



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

SDMS 263168

April 9, 2001

Bryan Olson EPA Project Coordinator U.S. Environmental Protection Agency EPA New England One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site

Newell Street Area I (GECD440)

Supplemental Pre-Design Investigation Proposal for Parcel J9-23-26 (Hibbard Playground)

Dear Mr. Olson:

As follow-up to our recent discussions, this letter provides General Electric's (GE's) proposal for certain additional soil investigations within the Newell Street Area I Removal Action Area (RAA) located in Pittsfield, Massachusetts. This proposal is being submitted in response to the results of recent pre-design soil investigations performed by GE at one property within that RAA -- specifically, the Hibbard Playground (Parcel J9-23-26). The pre-design investigations were conducted in accordance with GE's Addendum to Pre-Design Investigation Work Plan for the Newell Street Area I Removal Action, which was submitted to the U.S. Environmental Protection Agency (EPA) on December 1, 2000 and conditionally approved by EPA on January 11, 2001.

RECENT SOIL INVESTIGATIONS

As part of these pre-design investigations, GE collected surface and subsurface soil samples at various parcels within Newell Street Area I. For the Hibbard Playground, the pre-design investigation consisted of the collection of 11 surface soil samples (0- to 1-foot depth increment) from 11 locations within a 50-foot grid, and the collection of 14 subsurface soil samples (1- to 3-foot, 3- to 6-foot, 6- to 10-foot, and 10-to 15-foot depth increments) from 3 locations on a 100-foot grid. All samples were analyzed for PCBs except at locations near where previous PCB data exist. In addition, approximately one-third of these soil samples were also analyzed for the non-PCB constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3) (excluding pesticides and herbicides in all but two samples from this parcel). The pre-design investigation soil sampling locations, as well as previous sample locations, on Parcel J9-23-26 are illustrated on Figure 1.

The preliminary pre-design investigation results and historical soil data for Parcel J9-23-26 are summarized in Table 1 for PCBs and in Table 2 for Appendix IX+3 constituents. The preliminary pre-design investigation results indicate the detection of arsenic in two surface soil samples at concentrations that exceed the threshold set forth in the Massachusetts Contingency Plan (MCP) for reporting a potential Imminent Hazard for arsenic (40 ppm) (310 CMR 40.0321(2)(b)). Those samples consisted of surface soil samples from locations J9-23-26-C-24 (41.8 ppm) and J9-23-26-E-23 (85.6 ppm). Upon learning of these results, GE notified the Massachusetts Department of Environmental

Protection (MDEP) on March 13, 2001, of a potential Imminent Hazard (as defined in the MCP) at these locations. As shown in Tables 1 and 2, no other constituents have been detected (during either the prior investigations or more recent pre-design efforts) at concentrations that warrant further investigation.

PROPOSED SUPPLEMENTAL SOIL INVESTIGATION

Based on the initial sampling results described above, GE proposes to collect additional soil samples to further evaluate the presence of arsenic within Parcel J9-23-26. Specifically, GE proposes to collect 14 additional soil samples from 12 locations on this parcel. The locations and depths for these samples are shown on Figure 1. These additional soil samples will include: samples from the 1- to 3-foot depth increment at the two prior sample locations (C-24 and E-23) where arsenic was detected in surface soils at levels exceeding 40 ppm; samples from the 0- to 1-foot and 1- to 3-foot depth increments at proposed sample locations D-24 and F-24; and samples from a 0- to 1-foot depth increment at existing pre-design sample locations B-24, PK-3, E-22, and D-23 and at proposed sample locations B-25, C-25, E-24, and F-23 (as shown on Figure 1). Each of these samples will be submitted for analysis of arsenic.

PROPOSED SCHEDULE

GE will initiate this supplemental sampling at Parcel J9-23-26 upon EPA approval of this proposal. GE will notify EPA of its timetable for this sampling at least seven days in advance of the initiation of the sampling.

GE anticipates that it should be able to collect the proposed supplemental samples and receive the analytical results from the laboratory within approximately 30 days from EPA approval of this proposal. Following receipt of the results from the laboratory, GE will report them in the next monthly progress report for the GE-Pittsfield/Housatonic River Site. If possible, these results will be included in the Pre-Design Investigation Report for the Newell Street Area I Removal Action, which is due to be submitted to EPA by May 16, 2001. If the results are not available within this time frame, GE will provide them promptly after receipt (i.e., in the next monthly progress report) and will incorporate them into its response action evaluations for this property. In either case, GE will also evaluate, based on the results from this supplemental sampling, the need for further sampling at Parcel J9-23-26 and, if appropriate, will submit a proposal for such further sampling.

Please call Richard Gates or me if you have any questions regarding this proposal.

Sincerely,

Andrew T. Silfer, P.E.

GE Project Coordinator

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Enclosures

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cc:

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Public Information Repositories

GE Internal Repositories

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR PCBs

(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth(Feet)	Date Collected	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
PK-1	0-0.5	4/28/88	ND(0.039)	ND(0.039)	0.53	0.28
PK-2	0-0.5	4/28/88	ND+	0.1**	0.77**	0.87
PK-3	0-0.5	4/28/88	ND+	ND+	0.06**	0.06
PK-4	0-0.5	4/28/88	ND+	ND+	0.35**	0.35
PK-5	0-0.5	4/28/88	ND+	ND+	0.22**	0.22
PK-6	0-0.5	4/28/88	ND+	ND+	0.24**	0.24
PK-7	0-0.5	4/28/88	ND+	0.06**	0.46**	0.52
PK-8	0-0.5	4/28/88	ND+	0.06**	0.33**	0.39
PK-9	0-0.5	4/28/88	ND+	ND+	0.09**	0.09
PK-10	0-0.5	4/28/88	ND+	ND+	0.35**	0.35
PK-11	0-0.5	4/28/88	ND+	0.35**	1.1**	1.4
J9-23-26-A-23	0-1	2/9/01	ND(0.039)	ND(0.039)	0.53	0.53
J9-23-26-A-24	0-1	2/9/01	ND(0.042)	ND(0.042)	0.79	0.79
J9-23-26-B-22	0-1	2/8/01	ND(0.043)	ND(0.043)	0.75	0.75
	1-3	2/8/01	ND(0.036)	6.3	4.2	11
	3-6	2/8/01	ND(0.036)	1.2	0.67	1.9
	6-10	2/8/01	ND(0.036)	0.053	0.037	0.090
	10-15	2/8/01	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
J9-23-26-B-23	0-1	2/8/01	ND(0.043)	ND(0.043)	1.3	1.3
J9-23-26-B-24	0-1	2/8/01	ND(0.041)	ND(0.041)	0.36	0.36
	1-3	2/8/01	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	3-6	2/8/01	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	6-10	2/8/01	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	10-15	2/8/01	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
J9-23-26-C-24	0-1	2/8/01	ND(0.038)	ND(0.038)	0.25	0.25
J9-23-26-D-22	0-1	2/8/01	ND(0.039)	ND(0.039)	0.092	0.092
	1-3	2/8/01	ND(0.035)	ND(0.035)	0.73	0.73
	3-6	2/8/01	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	6-10	2/8/01	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	10-15	2/8/01	ND(0.047)	ND(0,047)	ND(0.047)	ND(0.047)
J9-23-26-E-22	0-1	2/9/01	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	0.95 [1.0]	0.95 [1.0]
J9-23-26-E-23	0-1	2/9/01	ND(0.038)	0.68 E	0.35	1.0

Notes:

- 1. Duplicate sample results are presented in brackets.
- 2. ND Analyte was not detected. The value in parentheses is the associated detection limit.
- 3. E Analyte exceeded calibration range.
- 4. Sample J9-23-26-E-23 (0-1) is being reanalyzed by the laboratory.
- 5. * Aroclor pattern was identified and/or calculated as Aroclor 1242.
- 6. ** Sample exhibits alteration of standard Aroclor pattern.
- 7. ND + Detection limit to be confirmed during sample verification.

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

Sample ID:	PK-12	PK-13	PK-14	PK-15	J9-23-26-A-24
Sample Depth(Feet):	0-0.5	0-0.5	0-0.5	0-0.5	0-1
Parameter Date Collected:	05/09/91	05/09/91	05/09/91	05/09/91	02/09/01
Volatile Organics					
2-Butanone	NS	NS	NS	NS	0.0030 J
Acetone	NS	NS	NS	NS	0.020 J
Semivolatile Organics		<u> </u>			
Benzo(a)anthracene	NS	NS	NS	NS	0.050 J
Benzo(a)pyrene	NS	NS	NS	NS	0.074 J
Benzo(b)fluoranthene	NS	NS	NS	NS	0.062 J
Benzo(g,h,i)perylene	NS	NS	NS	NS	0.11 J
Benzo(k)fluoranthene	NS	NS	NS	NS	0.056 J
Chrysene	NS	NS	NS	NS	0.066 J
Di-n-Butylphthalate	NS	NS	NS	NS	0.051 J
Fluoranthene	NS	NS	NS	NS	0.096 J
Indeno(1,2,3-cd)pyrene	NS	NS	NS	NS	0.075 J
Phenanthrene	NS	NS	NS	NS	ND(0.42)
Pyrene	NS	NS	NS	NS	0.086 J
Organochlorine Pesticides		<u> </u>			
None Detected	NS	NS	NS	NS	NS
Herbicides		· · · · · · · · · · · · · · · · · · ·		······································	
None Detected	NS	NS	NS	NS	NS
Furans		I			
2,3,7,8-TCDF	NS	NS	NS	NS	0.000032 g
TCDFs (total)	NS	NS	NS	NS	0.00012
1,2,3,7,8-PeCDF	NS	NS	NS	NS	0.000015
2,3,4,7,8-PeCDF	NS	NS	NS	NS	0.000015
PeCDFs (total)	NS	NS	NS	NS	0.00014
1,2,3,4,7,8-HxCDF	NS	NS	NS	NS	0.000017
1,2,3,6,7,8-HxCDF	NS	NS	NS	NS	0.0000086
1,2,3,7,8,9-HxCDF	NS	NS	NS	NS	0.00000055 J**
2,3,4,6,7,8-HxCDF	NS	NS	NS	NS	0.0000099
HxCDFs (total)	NS	NS	NS	NS	0.00012
1,2,3,4,6,7,8-HpCDF	NS	NS	NS	NS	0.000016
1,2,3,4,7,8,9-HpCDF	NS	NS	NS	NS	0.0000022 J**
HpCDFs (total)	NS	NS	NS	NS	0.000033
OCDF	NS	NS	NS	NS	0.0000090
Total Furans	NS	NS	NS	NS	0.00042
Dioxins		<u> </u>			
2.3.7.8-TCDD	NS	NS	NS	NS	ND(0.00000017)
TCDDs (total)	NS	NS	NS	NS	ND(0.00000017)
1,2,3,7,8-PeCDD	NS	NS	NS	NS	ND(0.00000016)
PeCDDs (total)	NS	NS	NS	NS	0.00000024
1,2,3,4,7,8-HxCDD	NS	NS	NS	NS	0.00000032 J**
1,2,3,6,7,8-HxCDD	NS	NS	NS	NS	0.0000012 J**
1,2,3,7,8,9-HxCDD	NS	NS	NS	NS	0,00000073 J**
HxCDDs (total)	NS	NS	NS	NS	0.0000086
1.2.3.4.6.7.8-HpCDD	NS	NS	NS	NS	0.0000077
HpCDDs (total)	NS	NS	NS	NS	0.000016
OCDD CODD	NS	NS	NS	NS	0.000039
Total Dioxins	NS	NS	NS	NS	0.000064
Total TEQs (WHO TEFs)	NS	NS	NS	NS	0.000016

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

Sample ID:	PK-12	PK-13	PK-14	PK-15	J9-23-26-A-24
Sample Depth(Feet):	0-0.5	0-0.5	0-0.5	0-0.5	0-1
Parameter Date Collected:	05/09/91	05/09/91	05/09/91	05/09/91	02/09/01
Inorganics					
Arsenic	6.30 AN**	5.00	9.10 N	7.00	6.30
Barium	21.7 J*	45.40 **	126.00	37.5**	28.7
Beryllium	0.17 J*	0.32 J*	0.29 J*	0.31 J*	ND(0.0400)
Cadmium	ND+	ND+	ND+	ND+	0.350 J*
Chromium	7.40	11.00	11.00	10.2	8.70
Cobalt	5.50 J*	10.80	7.10 J*	12.9	8.70
Соррег	16.00	22.70	29.50	18.8	33.4 E*
Lead	43.00	2.00 A**	56.00	16.0**	21.1
Mercury	ND+	ND+	ND+	ND+	0.0600
Nickel	12.50	20.90	14.00	20.7	17.5
Selenium	ND+	ND+	ND+	ND+	0.670
Tin	***				4.10 J*
Vanadium	18.50	25.10	24.20	17.0	14.9
Zinc	57.70 E	87.00	116.00	76.0 E	86.1

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA I PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

Samı	ole ID: J9-23-26-B-22	J9-23-26-B-22	J9-23-26-B-24	J9-23-26-B-24	J9-23-26-B-24	J9-23-26-C-24
Sample Depth	(Feet): 6-15	12-14	1-3	3-6	4-6	0-1
Parameter Date Col	lected: 02/08/01	02/08/01	02/08/01	02/08/01	02/08/01	02/08/01
Volatile Organics						
2-Butanone	NS	ND(0.012)	ND(0.011)	NS	ND(0.011)	ND(0.011)
Acetone	NS	0.037	0.012 J	NS	0.011J	ND(0.023)
Semivolatile Organics						
Benzo(a)anthracene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Benzo(a)pyrene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Benzo(b)fluoranthene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Benzo(g,h,i)perylene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Benzo(k)fluoranthene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Chrysene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Di-n-Butylphthalate	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	0.043 J
Fluoranthene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	0.050 J
Indeno(1,2,3-cd)pyrene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Phenanthrene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	ND(0.38)
Pyrene	ND(0.39)	NS	ND(0.35)	ND(0.36)	NS	0.044 J
Organochlorine Pesticides	· ·					
None Detected	NS	NS	NS	NS	NS	NS
Herbicides						
None Detected	NS	NS	NS	NS	NS	NS
Furans			<u> </u>			
2,3,7,8-TCDF	0.0000022 g	NS	0.00000052 gJ**	0.00000041 gJ**	NS	0.000077 g
TCDFs (total)	0,0000062	NS	0.00000074	0.00000041	NS	0.00042
1,2,3,7,8-PeCDF	0.00000035 J**	NS	ND(0.00000018)	ND(0.00000013)	NS	0.000019
2,3,4,7,8-PeCDF	0.00000051 J**	NS	ND(0.0000017)	ND(0.00000012)	NS	0.000015
PeCDFs (total)	0.0000065	NS	0.0000011	0.00000065	NS	0.00021
1,2,3,4,7,8-HxCDF	0.00000077 J**	NS	ND(0.00000017)	0.00000019 J**K	NS	0.000029
1,2,3,6,7,8-HxCDF	0.00000031 J**	NS	ND(0.00000016)	ND(0.00000011)	NS	0.000013
1,2,3,7,8,9-HxCDF	ND(0.00000053)	NS	ND(0.00000021)	ND(0.00000015)	NS	0.00000056 J**
2,3,4,6,7,8-HxCDF	ND(0.00000045)	NS	ND(0.00000018)	ND(0.00000012)	NS	0.000012
HxCDFs (total)	0.0000069	NS	0.00000060	0.00000048	NS	0.00017
1,2,3,4,6,7,8-HpCDF	0.0000019 J**	NS	0.00000033 J**	0.00000058 J**	NS	0.000032
1,2,3,4,7,8,9-HpCDF	ND(0.00000027)	NS	ND(0.00000022)	ND(0.00000020)	NS	0.0000043
HpCDFs (total)	0.0000019	NS	0.00000033	0.00000058	NS	0,000057
OCDF	0.0000014 J**	NS	ND(0.00000039)	0.00000058 J**K	NS	0.000019
Total Furans	0.000023	NS	0.0000028	0.0000027	NS	0.00088
Dioxins						
2,3,7,8-TCDD	ND(0.00000031)	NS	ND(0.00000023)	ND(0.00000018)	NS	0.0000044
TCDDs (total)	ND(0.00000031)	NS	ND(0.00000023)	ND(0.00000018)	NS	0.0000078
1,2,3,7,8-PeCDD	ND(0.00000024)	NS	ND(0.00000026)	ND(0.00000019)	NS	0,00000060 J**
PeCDDs (total)	ND(0.00000024)	NS	ND(0.00000026)	ND(0.00000019)	NS	0.0000022
1,2,3,4,7,8-HxCDD	ND(0.00000027)	NS	ND(0.00000023)	ND(0.00000022)	NS	0.00000075 J**
1,2,3,6,7,8-HxCDD	ND(0.00000024)	NS	ND(0.00000020)	0.00000055 J**	NS	0.0000023
1,2,3,7,8,9-HxCDD	ND(0.00000024)	NS	ND(0.00000021)	ND(0.00000020)	NS	0.0000015 J**
HxCDDs (total)	0.0000024	NS	ND(0.00000020)	0.00000055	NS	0.000015
1,2,3,4,6,7,8-HpCDD	0.0000016 J**	NS	0.00000063 J**	0.0000014 J**	NS	0.0000074
HpCDDs (total)	0.0000028	NS	0.00000063	0.0000021	NS	0.000014
OCDD	0.0000045 J**	NS	0,0000023 J**	0.0000040 J**	NS	0,000025
Total Dioxins	0.0000097	NS	0.0000029	0.0000067	NS	0.000064
Total TEQs (WHO TEFs)	0.0000064	NS	0.000000062	0.00000014	NS	0.000028

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

	Sample ID:	J9-23-26-B-22	J9-23-26-B-22	J9-23-26-B-24	J9-23-26-B-24	J9-23-26-B-24	J9-23-26-C-24
	Sample Depth(Feet):	6-15	12-14	1-3	3-6	4-6	0-1
Parameter	Date Collected:	02/08/01	02/08/01	02/08/01	02/08/01	02/08/01	02/08/01
Inorganics							
Arsenic		7.80	NS	10,1	11.0	NS	41.8
Barium		27.8	NS	24.3	16.3 J*	NS	22.8
Beryllium		ND(0.0400)	NS	ND(0.0400)	ND(0.0400)	NS	ND(0.0400)
Cadmium		0.330 J*	NS	0.230 J*	0.310 J*	NS	0.270 J*
Chromium		9.00	NS	10.0	11.7	NS	8.40
Cobalt		10.6	NS	12.3	14.2	NS	10.5
Copper		31.7 E*	NS	33.7 E*	30.8 E*	NS	29.4 E*
Lead		13.7	NS	13.8	14.5	NS	13.0
Mercury		0.0300 J*	NS	0.0100 J*	0.0200 J*	NS -	0.0200 J*
Nickel		19.4	NS	21.9	24.2	NS	19.3
Selenium		0.510 J*	NS	0.380 J*	0.500 J*	NS	0.510 J*
Tin		6.70 J*	NS	5.30 J*	6.00 J*	NS	6.70 J*
Vanadium		9.20	NS	8.40	9.90	NS	9.70
Zinc		57.1	NS	63.0	76.2	NS	58.3

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

Sample ID: Sample Depth(Feet):	J9-23-26-D-22 3-4	J9-23-26-D-22 3-6	J9-23-26-D-22 6-15	J9-23-26-D-23 0-1	J9-23-26-E-23 0-1	J9-23-26-SLO445 0-1
Parameter Date Collected:	02/08/01	02/08/01	02/08/01	02/08/01	02/09/01	02/09/01
Volatile Organics						
2-Butanone	ND(0.011)	NS I	NS	ND(0.012)	ND(0.011)	ND(0.013)
Acetone	0.0097 J	NS	NS	ND(0.024)	0.0083 J	ND(0.027)
Semivolatile Organics						`
Benzo(a)anthracene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.068 J
Benzo(a)pyrene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.076 J
Benzo(b)fluoranthene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.069 J
Benzo(g,h,i)perylene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.067 J
Benzo(k)fluoranthene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0,065 J
Chrysene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.081 J
Di-n-Butylphthalate	NS	ND(0.36)	NS	0.041 J	0.044 J	0.047 J
Fluoranthene	NS	ND(0.36)	NS	0.048 J	0.050 J	0.14 J
Indeno(1,2,3-cd)pyrene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.053 J
Phenanthrene	NS	ND(0.36)	NS	ND(0.39)	ND(0.38)	0.068 J
Pyrene	NS	ND(0.36)	NS	0.045 J	0.049 J	0.13 J
Organochlorine Pesticides					·	
None Detected	NS	**		NS	NS	NS
Herbicides		<u> </u>			·	
None Detected	NS	T 1		NS	NS	NS
Furans		1				*
2,3,7,8-TCDF	NS	0.00000098 gJ**	NS	0.000013 g	0.000011 g	0.00013 g
TCDFs (total)	NS	0.0000018	NS	0.000052	0.000055	0,00069
1,2,3,7,8-PeCDF	NS	ND(0.00000013)	NS	0.0000052	0.0000037	0.000033
2,3,4,7,8-PeCDF	NS	ND(0.00000012)	NS	0.0000057	0.0000039	0.000035
PeCDFs (total)	NS	0.0000015	NS	0.00011	0.000053	0.00045
1,2,3,4,7,8-HxCDF	NS	0.00000033 J**K	NS	0.0000074	0.0000062	0.000049
1,2,3,6,7,8-HxCDF	NS	0.00000014 J**K	NS	0.0000046	0.0000035	0.000021
1,2,3,7,8,9-HxCDF	NS	ND(0.00000017)	NS	0.0000012 J**	0.00000053 J**	0.0000042
2,3,4,6,7,8-HxCDF	NS	ND(0.00000015)	NS	0.0000093	0.0000061	0.000024
HxCDFs (total)	NS	0.0000016	NS	0.00013	0.000089	0.00033
1,2,3,4,6,7,8-HpCDF	NS	0.00000090 J**	NS	0.000016	0.000012	0.000053
1,2,3,4,7,8,9-HpCDF	NS	ND(0.00000024)	NS	0.0000016 J**	0.0000010 J**	0.0000073
HpCDFs (total)	NS	0.0000014	NS	0.000035	0.000025	0,000099
OCDF	NS	0.0000019 J**	NS	0.0000082	0.0000070	0.000037
Total Furans	NS	0.0000082	NS	0.00034	0.00023	0.0016
Dioxins						
2,3,7,8-TCDD	NS	ND(0.00000019)	NS	ND(0.00000017)	0.00000060 J**	0.00000073 J**
TCDDs (total)	NS	ND(0.00000019)	NS	ND(0.00000017)	0.00000060	0.0000080
1,2,3,7,8-PeCDD	NS	ND(0.00000018)	NS	ND(0.00000016)	ND(0.00000019)	0.0000010 J**
PeCDDs (total)	NS	ND(0.00000018)	NS	0.00000098	ND(0.00000019)	0,0000058
1,2,3,4,7,8-HxCDD	NS	ND(0.00000022)	NS	0.0000011J**	ND(0.00000022)	0.00000091 J**
1,2,3,6,7,8-HxCDD	NS	0.0000019 J**	NS	0.0000030	0.00000075 J**	0.0000019 J**
1,2,3,7,8,9-HxCDD	NS	0.00000082 J**	NS	0.0000015 J**	0.00000059 J**	0.0000018 J**
HxCDDs (total)	NS	0.0000069	NS	0.000017	0.0000066	0.000020
1,2,3,4,6,7,8-HpCDD	NS	0.0000024	NS	0.0000093	0.0000067	0.000014
HpCDDs (total)	NS	0.0000038	NS	0.000019	0.000015	0.000030
OCDD	NS	0.0000059	NS	0.000045	0.000039	0.000064
Total Dioxins	NS	0.000017	NS	0.000082	0.000061	0.00013
Total TEQs (WHO TEFs)	NS	0.00000045	NS	0.0000075	0.0000058	0.000045

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

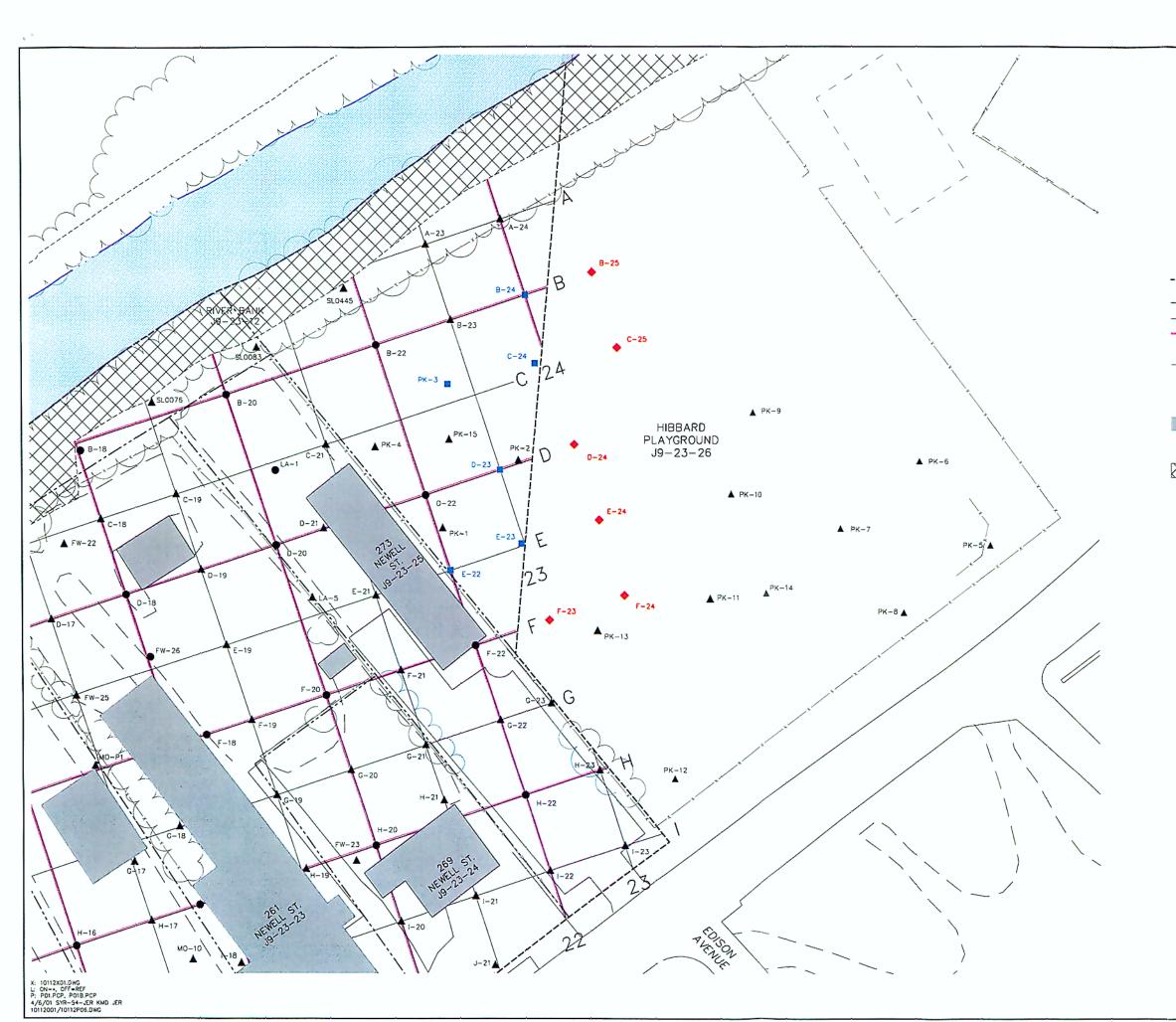
NEWELL STREET AREA 1 PARCEL J9-23-26 SOIL SAMPLING RESULTS FOR APPENDIX IX+3 CONSTITUENTS

(Results are presented in dry weight parts per million, ppm)

	Sample ID:	J9-23-26-D-22	J9-23-26-D-22	J9-23-26-D-22	J9-23-26-D-23	J9-23-26-E-23	J9-23-26-SLO445
	Sample Depth(Feet):	3-4	3-6	6-15	0-1	0-1	0-1
Parameter	Date Collected:	02/08/01	02/08/01	02/08/01	02/08/01	02/09/01	02/09/01
Inorganics							
Arsenic		NS	7.40	NS	NS	85.6	8.50
Barium		NS	16.8 J*	NS	NS	23.2	40.4
Beryllium		NS	ND(0.0300)	NS	NS	0.0600 J*	ND(0.0400)
Cadmium		NS	0.260 J*	NS	NS	0.200 J*	0.330 J*
Chromium		NS	7.70	NS	NS	6.10	10.6
Cobalt		NS	10.2	NS	NS	6.10	10.6
Copper		NS	24.9 E*	NS	NS	14.3 E*	184 E*
Lead		NS	10.6	NS	NS	13.9	50.8
Mercury		NS	0.0100 J*	NS	NS	0.0300 J*	0.130
Nickel		NS	17.2	NS	NS	12.3	22.1
Selenium		NS	0.450 J*	NS	NS	0.250 J*	0.710
Tin		NS	5.40 J*	NS	NS	6.90 J*	11.6 J*
Vanadium		NS	7.30	NS	NS	8.80	11.7
Zinc		NS	53.2	NS	NS	46.5	123

Notes:

- Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to Columbia Analytical Services, Inc. for analysis of Appendix IX+3 constituents.
- 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.
- 3. NS Not Sampled Parameter was not requested on sample chain of custody form.
- 4. J Indicates an estimated value less than the practical quantitation limit (PQL).
- 5. J* Indicates an estimated value between the instrument detection limit and practical quantitation limit (PQL).
- 6. J** Indicates an estimated value between the lower calibration limit and the target detection limit.
- 7. Duplicate sample results are presented in brackets.
- 8. g 2,3,7,8-TCDF results have been confirmed on a DB-225 column.
- E* Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
- 10. w Estimated maximum possible concentration.
- 12. With the exception of dioxin/furans, only those constituents detected in at least one sample are summarized.
- Total dioxins/furans determined as the sum of the total homolog concentrations; non-detect values considered as zero.
- 14. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmenntal Health Perspectives 106(2), December 1998, per technical Attachment F to the SOW.
- 15. Indicates that all analytes for a parameter group (e.g., Pesticides) are not detected.
- 16. ND + Detection limit to be confirmed during sample verification.
- 17. ** Indicates sample matrix duplicate was outside control limits.
- 18. E Indicates the reported value is estimated because of the presence of interference.
- 19. --- Not analyzed for this constituent.
- 20. A Results reported from single-point method-of-standard addition calculation.
- 21. N Indicates sample matrix spike analysis was outside control limits.



LEGEND

- APPROXIMATE PARCEL BOUNDARY

- 50-FOOT SURFACE SAMPLING GRID

J9-23-23 PARCEL ID SUBSURFACE SAMPLING GRID

FENCELINE

.

2-30 EXISTING SURFACE SOIL SAMPLE LOCATION

■ MM-3

EXISTING SURFACE/SUBSURFACE SOIL SAMPLE LOCATION

BUILDINGS

PAVED ARE



AREA TO BE ADDRESSED AS PART OF 1/2-MILE REACH

PROPOSED SUPPLEMENTAL SOIL SAMPLE LOCATION FOR ARSENIC ANALYSIS

0-24

EXISTING SOIL SAMPLE LOCATION WITH ADDITIONAL SUPPLEMENTAL SAMPLING PROPOSED FOR ARSENIC ANALYSIS

SAMPLE LOCATION	SAMPLE DEPTH (FEET)
B-24	0-1
8-25	0-1
C-24	1-3
C-25	0-1
D-23	0-1
D-24	0-1 / 1-3
E-22	0-1
E-23	1-3
E-24	0-1
F-23	0-1
F-24	0-1 / 1-3
PK-3	0-1

ILLUSTRATION NOTES:

- THE BASE MAP FEATURES PRÉSENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
- 2. SAMPLE LOCATIONS ARE APPROXIMATE.
- 3. THE PROPOSED SURFACE SOIL SAMPLE LOCATIONS ARE GENERALLY BASED ON A 50' GRID, WHILE THE PROPOSED SOIL BORING LOCATIONS ARE GENERALLY BASED ON A 100' GRID. GRID COORDINATES ARE DESIGNATED BY NUMBERS 1 THROUGH 26 (EAST/WEST) AND LETTERS A THROUGH K (NORTH/SOUTH).
- PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
SUPPLEMENTAL PRE-DESIGN INVESTIGATION
PROPOSAL FOR PARCEL J9-23-26

PROPOSED SUPPLEMENTAL SOIL SAMPLING LOCATIONS

BBL BLASLA engin

FIGURE

BLASLAND, BOUCK & LEE, INC. engineers & scientists

1