	Background	--	--
11/17/2003	Upwind	0.048	5
	Downwind	0.029	5
	Background	0.066	5
11/18/2003	Upwind	0.000	6
	Downwind	--	--
	Background	0.000	6
11/19/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA
11/20/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA

**Table 6 - Daily Air Monitoring Results
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

Date Collected	Sample Location	Average Site Concentration (mg/m³)	Average Period (Hours)
11/21/2003	Upwind	0.007	5
	Downwind	0.000	5
	Background	0.000	5
11/24/2003	Upwind	NA	NA
	Downwind	NA	NA
	Background	NA	NA
11/25/2003	Upwind	0.006	7
	Downwind	0.000	7
	Background	0.000	7
notification level		0.120	
action level		0.150	

Notes:

N/A - Not available due to precipitation

--- - No reading due to technical difficulties with monitoring equipment

**Table 7 - Daily Water Column Turbidity Monitoring Results
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

Date	Flow at Coltsville (cfs)	Location	Turbidity			Temperature Average (°C)
			Average	High	Low	
11/3/2003	168	Upstream of Lyman Street Bridge	-0.1	0.3	-0.1	10.41
		Downstream of Pomeroy Avenue Bridge	2.6	10.8	1.3	10.70
11/4/2003	159	Upstream of Lyman Street Bridge	0.0	0.7	-0.1	11.31
		Downstream of Pomeroy Avenue Bridge	1.7	2.7	1.1	11.29
11/5/2003	165	Upstream of Lyman Street Bridge	-0.1	-0.1	-0.1	9.15
		Downstream of Pomeroy Avenue Bridge	2.8	8.5	1.3	9.20
11/6/2003	193	Upstream of Lyman Street Bridge	0.2	3.5	-0.1	9.31
		Downstream of Pomeroy Avenue Bridge	8.3	37.4	2.6	9.44
11/7/2003	145	Upstream of Lyman Street Bridge	-0.1	0.1	-0.1	9.03
		Downstream of Pomeroy Avenue Bridge	3.1	4.5	2.0	9.16
11/10/2003	109	Upstream of Lyman Street Bridge	0.4	2.3	0.0	3.38
		Downstream of Pomeroy Avenue Bridge	18.0	143.4	1.2	3.61
11/11/2003	107	Upstream of Lyman Street Bridge	3.1	20.6	-0.1	3.48
		Downstream of Pomeroy Avenue Bridge	1.8	3.2	1.1	3.59
11/12/2003	131	Upstream of Lyman Street Bridge	3.4	24.5	-0.1	4.64
		Downstream of Pomeroy Avenue Bridge	1.9	3.0	1.4	5.07
11/13/2003	133	Upstream of Lyman Street Bridge	6.9	26.9	-0.1	6.35
		Downstream of Pomeroy Avenue Bridge	1.7	2.2	1.2	6.49
11/14/2003	94	Upstream of Lyman Street Bridge	8.0	26.1	-0.1	3.89
		Downstream of Pomeroy Avenue Bridge	2.5	3.4	2.0	3.67
11/17/2003	69	Upstream of Lyman Street Bridge	8.0	28.4	-0.1	3.80
		Downstream of Pomeroy Avenue Bridge	1.7	2.4	1.4	4.08
11/18/2003	75	Upstream of Lyman Street Bridge	11.7	41.2	-0.1	4.81
		Downstream of Pomeroy Avenue Bridge	1.5	2.2	1.0	5.15
11/19/2003	77	Upstream of Lyman Street Bridge	6.2	30.4	-0.1	4.81
		Downstream of Pomeroy Avenue Bridge	3.4	8.3	0.8	6.60
11/20/2003	1019	Upstream of Lyman Street Bridge	2.2	11.8	-0.1	7.40
		Downstream of Pomeroy Avenue Bridge	27.3	44.7	13.3	7.20
11/21/2003	422	Upstream of Lyman Street Bridge	2.8	7.5	-0.1	5.32
		Downstream of Pomeroy Avenue Bridge	5.8	10.0	3.9	5.35
11/24/2003	162	Upstream of Lyman Street Bridge	1.9	12.7	-0.1	4.52
		Downstream of Pomeroy Avenue Bridge	3.0	7.4	1.9	4.73
11/25/2003	131	Upstream of Lyman Street Bridge	2.8	13.6	-0.1	4.87
		Downstream of Pomeroy Avenue Bridge	2.3	4.1	1.3	4.88

Notes:

Turbidity Action Level - Average Downstream (Elm Street) \geq Average Upstream (Lyman Street) + 50 ntu

cfs - Cubic feet per second

ntu - nephelometric turbidity units

Measurements collected using YSI 6200 Data Acquisition System using 600 OMS

sonde with a 6136 Turbidity Probe

Flow data was obtained from the USGS Station 01197000 in Coltsville, MA at approximately midday.

**Table 8 - Summary of Turbidity, PCB, and TSS Water Column Monitoring Results
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

Location	Date	Estimated Flow (cfs)	Turbidity (ntu)			Water Temp. (°C)	Water Temp. End(°C)	Flow Beginning (cfs)	Calculated Flow End (cfs)	Sample ID	Total PCB Concentration (ug/l)	Filtered PCB Concentration (ug/l)
			High	Low	Daily Average							
Upstream of Newell St. Bridge	10/16/03	224	---	---	---	---	---	128.9	115	H0-SW000054-0-3C16	ND(0.012)	ND(0.012)
Downstream of Lyman St. Bridge	10/16/03	224	69.1	-0.1	11.8	9.95	---	---	---	H2-SW000055-0-3C16	ND(0.012)	ND(0.012)
Downstream of Pomeroy Ave. Bridge	10/16/03	224	25.0	-9.1	13.2	8.08	---	190.2	191.4	H2-SW000052-0-3C16	0.013	ND(0.012)
Upstream of Newell St. Bridge	11/05/03	165	---	---	---	---	---	---	---	---	---	---
Downstream of Lyman St. Bridge	11/05/03	165	121.5	0.1	37.6	9.15*	---	---	---	H2-SW000055-0-3N05	ND(0.012)	ND(0.012)
Downstream of Pomeroy Ave. Bridge	11/05/03	165	6.3	5.3	5.7	9.20*	---	221.5	225.3	H2-SW000052-0-3N05	0.018	ND(0.012)
(duplicate)	11/05/03	165	6.3	5.3	5.7	9.20*	---	221.5	225.3	H2-SW000052-1-3N05	---	ND(0.012)
Upstream of Newell St. Bridge	11/19/03	77	---	---	---	---	---	74.8	91.4	H0-SW000054-0-3N19	NR	NR
Downstream of Lyman St. Bridge	11/19/03	77	323.3	0.8	45.2	4.81*	---	---	---	H2-SW000055-0-3N19	NR	NR
Downstream of Pomeroy Ave. Bridge	11/19/03	77	2.1	1.1	1.7	6.60*	---	97.1	121.6	H2-SW000052-0-3N19	NR	NR

Notes:

PCB Action Level - Downstream (Pomeroy Avenue) ≥ Upstream (Lyman Street) + 5 ug/L

ND(0.012) - Analyte was not detected. The value in parentheses is the associated detection limit.

cfs - Cubic feet per second

ntu - nephelometric turbidity units

--- - No data obtained

* - Temperature measured YSI 600 oms system.

** - Temperature measured using hand held stainless steel thermometer.

Flow data was obtained from the USGS Station 01197000 in Coltsville, MA at approximately midday.

Water column samples on 10/16/03 and 11/05/03 were collected as 4 grab composite samples.

Water column samples on 11/19/03 were collected as 10-hour composite samples.

Two flow values calculated, one at the beginning of the sampling event and one at the end of sampling event.

NR - Not yet reported

TSS (mg/l)
5.3
3.8
3.7

3.0
3.2

NR
NR
NR

**Table 9 - Equipment and Sheetpile Confirmatory Wipe Samples
November 2003 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in mg/100 cm²)

Sample ID	Date Collected	Aroclor 1016, 1221, 1232, 1242, & 1248	Aroclor 1254	Aroclor 1260	Total PCBs
H2-XI000114-0-3N03	03-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000115-0-3N03	03-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000116-0-3N03	03-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000117-0-3N03	03-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000118-0-3N04	04-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000119-0-3N04	04-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000120-0-3N04	04-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000121-0-3N04	04-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000122-0-3N06	06-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000123-0-3N06	06-Nov-03	ND(0.5)	ND(0.5)	2.3	2.3
H2-XI000124-0-3N06	06-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000125-0-3N06	06-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000126-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000127-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	0.77	0.77
H2-XI000128-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000129-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	1.1	1.1
H2-XI000130-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000131-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000132-0-3N07	07-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000133-0-3N11	11-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000134-0-3N11	11-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000135-0-3N11	11-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
H2-XI000136-0-3N11	11-Nov-03	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Notes:

PCB Action Level - 10.0 mg/100 cm²

ND(0.5) - Analyte was not detected. The value in parentheses is the associated detection limit.

**Table 10 - NAPL- Impacted Sediment from Cell 13 Analytical Results
November 2003 Monthly Report
GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in part per million, ppm)

Sample ID	H2-OT000081-0-3C23	H2-OT000082-0-3C23	H2-OT000083-0-3C23	H2-OT000084-0-3C23	H2-OT000085-0-3C23	H2-OT000086-0-3C23
Sample type	Cell 13, NAPL-impacted sediment stockpile					
Date Collected	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003
Analyte						
APP IX SEMIVOLATILES						
2-METHYLNAPHTHALENE	2.8	3.2	0.51 J	1.7	1.0 J	9.1
ACENAPHTHENE	0.47 J	2.0	0.46 J	2.3	3.2	6.4
ACENAPHTHYLENE	1.6	0.97 J	0.45 J	1.7	0.49 J	8.8
ANTHRACENE	1.2	2.0	0.88	2.5	3.0 J	11.0
BENZO(A)ANTHRACENE	0.86	1.5	0.93	2.9	6.0	8.6
BENZO(A)PYRENE	0.72 J	1.2	0.78	2.4	5.3	7.2
BENZO(B)FLUORANTHENE	0.28 J	0.55 J	0.42 J	1.3 J	2.5 J	3.1 J
BENZO(GHI)PERYLENE	0.35 J	0.61 J	0.35 J	1.2 J	2.7 J	3.2 J
BENZO(K)FLUORANTHENE	0.48 J	0.73 J	0.48 J	1.8	3.6	4.7
CHRYSENE	0.8	1.3	0.84	2.8	5.6	7.9
DIBENZO(A,H)ANTHRACENE	0.094 J	0.13 J	0.095 J	0.35 J	0.8 J	0.83 J
DIBENZOFURAN	0.079 J	0.12 J	0.049 J	0.25 J	0.15 J	0.59 J
FLUORANTHENE	1.5	2.4	1.4	5.7	9.0	16.0
FLUORENE	1.0	1.6	0.46 J	1.6	1.3 J	6.6
INDENO(1,2,3-C,D)PYRENE	0.27 J	0.40 J	0.28 J	0.99 J	2.0 J	2.3 J
NAPHTHALENE	3.8	2.9	0.34 J	1.2 J	1.1 J	6.4
PHENANTHRENE	4.1	6.0	2.2	5.8	5.5	20.0
PYRENE	2.5	3.9	2.5	77.7	15.0	23.0
INORGANICS						
CORROSIVITY BY PH	8.2	8.8	8.8	8.4	8.0	8.3
IGNITABILITY (deg f)	150	150	150	150	150	150
PAINT FILTER LIQUIDS (ml)	0	0	0	0	0	0
PERCENT SOLIDS (%)	85.5	89.4	87.8	90.2	86.8	87.7
SULFIDE REACTIVITY	ND	ND	ND	ND	ND	ND
TCLP HERBICIDES						
	all Non-Detects					

**Table 10 - NAPL- Impacted Sediment from Cell 13 Analytical Results
November 2003 Monthly Report
GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in part per million, ppm)

Sample ID	H2-OT000081-0-3C23	H2-OT000082-0-3C23	H2-OT000083-0-3C23	H2-OT000084-0-3C23	H2-OT000085-0-3C23	H2-OT000086-0-3C23
Sample type	Cell 13, NAPL-impacted sediment stockpile					
Date Collected	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003
TCLP METALS						
BARIUM, TCLP LEACHATE	0.587	0.266	0.359	0.542	0.328	0.591
CADMIUM, TCLP LEACHATE	0.00056	ND	0.00096	0.00086	0.004	0.00084
CHROMIUM, TCLP LEACHATE	ND	ND	ND	0.0015	0.0012	ND
LEAD, TCLP	ND	ND	0.0063	0.0017	0.0812	0.0023
SELENIUM, TCLP LEACHATE	ND	ND	0.0056	ND	ND	0.005
TCLP PESTICIDES						
	all Non-Detects					
TCLP SEMIVOLATILES						
	all Non-Detects					
TCLP VOLATILES						
	all Non-Detects					
PCBS						
AROCLOR-1254	0.082	0.099	0.160	0.490	1.5	0.320
AROCLOR-1260	0.430	0.710	0.580	1.8	6.0	0.590
PCB, TOTAL	0.510	0.810	0.740	2.3	7.5	0.910
ORGANIC						
PETROLEUM HYDROCARBON	ND	ND	22.0	64.5	108	60.1

Notes:

Only detected constituents are summarized

J - Indicates as estimated value

ND - not detected



Photograph 1 – Common Fill Installation behind the Retaining Wall in Cell 13W



Photograph 2 – Topsoil Installation in Cell 13W



Photograph 3 – Cellular GeoGrid Installation in Cell 13W



Photograph 4 – Riverbank Backfill Activities in Cell 13W



Photograph 5 – Overview of Restored Riverbank in Cell 13W



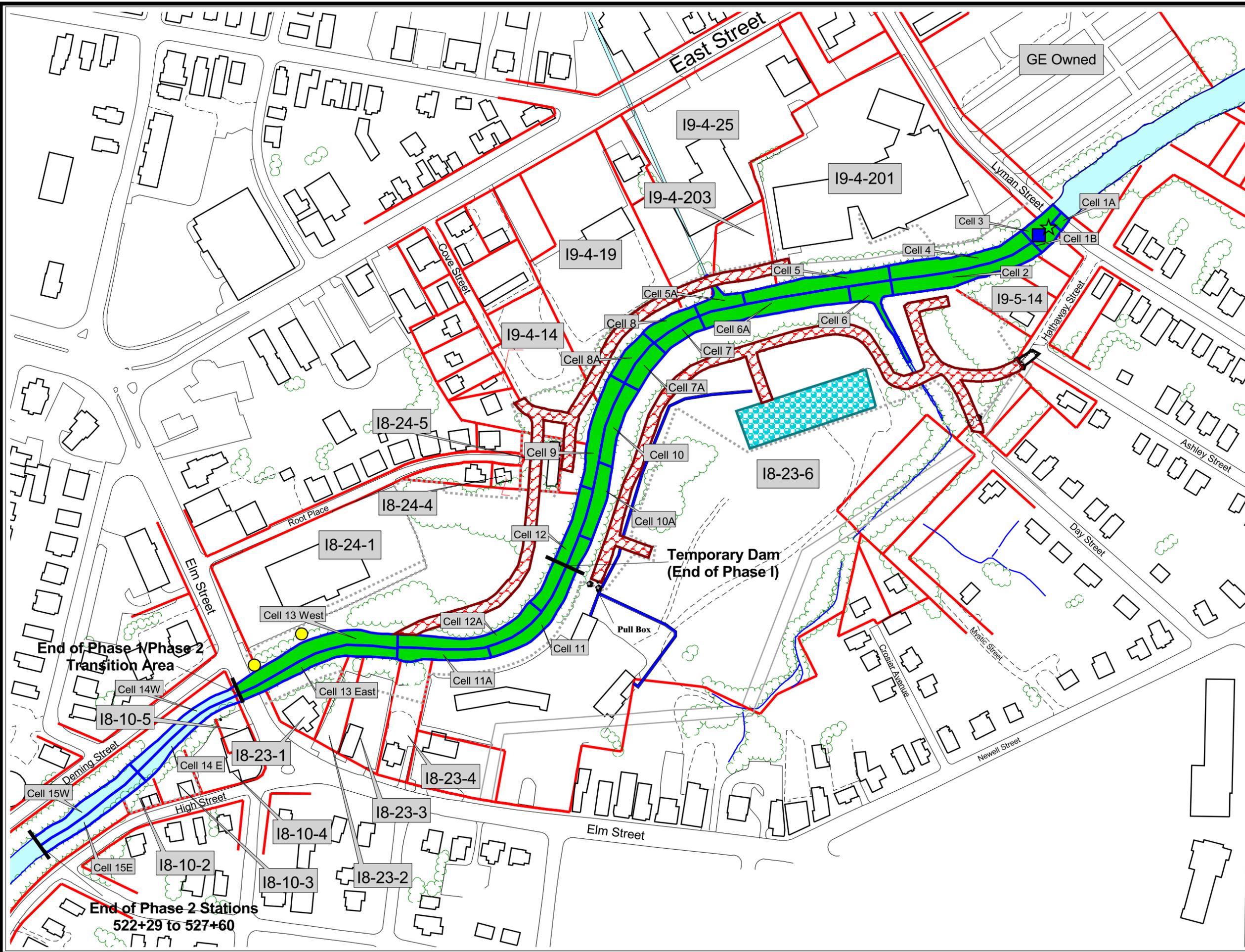
Photograph 6 – Concrete Pad Construction for the Earthen Dam, Located near the 54-inch Pipe Effluent



Photograph 7 – House Demolition Activities on Parcels I8- 10-2 and I8-10-3



Photograph 8 – Regrading of Parcels I8- 10-2 and I8-10-3 in Preparation of Additional Parking and Access along the River



LEGEND

- Roads
- Surface Water
- Water Treatment Plant*
- Access Roads
- Asphalt Access Road
- Property Lines
- Fence line*
- Work Completed
- Work Pending
- Turbidity Monitoring Locations
- Water Monitoring Locations
- Vibration Monitoring Locations
- Buried Electric/Telephone Line*

*Note: As-built features were located using a real time GPS unit

N

Scale in Feet



Figure 1
1.5 Mile Removal Action
Site Map
November 2003 Monthly Report