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

Transmitted via Overnight Courier

September 9, 2004

Mr. Dean Tagliaferro
U.S. Environmental Protection Agency
Region I – New England
10 Lyman Street, Suite 2
Pittsfield, MA 01201

Ms. Susan Steenstrup
Acting Section Chief, Special Projects
Bureau of Waste Site Cleanup
Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

Re: GE-Pittsfield/Housatonic River Site
Monthly Status Report Pursuant to Consent Decree for August 2004 (GECD900)

Dear Mr. Tagliaferro and Ms. Steenstrup:

Enclosed are copies of General Electric's (GE's) monthly progress report for August 2004 activities conducted by GE at the GE-Pittsfield/Housatonic River Site. This monthly report is submitted pursuant to Paragraph 67 of the Consent Decree (CD) for this Site, which was entered by the U.S. District Court on October 27, 2000.

The enclosed monthly report includes not only the activities conducted by GE under the CD, but also other activities conducted by GE at the GE-Pittsfield/Housatonic River Site (as defined in the CD). The report is formatted to apply to the various areas of the Site as defined in the CD, and to provide for each area, the information specified in Paragraph 67 of the CD. The activities conducted specifically pursuant to or in connection with the CD are marked with an asterisk. GE is submitting a separate monthly report to the Massachusetts Department of Environmental Protection (MDEP), with a copy to the United States Environmental Protection Agency (EPA), describing the activities conducted by GE at properties outside the CD Site pursuant to GE's December 2000 Administrative Consent Order from MDEP.

The enclosed monthly report includes, where applicable, tables that list the samples collected during the subject month, summarize the analytical results received during that month from sampling or other testing activities, and summarize other groundwater monitoring and oil recovery information obtained during that month. Also, enclosed for each of you (and for Weston) is a CD-ROM that contains these same tables of the analytical data and monitoring information in electronic form.

Please call Andrew Silfer or me if you have any questions.

Sincerely,

John F. Novotny

John F. Novotny, P.E.
Manager - Facilities and Brownfields Programs

Enclosures
V:\GE_Pittsfield_General\Reports\Monthly\2004\August cover ltr.doc

cc: Robert Cianciarulo, EPA (cover letter only)
Tim Conway, EPA (cover letter only)
James DiLorenzo, EPA
Rose Howell, EPA (CD-ROM of report)
Holly Inglis, EPA
William Lovely, EPA (Items 7, 8, 9, 10, 11, 12, 16/17, 22, 23, and 25 only)
Susan Svirsky, EPA (Items 7, 15, and 20 only)
K.C. Mitkevicius, USACE (CD-ROM of report)
Thomas Angus, MDEP (cover letter only)
Robert Bell, MDEP (cover letter only)
Anna Symington, MDEP (cover letter only)
Nancy E. Harper, MA AG
Susan Peterson, CT DEP
Field Supervisor, US FWS, DOI
Kenneth Finkelstein, Ph.D., NOAA (Items 13, 14, and 15 only)
Dale Young, MA EOEA
Mayor James Ruberto, City of Pittsfield
Thomas Hickey, Director, Pittsfield Economic Development Authority
Dawn Jamros, Weston (hard copy of report, CD-ROM of report, CD-ROM of data)
Richard Nasman, P.E., Berkshire Gas (CD-ROM of report)
Michael Carroll GE (CD-ROM of report)
Andrew Silfer, GE (cover letter only)
Rod McLaren, GE (CD-ROM of report)
James Nuss, BBL
James Bieke, Shea & Gardner
Jim Rhea, QEA (narrative only)
Teresa Bowers, Gradient
Public Information Repositories (5 copies)
GE Internal Repository (2 copies)

(w/o separate CD-ROM, except where noted)

AUGUST 2004

MONTHLY STATUS REPORT

PURSUANT TO CONSENT DECREE FOR GE-PITTSFIELD/HOUSATONIC RIVER SITE

GENERAL ELECTRIC COMPANY

PITTSFIELD, MASSACHUSETTS

Background

The General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and other governmental entities have entered into a Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site, which was entered by the U.S. Court on October 27, 2000. In accordance with Paragraph 67 of the CD, GE has prepared this monthly report, which summarizes the status of activities conducted by GE at the GE-Pittsfield/ Housatonic River Site ("Site") (as defined in the CD).

This report covers activities in the areas listed below (as defined in the CD and/or the accompanying Statement of Work for Removal Actions Outside the River [SOW]). Only those areas that have had work activities for the month subject to reporting are included. The specific activities conducted pursuant to or in connection with the CD are noted with an asterisk.

General Activities (GECD900)

GE Plant Area (non-groundwater)

1. 20s, 30s, 40s Complexes (GECD120)
2. East Street Area 2 – South (GECD150)
3. East Street Area 2 – North (GECD140)
4. East Street Area 1 – North (GECD130)
5. Hill 78 and Building 71 Consolidation Areas (GECD210/220)
6. Hill 78 Area – Remainder (GECD160)
7. Unkamet Brook Area (GECD170)

Former Oxbow Areas (non-groundwater)

8. Former Oxbow Areas A & C (GECD410)
9. Lyman Street Area (GECD430)
10. Newell Street Area I (GECD440)
11. Newell Street Area II (GECD450)
12. Former Oxbow Areas J & K (GECD420)

Housatonic River

13. Upper ½-Mile Reach (GECD800)
14. 1½-Mile Reach (only for activities, if any, conducted by GE) (GECD820)
15. Rest of the River (GECD850)

Housatonic River Floodplain

16. Current Residential Properties Adjacent to 1½-Mile Reach (Actual/Potential Lawns) (GECD710)
17. Non-Residential Properties Adjacent to 1½-Mile Reach (excluding banks) (GECD720)
18. Current Residential Properties Downstream of Confluence (Actual/Potential Lawns) (GECD730)

Other Areas

19. Allendale School Property (GECD500)
20. Silver Lake Area (GECD600)

Groundwater Management Areas (GMAs)

21. Plant Site 1 (GECD310)
22. Former Oxbows J & K (GECD320)
23. Plant Site 2 (GECD330)
24. Plant Site 3 (GECD340)
25. Former Oxbows A&C (GECD350)

GENERAL ACTIVITIES
GE-PITTSFIELD/HOUSATONIC RIVER SITE
(GECD900)
AUGUST 2004

a. Activities Undertaken/Completed

- Continued GE-EPA electronic data exchanges for the Housatonic River Watershed and Areas Outside the River.*

- Continued meetings with EPA, MDEP, and the Pittsfield Economic Development Authority (PEDA) to discuss a revised NPDES permit.

b. Sampling/Test Results Received

- Sample results were received for routine sampling conducted pursuant to GE's NPDES Permit for the GE facility. Sampling records and results are provided in Attachment A to this report.

- NPDES Discharge Monitoring Reports (DMRs) for the period of July 1 through July 31, 2004, are provided in Attachment B to this report.

- A report titled *Toxicity Evaluation of Wastewaters Discharged from the General Electric Plant; Pittsfield, Massachusetts (Samples Collected in August 2004)* was prepared for GE by SGS Environmental Services, Inc. (SGS). A copy of that report is provided in Attachment C.

- A report titled *Chronic Effects of the Process Wastewaters Discharged from the General Electric Plant; Pittsfield, Massachusetts (Samples Collected in August 2004)* was prepared for GE by SGS. A copy of that report is provided in Attachment D.

c. Work Plans/Reports/Documents Submitted

- Submitted DMR Quality Assurance/Quality Control Study #24 (August 9, 2004).

- Submitted Notice of Planned Potential Bypass at Outfall 001 (August 9, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Attend public, Pittsfield Citizens Coordinating Council (CCC), and PEDA meetings as appropriate.

- Continue NPDES sampling and monitoring activities.

- Continue meetings to discuss a revised NPDES permit.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

Issues relating to a revised NPDES permit are under discussion.

GENERAL ACTIVITIES
(cont'd)
GE-PITTSFIELD/HOUSATONIC RIVER SITE
(GECD900)
AUGUST 2004

f. <u>Proposed/Approved Work Plan Modifications</u>

None

ITEM 1
PLANT AREA
20s, 30s, 40s COMPLEXES
(GECD120)
AUGUST 2004

a. Activities Undertaken/Completed

- Continued discussions with EPA, MDEP, and PEDA regarding land transfer issues for the 20s and 30s Complexes.

- Continued discussions with holders of encumbrances at 20s and 30s Complexes regarding subordination agreements for Grants of Environmental Restrictions and Easements (EREs).*

- Continued pre-demolition activities at Buildings 28B, 42, 43/43-A, and 44.

- Continued oil monitoring in Building 43 elevator shaft; no recoverable quantities were encountered (see Item 21.a).

- Conducted miscellaneous sediment and liquid sampling, as identified in Table 1-1.

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

- Submitted proposal to conduct additional building material characterization for Buildings 42, 43/43-A, and 44 (August 4, 2004).

- Submitted letter discussing GE's inability to obtain subordination agreements from the Berkshire Gas Company (August 30, 2004).*

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue discussions with EPA, MDEP, and PEDA regarding land transfer issues for the 20s and 30s Complexes.

- Continue discussions with encumbrance holders at 20s and 30s Complexes regarding subordination agreements for EREs.*

- Develop Data Compilation Report for 30s Complex.*

- Continue pre-demolition activities (including asbestos abatement) at Buildings 42, 43/43-A, and 44.

- Complete demolition activities at Building 28B.

ITEM 1
(cont'd)
PLANT AREA
20s, 30s, 40s COMPLEXES
(GECD120)
AUGUST 2004

e. General Progress/Unresolved Issues/Potential Schedule Impacts

Issues relating to transfer of 20s and 30s Complexes from GE to PEDA are under discussion among GE, PEDA, EPA, and MDEP.

f. Proposed/Approved Work Plan Modifications

None

TABLE 1-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

20s, 30s, 40s COMPLEX
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
31W Oil/Water Separator Sediment Sampling	31W-1	8/3/04	0-4	Sedimen	SGS	PCB	8/10/04
31W Oil/Water Separator Sediment Sampling	31W-2	8/3/04	0-4.85	Sedimen	SGS	PCB	8/10/04
31W Oil/Water Separator Sediment Sampling	31W-3	8/3/04	0-3.45	Sedimen	SGS	PCB	8/10/04
31W Oil/Water Separator Sediment Sampling	31W-4	8/3/04	0-2	Sedimen	SGS	PCB	8/10/04
31W Oil/Water Separator Sediment Sampling	31W-C1	8/3/04	0-4.85	Sedimen	SGS	TCLP	8/10/04
31W Oil/Water Separator Sediment Sampling	31W-DUP-1 (31W-1)	8/3/04	0-4	Sedimen	SGS	PCB	8/10/04
40's Complex Mastic Remover Drum Sampling	40's-MASTIC-C1	8/10/04	NA	Liquid	SGS	PCB, VOC, SVOC, RCRA Metals	8/18/04

Note:
1. Field duplicate sample locations are presented in parenthesis.

TABLE 1-2
PCB DATA RECEIVED DURING AUGUST 2004

31W OIL/WATER SEPARATOR SEDIMENT SAMPLING
20s, 30s, 40s COMPLEX
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth(Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
31W-1	0-4	8/3/2004	ND(4.1) [ND(0.41)]	12 [4.8]	14 [7.1]	26 [11.9]
31W-2	0-4.85	8/3/2004	ND(0.20)	1.9	0.98	2.88
31W-3	0-3.45	8/3/2004	ND(2.0)	20	37	57
31W-4	0-2	8/3/2004	ND(2.5)	20	32	52

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

TABLE 1-3
TCLP DATA RECEIVED DURING AUGUST 2004

31W OIL/WATER SEPARATOR SEDIMENT SAMPLING
20s, 30s, 40s COMPLEX
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	TCLP Regulatory Limits	31W-C1 0-4.85 8/3/2004
Volatile Organics			
1,1-Dichloroethene		0.7	ND(0.10)
1,2-Dichloroethane		0.5	ND(0.10)
2-Butanone		200	ND(0.20)
Benzene		0.5	ND(0.10)
Carbon Tetrachloride		0.5	ND(0.10)
Chlorobenzene		100	ND(0.10)
Chloroform		6	ND(0.10)
Tetrachloroethene		0.7	ND(0.10)
Trichloroethene		0.5	ND(0.10)
Vinyl Chloride		0.2	ND(0.10)
Semivolatile Organics			
1,4-Dichlorobenzene		7.5	ND(0.050)
2,4,5-Trichlorophenol		400	ND(0.050)
2,4,6-Trichlorophenol		2	ND(0.050)
2,4-Dinitrotoluene		0.13	ND(0.050)
Cresol		200	ND(0.050)
Hexachlorobenzene		0.13	ND(0.050)
Hexachlorobutadiene		0.5	ND(0.050)
Hexachloroethane		3	ND(0.050)
Nitrobenzene		2	ND(0.050)
Pentachlorophenol		100	ND(0.050)
Pyridine		5	ND(0.050)
Inorganics			
Arsenic		5	ND(0.100)
Barium		100	0.410
Cadmium		1	0.00420 B
Chromium		5	0.00710 B
Lead		5	0.260
Mercury		0.2	ND(0.00200)
Selenium		1	0.00600 B
Silver		5	0.00130 B

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of TCLP constituents.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 1-4
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

MASTIC REMOVER DRUM SAMPLING
20s, 30s, 40s COMPLEX
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	40's-MASTIC-C1 08/10/04
Volatile Organics	
None Detected	--
PCBs-Unfiltered	
Aroclor-1254	0.25
Aroclor-1260	0.071
Total PCBs	0.321
Semivolatile Organics	
2,3,4,6-Tetrachlorophenol	0.016
Acenaphthylene	0.0070 J
Anthracene	0.013
Benzo(a)anthracene	0.025
Benzo(a)pyrene	0.0071 J
Benzo(b)fluoranthene	0.0055 J
Benzo(g,h,i)perylene	0.0040 J
Benzo(k)fluoranthene	0.0069 J
bis(2-Ethylhexyl)phthalate	1.6
Butylbenzylphthalate	2.7
Chrysene	0.036
Fluoranthene	0.046
Indeno(1,2,3-cd)pyrene	0.0031 J
Pentachlorophenol	0.022 J
Phenanthrene	0.074
Pyrene	0.084
Inorganics-Unfiltered	
Arsenic	0.0520
Barium	0.370
Cadmium	0.00980
Chromium	0.0480
Lead	0.850
Mercury	0.00480
Selenium	0.00560
Silver	0.00190 B

Notes:

1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs, volatiles, semivolatiles and metals.
2. Only detected constituents are summarized.
3. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (PCBs, volatiles, semivolatiles)

J - Indicates an estimated value less than the practical quantitation limit (PQL).

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

ITEM 2
PLANT AREA
EAST STREET AREA 2-SOUTH
(GECD150)
AUGUST 2004

a. Activities Undertaken/Completed

- Continued pre-demolition activities (including oils sampling of equipment) at the 60s Complex.
- Performed sludge sampling at Building 64T and other miscellaneous sampling as identified in Table 2-1.
- Tankered and transported 1,500 gallons of water from Building 61 to Building 64G for treatment.
- Completed remaining field construction activities (punch list items) at City Recreational Area (CRA).
- Continued discussions regarding ERE and subordination agreements for CRA.*
- Continued survey activities associated with finalizing ERE for CRA.*
- Continued development of interim report on additional data needs at East Street Area 2-South (due on or before October 26, 2004).*

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue to conduct routine process sampling at Buildings 64G and 64T.
- Continue discussions regarding ERE and subordination agreements for CRA.*
- Continue pre-demolition and potentially initiate demolition activities at the 60s Complex.
- Continue development of interim report on additional data needs at East Street Area 2-South (due on or before October 26, 2004).*

ITEM 2
(cont'd)
PLANT AREA
EAST STREET AREA 2-SOUTH
(GECD150)
AUGUST 2004

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 2-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
60's Complex Oil Sampling	66-1-101-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-102-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-103-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-104-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-106-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-107-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-108-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-110-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-112-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-113-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-114-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-115-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-116-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-117-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-118-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-119-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-120-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-124-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-126-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-130-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-131-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-132-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-133-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-134-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-135-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-136-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-137-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-138-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-139-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-140-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-141-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-142-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-143-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-144-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-145-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-146-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-147-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-148-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-149-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-150-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-151-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-152-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-153-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-154-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-155-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-156-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-157-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04

TABLE 2-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
60's Complex Oil Sampling	66-1-158-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-159-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-160-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-161-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-162-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-163-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-164-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-165-OIL-1	8/11/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-166-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-167-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-168-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-169-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-170-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-171-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-172-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-173-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-174-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-175-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-176-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-177-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-178-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-179-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-180-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-181-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-182-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-183-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-184-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-185-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-186-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-187-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-188-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-189-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-190-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-191-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-192-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-193-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-194-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-195-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-196-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-197-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-198-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-199-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-200-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-201-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-202-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-203-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-204-OIL-1	8/12/04	Oil	SGS	PCB	8/23/04

TABLE 2-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
60's Complex Oil Sampling	66-1-205-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-206-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-207-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-208-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-209-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-210-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-211-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-212-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-213-OIL-1	8/13/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-214-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-215-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-216-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-217-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-218-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-219-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-220-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-221-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-222-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-223-OIL-1	8/16/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-224-OIL-1	8/17/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-225-OIL-1	8/17/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-226-OIL-1	8/17/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-227-OIL-1	8/17/04	Oil	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-228-GREASE-1	8/17/04	Grease	SGS	PCB	8/23/04
60's Complex Oil Sampling	66-1-228-GREASE-1	8/17/04	Grease	SGS	TCLP Metals	8/25/04
60's Complex Oil Sampling	66-1-84-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-87-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-89-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-91-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-92-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-93-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-94-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-95-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-96-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	66-1-99-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
60's Complex Oil Sampling	67-1-5-OIL-1	7/22/04	Oil	SGS	PCB	8/10/04
Building 62 Debris & Orange Dye Sampling	F1199-62-Soil-1	7/29/04	Soil	SGS	TCLP	8/5/04
Building 64T Sludge Sampling	H4-64T-01	8/7/04	Sludge	SGS	PCB	8/12/04
Southside Pump Station Sediment Sampling	SSPS-1	8/3/04	Sediment	SGS	PCB	8/10/04
Southside Pump Station Sediment Sampling	SSPS-2	8/3/04	Sediment	SGS	PCB	8/10/04
Southside Pump Station Sediment Sampling	SSPS-C1	8/3/04	Sediment	SGS	TCLP	8/10/04
Southside Pump Station Sediment Sampling	SSPS-DUP-1 (SSPS-1)	8/3/04	Sediment	SGS	PCB	8/10/04

Note:
1. Field duplicate sample locations are presented in parenthesis.

TABLE 2-2
TCLP DATA RECEIVED DURING AUGUST 2004

BUILDING 62 DEBRIS & ORANGE DYE SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	TCLP Regulatory Limits	F1199-62-SOIL-1 7/29/2004
Volatile Organics		
1,1-Dichloroethene	0.7	ND(0.10)
1,2-Dichloroethane	0.5	ND(0.10)
2-Butanone	200	ND(0.20)
Benzene	0.5	ND(0.10)
Carbon Tetrachloride	0.5	ND(0.10)
Chlorobenzene	100	ND(0.10)
Chloroform	6	ND(0.10)
Tetrachloroethene	0.7	ND(0.10)
Trichloroethene	0.5	ND(0.10)
Vinyl Chloride	0.2	ND(0.10)
Semivolatile Organics		
1,4-Dichlorobenzene	7.5	ND(0.050)
2,4,5-Trichlorophenol	400	ND(0.050)
2,4,6-Trichlorophenol	2	ND(0.050)
2,4-Dinitrotoluene	0.13	ND(0.050)
Cresol	200	ND(0.050)
Hexachlorobenzene	0.13	ND(0.050)
Hexachlorobutadiene	0.5	ND(0.050)
Hexachloroethane	3	ND(0.050)
Nitrobenzene	2	ND(0.050)
Pentachlorophenol	100	ND(0.050)
Pyridine	5	ND(0.050)
Inorganics		
Arsenic	5	ND(0.100)
Barium	100	0.300
Cadmium	1	0.0740
Chromium	5	0.0130 B
Lead	5	4.70
Mercury	0.2	ND(0.00200)
Selenium	1	ND(0.200)
Silver	5	0.00140 B

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of TCLP constituents.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 2-3
PCB DATA RECEIVED DURING AUGUST 2004

60's COMPLEX OIL SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
66-1-84-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-87-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-89-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-91-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-92-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-93-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-94-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-95-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-96-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-99-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-101-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-102-OIL-1	7/22/2004	ND(7.6)	ND(7.6)	ND(7.6)	ND(7.6)
66-1-103-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-104-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-106-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-107-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-108-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-110-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-112-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-113-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-114-OIL-1	7/22/2004	ND(1.5)	1.2 J	ND(1.5)	1.2 J
66-1-115-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-116-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-117-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-118-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-119-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-120-OIL-1	7/22/2004	ND(1.5)	0.79 J	ND(1.5)	0.79 J
66-1-124-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-126-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-130-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-131-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-132-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-133-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-134-OIL-1	7/22/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-135-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-136-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-137-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-138-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-139-OIL-1	8/11/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-140-OIL-1	8/11/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-141-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-142-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-143-OIL-1	8/11/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-144-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-145-OIL-1	8/11/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-146-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-147-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-148-OIL-1	8/16/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-149-OIL-1	8/16/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-150-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	7.1	7.1
66-1-151-OIL-1	8/11/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-152-OIL-1	8/16/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-153-OIL-1	8/11/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)

TABLE 2-3
PCB DATA RECEIVED DURING AUGUST 2004

60's COMPLEX OIL SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
66-1-154-OIL-1	8/16/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-155-OIL-1	8/12/2004	ND(1.5)	3.7	ND(1.5)	3.7
66-1-156-OIL-1	8/12/2004	ND(1.5)	0.76 J	1.5 J	2.26 J
66-1-157-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-158-OIL-1	8/11/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-159-OIL-1	8/12/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-160-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-161-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-162-OIL-1	8/11/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-163-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-164-OIL-1	8/11/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-165-OIL-1	8/11/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-166-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-167-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-168-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-169-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-170-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-171-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-172-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-173-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-174-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-175-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-176-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-177-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-178-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-179-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-180-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-181-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-182-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-183-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-184-OIL-1	8/13/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-185-OIL-1	8/13/2004	ND(1.5)	1.8	ND(1.5)	1.8
66-1-186-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-187-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-188-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-189-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-190-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-191-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-192-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-193-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-194-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-195-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-196-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-197-OIL-1	8/12/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-198-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-199-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-200-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-201-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-202-OIL-1	8/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-203-OIL-1	8/12/2004	ND(1.6)	0.79 J	ND(1.6)	0.79 J
66-1-204-OIL-1	8/12/2004	ND(1.5)	ND(1.5)	1.4 J	1.4 J
66-1-205-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-206-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)

TABLE 2-3
PCB DATA RECEIVED DURING AUGUST 2004

60's COMPLEX OIL SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
66-1-207-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-208-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-209-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	1.4 J	1.4 J
66-1-210-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-211-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-212-OIL-1	8/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-213-OIL-1	8/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-214-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-215-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-216-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-217-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-218-OIL-1	8/16/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-219-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-220-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	40	40
66-1-221-OIL-1	8/16/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-222-OIL-1	8/16/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-223-OIL-1	8/16/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-224-OIL-1	8/17/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-225-OIL-1	8/17/2004	ND(1.5)	ND(1.5)	2.6	2.6
66-1-226-OIL-1	8/17/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-227-OIL-1	8/17/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
67-1-5-OIL-1	7/22/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

J - Indicates an estimated value less than the practical quantitation limit (PQL).

TABLE 2-4
PCB DATA RECEIVED DURING AUGUST 2004

60's COMPLEX GREASE SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
66-1-228-GREASE-1	8/17/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)

Notes:
1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and TCLP metals.
2. Please refer to Table 2-5 for a summary of TCLP metals.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

TABLE 2-5
TCLP DATA RECEIVED DURING AUGUST 2004

60's COMPLEX GREASE SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	TCLP Regulatory Limits	66-1-228-GREASE-1 8/17/2004
Inorganics		
Arsenic	5	ND(0.100)
Barium	100	0.0660
Cadmium	1	0.0180 B
Chromium	5	0.00290 B
Lead	5	0.820
Mercury	0.2	ND(0.00200)
Selenium	1	0.00770 B
Silver	5	ND(0.0200)

Notes:

1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and TCLP metals.
2. Please refer to Table 2-4 for a summary of PCBs.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 2-6
PCB DATA RECEIVED DURING AUGUST 2004

SOUTHSIDE PUMP STATION SEDIMENT SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
SSPS-1	8/3/2004	ND(2.8) [ND(0.28)]	16 [3.1]	14 [2.9]	30 [6.0]
SSPS-2	8/3/2004	ND(23)	54	41	95

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

TABLE 2-7
TCLP DATA RECEIVED DURING AUGUST 2004

SOUTHSIDE PUMP STATION SEDIMENT SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	TCLP Regulatory Limits	SSPS-C1 8/3/2004
Volatile Organics		
1,1-Dichloroethene	0.7	ND(0.10)
1,2-Dichloroethane	0.5	ND(0.10)
2-Butanone	200	ND(0.20)
Benzene	0.5	ND(0.10)
Carbon Tetrachloride	0.5	ND(0.10)
Chlorobenzene	100	ND(0.10)
Chloroform	6	ND(0.10)
Tetrachloroethene	0.7	ND(0.10)
Trichloroethene	0.5	ND(0.10)
Vinyl Chloride	0.2	ND(0.10)
Semivolatile Organics		
1,4-Dichlorobenzene	7.5	ND(0.050)
2,4,5-Trichlorophenol	400	ND(0.050)
2,4,6-Trichlorophenol	2	ND(0.050)
2,4-Dinitrotoluene	0.13	ND(0.050)
Cresol	200	ND(0.050)
Hexachlorobenzene	0.13	ND(0.050)
Hexachlorobutadiene	0.5	ND(0.050)
Hexachloroethane	3	ND(0.050)
Nitrobenzene	2	ND(0.050)
Pentachlorophenol	100	ND(0.050)
Pyridine	5	ND(0.050)
Inorganics		
Arsenic	5	ND(0.100)
Barium	100	0.330
Cadmium	1	0.00890 B
Chromium	5	0.00120 B
Lead	5	0.0140 B
Mercury	0.2	ND(0.00200)
Selenium	1	0.00610 B
Silver	5	ND(0.0200)

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of TCLP constituents.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 2-8
PCB DATA RECEIVED DURING AUGUST 2004

BUILDING 64T SLUDGE SAMPLING
EAST STREET AREA 2 - SOUTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
H4-64T-01	8/7/2004	ND(6.8)	91	94	185

Notes:

1. Sample was collected by General Electric Company and submitted to SGS Environmental Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

ITEM 3
PLANT AREA
EAST STREET AREA 2-NORTH
(GECD140)
AUGUST 2004

a. Activities Undertaken/Completed

- Tankered and transported 4,500 gallons of water from Building 9 to Building 64G for treatment.

- Conducted miscellaneous sampling as identified in Table 3-1.

b. Sampling/Test Results Received

See attached table.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Awaiting EPA approval of the Pre-Design Investigation Report submitted on June 17, 2004.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 3-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

EAST STREET AREA 2 - NORTH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
Building 12 Carwash Sludge Sampling	A2188-Carwash-Sludge-1	7/30/04	Solid	SGS	PCB, TCLP	8/5/04
Building 12 Paint Chip Drum Sampling	12-PAINTCHIPS-C1	8/10/04	Paint Chips	SGS	TCLP Metals	8/20/04
Building 19 Liquid Heating System	19-1-HS-1	8/25/04	Liquid	SGS	PCB, VOC, Total Metals, Glycol	
Building 78 Compressor Water Sampling	E0499-Compressor-Water-1	7/30/04	Water	SGS	PCB	8/6/04
Building 78 Decon Water Sampling	B0680-Decon-Water-1	7/30/04	Water	SGS	PCB	8/6/04

TABLE 3-2
PCB DATA RECEIVED DURING AUGUST 2004

BUILDING 78 DECON WATER AND COMPRESSOR WATER SAMPLING
EAST STREET AREA 2 - NORTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
B0680-DECON-WATER-1	7/30/2004	ND(0.0012)	0.022	0.010	0.032
E0499-COMPRESSOR-WATER-1	7/30/2004	ND(0.0025)	0.0040	ND(0.0025)	0.0040

Notes:
1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

TABLE 3-3
PCB DATA RECEIVED DURING AUGUST 2004

BUILDING 12 CARWASH SLUDGE SAMPLING
EAST STREET AREA 2 - NORTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
A2188-CARWASH-SLUDGE-1	7/30/2004	ND(1.8)	9.2	11	20.2

Notes:
1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and TCLP constituents.
2. Please refer to Table 3-4 for a summary of TCLP constituents.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

TABLE 3-4
TCLP DATA RECEIVED DURING AUGUST 2004

BUILDING 12 CARWASH SLUDGE SAMPLING
EAST STREET AREA 2 - NORTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	TCLP Regulatory Limits	A2188-CARWASH-SLUDGE-1 7/30/2004
Volatile Organics		
1,1-Dichloroethene	0.7	ND(0.10)
1,2-Dichloroethane	0.5	ND(0.10)
2-Butanone	200	ND(0.20)
Benzene	0.5	ND(0.10)
Carbon Tetrachloride	0.5	ND(0.10)
Chlorobenzene	100	ND(0.10)
Chloroform	6	ND(0.10)
Tetrachloroethene	0.7	ND(0.10)
Trichloroethene	0.5	ND(0.10)
Vinyl Chloride	0.2	ND(0.10)
Semivolatile Organics		
1,4-Dichlorobenzene	7.5	ND(0.050)
2,4,5-Trichlorophenol	400	ND(0.050)
2,4,6-Trichlorophenol	2	ND(0.050)
2,4-Dinitrotoluene	0.13	ND(0.050)
Cresol	200	ND(0.050)
Hexachlorobenzene	0.13	ND(0.050)
Hexachlorobutadiene	0.5	ND(0.050)
Hexachloroethane	3	ND(0.050)
Nitrobenzene	2	ND(0.050)
Pentachlorophenol	100	ND(0.050)
Pyridine	5	ND(0.050)
Inorganics		
Arsenic	5	ND(0.100)
Barium	100	0.230
Cadmium	1	0.0110 B
Chromium	5	0.00150 B
Lead	5	0.0250 B
Mercury	0.2	ND(0.00200)
Selenium	1	ND(0.200)
Silver	5	0.00130 B

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs and TCLP constituents.
2. Please refer to Table 3-3 for a summary of PCBs.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 3-5
TCLP DATA RECEIVED DURING AUGUST 2004

BUILDING 12 PAINT CHIP DRUM SAMPLING
EAST STREET AREA 2 - NORTH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	TCLP Regulatory Limits	12-PAINTCHIPS-C1 8/10/2004
Inorganics		
Arsenic	5	ND(0.100)
Barium	100	0.280
Cadmium	1	0.0870
Chromium	5	1.50
Lead	5	0.740
Mercury	0.2	ND(0.00200)
Selenium	1	0.00550 B
Silver	5	ND(0.0200)

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of TCLP metals.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

Data Qualifiers:

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

ITEM 4
PLANT AREA
EAST STREET AREA 1-NORTH
(GECD130)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

- Continued discussions regarding ERE and subordination agreements for GE-owned properties at this area.

- Continued survey activities associated with finalizing ERE for GE-owned properties.

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue discussions with holders of encumbrances on GE properties regarding subordination agreements.

- Submit executed ERE and subordination agreements for GE properties.

- Send notices to holders of encumbrances on Parcel K11-1-15 that a Conditional Solution was implemented at the portion of that property within East Street Area 1-North.

- Conduct pre-certification inspection of this RAA with EPA and MDEP.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

ITEM 5
PLANT AREA
HILL 78 & BUILDING 71 CONSOLIDATION AREAS
(GECD210/220)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

- Transferred soil and sediment from 1½ Mile Reach of the Housatonic River to the On-Plant Consolidation Areas (OPCAs).

- Conducted ambient air monitoring for particulate matter at the OPCAs.

- Continued transfer of leachate from Building 71 OPCA to Building 64G for treatment. The total amount transferred in August 2004 was 214,000 gallons (see Table 5-3).

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue transfer of building demolition debris and excavated material from 1½ Mile Reach removal activities to the OPCAs.

- Submit (for informational purposes only) final engineering cover design for approximately 1.2 acres at the Building 71 OPCA cell.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 5-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

HILL 78/BUILDING 71 ON PLANT CONSOLIDATION AREAS
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
Ambient Air Particulate Matter Sampling	North of OPCAs	8/11/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	8/11/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	8/11/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	8/11/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	West of OPCAs	8/11/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Background Location	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	North of OPCAs	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	West of OPCAs	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04
Ambient Air Particulate Matter Sampling	Background Location	8/12/04	Air	Berkshire Environmental	Particulate Matter	8/17/04

TABLE 5-2
AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING AUGUST 2004

PARTICULATE AMBIENT AIR CONCENTRATIONS
HILL 78/BUILDING 71 ON PLANT CONSOLIDATION AREAS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Date	Sampler Location	Average Site Concentration (mg/m^3)	Background Site Concentration (mg/m^3)	Average Period (Hours:Min)	Predominant Wind Direction
08/09/04[1]	North of OPCAs	NA	NA	NA	NA
	Pittsfield Generating Co.				
	Southeast of OPCAs				
	Southwest of OPCAs				
	West of OPCAs				
08/10/04[1]	North of OPCAs	NA	NA	NA	NA
	Pittsfield Generating Co.				
	Southeast of OPCAs				
	Southwest of OPCAs				
	West of OPCAs				
08/11/04	North of OPCAs	0.072	0.060*	6:45[2]	SSW, SW
	Pittsfield Generating Co.	0.070*		6:30[2]	
	Southeast of OPCAs	0.086		6:45[2]	
	Southwest of OPCAs	0.071*		6:45[2]	
	West of OPCAs	0.098		6:45[2]	
08/12/04	North of OPCAs	0.056	0.048*	4:00[3]	Calm
	Pittsfield Generating Co.	0.051*		4:00[3]	
	Southeast of OPCAs	0.042		4:00[3]	
	Southwest of OPCAs	0.037*		4:00[3]	
	West of OPCAs	0.082		4:00[3]	
08/13/04[1]	North of OPCAs	NA	NA	NA	NA
	Pittsfield Generating Co.				
	Southeast of OPCAs				
	Southwest of OPCAs				
	West of OPCAs				
Notification Level		0.120			

NA - Not Available

* Measured with DR-2000. All others measured with pDR-1000.

Background monitoring location inside GE Gate 31 on the corner of Woodlawn Avenue and Tyler Street.

[1] Sampling was not performed due to lack of site activity.

[2] Sampling period was shortened due to late notification of monitors needed.

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

TABLE 5-3
BUILDING 71 CONSOLIDATION AREA LEACHATE TRANSFER SUMMARY
PLANT AREA - HILL 78 & BUILDING 71 CONSOLIDATION AREAS

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Month / Year	Total Volume of Leachate Transferred (Gallons)
August 2003	122,500
September 2003	94,000
October 2003	84,000
November 2003	86,500
December 2003	102,500
January 2004	35,000
February 2004	30,000
March 2004	98,000
April 2004	107,000
May 2004	164,500
June 2004	147,500
July 2004	171,000
August 2004	214,000

Leachate is transferred from the Building 71 On-Plant Consolidation Area to Building 64G for treatment.

ITEM 6
PLANT AREA
HILL 78 AREA - REMAINDER
(GECD160)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

Submitted Addendum to Pre-Design Investigation Work Plan (August 19, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Following EPA approval of Addendum to Pre-Design Investigation Work Plan, initiate pre-design investigation.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

ITEM 7
PLANT AREA
UNKAMET BROOK AREA
(GECD170)
AUGUST 2004

a. Activities Undertaken/Completed

- Continued pre-design investigation soil sampling.*

- Notified MDEP of Potential Imminent Hazards (PIHs) (as defined in MCP) within Parcel L11-4-11 at soil sample locations RAA10-E-LL13, RAA10-E-MM14, and RAA10-E-NN14 (August 23, 2004).

- Conducted other miscellaneous sampling as identified in Table 7-1.

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue pre-design investigation soil sampling.*

- Following EPA approval of additional sampling proposed in the Interim Pre-Design Investigation Report (submitted on February 18, 2004), conduct such additional sampling.*

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 7-1

DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

UNKAMET BROOK AREA

GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
Building 12X Decon Water Drum Sampling	12X-B0671-WATER-1	8/10/04	NA	Water	SGS	PCB	8/13/04
Building 12X Waste Solvent Drum Sampling	12X-E0303-Solvent-1	8/10/04	NA	Liquid	SGS	PCB	8/13/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-88 (RAA10-E-OO27)	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-90 (RAA10-E-WW28)	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-91 (RAA10-E-AAA30)	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-92 (RAA10-E-X15)	7/27/04	6-15	Soil	SGS	Pest, Herb	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-93 (RAA10-E-R16)	7/27/04	6-15	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-94 (RAA10-E-F22)	7/28/04	3-6	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-95 (RAA10-E-NN14)	8/3/04	3-6	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-96 (RAA10-E-QQ15)	8/5/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-97 (RAA10-E-TT18)	8/9/04	1-3	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-AAA27	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-AAA28	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-AAA29	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-AAA30	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	3-6	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	6-15	Soil	SGS	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	8-10	Soil	SGS	VOC	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	1-3	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	3-6	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	6-15	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	0-1	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	1-3	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	3-6	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	6-15	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	1-3	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	3-6	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	6-15	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-K27	7/28/04	0-1	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL11	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL13	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM12	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM13	8/5/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM14	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM18	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN13	8/3/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN14	8/3/04	1-3	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN14	8/3/04	3-6	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN14	8/3/04	6-15	Soil	SGS	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN14	8/3/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, Pest, Herb	8/20/04

TABLE 7-1

DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

UNKAMET BROOK AREA

GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
Pre-Design Soil Investigation Sampling	RAA10-E-NN14	8/3/04	6-8	Soil	SGS	VOC	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN21	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN23	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN25	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN27	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO11	8/3/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO12	8/3/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO13	8/3/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO14	8/3/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO22	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO23	7/13/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO24	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO25	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO26	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-OO27	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP11	8/6/04	0-1	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP12	8/2/04	0-1	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP12	8/2/04	3-6	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP12	8/2/04	6-15	Soil	SGS	PCB, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP12	8/2/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP12	8/2/04	6-8	Soil	SGS	VOC	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP13	8/3/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP14	8/2/04	6-15	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP14	8/2/04	3-6	Soil	SGS	PCB, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP14	8/2/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP14	8/2/04	4-6	Soil	SGS	VOC	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP14	8/2/04	0-1	Soil	SGS	VOC, Inorganics, PCDD/PCDF, Pest, Herb	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP23	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP25	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-QQ12	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-QQ13	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-QQ15	8/5/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-QQ24	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	6-15	Soil	SGS	PCB	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	3-6	Soil	SGS	PCB, SVOC, Inorganics, PCDD/PCDF	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	4-6	Soil	SGS	VOC	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR13	8/5/04	0-1	Soil	SGS	PCB	8/20/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR14	8/6/04	3-6	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR14	8/6/04	6-15	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR14	8/6/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR14	8/6/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR18	8/6/04	0-1	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR18	8/6/04	1-3	Soil	SGS	PCB	8/25/04

TABLE 7-1

DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

UNKAMET BROOK AREA

GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
Pre-Design Soil Investigation Sampling	RAA10-E-RR18	8/6/04	3-6	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR18	8/6/04	6-15	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR20	8/6/04	0-1	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR20	8/6/04	1-3	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR20	8/6/04	3-6	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR20	8/6/04	6-15	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR27	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-SS24	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-SS25	7/13/04	0-1	Soil	SGS	PCB	8/5/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	1-3	Soil	SGS	PCB	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	6-15	Soil	SGS	PCB, SVOC, Inorganics	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	3-6	Soil	SGS	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	12-14	Soil	SGS	VOC	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT16	8/6/04	4-6	Soil	SGS	VOC	8/25/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT18	8/9/04	0-1	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT18	8/9/04	1-3	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT18	8/9/04	3-6	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT18	8/9/04	6-15	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT20	8/9/04	6-15	Soil	SGS	PCB	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT20	8/9/04	3-6	Soil	SGS	PCB, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT20	8/9/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT20	8/9/04	1-3	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT20	8/9/04	4-6	Soil	SGS	VOC	8/18/04
Pre-Design Soil Investigation Sampling	RAA10-E-WW25	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-WW26	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-WW27	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-WW28	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	6-15	Soil	SGS	SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	6-8	Soil	SGS	VOC	8/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-XX23	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-XX25	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-XX27	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-YY24	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-YY25	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-YY26	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-YY27	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-YY28	7/15/04	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ25	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ27	7/15/04	0-1	Soil	SGS	PCB	8/2/04
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ29	7/15/04	0-1	Soil	SGS	PCB	8/2/04

Note:

1. Field duplicate sample locations are presented in parenthesis.

TABLE 7-2
PCB DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth(Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA10-E-AAA27	0-1	7/15/2004	ND(19)	140	ND(19)	140
RAA10-E-AAA28	0-1	7/15/2004	ND(0.050)	1.2	0.66	1.86
RAA10-E-AAA29	0-1	7/15/2004	ND(0.042)	0.097	0.050	0.147
RAA10-E-AAA30	0-1	7/15/2004	ND(0.038) [ND(0.038)]	0.082 [0.065]	0.059 [0.044]	0.141 [0.109]
RAA10-E-DD16	0-1	7/27/2004	ND(0.043)	ND(0.043)	0.039 J	0.039 J
	1-3	7/27/2004	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
	3-6	7/27/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
	6-15	7/27/2004	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
RAA10-E-DD18	0-1	7/27/2004	ND(0.046)	ND(0.046)	0.14	0.14
	1-3	7/27/2004	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
	3-6	7/27/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
	6-15	7/27/2004	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
RAA10-E-F22	0-1	7/28/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	1-3	7/28/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	3-6	7/28/2004	ND(0.042) [ND(0.040)]	ND(0.042) [ND(0.040)]	ND(0.042) [ND(0.040)]	ND(0.042) [ND(0.040)]
	6-15	7/28/2004	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)
RAA10-E-H20	0-1	7/28/2004	ND(0.036)	ND(0.036)	0.020 J	0.020 J
	1-3	7/28/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	3-6	7/28/2004	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	6-15	7/28/2004	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
RAA10-E-K27	0-1	7/28/2004	ND(0.037)	0.090	0.20	0.29
RAA10-E-LL11	0-1	8/5/2004	ND(0.038)	1.1	0.87	1.97
RAA10-E-LL13	0-1	8/5/2004	ND(4.0)	64	ND(4.0)	64
RAA10-E-MM12	0-1	8/5/2004	ND(0.040)	1.2	0.44	1.64
RAA10-E-MM13	0-1	8/5/2004	ND(0.19)	2.9	1.2	4.1
RAA10-E-MM14	0-1	8/5/2004	ND(99)	3300	ND(99)	3300
RAA10-E-MM18	0-1	7/13/2004	ND(0.81)	6.8	12	18.8
RAA10-E-NN13	0-1	8/3/2004	ND(0.041)	0.37	0.097	0.467
RAA10-E-NN14	0-1	8/3/2004	ND(20)	170	ND(20)	170
	1-3	8/3/2004	ND(0.037)	0.33	0.083	0.413
	3-6	8/3/2004	ND(0.038) [ND(0.039)]	0.034 J [0.033 J]	ND(0.038) [0.015 J]	0.034 J [0.048 J]
	6-15	8/3/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA10-E-NN21	0-1	7/13/2004	ND(0.43)	5.1	8.3	13.4
RAA10-E-NN23	0-1	7/13/2004	ND(0.075)	0.060 J	0.095	0.155
RAA10-E-NN25	0-1	7/13/2004	ND(0.055)	ND(0.055)	ND(0.055)	ND(0.055)
RAA10-E-NN27	0-1	7/13/2004	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
RAA10-E-OO11	0-1	8/3/2004	ND(0.041)	ND(0.041)	0.060	0.060
RAA10-E-OO12	0-1	8/3/2004	ND(0.041)	ND(0.041)	0.035 J	0.035 J
RAA10-E-OO13	0-1	8/3/2004	ND(0.040)	0.077	0.068	0.145
RAA10-E-OO14	0-1	8/3/2004	ND(0.040)	0.63	0.24	0.87
RAA10-E-OO22	0-1	7/13/2004	ND(0.076)	0.35	1.4	1.75
RAA10-E-OO23	0-1	7/13/2004	ND(0.081)	0.11	0.15	0.26
RAA10-E-OO24	0-1	7/13/2004	ND(0.064)	ND(0.064)	ND(0.064)	ND(0.064)
RAA10-E-OO25	0-1	7/13/2004	ND(0.058)	ND(0.058)	ND(0.058)	ND(0.058)
RAA10-E-OO26	0-1	7/13/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
RAA10-E-OO27	0-1	7/13/2004	ND(0.052) [ND(0.056)]	0.11 [0.034 J]	0.19 [0.072]	0.30 [0.106]
RAA10-E-PP11	0-1	8/6/2004	ND(0.040)	0.17	0.13	0.30
RAA10-E-PP12	0-1	8/2/2004	ND(0.040)	0.14	0.22	0.36
	1-3	8/2/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	3-6	8/2/2004	ND(0.041)	0.046	ND(0.041)	0.046
	6-15	8/2/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
RAA10-E-PP13	0-1	8/3/2004	ND(0.038)	0.045	0.022 J	0.067
RAA10-E-PP14	1-3	8/2/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	3-6	8/2/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	6-15	8/2/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA10-E-PP23	0-1	7/13/2004	ND(0.091)	1.9	3.2	5.1
RAA10-E-PP25	0-1	7/13/2004	ND(0.051)	ND(0.051)	ND(0.051)	ND(0.051)
RAA10-E-QQ12	0-1	8/5/2004	ND(0.040)	0.060	0.086	0.146
RAA10-E-QQ13	0-1	8/5/2004	ND(0.038)	0.18	0.072	0.252

TABLE 7-2
PCB DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth(Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA10-E-QQ15	0-1	8/5/2004	ND(0.037) [ND(0.037)]	0.071 [0.092]	0.068 [0.067]	0.139 [0.159]
RAA10-E-QQ24	0-1	7/13/2004	ND(0.069)	0.46	0.50	0.96
RAA10-E-R16	1-3	7/27/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	7/27/2004	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
	6-15	7/27/2004	ND(0.051) [ND(0.060)]	ND(0.051) [ND(0.060)]	ND(0.051) [ND(0.060)]	ND(0.051) [ND(0.060)]
RAA10-E-RR13	0-1	8/5/2004	ND(0.041)	0.25	0.17	0.42
RAA10-E-RR14	0-1	8/6/2004	ND(0.036)	0.19	0.16	0.35
	1-3	8/6/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	3-6	8/6/2004	ND(0.034)	ND(0.034)	ND(0.034)	ND(0.034)
	6-15	8/6/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA10-E-RR18	0-1	8/6/2004	ND(0.040)	0.10	0.14	0.24
	1-3	8/6/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
	3-6	8/6/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
	6-15	8/6/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
RAA10-E-RR20	0-1	8/6/2004	ND(0.21)	4.0	5.6	9.6
	1-3	8/6/2004	ND(0.040)	0.65	1.1	1.75
	3-6	8/6/2004	ND(0.042)	1.2	1.6	2.8
	6-15	8/6/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
RAA10-E-RR27	0-1	7/13/2004	ND(0.045)	0.016 J	0.021 J	0.037 J
RAA10-E-SS24	0-1	7/13/2004	ND(0.051)	ND(0.051)	0.018 J	0.018 J
RAA10-E-SS25	0-1	7/13/2004	ND(0.048)	0.020 J	0.033 J	0.053 J
RAA10-E-TT16	0-1	8/6/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
	1-3	8/6/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	3-6	8/6/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	6-15	8/6/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
RAA10-E-TT18	0-1	8/9/2004	ND(0.038)	0.77	0.51	1.28
	1-3	8/9/2004	ND(0.036) [ND(0.037)]	ND(0.036) [ND(0.037)]	ND(0.036) [ND(0.037)]	ND(0.036) [ND(0.037)]
	3-6	8/9/2004	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	6-15	8/9/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
RAA10-E-TT20	0-1	8/9/2004	ND(1.8)	7.8	2.5	10.3
	1-3	8/9/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	3-6	8/9/2004	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	6-15	8/9/2004	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
RAA10-E-WW25	0-1	7/15/2004	ND(1.4)	14	19	33
RAA10-E-WW26	0-1	7/15/2004	ND(0.048)	0.22	0.51	0.73
RAA10-E-WW27	0-1	7/15/2004	ND(0.040)	0.55	0.20	0.75
RAA10-E-WW28	0-1	7/15/2004	ND(0.040) [ND(0.040)]	0.26 [0.30]	0.10 [0.13]	0.36 [0.43]
RAA10-E-X15	0-1	7/27/2004	ND(0.051)	1.2	0.82	2.02
RAA10-E-XX23	0-1	7/15/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
RAA10-E-XX25	0-1	7/15/2004	ND(0.049)	0.13	0.23	0.36
RAA10-E-XX27	0-1	7/15/2004	ND(4.4)	29	ND(4.4)	29
RAA10-E-YY24	0-1	7/15/2004	ND(0.041)	0.041 J	0.060	0.101
RAA10-E-YY25	0-1	7/15/2004	ND(0.051)	0.087	0.12	0.207
RAA10-E-YY26	0-1	7/15/2004	ND(0.048)	0.069	0.080	0.149
RAA10-E-YY27	0-1	7/15/2004	ND(3.8)	26	ND(3.8)	26
RAA10-E-YY28	0-1	7/15/2004	ND(0.044)	0.57	0.48	1.05
RAA10-E-ZZ25	0-1	7/15/2004	ND(0.049)	0.10	0.16	0.26
RAA10-E-ZZ27	0-1	7/15/2004	ND(42)	440	ND(42)	440
RAA10-E-ZZ29	0-1	7/15/2004	ND(0.044)	0.15	0.11	0.26

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

Data Qualifiers:
J - Indicates an estimated value less than the practical quantitation limit (PQL).

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-AAA27 0-1 07/15/04	RAA10-E-AAA30 0-1 07/15/04	RAA10-E-DD16 0-1 07/27/04
Volatile Organics				
Acetone		ND(0.023)	ND(0.023) [ND(0.023)]	ND(0.026)
Trichloroethene		ND(0.0058)	ND(0.0056) [ND(0.0056)]	ND(0.0065)
Semivolatile Organics				
1,2,4-Trichlorobenzene		0.26 J	ND(0.38) [ND(0.38)]	ND(0.43)
2-Methylnaphthalene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Acenaphthene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Acenaphthylene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Aniline		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Anthracene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Benzo(a)anthracene		ND(0.38)	0.13 J [ND(0.38)]	ND(0.43)
Benzo(a)pyrene		ND(0.38)	0.082 J [ND(0.38)]	ND(0.43)
Benzo(b)fluoranthene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Benzo(g,h,i)perylene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Benzo(k)fluoranthene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
bis(2-Ethylhexyl)phthalate		ND(0.38)	ND(0.37) [ND(0.37)]	ND(0.43)
Chrysene		ND(0.38)	0.20 J [0.091 J]	ND(0.43)
Dibenzo(a,h)anthracene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Dibenzofuran		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Fluoranthene		0.14 J	0.30 J [0.12 J]	ND(0.43)
Fluorene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Indeno(1,2,3-cd)pyrene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Naphthalene		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Pentachloroethane		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Phenanthrene		ND(0.38)	0.093 J [ND(0.38)]	ND(0.43)
Phenol		ND(0.38)	ND(0.38) [ND(0.38)]	ND(0.43)
Pyrene		0.12 J	0.26 J [0.11 J]	ND(0.43)
Organochlorine Pesticides				
Dieldrin		NA	ND(0.016) [ND(0.016)]	0.29
Organophosphate Pesticides				
None Detected		NA	--	--
Herbicides				
None Detected		NA	--	--
Furans				
2,3,7,8-TCDF		NA	0.00000051 J [0.0000028 Y]	0.0000040 Y
TCDFs (total)		NA	0.0000026 [0.000026 Q]	0.000037 I
1,2,3,7,8-PeCDF		NA	ND(0.00000032) [0.00000098 J]	ND(0.0000014) X
2,3,4,7,8-PeCDF		NA	ND(0.00000032) [0.0000028]	0.0000035
PeCDFs (total)		NA	0.0000028 J [0.000031 Q]	0.000052
1,2,3,4,7,8-HxCDF		NA	ND(0.00000034) [0.0000022 J]	0.0000051
1,2,3,6,7,8-HxCDF		NA	ND(0.00000032) [0.0000014 J]	0.0000018 J
1,2,3,7,8,9-HxCDF		NA	ND(0.00000039) [0.00000063 J]	0.00000065 J
2,3,4,6,7,8-HxCDF		NA	ND(0.00000032) [0.0000020 J]	0.0000032
HxCDFs (total)		NA	0.0000069 [0.000078]	0.000064
1,2,3,4,6,7,8-HpCDF		NA	0.0000091 [0.000096]	0.000058
1,2,3,4,7,8,9-HpCDF		NA	ND(0.00000033) [0.00000077 J]	0.00000087 J
HpCDFs (total)		NA	0.000017 [0.00018]	0.000098
OCDF		NA	0.0000041 J [0.000048]	0.000026

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-AAA27 0-1 07/15/04	RAA10-E-AAA30 0-1 07/15/04	RAA10-E-DD16 0-1 07/27/04
Dioxins				
2,3,7,8-TCDD		NA	ND(0.00000013) [ND(0.00000018) X]	ND(0.00000013) X
TCDDs (total)		NA	ND(0.00000013) [0.0000017]	0.0000011
1,2,3,7,8-PeCDD		NA	ND(0.00000032) [0.00000036 J]	ND(0.00000026)
PeCDDs (total)		NA	ND(0.00000032) [0.0000039 Q]	0.0000029
1,2,3,4,7,8-HxCDD		NA	ND(0.00000032) [0.00000031 J]	0.00000035 J
1,2,3,6,7,8-HxCDD		NA	ND(0.00000032) [0.0000018 J]	0.00000097 J
1,2,3,7,8,9-HxCDD		NA	ND(0.00000032) [0.00000082 J]	0.00000053 J
HxCDDs (total)		NA	0.00000070 J [0.000014]	0.0000070
1,2,3,4,6,7,8-HpCDD		NA	0.0000028 J [0.000028]	0.000012
HpCDDs (total)		NA	0.0000051 [0.000052]	0.000022
OCDD		NA	0.000023 [0.00026]	0.00012
Total TEQs (WHO TEFs)		NA	0.00000060 [0.0000044]	0.0000044
Inorganics				
Antimony		2.70 B	1.40 B [ND(6.00)]	ND(6.00)
Arsenic		4.50	6.10 [4.90]	4.10
Barium		38.0	32.0 [32.0]	72.0
Beryllium		0.230 B	0.280 B [0.300 B]	0.820
Cadmium		0.550	0.490 B [0.410 B]	0.770
Chromium		7.80	11.0 [9.90]	18.0
Cobalt		5.90	6.60 [6.90]	12.0
Copper		58.0	19.0 [19.0]	17.0
Cyanide		0.200	0.170 [0.160]	0.110 B
Lead		53.0	24.0 [19.0]	14.0
Mercury		0.330	0.0950 B [0.0750 B]	0.0810 B
Nickel		11.0	10.0 [10.0]	20.0
Selenium		ND(1.00)	ND(1.00) [ND(1.00)]	0.830 B
Silver		0.210 B	ND(1.00) [ND(1.00)]	ND(1.00)
Sulfide		5.50 B	7.20 [14.0]	6.20 B
Thallium		ND(1.20)	ND(1.10) [ND(1.10)]	ND(1.30)
Tin		7.10 B	5.20 B [4.50 B]	5.20 B
Vanadium		6.70	11.0 [10.0]	21.0
Zinc		72.0	42.0 [42.0]	86.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-DD16 1-3 07/27/04	RAA10-E-DD16 6-15 07/27/04	RAA10-E-DD16 8-10 07/27/04	RAA10-E-DD18 0-1 07/27/04
Volatile Organics					
Acetone		ND(0.024)	NA	ND(0.025)	ND(0.027)
Trichloroethene		ND(0.0060)	NA	ND(0.0062)	ND(0.0068)
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.40)	ND(0.42)	NA	ND(0.46)
2-Methylnaphthalene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Acenaphthene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Acenaphthylene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Aniline		ND(0.40)	ND(0.42)	NA	ND(0.46)
Anthracene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Benzo(a)anthracene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Benzo(a)pyrene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Benzo(b)fluoranthene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Benzo(g,h,i)perylene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Benzo(k)fluoranthene		ND(0.40)	ND(0.42)	NA	ND(0.46)
bis(2-Ethylhexyl)phthalate		ND(0.39)	ND(0.42)	NA	ND(0.45)
Chrysene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Dibenzo(a,h)anthracene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Dibenzofuran		ND(0.40)	ND(0.42)	NA	ND(0.46)
Fluoranthene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Fluorene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Indeno(1,2,3-cd)pyrene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Naphthalene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Pentachloroethane		ND(0.40)	ND(0.42)	NA	ND(0.46)
Phenanthrene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Phenol		ND(0.40)	ND(0.42)	NA	ND(0.46)
Pyrene		ND(0.40)	ND(0.42)	NA	ND(0.46)
Organochlorine Pesticides					
Dieldrin		ND(0.016)	ND(0.016)	NA	NA
Organophosphate Pesticides					
None Detected		--	--	NA	NA
Herbicides					
None Detected		--	--	NA	NA
Furans					
2,3,7,8-TCDF		0.00000017 J	0.000000096 J	NA	NA
TCDFs (total)		0.00000032 J	0.000000096 J	NA	NA
1,2,3,7,8-PeCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
2,3,4,7,8-PeCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
PeCDFs (total)		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,4,7,8-HxCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,6,7,8-HxCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,7,8,9-HxCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
2,3,4,6,7,8-HxCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
HxCDFs (total)		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,4,6,7,8-HpCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,4,7,8,9-HpCDF		ND(0.00000027)	ND(0.00000018)	NA	NA
HpCDFs (total)		ND(0.00000027)	ND(0.00000018)	NA	NA
OCDF		ND(0.00000054)	ND(0.00000037)	NA	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-DD16 1-3 07/27/04	RAA10-E-DD16 6-15 07/27/04	RAA10-E-DD16 8-10 07/27/04	RAA10-E-DD18 0-1 07/27/04
Dioxins					
2,3,7,8-TCDD		ND(0.00000011)	ND(0.000000076)	NA	NA
TCDDs (total)		ND(0.00000034)	ND(0.00000021)	NA	NA
1,2,3,7,8-PeCDD		ND(0.00000027)	ND(0.00000018)	NA	NA
PeCDDs (total)		ND(0.00000038)	ND(0.00000018)	NA	NA
1,2,3,4,7,8-HxCDD		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,6,7,8-HxCDD		ND(0.00000027)	ND(0.00000018)	NA	NA
1,2,3,7,8,9-HxCDD		ND(0.00000027)	ND(0.00000018)	NA	NA
HxCDDs (total)		ND(0.00000047)	ND(0.00000028)	NA	NA
1,2,3,4,6,7,8-HpCDD		ND(0.00000027)	ND(0.00000018)	NA	NA
HpCDDs (total)		ND(0.00000027)	ND(0.00000018)	NA	NA
OCDD		0.0000021 J	0.00000041 J	NA	NA
Total TEQs (WHO TEFs)		0.00000038	0.00000025	NA	NA
Inorganics					
Antimony		ND(6.00)	ND(6.00)	NA	ND(6.00)
Arsenic		2.90	0.720 B	NA	4.10
Barium		68.0	8.80 B	NA	91.0
Beryllium		0.820	0.170 B	NA	0.820
Cadmium		0.430 B	0.280 B	NA	0.720
Chromium		14.0	4.70	NA	19.0
Cobalt		9.40	3.90 B	NA	12.0
Copper		15.0	7.00	NA	16.0
Cyanide		0.0280 B	ND(0.250)	NA	0.150
Lead		7.80	2.40	NA	21.0
Mercury		0.0260 B	ND(0.130)	NA	0.120 B
Nickel		18.0	6.50	NA	19.0
Selenium		ND(1.00)	ND(1.00)	NA	0.860 B
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00)
Sulfide		5.70 B	16.0	NA	6.60 B
Thallium		ND(1.20)	ND(1.30)	NA	ND(1.40)
Tin		3.60 B	3.40 B	NA	5.50 B
Vanadium		16.0	4.00 B	NA	22.0
Zinc		68.0	18.0	NA	86.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-H20 0-1 07/28/04	RAA10-E-MM13 0-1 08/05/04	RAA10-E-NN14 0-1 08/03/04	RAA10-E-NN14 6-8 08/03/04
Volatile Organics				
Acetone	ND(0.021)	ND(0.023)	ND(0.024)	ND(0.022)
Trichloroethene	ND(0.0054)	0.0065	ND(0.0060)	0.0075
Semivolatile Organics				
1,2,4-Trichlorobenzene	ND(0.36)	ND(0.38)	0.13 J	NA
2-Methylnaphthalene	ND(0.36)	ND(0.38)	ND(0.40)	NA
Acenaphthene	ND(0.36)	ND(0.38)	ND(0.40)	NA
Acenaphthylene	ND(0.36)	0.49	0.13 J	NA
Aniline	ND(0.36)	0.16 J	ND(0.40)	NA
Anthracene	ND(0.36)	0.31 J	0.15 J	NA
Benzo(a)anthracene	ND(0.36)	0.68	0.37 J	NA
Benzo(a)pyrene	ND(0.36)	0.55	0.20 J	NA
Benzo(b)fluoranthene	ND(0.36)	0.42	0.25 J	NA
Benzo(g,h,i)perylene	ND(0.36)	0.46	0.14 J	NA
Benzo(k)fluoranthene	ND(0.36)	0.61	0.22 J	NA
bis(2-Ethylhexyl)phthalate	ND(0.35)	ND(0.38)	ND(0.40)	NA
Chrysene	ND(0.36)	1.0	0.44	NA
Dibenzo(a,h)anthracene	ND(0.36)	0.095 J	ND(0.40)	NA
Dibenzofuran	ND(0.36)	0.084 J	ND(0.40)	NA
Fluoranthene	0.099 J	1.5	0.80	NA
Fluorene	ND(0.36)	ND(0.38)	ND(0.40)	NA
Indeno(1,2,3-cd)pyrene	ND(0.36)	0.35 J	0.13 J	NA
Naphthalene	ND(0.36)	0.16 J	0.10 J	NA
Pentachloroethane	ND(0.36)	ND(0.38)	ND(0.40)	NA
Phenanthrene	ND(0.36)	0.80	0.37 J	NA
Phenol	ND(0.36)	ND(0.38)	ND(0.40)	NA
Pyrene	0.081 J	1.5	0.65	NA
Organochlorine Pesticides				
Dieldrin	NA	ND(0.016)	ND(0.60)	NA
Organophosphate Pesticides				
None Detected	NA	--	--	NA
Herbicides				
None Detected	NA	--	--	NA
Furans				
2,3,7,8-TCDF	0.00000032 J	0.000053 Y	NA	NA
TCDFs (total)	0.0000022	0.00057 Q	NA	NA
1,2,3,7,8-PeCDF	ND(0.00000022)	0.000049	NA	NA
2,3,4,7,8-PeCDF	0.00000045 J	0.000090	NA	NA
PeCDFs (total)	0.0000046	0.00075 Q	NA	NA
1,2,3,4,7,8-HxCDF	ND(0.00000029)	0.00014	NA	NA
1,2,3,6,7,8-HxCDF	ND(0.00000026)	0.000089	NA	NA
1,2,3,7,8,9-HxCDF	ND(0.00000034)	0.000016	NA	NA
2,3,4,6,7,8-HxCDF	ND(0.00000028)	0.000045	NA	NA
HxCDFs (total)	0.0000028	0.00075	NA	NA
1,2,3,4,6,7,8-HpCDF	0.00000049 J	0.00015	NA	NA
1,2,3,4,7,8,9-HpCDF	ND(0.00000023)	0.000042	NA	NA
HpCDFs (total)	0.00000049 J	0.00027	NA	NA
OCDF	0.00000060 J	0.00013	NA	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-H20 0-1 07/28/04	RAA10-E-MM13 0-1 08/05/04	RAA10-E-NN14 0-1 08/03/04	RAA10-E-NN14 6-8 08/03/04
Dioxins					
2,3,7,8-TCDD		ND(0.00000012)	ND(0.00000078) X	NA	NA
TCDDs (total)		ND(0.00000026)	0.000013 Q	NA	NA
1,2,3,7,8-PeCDD		ND(0.00000022)	ND(0.0000031)	NA	NA
PeCDDs (total)		ND(0.00000022)	0.000015 Q	NA	NA
1,2,3,4,7,8-HxCDD		ND(0.00000053)	0.0000022 J	NA	NA
1,2,3,6,7,8-HxCDD		ND(0.00000047)	0.0000047 J	NA	NA
1,2,3,7,8,9-HxCDD		ND(0.00000051)	0.0000038 J	NA	NA
HxCDDs (total)		0.00000054 J	0.000059	NA	NA
1,2,3,4,6,7,8-HpCDD		0.00000088 J	0.000052	NA	NA
HpCDDs (total)		0.0000016 J	0.00010	NA	NA
OCDD		0.0000072	0.00044	NA	NA
Total TEQs (WHO TEFs)		0.00000058	0.000087	NA	NA
Inorganics					
Antimony		ND(6.00)	6.20	2.50 B	NA
Arsenic		3.40	13.0	6.60	NA
Barium		12.0 B	73.0	120	NA
Beryllium		0.110 B	0.300 B	0.390 B	NA
Cadmium		0.220 B	0.550	0.500 B	NA
Chromium		6.20	12.0	9.70	NA
Cobalt		4.60 B	6.00	11.0	NA
Copper		9.40	86.0	120	NA
Cyanide		0.0170 B	0.330	0.150	NA
Lead		6.10	190	95.0	NA
Mercury		ND(0.110)	0.380	0.190	NA
Nickel		8.70	14.0	13.0	NA
Selenium		0.880 B	1.10	0.970 B	NA
Silver		ND(1.00)	0.180 B	1.20	NA
Sulfide		6.90	26.0	ND(6.00)	NA
Thallium		ND(1.10)	2.10	ND(1.20)	NA
Tin		3.20 B	19.0	11.0	NA
Vanadium		4.70 B	12.0	11.0	NA
Zinc		26.0	120	120	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-NN14 6-15 08/03/04	RAA10-E-OO11 0-1 08/03/04	RAA10-E-OO13 0-1 08/03/04	RAA10-E-OO23 0-1 07/13/04
Volatile Organics					
Acetone		NA	ND(0.025)	ND(0.024)	ND(0.049)
Trichloroethene		NA	ND(0.0062)	ND(0.0060)	ND(0.012)
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
2-Methylnaphthalene		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
Acenaphthene		ND(0.39)	0.13 J	ND(0.40)	ND(0.81)
Acenaphthylene		ND(0.39)	0.38 J	ND(0.40)	ND(0.81)
Aniline		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
Anthracene		ND(0.39)	0.52	ND(0.40)	ND(0.81)
Benzo(a)anthracene		ND(0.39)	1.2	0.13 J	ND(0.81)
Benzo(a)pyrene		ND(0.39)	0.72	0.13 J	ND(0.81)
Benzo(b)fluoranthene		ND(0.39)	0.77	ND(0.40)	ND(0.81)
Benzo(g,h,i)perylene		ND(0.39)	0.52	ND(0.40)	ND(0.81)
Benzo(k)fluoranthene		ND(0.39)	0.71	ND(0.40)	ND(0.81)
bis(2-Ethylhexyl)phthalate		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
Chrysene		ND(0.39)	1.4	0.44	ND(0.81)
Dibenzo(a,h)anthracene		ND(0.39)	0.20 J	ND(0.40)	ND(0.81)
Dibenzofuran		ND(0.39)	0.22 J	ND(0.40)	ND(0.81)
Fluoranthene		ND(0.39)	2.7	0.24 J	ND(0.81)
Fluorene		ND(0.39)	0.17 J	ND(0.40)	ND(0.81)
Indeno(1,2,3-cd)pyrene		ND(0.39)	0.42	ND(0.40)	ND(0.81)
Naphthalene		ND(0.39)	0.34 J	0.15 J	ND(0.81)
Pentachloroethane		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
Phenanthrene		ND(0.39)	1.9	0.35 J	ND(0.81)
Phenol		ND(0.39)	ND(0.41)	ND(0.40)	ND(0.81)
Pyrene		ND(0.39)	2.1	0.20 J	ND(0.81)
Organochlorine Pesticides					
Dieldrin		ND(0.016)	ND(0.016)	NA	ND(0.024)
Organophosphate Pesticides					
None Detected		--	--	NA	--
Herbicides					
None Detected		--	--	NA	--
Furans					
2,3,7,8-TCDF		0.00000022 J	0.0000056 Y	NA	0.0000031 Y
TCDFs (total)		0.00000022 J	0.000053 Q	NA	0.000025
1,2,3,7,8-PeCDF		ND(0.00000052)	0.0000020 JQ	NA	0.00000088 J
2,3,4,7,8-PeCDF		ND(0.00000052)	0.0000043 JQ	NA	0.0000028 J
PeCDFs (total)		ND(0.00000052)	0.000044 Q	NA	0.000042
1,2,3,4,7,8-HxCDF		ND(0.00000052)	0.0000038 J	NA	0.0000028 J
1,2,3,6,7,8-HxCDF		ND(0.00000052)	0.0000026 J	NA	0.0000016 J
1,2,3,7,8,9-HxCDF		ND(0.00000052)	0.00000064 J	NA	ND(0.00000061) X
2,3,4,6,7,8-HxCDF		ND(0.00000052)	0.0000033 J	NA	0.0000032 J
HxCDFs (total)		ND(0.00000052)	0.000040 Q	NA	0.000070
1,2,3,4,6,7,8-HpCDF		ND(0.00000052)	0.000012 Q	NA	0.000076
1,2,3,4,7,8,9-HpCDF		ND(0.00000052)	0.0000013 J	NA	0.00000097 J
HpCDFs (total)		ND(0.00000052)	0.000024	NA	0.00014
OCDF		ND(0.0000010)	0.000016	NA	0.000037

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-NN14 6-15 08/03/04	RAA10-E-OO11 0-1 08/03/04	RAA10-E-OO13 0-1 08/03/04	RAA10-E-OO23 0-1 07/13/04
Dioxins					
2,3,7,8-TCDD		ND(0.00000021)	ND(0.00000049) X	NA	ND(0.00000022) X
TCDDs (total)		ND(0.00000064)	0.0000099	NA	ND(0.00000057)
1,2,3,7,8-PeCDD		ND(0.00000052)	0.00000071 JQ	NA	ND(0.00000060) X
PeCDDs (total)		ND(0.00000052)	0.000012 Q	NA	0.0000014 J
1,2,3,4,7,8-HxCDD		ND(0.00000052)	ND(0.00000071) X	NA	ND(0.00000048)
1,2,3,6,7,8-HxCDD		ND(0.00000052)	ND(0.0000014) X	NA	0.0000014 J
1,2,3,7,8,9-HxCDD		ND(0.00000052) X	0.0000013 J	NA	0.00000074 J
HxCDDs (total)		ND(0.0000010)	0.000012	NA	0.0000092
1,2,3,4,6,7,8-HpCDD		ND(0.00000052)	0.000016	NA	0.000022
HpCDDs (total)		ND(0.00000052)	0.000032	NA	0.000039
OCDD		0.0000015 J	0.00011	NA	0.00020
Total TEQs (WHO TEFs)		0.00000072	0.0000053	NA	0.0000042
Inorganics					
Antimony		ND(6.00)	7.00	6.50	ND(6.00)
Arsenic		2.90	29.0	20.0	7.90
Barium		8.70 B	82.0	20.0 B	110
Beryllium		0.280 B	0.540	0.440 B	0.690
Cadmium		0.180 B	0.470 B	0.140 B	1.40
Chromium		5.30	10.0	5.60	22.0
Cobalt		6.90	6.90	4.50 B	13.0
Copper		9.60	100	160	27.0
Cyanide		ND(0.120)	0.360	0.230	0.230 B
Lead		4.50	210	74.0	29.0
Mercury		ND(0.120)	0.600	0.0740 B	0.380
Nickel		12.0	14.0	8.70	22.0
Selenium		0.620 B	2.00	1.60	1.40 B
Silver		0.230 B	0.210 B	ND(1.00)	0.430 B
Sulfide		7.50	45.0	27.0	16.0
Thallium		ND(1.20)	2.40	1.20 B	ND(2.40)
Tin		3.50 B	17.0	12.0	7.30 B
Vanadium		4.80 B	14.0	8.80	20.0
Zinc		33.0	140	18.0	100

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-PP12 1-3 08/02/04	RAA10-E-PP12 6-8 08/02/04	RAA10-E-PP12 6-15 08/02/04	RAA10-E-PP14 0-1 08/02/04
Volatile Organics					
Acetone		ND(0.024)	ND(0.023)	NA	ND(0.024)
Trichloroethene		ND(0.0059)	ND(0.0058)	NA	ND(0.0060)
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.39)	NA	ND(0.36)	NA
2-Methylnaphthalene		ND(0.39)	NA	ND(0.36)	NA
Acenaphthene		ND(0.39)	NA	ND(0.36)	NA
Acenaphthylene		ND(0.39)	NA	ND(0.36)	NA
Aniline		ND(0.39)	NA	ND(0.36)	NA
Anthracene		ND(0.39)	NA	ND(0.36)	NA
Benzo(a)anthracene		0.098 J	NA	ND(0.36)	NA
Benzo(a)pyrene		0.095 J	NA	ND(0.36)	NA
Benzo(b)fluoranthene		ND(0.39)	NA	ND(0.36)	NA
Benzo(g,h,i)perylene		ND(0.39)	NA	ND(0.36)	NA
Benzo(k)fluoranthene		ND(0.39)	NA	ND(0.36)	NA
bis(2-Ethylhexyl)phthalate		ND(0.39)	NA	ND(0.36)	NA
Chrysene		0.24 J	NA	ND(0.36)	NA
Dibenzo(a,h)anthracene		ND(0.39)	NA	ND(0.36)	NA
Dibenzofuran		ND(0.39)	NA	ND(0.36)	NA
Fluoranthene		0.16 J	NA	ND(0.36)	NA
Fluorene		ND(0.39)	NA	ND(0.36)	NA
Indeno(1,2,3-cd)pyrene		ND(0.39)	NA	ND(0.36)	NA
Naphthalene		0.12 J	NA	ND(0.36)	NA
Pentachloroethane		ND(0.39)	NA	ND(0.36)	NA
Phenanthrene		0.28 J	NA	ND(0.36)	NA
Phenol		ND(0.39)	NA	ND(0.36)	NA
Pyrene		0.12 J	NA	ND(0.36)	NA
Organochlorine Pesticides					
Dieldrin		ND(0.016)	NA	NA	ND(0.016)
Organophosphate Pesticides					
None Detected		--	NA	NA	--
Herbicides					
None Detected		--	NA	NA	--
Furans					
2,3,7,8-TCDF		0.0000025 Y	NA	NA	0.0000047 Y
TCDFs (total)		0.000036 Q	NA	NA	0.000050 QI
1,2,3,7,8-PeCDF		0.0000012 J	NA	NA	0.0000017 J
2,3,4,7,8-PeCDF		0.0000024 J	NA	NA	0.0000026 J
PeCDFs (total)		0.000024 Q	NA	NA	0.000029 Q
1,2,3,4,7,8-HxCDF		0.0000015 J	NA	NA	0.0000020 J
1,2,3,6,7,8-HxCDF		0.0000012 J	NA	NA	0.0000014 J
1,2,3,7,8,9-HxCDF		ND(0.00000076)	NA	NA	ND(0.00000080)
2,3,4,6,7,8-HxCDF		0.0000015 J	NA	NA	0.0000018 J
HxCDFs (total)		0.000021	NA	NA	0.000022
1,2,3,4,6,7,8-HpCDF		0.0000063	NA	NA	0.0000049 J
1,2,3,4,7,8,9-HpCDF		ND(0.00000055)	NA	NA	0.00000059 J
HpCDFs (total)		0.000012	NA	NA	0.000011
OCDF		0.0000031 J	NA	NA	0.0000088 J

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-PP12 1-3 08/02/04	RAA10-E-PP12 6-8 08/02/04	RAA10-E-PP12 6-15 08/02/04	RAA10-E-PP14 0-1 08/02/04
Dioxins					
2,3,7,8-TCDD		0.00000041 J	NA	NA	ND(0.00000025) X
TCDDs (total)		0.0000040	NA	NA	0.0000011 J
1,2,3,7,8-PeCDD		0.00000089 J	NA	NA	ND(0.00000056)
PeCDDs (total)		0.0000087 Q	NA	NA	0.0000023 JQ
1,2,3,4,7,8-HxCDD		ND(0.00000079)	NA	NA	ND(0.00000083)
1,2,3,6,7,8-HxCDD		0.00000080 J	NA	NA	ND(0.00000073)
1,2,3,7,8,9-HxCDD		ND(0.00000076)	NA	NA	ND(0.00000080)
HxCDDs (total)		0.0000068	NA	NA	0.0000028 J
1,2,3,4,6,7,8-HpCDD		0.0000054 J	NA	NA	0.0000096
HpCDDs (total)		0.0000099	NA	NA	0.000021
OCDD		0.000034	NA	NA	0.000079
Total TEQs (WHO TEFs)		0.0000035	NA	NA	0.0000031
Inorganics					
Antimony		ND(6.00)	NA	ND(6.00)	ND(6.00)
Arsenic		10.0	NA	3.40	10.0
Barium		23.0	NA	17.0 B	22.0
Beryllium		ND(0.500)	NA	0.150 B	ND(0.500)
Cadmium		0.340 B	NA	0.360 B	0.470 B
Chromium		4.00	NA	5.60	4.10
Cobalt		2.70 B	NA	5.80	2.00 B
Copper		18.0	NA	12.0	11.0
Cyanide		0.110 B	NA	0.0290 B	0.380
Lead		15.0	NA	5.40	10.0
Mercury		0.140	NA	ND(0.110)	0.0440 B
Nickel		5.70	NA	9.80	3.10 B
Selenium		2.00	NA	ND(1.00)	2.20
Silver		ND(1.00)	NA	ND(1.00)	ND(1.00)
Sulfide		26.0	NA	ND(5.40)	7.70
Thallium		ND(1.20)	NA	ND(1.10)	ND(1.20)
Tin		50.0	NA	3.60 B	4.80 B
Vanadium		6.90	NA	5.50	8.80
Zinc		5.90	NA	33.0	10.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-PP14 1-3 08/02/04	RAA10-E-PP14 3-6 08/02/04	RAA10-E-PP14 4-6 08/02/04	RAA10-E-QQ15 0-1 08/05/04
Volatile Organics					
Acetone		ND(0.022)	NA	ND(0.021)	ND(0.022) [ND(0.022)]
Trichloroethene		ND(0.0056)	NA	ND(0.0053)	ND(0.0056) [ND(0.0056)]
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
2-Methylnaphthalene		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Acenaphthene		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Acenaphthylene		ND(0.38)	ND(0.36)	NA	0.38 [0.43]
Aniline		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Anthracene		ND(0.38)	ND(0.36)	NA	0.37 [0.41]
Benzo(a)anthracene		ND(0.38)	ND(0.36)	NA	0.79 [0.91]
Benzo(a)pyrene		ND(0.38)	ND(0.36)	NA	0.46 [0.52]
Benzo(b)fluoranthene		ND(0.38)	ND(0.36)	NA	0.44 [0.52]
Benzo(g,h,i)perylene		ND(0.38)	ND(0.36)	NA	0.27 J [0.30 J]
Benzo(k)fluoranthene		ND(0.38)	ND(0.36)	NA	0.61 [0.73]
bis(2-Ethylhexyl)phthalate		ND(0.37)	ND(0.35)	NA	ND(0.37) [ND(0.37)]
Chrysene		ND(0.38)	ND(0.36)	NA	0.93 [1.0]
Dibenzo(a,h)anthracene		ND(0.38)	ND(0.36)	NA	0.078 J [0.095 J]
Dibenzofuran		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Fluoranthene		ND(0.38)	ND(0.36)	NA	1.9 [2.3]
Fluorene		ND(0.38)	ND(0.36)	NA	ND(0.37) [0.078 J]
Indeno(1,2,3-cd)pyrene		ND(0.38)	ND(0.36)	NA	0.24 J [0.28 J]
Naphthalene		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Pentachloroethane		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Phenanthrene		ND(0.38)	ND(0.36)	NA	0.69 [0.90]
Phenol		ND(0.38)	ND(0.36)	NA	ND(0.37) [ND(0.37)]
Pyrene		ND(0.38)	ND(0.36)	NA	1.5 [1.7]
Organochlorine Pesticides					
Dieldrin		NA	NA	NA	NA
Organophosphate Pesticides					
None Detected		NA	NA	NA	NA
Herbicides					
None Detected		NA	NA	NA	NA
Furans					
2,3,7,8-TCDF		NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA
OCDF		NA	NA	NA	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-PP14 1-3 08/02/04	RAA10-E-PP14 3-6 08/02/04	RAA10-E-PP14 4-6 08/02/04	RAA10-E-QQ15 0-1 08/05/04
Dioxins					
2,3,7,8-TCDD		NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA
OCDD		NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA
Inorganics					
Antimony		ND(6.00)	ND(6.00)	NA	1.10 B [1.10 B]
Arsenic		4.80	5.10	NA	9.00 [8.20]
Barium		24.0	45.0	NA	42.0 [39.0]
Beryllium		0.150 B	0.240 B	NA	0.410 B [0.380 B]
Cadmium		0.580	0.460 B	NA	0.160 B [0.160 B]
Chromium		8.40	6.40	NA	9.00 [9.70]
Cobalt		6.20	9.20	NA	11.0 [12.0]
Copper		14.0	16.0	NA	20.0 [21.0]
Cyanide		0.0770 B	0.0480 B	NA	0.110 B [0.100 B]
Lead		9.60	8.40	NA	41.0 [41.0]
Mercury		ND(0.110)	ND(0.110)	NA	0.190 [0.0470 B]
Nickel		10.0	13.0	NA	16.0 [17.0]
Selenium		1.80	0.910 B	NA	1.00 [0.840 B]
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00) [ND(1.00)]
Sulfide		ND(5.60)	ND(5.40)	NA	7.10 [ND(5.60)]
Thallium		ND(1.10)	ND(1.10)	NA	1.70 [1.90]
Tin		3.80 B	3.70 B	NA	5.20 B [5.40 B]
Vanadium		8.30	5.60	NA	13.0 [13.0]
Zinc		30.0	29.0	NA	67.0 [71.0]

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-R16 1-3 07/27/04	RAA10-E-R16 3-6 07/27/04	RAA10-E-R16 4-6 07/27/04	RAA10-E-RR14 0-1 08/06/04
Volatile Organics					
Acetone		ND(0.026)	NA	0.018 J	ND(0.022)
Trichloroethene		ND(0.0066)	NA	ND(0.0067)	ND(0.0054)
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.44)	ND(0.47)	NA	ND(0.36)
2-Methylnaphthalene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Acenaphthene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Acenaphthylene		ND(0.44)	ND(0.47)	NA	0.095 J
Aniline		ND(0.44)	ND(0.47)	NA	ND(0.36)
Anthracene		ND(0.44)	ND(0.47)	NA	0.079 J
Benzo(a)anthracene		ND(0.44)	ND(0.47)	NA	0.15 J
Benzo(a)pyrene		ND(0.44)	ND(0.47)	NA	0.086 J
Benzo(b)fluoranthene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Benzo(g,h,i)perylene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Benzo(k)fluoranthene		ND(0.44)	ND(0.47)	NA	ND(0.36)
bis(2-Ethylhexyl)phthalate		ND(0.43)	ND(0.47)	NA	ND(0.36)
Chrysene		ND(0.44)	ND(0.47)	NA	0.28 J
Dibenzo(a,h)anthracene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Dibenzofuran		ND(0.44)	ND(0.47)	NA	ND(0.36)
Fluoranthene		ND(0.44)	ND(0.47)	NA	0.32 J
Fluorene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Indeno(1,2,3-cd)pyrene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Naphthalene		ND(0.44)	ND(0.47)	NA	ND(0.36)
Pentachloroethane		ND(0.44)	ND(0.47)	NA	ND(0.36)
Phenanthrene		ND(0.44)	ND(0.47)	NA	0.14 J
Phenol		ND(0.44)	ND(0.47)	NA	ND(0.36)
Pyrene		ND(0.44)	ND(0.47)	NA	0.31 J
Organochlorine Pesticides					
Dieldrin		NA	NA	NA	ND(0.016)
Organophosphate Pesticides					
None Detected		NA	NA	NA	--
Herbicides					
None Detected		NA	NA	NA	--
Furans					
2,3,7,8-TCDF		0.00000024 J	ND(0.00000014) X	NA	0.0000039 Y
TCDFs (total)		0.00000098 J	ND(0.00000010)	NA	0.000043 Q
1,2,3,7,8-PeCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000025 J
2,3,4,7,8-PeCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000051
PeCDFs (total)		0.00000082 J	ND(0.00000026)	NA	0.000052 Q
1,2,3,4,7,8-HxCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000062
1,2,3,6,7,8-HxCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000041 J
1,2,3,7,8,9-HxCDF		ND(0.00000027)	ND(0.00000026)	NA	ND(0.0000014) Q
2,3,4,6,7,8-HxCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000038 J
HxCDFs (total)		0.0000013 J	ND(0.00000026)	NA	0.000054 Q
1,2,3,4,6,7,8-HpCDF		0.0000019 J	ND(0.00000026)	NA	0.000019
1,2,3,4,7,8,9-HpCDF		ND(0.00000027)	ND(0.00000026)	NA	0.0000010 J
HpCDFs (total)		0.0000034	ND(0.00000026)	NA	0.000048
OCDF		0.0000010 J	ND(0.00000053)	NA	0.000047

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-R16 1-3 07/27/04	RAA10-E-R16 3-6 07/27/04	RAA10-E-R16 4-6 07/27/04	RAA10-E-RR14 0-1 08/06/04
Dioxins					
2,3,7,8-TCDD		ND(0.00000011)	ND(0.00000010)	NA	0.00000036 J
TCDDs (total)		ND(0.00000034)	ND(0.00000033)	NA	0.0000010 J
1,2,3,7,8-PeCDD		ND(0.00000027)	ND(0.00000026)	NA	ND(0.00000096) X
PeCDDs (total)		ND(0.00000048)	ND(0.00000041)	NA	0.0000050 Q
1,2,3,4,7,8-HxCDD		ND(0.00000027)	ND(0.00000026)	NA	ND(0.0000023) X
1,2,3,6,7,8-HxCDD		ND(0.00000027)	ND(0.00000026)	NA	0.0000042 J
1,2,3,7,8,9-HxCDD		ND(0.00000027)	ND(0.00000026)	NA	0.0000045 J
HxCDDs (total)		ND(0.00000027)	ND(0.00000026)	NA	0.000033
1,2,3,4,6,7,8-HpCDD		0.00000076 J	ND(0.00000026)	NA	0.000076
HpCDDs (total)		0.00000076 J	ND(0.00000026)	NA	0.00019
OCDD		0.0000063	0.00000087 J	NA	0.00074
Total TEQs (WHO TEFs)		0.00000041	0.00000035	NA	0.0000074
Inorganics					
Antimony		ND(6.00)	ND(6.00)	NA	0.750 B
Arsenic		2.00	1.80	NA	6.20
Barium		100	45.0	NA	41.0
Beryllium		0.890	0.520	NA	0.240 B
Cadmium		0.560	0.240 B	NA	0.210 B
Chromium		19.0	12.0	NA	6.40
Cobalt		11.0	9.20	NA	7.50
Copper		18.0	12.0	NA	22.0
Cyanide		ND(0.130)	0.0280 B	NA	0.140
Lead		8.40	4.50	NA	32.0
Mercury		0.0320 B	ND(0.140)	NA	0.0320 B
Nickel		22.0	15.0	NA	11.0
Selenium		0.820 B	ND(1.10)	NA	ND(1.00)
Silver		ND(1.00)	ND(1.10)	NA	ND(1.00)
Sulfide		6.30 B	18.0	NA	16.0
Thallium		ND(1.30)	ND(1.40)	NA	1.10
Tin		3.90 B	4.30 B	NA	5.20 B
Vanadium		19.0	14.0	NA	15.0
Zinc		80.0	55.0	NA	36.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-RR14 1-3 08/06/04	RAA10-E-TT16 0-1 08/06/04	RAA10-E-TT16 3-6 08/06/04	RAA10-E-TT16 4-6 08/06/04	RAA10-E-TT16 6-15 08/06/04
Volatile Organics						
Acetone		ND(0.021)	ND(0.024)	NA	ND(0.021)	NA
Trichloroethene		ND(0.0052)	ND(0.0061)	NA	ND(0.0053)	NA
Semivolatile Organics						
1,2,4-Trichlorobenzene		ND(0.35)	ND(0.41)	ND(0.35)	NA	ND(0.35)
2-Methylnaphthalene		ND(0.35)	ND(0.41)	ND(0.35)	NA	ND(0.35)
Acenaphthene		ND(0.35)	ND(0.41)	ND(0.35)	NA	ND(0.35)
Acenaphthylene		ND(0.35)	21	0.12 J	NA	ND(0.35)
Aniline		ND(0.35)	ND(0.41)	ND(0.35)	NA	ND(0.35)
Anthracene		ND(0.35)	39	ND(0.35)	NA	ND(0.35)
Benzo(a)anthracene		ND(0.35)	76	ND(0.35)	NA	ND(0.35)
Benzo(a)pyrene		ND(0.35)	7.8	ND(0.35)	NA	ND(0.35)
Benzo(b)fluoranthene		ND(0.35)	32	ND(0.35)	NA	ND(0.35)
Benzo(g,h,i)perylene		ND(0.35)	14	ND(0.35)	NA	ND(0.35)
Benzo(k)fluoranthene		ND(0.35)	34	ND(0.35)	NA	ND(0.35)
bis(2-Ethylhexyl)phthalate		ND(0.35)	ND(0.40)	ND(0.34)	NA	ND(0.35)
Chrysene		ND(0.35)	71	0.12 J	NA	ND(0.35)
Dibenzo(a,h)anthracene		ND(0.35)	6.8	ND(0.35)	NA	ND(0.35)
Dibenzofuran		ND(0.35)	1.8	ND(0.35)	NA	ND(0.35)
Fluoranthene		ND(0.35)	190	ND(0.35)	NA	ND(0.35)
Fluorene		ND(0.35)	5.6	ND(0.35)	NA	ND(0.35)
Indeno(1,2,3-cd)pyrene		ND(0.35)	13	ND(0.35)	NA	ND(0.35)
Naphthalene		ND(0.35)	0.30 J	ND(0.35)	NA	ND(0.35)
Pentachloroethane		ND(0.35)	ND(0.41)	ND(0.35)	NA	ND(0.35)
Phenanthrene		ND(0.35)	25	ND(0.35)	NA	ND(0.35)
Phenol		ND(0.35)	0.20 J	ND(0.35)	NA	ND(0.35)
Pyrene		ND(0.35)	160	ND(0.35)	NA	ND(0.35)
Organochlorine Pesticides						
Dieldrin		ND(0.016)	ND(0.016)	ND(0.016)	NA	NA
Organophosphate Pesticides						
None Detected		--	--	--	NA	NA
Herbicides						
None Detected		--	--	--	NA	NA
Furans						
2,3,7,8-TCDF		ND(0.00000020) X	ND(0.000025)	ND(0.00000018)	NA	NA
TCDFs (total)		ND(0.00000019)	ND(0.000025)	ND(0.00000018)	NA	NA
1,2,3,7,8-PeCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
2,3,4,7,8-PeCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
PeCDFs (total)		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
1,2,3,4,7,8-HxCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
1,2,3,6,7,8-HxCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
1,2,3,7,8,9-HxCDF		ND(0.00000048) Q	ND(0.000063)	ND(0.00000046)	NA	NA
2,3,4,6,7,8-HxCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
HxCDFs (total)		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
1,2,3,4,6,7,8-HpCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000050)	NA	NA
1,2,3,4,7,8,9-HpCDF		ND(0.00000048)	ND(0.000063)	ND(0.00000063)	NA	NA
HpCDFs (total)		ND(0.00000048) Q	ND(0.000063)	ND(0.00000056)	NA	NA
OCDF		ND(0.00000097)	ND(0.00012)	ND(0.00000091)	NA	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-RR14 1-3 08/06/04	RAA10-E-TT16 0-1 08/06/04	RAA10-E-TT16 3-6 08/06/04	RAA10-E-TT16 4-6 08/06/04	RAA10-E-TT16 6-15 08/06/04
Dioxins						
2,3,7,8-TCDD		ND(0.00000019)	ND(0.000028)	ND(0.00000018)	NA	NA
TCDDs (total)		ND(0.00000062)	ND(0.000075)	ND(0.00000057)	NA	NA
1,2,3,7,8-PeCDD		ND(0.00000048)	ND(0.000063)	ND(0.00000046)	NA	NA
PeCDDs (total)		ND(0.00000080)	ND(0.00011)	ND(0.00000046)	NA	NA
1,2,3,4,7,8-HxCDD		ND(0.00000048)	ND(0.000082)	ND(0.00000046)	NA	NA
1,2,3,6,7,8-HxCDD		ND(0.00000048)	ND(0.000072)	ND(0.00000046)	NA	NA
1,2,3,7,8,9-HxCDD		ND(0.00000048)	ND(0.000078)	ND(0.00000046)	NA	NA
HxCDDs (total)		ND(0.00000078)	ND(0.00010)	ND(0.00000084)	NA	NA
1,2,3,4,6,7,8-HpCDD		0.0000012 J	ND(0.000063)	ND(0.00000053)	NA	NA
HpCDDs (total)		0.0000026 J	ND(0.000063)	ND(0.00000053)	NA	NA
OCDD		0.000015	0.00061 J	0.0000055 J	NA	NA
Total TEQs (WHO TEFs)		0.00000066	0.000089	0.00000063	NA	NA
Inorganics						
Antimony		ND(6.00)	4.90 B	ND(6.00)	NA	ND(6.00)
Arsenic		7.30	14.0	5.00	NA	3.30
Barium		26.0	45.0	26.0	NA	71.0
Beryllium		0.270 B	0.180 B	0.230 B	NA	0.200 B
Cadmium		0.110 B	0.320 B	0.120 B	NA	0.140 B
Chromium		11.0	10.0	8.50	NA	4.60
Cobalt		8.50	5.70	13.0	NA	14.0
Copper		14.0	46.0	16.0	NA	11.0
Cyanide		0.110	0.300	0.0160 B	NA	0.0140 B
Lead		8.60	170	6.30	NA	5.10
Mercury		ND(0.100)	0.480	ND(0.100)	NA	ND(0.100)
Nickel		13.0	9.40	14.0	NA	11.0
Selenium		ND(1.00)	1.80	0.520 B	NA	ND(1.00)
Silver		ND(1.00)	ND(1.00)	ND(1.00)	NA	ND(1.00)
Sulfide		5.00 J	9.80	ND(5.20)	NA	ND(5.30)
Thallium		0.930 B	2.60	1.20	NA	1.20
Tin		3.40 B	8.80 B	3.20 B	NA	3.20 B
Vanadium		8.20	14.0	5.90	NA	5.60
Zinc		30.0	67.0	32.0	NA	29.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID / Sample Depth(Feet) / Date Collected:	RAA10-E-TT16 12-14 08/06/04	RAA10-E-TT20 0-1 08/09/04	RAA10-E-TT20 1-3 08/09/04	RAA10-E-TT20 3-6 08/09/04	RAA10-E-TT20 4-6 08/09/04
Volatile Organics					
Acetone	ND(0.021)	ND(0.022)	ND(0.023)	NA	ND(0.022)
Trichloroethene	ND(0.0053)	ND(0.0055)	ND(0.0057)	NA	ND(0.0054)
Semivolatile Organics					
1,2,4-Trichlorobenzene	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
2-Methylnaphthalene	NA	0.10 J	ND(0.38)	ND(0.37)	NA
Acenaphthene	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
Acenaphthylene	NA	0.30 J	ND(0.38)	ND(0.37)	NA
Aniline	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
Anthracene	NA	0.24 J	ND(0.38)	ND(0.37)	NA
Benzo(a)anthracene	NA	0.50	ND(0.38)	ND(0.37)	NA
Benzo(a)pyrene	NA	0.34 J	ND(0.38)	ND(0.37)	NA
Benzo(b)fluoranthene	NA	0.33 J	ND(0.38)	ND(0.37)	NA
Benzo(g,h,i)perylene	NA	0.27 J	ND(0.38)	ND(0.37)	NA
Benzo(k)fluoranthene	NA	0.35 J	ND(0.38)	ND(0.37)	NA
bis(2-Ethylhexyl)phthalate	NA	0.19 J	0.11 J	ND(0.36)	NA
Chrysene	NA	0.65	0.12 J	ND(0.37)	NA
Dibenzo(a,h)anthracene	NA	0.097 J	ND(0.38)	ND(0.37)	NA
Dibenzofuran	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
Fluoranthene	NA	0.95	0.085 J	ND(0.37)	NA
Fluorene	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
Indeno(1,2,3-cd)pyrene	NA	0.22 J	ND(0.38)	ND(0.37)	NA
Naphthalene	NA	0.11 J	ND(0.38)	ND(0.37)	NA
Pentachloroethane	NA	0.57	ND(0.38)	ND(0.37)	NA
Phenanthrene	NA	0.47	0.11 J	ND(0.37)	NA
Phenol	NA	ND(0.37)	ND(0.38)	ND(0.37)	NA
Pyrene	NA	0.95	ND(0.38)	ND(0.37)	NA
Organochlorine Pesticides					
Dieldrin	NA	NA	NA	NA	NA
Organophosphate Pesticides					
None Detected	NA	NA	NA	NA	NA
Herbicides					
None Detected	NA	NA	NA	NA	NA
Furans					
2,3,7,8-TCDF	NA	NA	NA	NA	NA
TCDFs (total)	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	NA	NA	NA	NA	NA
PeCDFs (total)	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	NA	NA	NA	NA	NA
HxCDFs (total)	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	NA	NA
HpCDFs (total)	NA	NA	NA	NA	NA
OCDF	NA	NA	NA	NA	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-TT16 12-14 08/06/04	RAA10-E-TT20 0-1 08/09/04	RAA10-E-TT20 1-3 08/09/04	RAA10-E-TT20 3-6 08/09/04	RAA10-E-TT20 4-6 08/09/04
Dioxins						
2,3,7,8-TCDD		NA	NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA	NA
OCDD		NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	NA
Inorganics						
Antimony		NA	2.30 B	1.20 B	ND(6.00)	NA
Arsenic		NA	8.40	8.40	4.20	NA
Barium		NA	35.0	32.0	14.0 B	NA
Beryllium		NA	0.280 B	0.360 B	0.420 B	NA
Cadmium		NA	0.240 B	0.130 B	0.0930 B	NA
Chromium		NA	6.30	6.40	7.20	NA
Cobalt		NA	5.00 B	5.70	7.90	NA
Copper		NA	37.0	33.0	9.90	NA
Cyanide		NA	0.120	0.120	ND(0.110)	NA
Lead		NA	98.0	60.0	6.90	NA
Mercury		NA	0.100 B	0.0690 B	0.0130 B	NA
Nickel		NA	8.60	9.50	13.0	NA
Selenium		NA	1.30	1.60	1.30	NA
Silver		NA	0.110 B	0.140 B	0.110 B	NA
Sulfide		NA	18.0	ND(5.70)	ND(5.50)	NA
Thallium		NA	ND(1.10)	1.10 B	0.890 B	NA
Tin		NA	7.90 B	8.70 B	4.00 B	NA
Vanadium		NA	12.0	10.0	10.0	NA
Zinc		NA	59.0	32.0	41.0	NA

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID / Sample Depth(Feet) / Date Collected:	RAA10-E-WW27 0-1 07/15/04	RAA10-E-X15 0-1 07/27/04	RAA10-E-X15 6-8 07/27/04	RAA10-E-X15 6-15 07/27/04
Volatile Organics				
Acetone	ND(0.024)	ND(0.030)	0.080	NA
Trichloroethene	ND(0.0060)	ND(0.0076)	ND(0.014)	NA
Semivolatile Organics				
1,2,4-Trichlorobenzene	ND(0.40)	ND(0.51)	NA	ND(0.53)
2-Methylnaphthalene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Acenaphthene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Acenaphthylene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Aniline	ND(0.40)	ND(0.51)	NA	ND(0.53)
Anthracene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Benzo(a)anthracene	0.17 J	ND(0.51)	NA	ND(0.53)
Benzo(a)pyrene	0.083 J	ND(0.51)	NA	ND(0.53)
Benzo(b)fluoranthene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Benzo(g,h,i)perylene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Benzo(k)fluoranthene	0.17 J	ND(0.51)	NA	ND(0.53)
bis(2-Ethylhexyl)phthalate	ND(0.40)	ND(0.50)	NA	ND(0.52)
Chrysene	0.24 J	ND(0.51)	NA	ND(0.53)
Dibenzo(a,h)anthracene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Dibenzofuran	ND(0.40)	ND(0.51)	NA	ND(0.53)
Fluoranthene	0.45	ND(0.51)	NA	ND(0.53)
Fluorene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Indeno(1,2,3-cd)pyrene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Naphthalene	ND(0.40)	ND(0.51)	NA	ND(0.53)
Pentachloroethane	ND(0.40)	ND(0.51)	NA	ND(0.53)
Phenanthrene	0.24 J	ND(0.51)	NA	ND(0.53)
Phenol	ND(0.40)	ND(0.51)	NA	ND(0.53)
Pyrene	0.36 J	ND(0.51)	NA	ND(0.53)
Organochlorine Pesticides				
Dieldrin	NA	NA	NA	ND(0.016) [ND(0.016)]
Organophosphate Pesticides				
None Detected	NA	NA	NA	--
Herbicides				
None Detected	NA	NA	NA	--
Furans				
2,3,7,8-TCDF	NA	NA	NA	ND(0.00000015) X
TCDFs (total)	NA	NA	NA	0.00000037 JQ
1,2,3,7,8-PeCDF	NA	NA	NA	ND(0.00000027)
2,3,4,7,8-PeCDF	NA	NA	NA	0.00000036 J
PeCDFs (total)	NA	NA	NA	0.0000010 JQ
1,2,3,4,7,8-HxCDF	NA	NA	NA	ND(0.00000027)
1,2,3,6,7,8-HxCDF	NA	NA	NA	ND(0.00000027)
1,2,3,7,8,9-HxCDF	NA	NA	NA	ND(0.00000027)
2,3,4,6,7,8-HxCDF	NA	NA	NA	ND(0.00000027)
HxCDFs (total)	NA	NA	NA	0.0000011 J
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	ND(0.00000027)
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	ND(0.00000027)
HpCDFs (total)	NA	NA	NA	ND(0.00000027)
OCDF	NA	NA	NA	ND(0.00000054)

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-WW27 0-1 07/15/04	RAA10-E-X15 0-1 07/27/04	RAA10-E-X15 6-8 07/27/04	RAA10-E-X15 6-15 07/27/04
Dioxins					
2,3,7,8-TCDD		NA	NA	NA	ND(0.00000011)
TCDDs (total)		NA	NA	NA	ND(0.00000033)
1,2,3,7,8-PeCDD		NA	NA	NA	ND(0.00000027)
PeCDDs (total)		NA	NA	NA	ND(0.00000042)
1,2,3,4,7,8-HxCDD		NA	NA	NA	ND(0.00000027)
1,2,3,6,7,8-HxCDD		NA	NA	NA	ND(0.00000027)
1,2,3,7,8,9-HxCDD		NA	NA	NA	ND(0.00000027)
HxCDDs (total)		NA	NA	NA	ND(0.00000049)
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	0.00000028 J
HpCDDs (total)		NA	NA	NA	0.00000028 J
OCDD		NA	NA	NA	0.0000020 J
Total TEQs (WHO TEFs)		NA	NA	NA	0.00000048
Inorganics					
Antimony		1.90 B	ND(6.00)	NA	ND(6.00)
Arsenic		6.10	2.40	NA	4.10
Barium		46.0	81.0	NA	31.0
Beryllium		0.370 B	0.650	NA	0.430 B
Cadmium		1.20	0.520	NA	0.540
Chromium		24.0	59.0	NA	9.00
Cobalt		7.20	8.60	NA	9.00
Copper		30.0	16.0	NA	20.0
Cyanide		0.220	0.0890 B	NA	0.0410 B
Lead		65.0	12.0	NA	5.10
Mercury		0.320	0.130 B	NA	ND(0.160)
Nickel		13.0	16.0	NA	16.0
Selenium		ND(1.00)	1.50	NA	1.20 B
Silver		0.190 B	ND(1.10)	NA	ND(1.20)
Sulfide		17.0	ND(7.60)	NA	170
Thallium		ND(1.20)	1.40 B	NA	ND(1.60)
Tin		9.20 B	5.30 B	NA	5.20 B
Vanadium		12.0	15.0	NA	9.50
Zinc		86.0	74.0	NA	48.0

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-XX23 0-1 07/15/04	RAA10-E-YY24 0-1 07/15/04	RAA10-E-YY26 0-1 07/15/04	RAA10-E-YY28 0-1 07/15/04
Volatile Organics					
Acetone		ND(0.022)	ND(0.025)	ND(0.029)	ND(0.026)
Trichloroethene		ND(0.0054)	ND(0.0062)	ND(0.0072)	ND(0.0066)
Semivolatile Organics					
1,2,4-Trichlorobenzene		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
2-Methylnaphthalene		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Acenaphthene		0.077 J	ND(0.41)	ND(0.48)	ND(0.44)
Acenaphthylene		0.074 J	ND(0.41)	ND(0.48)	ND(0.44)
Aniline		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Anthracene		0.66	ND(0.41)	ND(0.48)	ND(0.44)
Benzo(a)anthracene		0.88	0.088 J	ND(0.48)	0.15 J
Benzo(a)pyrene		0.46	ND(0.41)	ND(0.48)	0.10 J
Benzo(b)fluoranthene		0.55	ND(0.41)	ND(0.48)	ND(0.44)
Benzo(g,h,i)perylene		0.19 J	ND(0.41)	ND(0.48)	ND(0.44)
Benzo(k)fluoranthene		0.73	ND(0.41)	ND(0.48)	0.13 J
bis(2-Ethylhexyl)phthalate		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.43)
Chrysene		1.5	0.14 J	ND(0.48)	0.21 J
Dibenzo(a,h)anthracene		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Dibenzofuran		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Fluoranthene		3.0	0.22 J	0.14 J	0.42 J
Fluorene		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Indeno(1,2,3-cd)pyrene		0.18 J	ND(0.41)	ND(0.48)	ND(0.44)
Naphthalene		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Pentachloroethane		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Phenanthrene		0.30 J	0.12 J	ND(0.48)	0.26 J
Phenol		ND(0.36)	ND(0.41)	ND(0.48)	ND(0.44)
Pyrene		2.0	0.18 J	0.11 J	0.34 J
Organochlorine Pesticides					
Dieldrin		NA	ND(0.016)	NA	ND(0.016)
Organophosphate Pesticides					
None Detected		NA	--	NA	--
Herbicides					
None Detected		NA	--	NA	--
Furans					
2,3,7,8-TCDF		NA	0.0000054 Y	NA	0.000021 Y
TCDFs (total)		NA	0.000065 QI	NA	0.00018 QI
1,2,3,7,8-PeCDF		NA	0.0000021 J	NA	0.0000082
2,3,4,7,8-PeCDF		NA	0.0000066	NA	0.000026
PeCDFs (total)		NA	0.000094 QI	NA	0.00024 Q
1,2,3,4,7,8-HxCDF		NA	0.0000031	NA	0.000022
1,2,3,6,7,8-HxCDF		NA	0.0000030	NA	0.000014
1,2,3,7,8,9-HxCDF		NA	0.00000098 J	NA	0.0000053
2,3,4,6,7,8-HxCDF		NA	0.0000070	NA	0.000014
HxCDFs (total)		NA	0.00013	NA	0.00046
1,2,3,4,6,7,8-HpCDF		NA	0.000075	NA	0.00079
1,2,3,4,7,8,9-HpCDF		NA	0.0000013 J	NA	0.0000082
HpCDFs (total)		NA	0.00014	NA	0.0014
OCDF		NA	0.000040	NA	0.00043

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA10-E-XX23 0-1 07/15/04	RAA10-E-YY24 0-1 07/15/04	RAA10-E-YY26 0-1 07/15/04	RAA10-E-YY28 0-1 07/15/04
Dioxins					
2,3,7,8-TCDD		NA	0.00000024 J	NA	0.00000061 J
TCDDs (total)		NA	ND(0.00000036)	NA	0.0000055
1,2,3,7,8-PeCDD		NA	0.00000050 J	NA	ND(0.0000013) X
PeCDDs (total)		NA	0.0000049 Q	NA	0.000011 Q
1,2,3,4,7,8-HxCDD		NA	ND(0.00000046) X	NA	0.0000012 J
1,2,3,6,7,8-HxCDD		NA	0.0000017 J	NA	0.0000093
1,2,3,7,8,9-HxCDD		NA	0.0000011 J	NA	0.0000035
HxCDDs (total)		NA	0.000016	NA	0.000059
1,2,3,4,6,7,8-HpCDD		NA	0.000030	NA	0.00018
HpCDDs (total)		NA	0.000076	NA	0.00032
OCDD		NA	0.00025	NA	0.0017
Total TEQs (WHO TEFs)		NA	0.0000075	NA	0.000034
Inorganics					
Antimony		1.50 B	1.40 B	1.90 B	1.40 B
Arsenic		28.0	8.10	8.10	7.60
Barium		24.0	33.0	75.0	54.0
Beryllium		0.170 B	0.360 B	0.580	0.420 B
Cadmium		0.490 B	0.590	1.00	1.30
Chromium		5.30	17.0	35.0	37.0
Cobalt		6.90	8.20	11.0	7.90
Copper		12.0	27.0	36.0	39.0
Cyanide		0.0420 B	0.180	0.270	0.250
Lead		8.70	37.0	90.0	95.0
Mercury		0.00780 B	0.150	0.510	0.390
Nickel		8.70	12.0	18.0	14.0
Selenium		1.20	ND(1.00)	ND(1.10)	ND(1.00)
Silver		ND(1.00)	ND(1.00)	0.150 B	0.530 B
Sulfide		ND(5.40)	7.90	6.90 B	180
Thallium		ND(1.10)	ND(1.20)	ND(1.40)	ND(1.30)
Tin		4.60 B	7.20 B	10.0 B	11.0
Vanadium		6.30	12.0	18.0	13.0
Zinc		26.0	58.0	100	120

TABLE 7-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

PRE-DESIGN SOIL INVESTIGATION SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to SGS Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. 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 Environmental Health Perspectives 106(2), December 1998.
5. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
6. -- Indicates that all constituents for the parameter group were not detected.
7. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles, pesticides, herbicides, dioxin/furans)

J - Indicates an estimated value less than the practical quantitation limit (PQL).
I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
Q - Indicates the presence of quantitative interferences.
X - Estimated maximum possible concentration.
Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 7-4
PCB DATA RECEIVED DURING AUGUST 2004

BUILDING 12X DECON WATER AND WASTE SOLVENT DRUM SAMPLING
UNKAMET BROOK AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Matrix	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
12X-B0671-WATER-1	Water	8/10/2004	ND(0.0025)	0.011	0.0075	0.0185
12X-E0303-SOLVENT-1	Liquid	8/10/2004	ND(0.0025)	0.041	0.014	0.055

Notes:
1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

ITEM 8
FORMER OXBOW AREAS A & C
(GECD410)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

- Completed additional supplemental sampling as proposed in Supplemental Pre-Design Investigation Report and Additional Sampling Proposal submitted on May 19, 2004 and conditionally approved by EPA on July 1, 2004.

- Sent requests for ERE decisions to owners of Parcels I8-23-4, I8-23-9, and I8-23-10.

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

None

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 8-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17	7/28/04	1-3	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17E	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17SW	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-1 (RAA11-G27A)	7/28/04	10-15	Soil	SGS	PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-2 (RAA11-H27)	7/28/04	1-3	Soil	SGS	Inorganics	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-3 (RAA11-G28)	7/28/04	0-1	Soil	SGS	VOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-4 (RAA11-C17)	7/28/04	1-3	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-5 (SROW-1)	8/4/04	0-1	Soil	SGS	PCB	8/10/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15E	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15N	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15S	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15W	7/28/04	0-1	Soil	SGS	SVOC	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G27A	7/28/04	10-15	Soil	SGS	PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G28	7/28/04	0-1	Soil	SGS	VOC, SVOC, Inorganics, PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H26A	7/28/04	0-1	Soil	SGS	VOC, SVOC, Inorganics, PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H27	7/28/04	3-6	Soil	SGS	PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H27	7/28/04	1-3	Soil	SGS	VOC, SVOC, Inorganics, PCDD/PCDF	8/12/04
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-1	8/4/04	0-1	Soil	SGS	PCB	8/10/04
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	0-1	Soil	SGS	PCB	8/10/04
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	1-3	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	11-13	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	13-15	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	3-5	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	5-7	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	7-9	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-2	8/4/04	9-11	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-3	8/4/04	0-1	Soil	SGS	PCB	8/10/04
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	0-1	Soil	SGS	PCB	8/10/04
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	1-3	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	11-13	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	13-15	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	3-5	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	5-7	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	7-9	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-4	8/4/04	9-11	Soil	SGS	PCB	Cancelled
Additional Supplemental Pre-Design Soil Investigation Sampling	SROW-5	8/4/04	0-1	Soil	SGS	PCB	8/10/04

Note:

1. Field duplicate sample locations are presented in parenthesis.

TABLE 8-2
PCB DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
SROW-1	0-1	8/4/2004	ND(0.038) [ND(0.038)]	0.10 [0.10]	0.17 [0.15]	0.27 [0.25]
SROW-2	0-1	8/4/2004	ND(0.040)	0.11	0.14	0.25
SROW-3	0-1	8/4/2004	ND(0.040)	0.11	0.13	0.24
SROW-4	0-1	8/4/2004	ND(0.042)	0.17	0.16	0.33
SROW-5	0-1	8/4/2004	ND(0.042)	0.14	0.17	0.31

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

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA11-C17 1-3 07/28/04	RAA11-C17E 0-1 07/28/04	RAA11-C17SW 0-1 07/28/04	RAA11-G15E 0-1 07/28/04	RAA11-G15N 0-1 07/28/04
Volatile Organics						
None Detected		NA	NA	NA	NA	NA
Semivolatile Organics						
2-Methylnaphthalene		0.082 J [ND(0.37)]	ND(0.39)	ND(0.38)	11	ND(0.40)
3&4-Methylphenol		ND(0.76) [ND(0.75)]	ND(0.79)	ND(0.77)	ND(0.78)	ND(0.80)
4-Nitrophenol		ND(1.9) [ND(1.9)]	ND(2.0)	ND(1.9)	ND(2.0)	ND(2.0)
Acenaphthene		0.17 J [0.10 J]	0.22 J	ND(0.38)	12	ND(0.40)
Acenaphthylene		0.91 [0.43]	1.1	0.21 J	21	1.8
Anthracene		0.91 [0.39]	0.75	ND(0.38)	41	1.3
Benzo(a)anthracene		2.2 [1.1]	1.5	0.087 J	64	3.4
Benzo(a)pyrene		1.5 [0.87]	1.3	0.082 J	38	2.6
Benzo(b)fluoranthene		1.3 [0.60]	1.2	ND(0.38)	30	2.3
Benzo(g,h,i)perylene		1.2 [0.62]	1.0	ND(0.38)	23	1.8
Benzo(k)fluoranthene		1.4 [1.0]	1.0	ND(0.38)	35	2.4
Chrysene		2.4 [1.3]	1.5	0.087 J	64	3.6
Dibenzo(a,h)anthracene		0.32 J [0.27 J]	0.25 J	ND(0.38)	7.0	0.59
Dibenzofuran		0.094 J [ND(0.37)]	ND(0.39)	ND(0.38)	13	ND(0.40)
Fluoranthene		4.7 [2.4]	2.4	0.13 J	180	6.9
Fluorene		0.29 J [0.12 J]	0.14 J	ND(0.38)	33	0.43
Indeno(1,2,3-cd)pyrene		0.90 [0.51]	0.82	ND(0.38)	20	1.6
Naphthalene		0.098 J [0.077 J]	0.083 J	ND(0.38)	18	0.18 J
Phenanthrene		1.8 [0.84]	0.81	ND(0.38)	170	2.9
Phenol		ND(0.38) [ND(0.37)]	ND(0.39)	ND(0.38)	0.82	ND(0.40)
Pyrene		4.2 [2.2]	2.4	0.14 J	120	6.5
Furans						
2,3,7,8-TCDF		NA	NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA	NA
OCDF		NA	NA	NA	NA	NA
Dioxins						
2,3,7,8-TCDD		NA	NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA	NA

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA11-C17 1-3 07/28/04	RAA11-C17E 0-1 07/28/04	RAA11-C17SW 0-1 07/28/04	RAA11-G15E 0-1 07/28/04	RAA11-G15N 0-1 07/28/04
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA	NA
OCDD		NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	NA
Inorganics						
Antimony		NA	NA	NA	NA	NA
Arsenic		NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA
Beryllium		NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA
Cobalt		NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Sulfide		NA	NA	NA	NA	NA
Tin		NA	NA	NA	NA	NA
Vanadium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA11-G15S 0-1 07/28/04	RAA11-G15W 0-1 07/28/04	RAA11-G27A 10-15 07/28/04
Volatile Organics				
None Detected		NA	NA	NA
Semivolatile Organics				
2-Methylnaphthalene		0.41	0.88	NA
3&4-Methylphenol		ND(0.77)	0.26 J	NA
4-Nitrophenol		ND(2.0)	ND(2.2)	NA
Acenaphthene		ND(0.38)	1.6	NA
Acenaphthylene		3.0	11	NA
Anthracene		2.1	10	NA
Benzo(a)anthracene		3.5	20	NA
Benzo(a)pyrene		2.7	8.5	NA
Benzo(b)fluoranthene		2.3	13	NA
Benzo(g,h,i)perylene		2.1	7.5	NA
Benzo(k)fluoranthene		2.5	14	NA
Chrysene		3.5	21	NA
Dibenzo(a,h)anthracene		0.69	2.7	NA
Dibenzofuran		0.36 J	1.5	NA
Fluoranthene		6.8	44	NA
Fluorene		0.51	3.4	NA
Indeno(1,2,3-cd)pyrene		1.7	6.5	NA
Naphthalene		0.45	1.1	NA
Phenanthrene		3.2	22	NA
Phenol		ND(0.38)	ND(0.43)	NA
Pyrene		5.8	37	NA
Furans				
2,3,7,8-TCDF		NA	NA	ND(0.00000013) X [0.00000010 J]
TCDFs (total)		NA	NA	0.00000014 J [0.00000010 J]
1,2,3,7,8-PeCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
2,3,4,7,8-PeCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
PeCDFs (total)		NA	NA	ND(0.00000025) [ND(0.00000024)]
1,2,3,4,7,8-HxCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
1,2,3,6,7,8-HxCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
1,2,3,7,8,9-HxCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
2,3,4,6,7,8-HxCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
HxCDFs (total)		NA	NA	ND(0.00000025) [ND(0.00000024)]
1,2,3,4,6,7,8-HpCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
1,2,3,4,7,8,9-HpCDF		NA	NA	ND(0.00000025) [ND(0.00000024)]
HpCDFs (total)		NA	NA	ND(0.00000025) [ND(0.00000024)]
OCDF		NA	NA	ND(0.00000050) [ND(0.00000048)]
Dioxins				
2,3,7,8-TCDD		NA	NA	ND(0.00000010) [ND(0.000000096)]
TCDDs (total)		NA	NA	ND(0.00000028) [ND(0.00000024)]
1,2,3,7,8-PeCDD		NA	NA	ND(0.00000025) [ND(0.00000024)]
PeCDDs (total)		NA	NA	ND(0.00000043) [ND(0.00000033)]
1,2,3,4,7,8-HxCDD		NA	NA	ND(0.00000027) [ND(0.00000032)]
1,2,3,6,7,8-HxCDD		NA	NA	ND(0.00000025) [ND(0.00000028)]
1,2,3,7,8,9-HxCDD		NA	NA	ND(0.00000026) [ND(0.00000031)]
HxCDDs (total)		NA	NA	ND(0.00000048) [ND(0.00000047)]

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA11-G15S 0-1 07/28/04	RAA11-G15W 0-1 07/28/04	RAA11-G27A 10-15 07/28/04
1,2,3,4,6,7,8-HpCDD		NA	NA	ND(0.00000025) [ND(0.00000024)]
HpCDDs (total)		NA	NA	ND(0.00000025) [ND(0.00000024)]
OCDD		NA	NA	0.0000012 J [0.00000074 J]
Total TEQs (WHO TEFs)		NA	NA	0.00000034 [0.00000034]
Inorganics				
Antimony		NA	NA	NA
Arsenic		NA	NA	NA
Barium		NA	NA	NA
Beryllium		NA	NA	NA
Cadmium		NA	NA	NA
Chromium		NA	NA	NA
Cobalt		NA	NA	NA
Copper		NA	NA	NA
Cyanide		NA	NA	NA
Lead		NA	NA	NA
Mercury		NA	NA	NA
Nickel		NA	NA	NA
Selenium		NA	NA	NA
Silver		NA	NA	NA
Sulfide		NA	NA	NA
Tin		NA	NA	NA
Vanadium		NA	NA	NA
Zinc		NA	NA	NA

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: / Sample Depth(Feet): / Date Collected:	RAA11-G28 0-1 07/28/04	RAA11-H26A 0-1 07/28/04	RAA11-H27 1-3 07/28/04	RAA11-H27 3-6 07/28/04
Volatile Organics					
None Detected		--	--	--	NA
Semivolatile Organics					
2-Methylnaphthalene		ND(0.41)	ND(0.39)	0.11 J	NA
3&4-Methylphenol		ND(0.82)	ND(0.79)	ND(0.71)	NA
4-Nitrophenol		ND(2.1)	ND(2.0)	0.24 J	NA
Acenaphthene		ND(0.41)	ND(0.39)	ND(0.35)	NA
Acenaphthylene		0.11 J	2.4	1.7	NA
Anthracene		ND(0.41)	1.9	1.9	NA
Benzo(a)anthracene		0.088 J	4.9	4.1	NA
Benzo(a)pyrene		ND(0.41)	3.2	2.2	NA
Benzo(b)fluoranthene		ND(0.41)	3.0	1.8	NA
Benzo(g,h,i)perylene		ND(0.41)	2.2	1.2	NA
Benzo(k)fluoranthene		ND(0.41)	3.1	1.8	NA
Chrysene		0.12 J	6.1	4.6	NA
Dibenzo(a,h)anthracene		ND(0.41)	0.76	0.42	NA
Dibenzofuran		ND(0.41)	0.16 J	0.25 J	NA
Fluoranthene		0.19 J	7.8	6.6	NA
Fluorene		ND(0.41)	0.47	0.88	NA
Indeno(1,2,3-cd)pyrene		ND(0.41)	1.8	1.0	NA
Naphthalene		ND(0.41)	0.10 J	0.14 J	NA
Phenanthrene		0.083 J	6.0	5.7	NA
Phenol		ND(0.41)	ND(0.39)	ND(0.35)	NA
Pyrene		0.19 J	7.1	6.2	NA
Furans					
2,3,7,8-TCDF		0.0000040 Y	0.000036 Y	0.000042 Y	0.0000018 Y
TCDFs (total)		0.000053	0.00039 Q	0.00041 QI	0.000014 I
1,2,3,7,8-PeCDF		0.0000016 J	0.000014 J	0.000013 JQ	0.00000060 J
2,3,4,7,8-PeCDF		0.0000022 J	0.000041	0.000032	0.00000081 J
PeCDFs (total)		0.000051 Q	0.00048 Q	0.00022 Q	0.0000093 Q
1,2,3,4,7,8-HxCDF		0.00000091 J	0.000022	0.000016	0.00000070 J
1,2,3,6,7,8-HxCDF		0.00000080 J	0.000016	0.000012 J	0.00000045 J
1,2,3,7,8,9-HxCDF		ND(0.00000036) Q	0.0000047 JQ	ND(0.0000034) Q	ND(0.00000021)
2,3,4,6,7,8-HxCDF		0.00000098 J	0.000034	0.000018	0.00000038 J
HxCDFs (total)		0.000018 Q	0.00048 Q	0.00026	0.0000062
1,2,3,4,6,7,8-HpCDF		0.0000024	0.000052	0.000032	0.0000014 J
1,2,3,4,7,8,9-HpCDF		0.00000036 J	0.0000062 J	0.0000040 J	ND(0.00000021)
HpCDFs (total)		0.0000045	0.00012	0.000071	0.0000024
OCDF		0.0000023 J	0.000039	0.000027 J	0.00000099 J
Dioxins					
2,3,7,8-TCDD		ND(0.00000010)	ND(0.00000094)	ND(0.0000013)	ND(0.000000085)
TCDDs (total)		ND(0.00000029)	ND(0.0000021)	ND(0.0000021)	ND(0.00000022)
1,2,3,7,8-PeCDD		ND(0.00000023)	ND(0.0000027) X	ND(0.0000014) Q	ND(0.00000021)
PeCDDs (total)		0.0000011 JQ	0.000014 JQ	0.000012 JQ	ND(0.00000036)
1,2,3,4,7,8-HxCDD		ND(0.00000043)	ND(0.0000021)	ND(0.0000033)	ND(0.00000021)
1,2,3,6,7,8-HxCDD		ND(0.00000038)	0.0000027 J	0.0000029 J	ND(0.00000021)
1,2,3,7,8,9-HxCDD		ND(0.00000041)	0.0000022 J	ND(0.0000032)	ND(0.00000021)
HxCDDs (total)		0.00000086 J	0.000011 J	0.000022	ND(0.00000021)

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID / Sample Depth(Feet) / Date Collected:	RAA11-G28 0-1 07/28/04	RAA11-H26A 0-1 07/28/04	RAA11-H27 1-3 07/28/04	RAA11-H27 3-6 07/28/04
1,2,3,4,6,7,8-HpCDD	0.0000025	0.000023	0.000016	0.00000055 J
HpCDDs (total)	0.0000051	0.000046	0.000031	0.0000010 J
OCDD	0.000017	0.00016	0.00011	0.0000029 J
Total TEQs (WHO TEFs)	0.0000021	0.000036	0.000028	0.00000098
Inorganics				
Antimony	ND(6.00)	ND(6.00)	0.830 B [ND(6.00)]	NA
Arsenic	8.90	15.0	5.00 [6.80]	NA
Barium	22.0	40.0	39.0 [36.0]	NA
Beryllium	ND(0.500)	0.120 B	0.0520 B [0.150 B]	NA
Cadmium	0.330 B	0.440 B	0.400 B [0.570]	NA
Chromium	7.60	6.60	5.00 [6.70]	NA
Cobalt	5.20	7.30	5.30 [7.20]	NA
Copper	15.0	24.0	20.0 [24.0]	NA
Cyanide	0.190	0.140	0.0960 B [0.0700 B]	NA
Lead	43.0	69.0	75.0 [78.0]	NA
Mercury	0.130	0.130	0.300 [0.240]	NA
Nickel	10.0	13.0	8.50 [13.0]	NA
Selenium	0.810 B	ND(1.00)	ND(1.00) [0.560 B]	NA
Silver	0.140 B	0.130 B	ND(1.00) [0.110 B]	NA
Sulfide	ND(6.10)	7.60	350 [200]	NA
Tin	4.30 B	5.10 B	4.50 B [4.80 B]	NA
Vanadium	10.0	8.20	6.00 [7.60]	NA
Zinc	60.0	69.0	51.0 [76.0]	NA

TABLE 8-3
APPENDIX IX+3 DATA RECEIVED DURING AUGUST 2004

ADDITIONAL SUPPLEMENTAL PRE-DESIGN SOIL INVESTIGATION SAMPLING
FORMER OXBOW AREAS A AND C
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to SGS Environmental Services, Inc. for analysis of Appendix IX+3 constituents.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. 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 Environmental Health Perspectives 106(2), December 1998.
5. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
6. -- Indicates that all constituents for the parameter group were not detected.
7. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles, dioxin/furans)

J - Indicates an estimated value less than the practical quantitation limit (PQL).
I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
Q - Indicates the presence of quantitative interferences.
X - Estimated maximum possible concentration.
Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

ITEM 9
LYMAN STREET AREA
(GECD430)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

If additional sampling is required based on EPA's review of GE's Conceptual RD/RA Work Plan, submit proposal for such sampling.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

GE is currently discussing with EPA issues relating to GE's Conceptual RD/RA Work Plan submitted on March 23, 2004.

f. Proposed/Approved Work Plan Modifications

None

ITEM 10
NEWELL STREET AREA I
(GECD440)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

Completed restoration activities at Parcels J9-23-22, J9-23-23, and J9-23-24.

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

In response to a letter from EPA dated August 2, 2004, submitted letter to EPA clarifying what GE has offered and is prepared to offer the owner of Parcels J9-23-19, -20, and -21 to obtain access to that property to perform the required remediation (August 18, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Submit final executed ERE and associated documentation for Parcel J9-23-24.
- Continue discussions regarding access to Parcel J9-23-13 and Parcels J9-23-19, -20, and -21 for remediation.
- Discuss draft EREs for GE-owned properties with EPA and MDEP and work on obtaining subordination agreements for easements at those properties.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

Owners of Parcel J9-23-13 and Parcels J9-23-19, -20, and -21 have not granted access for remediation.

f. Proposed/Approved Work Plan Modifications

None

ITEM 11
NEWELL STREET AREA II
(GECD450)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Awaiting EPA review of Conceptual RD/RD Work Plan (submitted on July 16, 2004).

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

ITEM 12
FORMER OXBOW AREAS J & K
(GECD420)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

Sent letter to property owner at Parcel K10-11-5 regarding planned excavation(s) (August 12, 2004).

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Initiate additional supplemental sampling within 30 days of EPA conditional approval (dated August 26, 2004) of Supplemental Pre-Design Investigation Report and Additional Sampling Proposal.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

- Received approval of Soil Disposal Plan for soil excavated at Parcel K10-11-5 (August 8, 2004).

- Received EPA conditional approval of June 28, 2004 Supplemental Pre-Design Investigation Report and Additional Sampling Proposal (August 26, 2004).

ITEM 13
HOUSATONIC RIVER AREA
UPPER ½ MILE REACH
(GECD800)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

- Conducted 2004 aquatic habitat structure and armor stone layer inspections (August 16, 2004).
- Conducted summer 2004 restored bank vegetation inspection (August 17, 2004).

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

Submitted Bank Erosion Inspection Report for Spring 2004 (August 6, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Conduct seepage meter monitoring when water levels allow.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

- Seepage meter monitoring has not occurred due to increased water levels.
- Issues relating to TOC content in isolation layer remain to be resolved. EPA and GE have agreed that GE's report on those issues will be deferred until after the seepage meter data are available. The Final Completion Report for Upper ½ Mile Reach Removal Action will be submitted following resolution of those issues.

f. Proposed/Approved Work Plan Modifications

None

ITEM 14
HOUSATONIC RIVER AREA
1½-MILE REACH
(GECD820)
AUGUST 2004

(Note: This item is limited to activities conducted by GE and does not include EPA's work on the 1½-Mile Reach Removal Action)

a. Activities Undertaken/Completed

On August 25, 2004, BBL (on GE's behalf) performed a round of water column monitoring at nine locations along the Housatonic River between Coltsville, MA and Great Barrington, MA. Two of these locations are situated in the 1½-Mile Reach: Lyman Street Bridge (Location 4) and Pomeroy Avenue Bridge (Location 6A). A composite grab sample was collected at each location and submitted to Northeast Analytical for analysis of PCBs (total), TSS, POC, and chlorophyll-a (see Table 14-1). (The other seven locations are discussed under Item 15 below.)

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue Housatonic River monthly water column monitoring.
- Continue surface water sampling to monitor construction activities in the 1½-Mile Reach.*

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

TABLE 14-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

HOUSATONIC RIVER - 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
Monthly Water Column Sampling	Location-4	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-4	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-6A	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-6A	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	

TABLE 14-2
SAMPLE DATA RECEIVED DURING AUGUST 2004

MONTHLY WATER COLUMN SAMPLING
HOUSATONIC RIVER - 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Location	Date Collected	Aroclor-1016, -1221, -1232, -1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	POC	TSS	Chlorophyll (a)
LOCATION-4	Lyman Street Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.774	6.00	0.0026
LOCATION-6A	Pomeroy Ave. Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	0.0000260 AF	0.0000330	0.0000590	0.819	5.80	0.0028

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical, Inc. for analysis of unfiltered PCBs, total suspended solids (TSS), particulate organic carbon (POC), and chlorophyll (a).
2. Sampling methods involved the collection of composite grab samples at each location, representative of three stations (25, 50, and 75 percent of the total river width at each location) at 50 percent of the total river depth at each station.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

ITEM 15
HOUSATONIC RIVER AREA
REST OF THE RIVER
(GECD850)
AUGUST 2004

a. Activities Undertaken/Completed

- On August 25, 2004, BBL (on GE's behalf) performed a round of water column monitoring at nine locations along the Housatonic River between Coltsville and Great Barrington, MA. Two locations are situated in the 1½-Mile Reach of the Housatonic River and were discussed in Item 14. Of the remaining seven locations, two are located upstream of the 1½-Mile Reach: Hubbard Avenue Bridge (Location 1) and Newell Street Bridge (Location 2). The five remaining locations are situated in the Rest of the River: Holmes Road Bridge (Location 7); New Lenox Road Bridge (Location 9); Woods Pond Headwaters (Location 10); Schweitzer Bridge (Location 12); and Division Street Bridge (Location 13). Sampling activities were performed at all these locations on August 25, 2004 from downstream to upstream. Composite grab samples were collected at each location sampled and submitted to Northeast Analytical for analysis of PCBs (total), TSS, POC, and chlorophyll-a (see Table 15-1).

b. Sampling/Test Results

See attached tables.

c. Work Plans/Reports/Documents Submitted

Submitted Quarterly Inspection Report (July 2004) for Woods Pond (August 20, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue Housatonic River monthly water column monitoring.

- Proceed with work on gate stem repairs at Rising Pond Dam, as identified in the Structural Integrity Report submitted in July 2003 for that dam, and based on the October 2003 gate stem inspection.* Discuss with owner of Rising Pond.

- Conduct bi-annual structural integrity inspection of Woods Pond Dam (anticipated in October 2004).

- Conduct dam assessment training (anticipated in October 2004).

e. General Progress/Unresolved Issues/Potential Schedule Impacts

Ongoing issues relating to EPA's risk assessments.*

f. Proposed/Approved Work Plan Modifications

None

TABLE 15-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

HOUSATONIC RIVER - REST OF RIVER
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
Monthly Water Column Sampling	HR-D1 (Location-12)	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	HR-D1 (Location-12)	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-1	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-1	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-10	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-10	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-12	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-12	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-13	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-13	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-2	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-2	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-7	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-7	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04
Monthly Water Column Sampling	Location-9	8/25/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-9	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	8/20/04

Note:
1. Field duplicate sample locations are presented in parenthesis.

TABLE 15-2
SAMPLE DATA RECEIVED DURING AUGUST 2004

MONTHLY WATER COLUMN SAMPLING
HOUSATONIC RIVER - REST OF RIVER
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample ID	Location	Date Collected	Aroclor-1016, -1221, -1232, -1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	POC	TSS	Chlorophyll (a)
LOCATION-1	Hubbard Ave. Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.595	3.00	0.0012
LOCATION-2	Newell Street Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	1.0	7.50	0.0034
LOCATION-7	Holmes Rd. Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.0000330 AG	0.0000330	0.600	5.40	0.0022
LOCATION-9	New Lenox Rd. Bridge	7/29/2004	ND(0.0000220)	0.0000460 PE	0.0000860 AF	0.000190	0.000322	0.778	7.50	0.0034
LOCATION-10	Headwaters of Woods Pond	7/29/2004	ND(0.0000220)	0.0000430 PE	0.0000740 AF	0.000140	0.000257	0.515	4.20	0.0033
LOCATION-12	Schweitzer Bridge	7/29/2004 7/29/2004	ND(0.0000220) [ND(0.0000220)]	0.0000350 PE [0.000033 PE]	0.0000520 AF [0.0000550 AF]	0.0000990 [0.000110]	0.000186 [0.000198]	0.669 [0.484]	3.60 [5.10]	0.0055 [0.0059]
LOCATION-13	Division St. Bridge	7/29/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.0000510 AG	0.0000510	0.587	6.00	0.0024

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical, Inc. for analysis of unfiltered PCBs, total suspended solids (TSS), particulate organic carbon (POC), and chlorophyll (a).
2. Sampling methods involved the collection of composite grab samples at each location, representative of three stations (25, 50, and 75 percent of the total river width at each location) at 50 percent of the total river depth at eac station.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
5. AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
6. 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
7. Field duplicate sample results are presented in brackets.

ITEMS 16 & 17
HOUSATONIC RIVER FLOODPLAIN
RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES
ADJACENT TO 1½-MILE REACH
(GECD710 AND GECD720)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

Completed supplemental PCB sampling activities in accordance GE's Proposal for Supplemental PCB Pre-Design Investigations for Phase 3 Floodplain Properties – Groups 3A, 3B, 3C, and 3D (submitted on August 3 and approved on August 12, 2004).

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

- Submitted Proposal for Supplemental PCB Pre-Design Investigations for Phase 3 Floodplain Properties – Groups 3A, 3B, 3C, and 3D (August 3, 2004).

- Submitted Interim Pre-Design Investigation Report for Phase 3 Properties (August 13, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Submit a Pre-Design Investigation Work Plan Addendum for Phase 4, Groups 4B and 4C properties.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

- GE will discuss with EPA schedule for pre-certification inspection and submittal of Final Completion Report for Phase 1 and Phase 2 properties, and ERE for City-owned property in Phase 2.

- Issues related to timing for sampling at Phase 3 and Phase 4 properties are under discussion with EPA.

f. Proposed/Approved Work Plan Modifications

Received approval of Proposal for Supplemental PCB Pre-Design Investigations for Phase 3 Floodplain Properties – Groups 3A, 3B, 3C, and 3D (August 12, 2004).

TABLE 16&17-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Depth (feet)	Matrix	Laboratory	Analyses	Date Received
Residential Properties Soil Sampling	3A-DUP-7 (3A-SS-22)	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3A-SB-27	8/23/04	2-4	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SB-28	8/23/04	1-2	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SB-28	8/23/04	2-4	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SB-29	8/23/04	1-2	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SB-30	8/23/04	2-4	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SB-30	8/23/04	4-6	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3A-SS-20	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3A-SS-21	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3A-SS-22	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3A-SS-23	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3B-DUP-8 (3B-SB-27)	8/24/04	3-4	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-26	8/24/04	6-8	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-27	8/24/04	3-4	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-27	8/24/04	4-6	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-27	8/24/04	6-8	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-28	8/24/04	2-3	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-29	8/24/04	2-3	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3B-SB-30	8/24/04	2-3	Soil	SGS	PCB	Cancelled
Residential Properties Soil Sampling	3B-SB-31	8/24/04	6-8	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3C-SB-27	8/23/04	2-4	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3C-SB-28	8/23/04	2-4	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3C-SB-29	8/23/04	6-8	Soil	SGS	PCB	8/27/04
Residential Properties Soil Sampling	3C-SS-33	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3C-SS-34	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3C-SS-35	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3C-SS-36	8/20/04	0-1	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3C-SS-37	8/20/04	0-1	Soil	SGS	PCB	Cancelled
Residential Properties Soil Sampling	3C-SS-38	8/20/04	0-1	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3D-SB-25	8/24/04	1-2	Soil	SGS	PCB	8/31/04
Residential Properties Soil Sampling	3D-SS-21	8/19/04	0-1	Soil	SGS	PCB	8/25/04
Residential Properties Soil Sampling	3D-SS-22	8/19/04	0-1	Soil	SGS	PCB	8/25/04

Note:
1. Field duplicate sample locations are presented in parenthesis.

TABLE 16&17-2
PCB DATA RECEIVED DURING AUGUST 2004

SOIL BORING PROGRAM
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
Surface Samples						
3A-SS-20	0-1	8/19/2004	ND(0.040)	0.069	0.24	0.309
3A-SS-21	0-1	8/19/2004	ND(19)	ND(19)	130	130
3A-SS-22	0-1	8/19/2004	ND(0.80) [ND(0.81)]	2.4 [3.4]	5.8 [8.4]	8.2 [11.8]
3A-SS-23	0-1	8/19/2004	ND(0.044)	0.29	0.77	1.06
3C-SS-33	0-1	8/19/2004	ND(0.38)	7.4	10	17.4
3C-SS-34	0-1	8/19/2004	ND(0.039)	0.61	1.0	1.61
3C-SS-35	0-1	8/19/2004	ND(0.039)	0.82	1.4	2.22
3C-SS-36	0-1	8/20/2004	ND(0.039)	0.046	0.16	0.206
3C-SS-38	0-1	8/20/2004	ND(0.039)	0.12	0.40	0.52
3D-SS-21	0-1	8/19/2004	ND(0.19)	1.4	2.1	3.5
3D-SS-22	0-1	8/19/2004	ND(0.040)	0.046	0.047	0.093
Soil Boring Samples						
3A-SB-27	2-4	8/23/2004	ND(0.40)	3.8	6.7	10.5
3A-SB-28	1-2	8/23/2004	ND(0.20)	ND(0.20)	2.6	2.6
	2-4	8/23/2004	ND(0.20)	1.6	1.9	3.5
3A-SB-29	1-2	8/23/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
3A-SB-30	2-4	8/23/2004	ND(0.040)	0.20	0.35	0.55
	4-6	8/23/2004	ND(0.037)	0.38	0.64	1.02
3B-SB-26	6-8	8/24/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
3B-SB-27	3-4	8/24/2004	ND(0.042) [ND(0.042)]	ND(0.042) [ND(0.042)]	ND(0.042) [ND(0.042)]	ND(0.042) [ND(0.042)]
	4-6	8/24/2004	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	6-8	8/24/2004	ND(0.039)	ND(0.039)	0.12	0.12
3B-SB-28	2-3	8/24/2004	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
3B-SB-29	2-3	8/24/2004	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
3B-SB-31	6-8	8/24/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
3C-SB-27	2-4	8/23/2004	ND(0.23)	4.7	6.9	11.6
3C-SB-28	2-4	8/23/2004	ND(3.4)	20	27	47
3C-SB-29	6-8	8/23/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
3D-SB-25	1-2	8/24/2004	ND(0.040)	0.15	0.19	0.34

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

ITEM 18
HOUSATONIC RIVER FLOODPLAIN
CURRENT RESIDENTIAL PROPERTIES
DOWNSTREAM OF CONFLUENCE
(ACTUAL/POTENTIAL LAWNS)
(GECD730)
AUGUST 2004

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

None

e. General Progress/Unresolved Issues/Potential Schedule Impacts

Awaiting EPA approval of GE's Pre-Design Investigation Work Plan (submitted on February 26, 2002). (Based on discussions with EPA, it appears that this pre-design sampling will be deferred for some period of time.)*

f. Proposed/Approved Work Plan Modifications

None

ITEM 20
OTHER AREAS
SILVER LAKE AREA
(GECD600)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

Performed water level monitoring at wells surrounding the lake (see Item 21.a).

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

Submitted letter to property owner at Parcel I9-9-34 regarding planned excavation(s) (August 12, 2004).

d. Upcoming Scheduled Activities (next six weeks)

- Continue water-level monitoring at well pairs surrounding the lake.
- Submit Addendum to GE's Pre-Design Investigation Report for Silver Lake Sediments (due by September 16, 2004).
- Submit letter to EPA proposing: additional TPH sediment sampling, pore water analysis for PCBs and TPH, discussion and possible sampling of metal and possible NAPL investigations, and outlining objectives of upcoming bench-scale pilot study (due by September 16, 2004).
- Submit Interim Pre-Design Investigation Report for soils at properties adjacent to Silver Lake (due by September 30, 2004).

e. General Progress/Unresolved Issues/Potential Schedule Impacts

EPA has issued a conditional approval of GE's Pre-Design Investigation Report for Silver Lake Sediments (see Item 20.f below), and supports the performance of bench-scale pilot studies for capping of Silver Lake sediments.

ITEM 20
(cont'd)
OTHER AREAS
SILVER LAKE AREA
(GECD600)
AUGUST 2004

f. Proposed/Approved Work Plan Modifications

- Received a "No Position" letter from EPA for disposition of soil to be excavated by owner at Parcel I9-9-34. EPA concurs that property owner should have excavated soil analyzed (August 6, 2004).

- Received EPA's conditional approval letter for February 2004 Pre-Design Investigation Report for Silver Lake Sediments (August 17, 2004).

ITEM 21
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 1 (GMA 1)
(GECD310)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

General

- Sent request to property owner for access to Parcels K10-17-6 and K10-17-104 (August 30, 2004).

East Street Area 1-North and South:

- Continued automated groundwater and NAPL pumping at North Side and South Side Caissons. A total of approximately 2.0 gallons of LNAPL were removed from the North Side Caisson, while recoverable quantities were not encountered at the South Side Caisson in August.

- Continued routine well monitoring and manual NAPL removal activities. Approximately 0.04 liter (0.01 gallon) of LNAPL was removed from wells in this area during August.

- Decommissioned well 139.

- Installed replacement well 139R.

East Street Area 2-South:

- Continued automated groundwater and LNAPL removal activities. A total of approximately 4,039,296 gallons of groundwater was recovered from pumping systems 64R, 64S, 64V, 64X, RW-1(S), RW-1(X), and RW-2(X). In addition, approximately 1,441 gallons of LNAPL were removed from pumping systems 64R, 64V, RW-1(S), RW-1(X), 64X, and 64S Caisson.

- Continued automated DNAPL removal activities. Removed approximately 47 gallons of DNAPL from pumping system RW-3(X).

- Continued routine well monitoring and manual NAPL removal activities. Approximately 3.07 liters (0.81 gallon) of LNAPL were recovered from the wells monitored during August.

- Treated/discharged 5,154,369 gallons of water through 64G Groundwater Treatment Facility.

East Street Area 2-North:

- Continued routine well monitoring and manual NAPL removal activities. Recoverable quantities of NAPL were not encountered in any of the wells monitored during August.

ITEM 21
(cont'd)
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 1 (GMA 1)
(GECD310)
AUGUST 2004

a. Activities Undertaken/Completed (cont'd)

20s, 30s, and 40s Complexes:

- Continued routine well monitoring and manual NAPL removal activities. Recoverable quantities of NAPL were not encountered in any of the wells monitored in August.

- Continued to monitor LNAPL within the hydraulic piston cylinder of Building 43 elevator shaft; no recoverable quantities were encountered.

Lyman Street Area:

- Continued automated groundwater and NAPL removal activities. Recoverable quantities of NAPL were not encountered in any of the automated wells monitored in August.

- Continued routine well monitoring and manual NAPL removal activities and conducted semi-annual bailing round at all wells that contained NAPL in 2003. Approximately 1.28 liters (0.34 gallon) of DNAPL were removed from wells located in this area.

Newell Street Area II:

- Continued automated DNAPL recovery, with the collection of approximately 240 gallons of DNAPL from the automated collection systems.

- Continued routine well monitoring and manual NAPL removal activities. Approximately 1.33 liters (0.35 gallon) of DNAPL were removed from wells in this area.

Silver Lake:

- Continued routine monitoring of wells around lake.

b. Sampling/Test Results Received

See attached tables.

ITEM 21
(cont'd)
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 1 (GMA 1)
(GECD310)
AUGUST 2004

c. Work Plans/Reports/Documents Submitted

Submitted NAPL Monitoring Report for Spring 2004 (August 30, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue routine monitoring, including performance of NAPL bailing round prior to fall 2004 semi-annual monitoring event.
- Install monitoring well GMA1-18 to replace well ES1-14 in the interim monitoring program.
- Possibly install two soil borings downgradient of wells GMA1-15 and GMA1-16 upon EPA approval (see Item 21.f below).
- Submit a proposal for abandonment of Building 43 elevator shaft.
- Initiate fall 2004 interim groundwater quality sampling activities.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

None

f. Proposed/Approved Work Plan Modifications

The *Plant Site 1 Groundwater Management Area NAPL Monitoring Report for Fall 2003* contained a number of proposed modifications to the NAPL monitoring/recovery program at this GMA. These included a proposal to install two soil borings downgradient of wells GMA1-15 and GMA1-16 within one month of EPA approval of that report. The soil boring results will be compared with other soil boring logs in the area and GE will propose at least two locations for NAPL monitoring well installations.

TABLE 21-1
AUTOMATED LNAPL & GROUNDWATER RECOVERY SYSTEMS MONTHLY SUMMARY
EAST STREET AREA 1 - NORTH & SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Caisson	Month	Vol. LNAPL Collected (gallon)	Vol. Water Recovered (gallon)	Percent Downtime
Northside	August 2003	0.0	13,800	
	September 2003	5.0	26,800	0.074 Power Outage
	October 2003	0.0	22,700	
	November 2003	0.0	37,300	
	December 2003	0.0	47,300	
	January 2004	2.5	23,700	0.40
	February 2004	0.0	16,300	
	March 2004	0.0	22,500	0.27 - Power Outage
	April 2004	1.0	29,100	
	May 2004	0.0	22,300	
	June 2004	4.3	28,500	
	July 2004	4.4	16,700	
	August 2004	2.0	16,300	
Southside	August 2003	0.0	65,900	1.19
	September 2003	0.0	77,600	0.074 Power Outage
	October 2003	0.0	94,000	
	November 2003	0.0	85,100	
	December 2003	0.0	106,600	
	January 2004	2.5	72,500	0.40
	February 2004	0.0	5,400	
	March 2004	0.0	68,200	0.27 - Power Outage
	April 2004	1.0	74,600	
	May 2004	0.0	71,500	
	June 2004	0.0	75,300	
	July 2004	4.4	67,100	
	August 2004	0.0	67,300	

TABLE 21-2
MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL
EAST STREET AREA 1 - NORTH & SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	August 2004 Removal (liters)
34	9/1/2004	5.85	5.82	0.03	0.019	0.019
72	9/1/2004	6.53	6.50	0.03	0.019	0.019

Total Manual LNAPL Removal for August 2004: 0.038 liters
0.010 gallons

Note:

1. ft BMP - feet Below Measuring Point.

TABLE 21-3
ROUTINE WELL MONITORING
EAST STREET AREA 1 - NORTH & SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
GMA 1 - East Street Area 1 - North									
North Cassion	997.84	8/4/2004	18.30	18.20	0.10	---	19.80	0.00	979.63
North Cassion	997.84	8/11/2004	18.37	18.32	0.05	---	19.80	0.00	979.52
North Cassion	997.84	8/18/2004	18.14	P	< 0.01	---	19.80	0.00	979.70
North Cassion	997.84	8/24/2004	18.44	18.39	0.05	---	19.80	0.00	979.45
GMA 1 - East Street Area 1 - South									
31R	1,000.23	9/1/2004	9.14	---	0.00	---	15.06	0.00	991.09
33	999.50	9/1/2004	6.18	---	0.00	---	21.36	0.00	993.32
34	999.90	9/1/2004	5.85	5.82	0.03	---	21.02	0.00	994.08
72	1,000.62	9/1/2004	6.53	6.50	0.03	---	22.00	0.00	994.12
72R	1,000.92	9/1/2004	6.38	---	0.00	---	13.32	0.00	994.54
139R	NA	8/20/2004	11.26	---	0.00	---	14.92	0.00	NA
South Cassion	1,001.11	8/4/2004	13.75	13.74	0.01	---	15.00	0.00	987.37
South Cassion	1,001.11	8/11/2004	18.26	18.25	0.01	---	15.00	0.00	982.86
South Cassion	1,001.11	8/18/2004	13.71	13.63	0.08	---	15.00	0.00	987.47
South Cassion	1,001.11	8/24/2004	14.43	14.40	0.03	---	15.00	0.00	986.71

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. P indicates that LNAPL or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.

TABLE 21-4
AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS
EAST STREET AREA 2 - SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS
August 2004

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
40R	August 2003	0		
	September 2003	0		
	October 2003	0		
	November 2003	0		
	December 2003	0		
	January 2004	0		
	February 2004	0		0.3
	March 2004	0		0.27 - Power Outage
	April 2004	0		
	May 2004	0		
	June 2004	0		
	July 2004	0		
	August 2004	0		
64R	August 2003	300	580,600	
	September 2003	1,150	639,200	
	October 2003	975	717,300	
	November 2003	200	563,400	
	December 2003	625	290,500	
	January 2004	50	233,000	
	February 2004	250	1,015,000	0.3
	March 2004	325	897,300	0.94 - Power Outage
	April 2004	975	705,000	
	May 2004	125	629,500	
	June 2004	736	923,500	
	July 2004	380	693,900	
	August 2004	250	330,800	
64S System	August 2003	38	302,161	
	September 2003	0	443,631	
	October 2003	150	983,801	
	November 2003	1,198	1,041,476	
	December 2003	925	1,529,896	1.6 - Low Voltage
	January 2004	1,054	1,237,777	
	February 2004	224	651,804	3.88
	March 2004	1,271	802,349	1.88 - Power Outage
	April 2004	1,374	947,810	
	May 2004	1,045	1,062,518	
	June 2004	772	968,659	
	July 2004	154	349,705	
	August 2004	230	240,781	
64V	August 2003	391	1,026,400	
	September 2003	867	1,020,100	
	October 2003	1,071	1,482,600	
	November 2003	1,377	1,309,800	
	December 2003	2,261	1,719,700	6.7 - Replaced Pump
	January 2004	1,768	1,366,300	
	February 2004	408	1,091,800	0.3
	March 2004	1,173	1,370,200	0.27 - Power Outage
	April 2004	1,598	1,212,000	
	May 2004	933	1,313,100	
	June 2004	879	1,444,400	
	July 2004	773	940,100	
	August 2004	772	875,900	

TABLE 21-4
AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS
EAST STREET AREA 2 - SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS
August 2004

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
64X	August 2003	30	403,200	
	September 2003	15	403,200	
	October 2003	10	460,800	
	November 2003	10	403,200	
	December 2003	5	504,000	3.2 - Cleaned Flow Meter
	January 2004	10	676,800	
	February 2004	2	403,200	0.3
	March 2004	4	504,000	0.27 - Power Outage
	April 2004	0	388,800	
	May 2004	10	403,200	
	June 2004	5	518,400	
	July 2004	10	403,200	
	August 2004	31	388,800	
RW-2(X)	August 2003	0	481,800	
	September 2003	0	403,800	
	October 2003	0	498,300	
	November 2003	0	461,400	
	December 2003	0	917,800	
	January 2004	0	403,200	
	February 2004	0	580,000	0.3
	March 2004	0	644,300	0.27 - Power Outage
	April 2004	0	518,200	
	May 2004	0	427,200	
	June 2004	0	458,500	
	July 2004	0	1,029,700	
	August 2004	0	1,020,000	
RW-1(S) [1]	August 2003	12	776,403	
	September 2003	50	811,790	
	October 2003	25	1,303,720	
	November 2003	52	1,155,983	
	December 2003	0	1,677,094	
	January 2004	96	1,196,628	
	February 2004	51	832,544	0.3
	March 2004	31	1,114,375	0.27 - Power Outage
	April 2004	76	1,012,477	
	May 2004	36	1,056,169	
	June 2004	419	1,108,600	
	July 2004	196	669,474	
	August 2004	158	709,815	
RW-1(X)	August 2003	0	499,300	
	September 2003	10	486,700	
	October 2003	0	690,100	
	November 2003	0	488,500	
	December 2003	0	575,100	3.2 - Cleaned Flow Meter
	January 2004	0	426,600	
	February 2004	0	382,600	0.3
	March 2004	1	502,100	0.27 - Power Outage
	April 2004	0	387,100	
	May 2004	0	397,200	
	June 2004	5	453,900	
	July 2004	0	363,900	
	August 2004	0	473,200	

TABLE 21-4
AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS
EAST STREET AREA 2 - SOUTH
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS
August 2004

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
RW-3(X)	August 2003	54		
	September 2003	55		
	October 2003	56		
	November 2003	55		
	December 2003	56		
	January 2004	70		
	February 2004	49		0.3
	March 2004	75		0.27 - Power Outage
	April 2004	79		
	May 2004	55		
	June 2004	169		
	July 2004	57		
	August 2004	47		

Summary of Total Automated Removal	
LNAPL:	**1,441 Gallons**
DNAPL:	**47 Gallons**
Water:	**4,039,296 Gallons**

Note:

1. The flow meter at recovery well RW-1(S) was reset in March 2004.

TABLE 21-5
WELL MONITORING AND RECOVERY OF LNAPL
EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	August 2004 Removal (liters)
13	8/26/2004	16.46	16.38	0.08	0.049	0.049
14	8/26/2004	16.65	16.64	0.01	0.006	0.006
55	8/26/2004	16.90	15.87	1.03	0.635	0.635
GMA1-15	8/26/2004	15.14	14.20	0.94	0.592	0.592
GMA1-16	8/26/2004	12.92	12.50	0.42	0.259	0.259
GMA1-17W	8/26/2004	17.50	15.02	2.48	1.530	1.530

Total LNAPL Removal 20's, 30's & 40's Complexs for August 2004: 0.000 liters
0.000 gallons

Total LNAPL Removal East Street Area 2 - North for August 2004: 0.000 liters
0.000 gallons

Total LNAPL Removal East Street Area 2 - South for August 2004: 3.071 liters
0.810 gallons

Total LNAPL Removal for August 2004: 3.071 liters
0.810 gallons

Note:
1. ft BMP - feet Below Measuring Point.

TABLE 21-6
64G TREATMENT PLANT DISCHARGE DATA
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Date	Housatonic River Discharge (gallons)	Recharge Pond Discharge (gallons)	Total Discharge (gallons)
August 2003	3,810,650	339,323	4,149,973
September 2003	4,336,220	294,016	4,630,236
October 2003	5,428,939	251,753	5,680,692
November 2003	5,599,600	108,107	5,707,707
December 2003	6,406,420	60,343	6,466,763
January 2004	6,158,960	132,862	6,291,822
February 2004	4,883,690	186,281	5,069,971
March 2004	5,462,280	112,985	5,575,265
April 2004	5,406,760	169,598	5,576,358
May 2004	5,678,620	236,862	5,915,482
June 2004	4,709,390	350,668	5,060,058
July 2004	4,585,370	316,805	4,902,175
August 2004	4,844,170	310,199	5,154,369

After treatment, the majority of the water processed at GE's Building 64G groundwater treatment facility is discharged to the Housatonic River through NPDES permitted Outfall 005. However, as part of GE's overall efforts to contain NAPL within the site and to optimize NAPL recovery operations, a portion of the treated water discharged from the 64G facility is routed to GE's on-site recharge pond located in East Street Area 2-South.

TABLE 21-7
ROUTINE WELL MONITORING
EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
30's Complex									
95-15	986.38	8/27/2004	7.80	---	0.00	---	15.06	0.00	NA
GMA1-10	984.86	8/27/2004	7.00	---	0.00	---	19.80	0.00	977.86
GMA1-12	992.26	8/27/2004	16.02	---	0.00	---	22.15	0.00	976.24
RF-02	982.43	8/27/2004	5.25	---	0.00	---	18.30	0.00	977.18
RF-03	985.40	8/27/2004	9.53	---	0.00	---	18.43	0.00	975.87
RF-03D	985.31	8/27/2004	7.08	---	0.00	---	36.00	0.00	978.23
RF-16	987.91	8/27/2004	8.91	---	0.00	---	20.70	0.00	979.00
40s Complex									
Bldg. 43 Elev.	NA	8/2/2004	28.31	28.30	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	8/9/2004	28.15	28.14	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	8/16/2004	28.32	28.31	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	8/23/2004	27.88	27.87	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	8/30/2004	27.72	27.71	0.01	---	61.69	0.00	NA
95-17	1,007.67	8/27/2004	24.05	---	0.00	---	28.61	0.00	983.62
East Street Area 2 - South									
13	990.88	8/26/2004	16.46	16.38	0.08	---	22.59	0.00	974.49
14	991.61	8/26/2004	16.65	16.64	0.01	---	25.75	0.00	974.97
15R	989.23	8/26/2004	14.50	---	0.00	---	19.64	0.00	974.73
26RR	1,000.58	8/26/2004	22	21.80	0.20	---	28.60	0.00	978.77
40R	991.60	8/4/2004	16.15	---	0.00	---	NA	NA	975.45
40R	991.60	8/11/2004	17.94	---	0.00	---	NA	NA	973.66
40R	991.60	8/18/2004	17.88	---	0.00	---	NA	NA	973.72
40R	991.60	8/24/2004	16.51	---	0.00	---	NA	NA	975.09
49R	988.71	8/26/2004	14.85	---	0.00	---	24.88	0.00	973.86
49RR	989.80	8/26/2004	15.88	---	0.00	---	23.06	0.00	973.92
55	989.45	8/26/2004	16.90	15.87	1.03	---	30.04	0.00	973.51
64R	993.37	8/4/2004	17.63	17.34	0.29	---	19.00	0.00	976.01
64R	993.37	8/11/2004	16.99	16.72	0.27	---	19.00	0.00	976.63
64R	993.37	8/18/2004	17.12	16.86	0.26	---	19.00	0.00	976.49
64R	993.37	8/24/2004	17.21	17.00	0.21	---	19.00	0.00	976.36
64S	984.48	8/4/2004	13.60	---	0.00	---	28.70	0.00	970.88
64S	984.48	8/11/2004	13.49	---	0.00	---	28.70	0.00	970.99
64S	984.48	8/18/2004	13.44	13.36	0.08	---	28.70	0.00	971.11
64S	984.48	8/24/2004	12.39	---	0.00	---	28.70	0.00	972.09
64S-Caisson	NA	8/4/2004	9.70	9.60	0.10	---	14.55	0.00	NA
64S-Caisson	NA	8/11/2004	8.47	8.41	0.06	---	14.55	0.00	NA
64S-Caisson	NA	8/18/2004	9.48	9.34	0.14	---	14.55	0.00	NA
64S-Caisson	NA	8/24/2004	9.41	9.28	0.13	---	14.55	0.00	NA
64V	987.29	8/4/2004	22.30	21.50	0.80	P	29.60	< 0.01	965.73
64V	987.29	8/11/2004	22.30	21.40	0.90	P	29.60	< 0.01	965.83
64V	987.29	8/18/2004	21.40	21.20	0.20	P	29.60	< 0.01	966.08
64V	987.29	8/24/2004	22.00	21.50	0.50	P	29.60	< 0.01	965.76
64X(N)	984.83	8/4/2004	12.65	12.50	0.15	---	15.85	0.00	972.32
64X(N)	984.83	8/11/2004	12.87	12.59	0.28	---	15.85	0.00	972.22

TABLE 21-7
ROUTINE WELL MONITORING
EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
64X(N)	984.83	8/18/2004	12.14	11.98	0.16	---	15.85	0.00	972.84
64X(N)	984.83	8/24/2004	10.50	10.34	0.16	---	15.85	0.00	974.48
64X(S)	981.56	8/4/2004	15.40	15.37	0.03	---	23.82	0.00	966.19
64X(S)	981.56	8/11/2004	15.57	15.56	0.01	---	23.82	0.00	966.00
64X(S)	981.56	8/18/2004	15.10	15.03	0.07	---	23.82	0.00	966.53
64X(S)	981.56	8/24/2004	13.69	13.68	0.01	---	23.82	0.00	967.88
64X(W)	984.87	8/4/2004	18.60	18.57	0.03	---	24.35	0.00	966.30
64X(W)	984.87	8/11/2004	18.79	18.67	0.12	---	24.35	0.00	966.19
64X(W)	984.87	8/18/2004	18.31	18.24	0.07	---	24.35	0.00	966.63
64X(W)	984.87	8/24/2004	16.97	16.87	0.10	---	24.35	0.00	967.99
3-6C-EB-22	986.94	8/26/2004	13.01	---	0.00	---	20.01	0.00	973.93
95-01	983.77	8/26/2004	9.18	---	0.00	---	17.20	0.00	974.59
E2SC-23	992.07	8/26/2004	17.13	---	0.00	---	21.15	0.00	974.94
E2SC-24	987.90	8/26/2004	15.09	---	0.00	---	21.62	0.00	972.81
GMA1-14	997.43	8/26/2004	18.95	---	0.00	---	23.65	0.00	978.48
GMA1-15	988.59	8/26/2004	15.14	14.20	0.94	---	17.85	0.00	974.32
GMA1-16	986.82	8/26/2004	12.92	12.50	0.42	---	20.02	0.00	974.29
GMA1-17E	993.03	8/26/2004	15.20	---	0.00	---	17.35	0.00	977.83
GMA1-17W	992.63	8/26/2004	17.50	15.02	2.48	---	23.38	0.00	977.44
HR-G2-MW-1	982.60	8/26/2004	10.02	---	0.00	---	18.26	0.00	972.58
HR-G2-MW-2	981.39	8/26/2004	7.50	---	0.00	---	17.67	0.00	973.89
HR-G2-MW-3	987.14	8/26/2004	13.85	---	0.00	---	22.00	0.00	973.29
HR-G2-RW-1	976.88	8/26/2004	5.50	5.49	0.01	---	18.72	0.00	972.78
RW-1(S)	987.23	8/4/2004	17.45	17.35	0.10	---	28.60	0.00	969.87
RW-1(S)	987.23	8/11/2004	17.66	17.46	0.20	P	28.60	< 0.01	969.76
RW-1(S)	987.23	8/18/2004	18.46	17.32	1.14	---	28.60	0.00	969.83
RW-1(S)	987.23	8/24/2004	18.51	18.23	0.28	P	28.60	< 0.01	968.98
RW-1(X)	982.68	8/4/2004	19.00	---	0.00	---	20.80	0.00	963.68
RW-1(X)	982.68	8/11/2004	19.20	---	0.00	---	20.80	0.00	963.48
RW-1(X)	982.68	8/18/2004	17.87	---	0.00	---	20.80	0.00	964.81
RW-1(X)	982.68	8/24/2004	17.46	---	0.00	---	20.80	0.00	965.22
RW-2(X)	985.96	8/4/2004	15.56	---	0.00	---	15.30	0.00	970.40
RW-2(X)	985.96	8/11/2004	15.55	---	0.00	---	15.30	0.00	970.41
RW-2(X)	985.96	8/18/2004	15.08	---	0.00	---	15.30	0.00	970.88
RW-2(X)	985.96	8/24/2004	12.33	---	0.00	---	15.30	0.00	973.63
RW-3(X)	980.28	8/4/2004	8.97	---	0.00	41.88	44.40	2.52	971.31
RW-3(X)	980.28	8/11/2004	9.02	---	0.00	42.05	44.40	2.35	971.26
RW-3(X)	980.28	8/18/2004	8.70	---	0.00	41.85	44.40	2.55	971.58
RW-3(X)	980.28	8/24/2004	7.58	---	0.00	41.92	44.40	2.48	972.70

TABLE 21-7
ROUTINE WELL MONITORING
EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
Housatonic River									
SG-HR-1	990.73	8/26/2004	19.10	---	---	---	---	---	971.63
SG-HR-1	990.73	8/20/2004	19.30	---	---	---	---	---	971.43
SG-HR-1	990.73	8/13/2004	18.90	---	---	---	---	---	971.83
SG-HR-1	990.73	8/6/2004	18.90	---	---	---	---	---	971.83

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. P indicates that LNAPL is present at a thickness that is < 0.01 feet, the corresponding thickness is recorded as such.
5. Well HR-G2-RW-1 is constructed at an angle of 41.67 degrees from vertical. Depth to water data reflect measurements collected along the angled well casing. Groundwater elevations are corrected to account for the angle
6. A survey reference point (SG-HR-1) was established on the Newell Street Bridge. The "Depth to Water" value(s) provided in the above table refer to the vertical distance from the surveyed refernece point to the water surface.

TABLE 21-8
ACTIVE RECOVERY SYSTEMS MONTHLY SUMMARY
LYMAN STREET AREA
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Month / Year	Volume Water Pumped (gallon)	RW-1R LNAPL Recovered (gallon)	RW-1 DNAPL Recovered (gallon)	RW-3 LNAPL Recovered (gallon)
August 2002	127,581	--	--	15
September 2002	165,634	4	--	10
October 2002	271,056	--	--	15
November 2002	264,950	--	--	5
December 2002	316,482	2	--	23
January 2003	272,679	--	--	20
February 2003	228,093	--	--	20
March 2003	287,152	--	--	20
April 2003	518,782	--	--	10
May 2003	281,349	--	--	10
June 2003	266,987	--	--	10
July 2003	244,776	--	--	10
August 2003	290,984	--	--	10
September 2003	309,162	--	--	20
October 2003	485,653	--	--	20
November 2003	363,979	--	--	10
December 2003	490,517	--	--	--
January 2004	299,584	--	--	--
February 2004	305,485	--	--	--
March 2004	409,514	--	--	--
April 2004	344,707	--	--	1
May 2004	307,361	--	--	--
June 2004	410,230	--	--	--
July 2004	328,363	--	--	--
August 2004	310,473	--	--	--

Notes:
1. Volume of water pumped is total from Wells RW-1R, RW-2, and RW-3.
2. -- indicates LNAPL or DNAPL was not recovered by the system.
3. There was approximately 3.7% downtime (24 hours) during August 2004.

TABLE 21-9
MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL
LYMAN STREET AREA
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	August 2004 Removal (liters)
LS-31	8/26/2004	12.79	22.40	0.92	0.568	0.568
LS-38	8/26/2004	14.28	25	0.05	0.031	0.031
LSSC-07	8/6/2004	9.50	24.73	0.35	0.216	0.623
	8/13/2004	9.85	24.88	0.20	0.123	
	8/20/2004	9.88	24.85	0.23	0.142	
	8/26/2004	9.84	24.85	0.23	0.142	
LSSC-08I	8/6/2004	10.80	23.34	0.04	0.025	0.031
	8/26/2004	10.95	23.37	0.01	0.006	
LSSC-16I	8/26/2004	7.75	28.5	0.04	0.025	0.025

Total Manual DNAPL Removal for August 2004: 1.278 liters
0.337 gallons

Notes:

1. ft BMP - feet Below Measuring Point.
2. P indicates that DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.

TABLE 21-10
ROUTINE WELL MONITORING
LYMAN STREET AREA
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
E-07	982.87	8/26/2004	6.26	---	0.00	---	19.79	0.00	976.61
LS-24	986.58	8/26/2004	13.01	---	0.00	---	15.26	0.00	973.57
LS-30	986.44	8/26/2004	12.87	12.86	0.01	21.9	22.22	0.32	973.58
LS-31	987.09	8/26/2004	12.79	---	0.00	22.40	23.32	0.92	974.30
LS-38	986.95	8/26/2004	14.28	---	0.00	25	25.05	0.05	972.67
LS-44	980.78	8/26/2004	8.27	---	0.00	---	24.78	0.00	972.51
LSSC-07	982.48	8/6/2004	9.50	---	0.00	24.73	25.08	0.35	972.98
LSSC-07	982.48	8/13/2004	9.85	---	0.00	24.88	25.08	0.20	972.63
LSSC-07	982.48	8/20/2004	9.88	---	0.00	24.85	25.08	0.23	972.60
LSSC-07	982.48	8/26/2004	9.84	---	0.00	24.85	25.08	0.23	972.64
LSSC-08I	983.13	8/6/2004	10.80	---	0.00	23.34	23.38	0.04	972.33
LSSC-08I	983.13	8/13/2004	11.06	---	0.00	---	23.39	0.00	972.07
LSSC-08I	983.13	8/20/2004	11.30	---	0.00	---	23.38	0.00	971.83
LSSC-08I	983.13	8/26/2004	10.95	---	0.00	23.37	23.38	0.01	972.18
LSSC-08S	983.11	8/26/2004	10.95	---	0.00	---	14.68	0.00	972.16
LSSC-16I	980.88	8/26/2004	7.75	---	0.00	28.5	28.54	0.04	973.13
LSSC-18	987.32	8/26/2004	13.65	---	0.00	---	18.58	0.00	973.67
LSSC-32	980.68	8/26/2004	7.85	---	0.00	---	35.24	0.00	972.83
LSSC-33	980.49	8/26/2004	7.50	---	0.00	---	29.75	0.00	972.99
MW-6R	985.14	8/26/2004	10.01	---	0.00	---	13.91	0.00	975.13
RW-1	984.88	8/4/2004	12.21	P	< 0.01	P	21.00	< 0.01	972.67
RW-1	984.88	8/11/2004	12.30	---	0.00	20.82	21.00	0.18	972.58
RW-1	984.88	8/18/2004	12.93	---	0.00	20.65	21.00	0.35	971.95
RW-1	984.88	8/24/2004	10.90	---	0.00	20.90	21.00	0.10	973.98
RW-1 (R)	985.07	8/4/2004	15.56	P	< 0.01	---	20.42	0.00	969.51
RW-1 (R)	985.07	8/11/2004	15.73	---	0.00	P	20.42	< 0.01	969.34
RW-1 (R)	985.07	8/18/2004	15.62	---	0.00	P	20.42	< 0.01	969.45
RW-1 (R)	985.07	8/24/2004	14.80	---	0.00	P	20.42	< 0.01	970.27
RW-2	987.82	8/4/2004	15.70	---	0.00	---	21.75	0.00	972.12
RW-2	987.82	8/11/2004	16.57	---	0.00	---	21.75	0.00	971.25
RW-2	987.82	8/18/2004	15.24	---	0.00	---	21.75	0.00	972.58
RW-2	987.82	8/24/2004	12.95	---	0.00	---	21.75	0.00	974.87
RW-3	984.08	8/4/2004	16.43	16.42	0.01	---	21.57	0.00	967.66
RW-3	984.08	8/11/2004	16.74	16.45	0.29	---	21.57	0.00	967.61
RW-3	984.08	8/18/2004	16.79	16.45	0.34	---	21.57	0.00	967.61
RW-3	984.08	8/24/2004	16.88	16.38	0.50	---	21.57	0.00	967.67
Housatonic River (Lyman Street Bridge)									
BM-2A	986.32	8/6/2004	14.46	---	---	---	---	---	971.86
BM-2A	986.32	8/13/2004	14.40	---	---	---	---	---	971.92
BM-2A	986.32	8/20/2004	14.82	---	---	---	---	---	971.50
BM-2A	986.32	8/26/2004	14.58	---	---	---	---	---	971.74

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. P indicates that LNAPL or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.
4. A survey reference point (BM-2A) was established on the Lyman Street Bridge. The "Depth to Water" value(s) provided in the above table refer to the vertical distance from the surveyed reference point to the

TABLE 21-11
ACTIVE DNAPL RECOVERY SYSTEMS MONTHLY SUMMARY
NEWELL STREET AREA II
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Recovery System	Date	Total Gallons Recovered
System 1	August 2003	53.0
	September 2003	26.0
	October 2003	56.0
	November 2003	27.0
	December 2003	47.0
	January 2004	24.0
	February 2004	25.5
	March 2004	25.3
	April 2004	26.4
	May 2004	16.0
	June 2004	16.5
	July 2004	14.3
	August 2004	14.6
System 2	August 2003	115.0
	September 2003	390.0
	October 2003	227.0
	November 2003	146.0
	December 2003	182.0
	January 2004	128.0
	February 2004	139.0
	March 2004	112.0
	April 2004	320.0
	May 2004	138.8
	June 2004	97.2
	July 2004	16.2
	August 2004	226.0
Total Automated DNAPL Removal for August 2004:		**240.6 Gallons**

Notes:
1. System 1 wells are NS-15, NS-30, and NS-32.
2. System 2 wells are N2SC-01I, N2SC-03I, and N2SC-14.
3. There was no downtime during the month of August 2004.

TABLE 21-12
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

CONSENT DECREE MONTHLY STATUS REPORT
GROUNDWATER MANAGEMENT AREA 1 - NEWELL STREET AREA II
MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL
August 2004

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	August 2004 Removal (liters)
N2SC-02	8/26/2004	12.04	40.37	0.03	0.019	0.019
N2SC-07	8/26/2004	11.60	38.11	0.05	0.031	0.031
N2SC-08	8/26/2004	11.41	40.50	2.07	1.277	1.277

Total DNAPL Removal for August 2004: 1.327 liters
0.350 gallons

Note:
1. ft BMP - feet Below Measuring Point.

TABLE 21-13
ROUTINE WELL MONITORING
NEWELL STREET AREA II
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
N2SC-02	985.56	8/26/2004	12.04	---	0.00	40.37	40.40	0.03	973.52
N2SC-07	984.61	8/26/2004	11.60	---	0.00	38.11	38.16	0.05	973.01
N2SC-08	986.07	8/26/2004	11.41	---	0.00	40.50	42.57	2.07	974.66

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.

TABLE 21-14
ROUTINE WELL MONITORING
SILVER LAKE AREA
GROUNDWATER MANAGEMENT AREA 1

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
Monitoring Wells Adjacent to Silver Lake									
SLGW-01S	982.94	8/27/2004	7.00	---	0.00	---	16.25	0.00	975.94
SLGW-01D	983.13	8/27/2004	4.30	---	0.00	---	36.98	0.00	978.83
SLGW-02S	985.39	8/27/2004	7.90	---	0.00	---	16.9	0.00	977.49
SLGW-02D	985.10	8/27/2004	7.34	---	0.00	---	36.90	0.00	977.76
SLGW-03S	980.21	8/27/2004	4.28	---	0.00	---	14.68	0.00	975.93
SLGW-03D	979.14	8/27/2004	1.35	---	0.00	---	32.08	0.00	977.79
SLGW-04S	984.02	8/27/2004	8.14	---	0.00	---	16.68	0.00	975.88
SLGW-04D	983.51	8/27/2004	6.10	---	0.00	---	37.15	0.00	977.41
SLGW-05S	979.12	8/27/2004	3.30	---	0.00	---	11.68	0.00	975.82
SLGW-05D	979.30	8/27/2004	3.31	---	0.00	---	34.92	0.00	975.99
SLGW-06S	981.66	8/27/2004	5.45	---	0.00	---	13.75	0.00	976.21
SLGW-06D	981.63	8/27/2004	5.31	---	0.00	---	34.96	0.00	976.32
Staff Gauge within Silver Lake									
Silver Lake Gauge	NA	8/6/2004	0.56	---	---	---	---	---	NA
Silver Lake Gauge	NA	8/13/2004	0.98	---	---	---	---	---	NA
Silver Lake Gauge	NA	8/20/2004	0.52	---	---	---	---	---	NA

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. A new Silver Lake Gauge has been installed and will be surveyed to obtain a new horizontal datum. "Depth to Water" values provided refer to feet above the datum, rather than feet below the measuring point.
5. Additional groundwater elevation data was collected from wells near Silver Lake that are located in the 30s Complex and at the Lyman Street Area. Those results are presented in the monitoring tables for those Removal Action Areas.

ITEM 22
GROUNDWATER MANAGEMENT AREAS
FORMER OXBOWS J & K (GMA 2)
(GECD320)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Initiate semi-annual groundwater elevation monitoring for fall 2004.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

ITEM 23
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 2 (GMA 3)
(GECD330)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

- Conducted monthly monitoring and NAPL removal in the vicinity of Buildings 51 and 59. Approximately 22.74 liters (6.00 gallons) of LNAPL were removed by the automatic skimmer located in well 51-21 and an additional 10.65 liters (2.81 gallons) of LNAPL were manually removed from the wells in this area.

- Decommissioned wells 6B, 16E, 82B, 95B, 111A, 114B, and 114C.

- Installed replacement monitoring wells 6B-R, 82B-R, 95B-R, 111A-R, and 114B-R.

b. Sampling/Test Results Received

See attached tables.

c. Work Plans/Reports/Documents Submitted

Submitted Baseline Groundwater Quality Interim Report for Spring 2004 (August 30, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

- Continue ongoing groundwater and NAPL monitoring and recovery activities, including performance of NAPL bailing round prior to fall 2004 semi-annual monitoring event.

- Decommission wells 54B, 89D, and 95C.

- Install replacement monitoring wells 54B-R and 89D-R (see Item 23.e below).

- Develop all newly installed replacement wells.

- Initiate fall 2004 baseline sampling and analysis round.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

The decommissioning of wells 54B, 89D, and 95C, and installation of replacement wells 54B-R and 89D-R, have been delayed due to the presence of standing water at these locations. EPA has approved a revised location for well 54B-R and this well will be installed shortly. GE and EPA are discussing the potential replacement of the inaccessible 89 well cluster with the nearby 109 well cluster. If implemented, a new well (109D) would be installed in place of well 89D-R.

ITEM 23
(cont'd)
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 2 (GMA 3)
(GECD330)
AUGUST 2004

f. Proposed/Approved Work Plan Modifications

Well 114B was replaced with well 114B-R due to difficulties encountered in sampling this well in spring 2004. Following discussions with EPA, this replacement was approved to be conducted as part of the other ongoing well replacement activities.

TABLE 23-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
Water Generated During Replacement of Well 16C with 16C-R	B1783-B1787-Water-1	7/30/04	Water	SGS	PCB, VOC, SVOC, RCRA Metals	8/5/04

TABLE 23-2
DATA RECEIVED DURING AUGUST 2004

WATER GENERATED DURING REPLACEMENT OF WELL 16C WITH 16C-R
GROUNDWATER MANAGEMENT AREA 3
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	B1783-B1787-WATER-1 07/30/04
Volatile Organics	
Benzene	0.64
Chlorobenzene	1.4
PCBs-Unfiltered	
None Detected	--
Semivolatile Organics	
1,4-Dichlorobenzene	0.0039 J
2-Chlorophenol	0.016
3&4-Methylphenol	0.0054 J
Naphthalene	0.031
Phenol	0.020
Inorganics-Unfiltered	
Barium	0.100
Chromium	0.00600

Notes:

1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of PCBs, volatiles, semivolatiles and metals.
2. Only detected constituents are summarized.
3. - Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (PCBs, volatiles, semivolatiles)

J - Indicates an estimated value less than the practical quantitation limit (PQL).

TABLE 23-3
MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL
GROUNDWATER MANAGEMENT AREA 3

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	August 2004 Removal (liters)
51-05	8/27/2004	11.10	10.12	0.98	0.605	0.605
51-08	8/6/2004	12.30	10.90	1.40	0.864	3.400
	8/13/2004	12.48	11.00	1.48	0.913	
	8/20/2004	12.30	10.95	1.35	0.833	
	8/27/2004	12.08	10.80	1.28	0.790	
51-17	8/27/2004	11.04	9.86	1.18	0.728	0.728
51-19	8/27/2004	10.90	10.20	0.70	0.432	0.432
51-21	8/4/2004	15.40	P	< 0.01	5.685	22.740
	8/11/2004	15.66	15.65	0.01	6.822	
	8/18/2004	15.57	P	< 0.01	5.685	
	8/24/2004	15.32	15.31	0.01	4.548	
59-03R	8/27/2004	12.20	11.32	0.88	0.543	0.543
GMA3-10	8/6/2004	11.90	11.28	0.62	0.383	1.672
	8/13/2004	12.08	11.36	0.72	0.444	
	8/20/2004	11.95	11.32	0.63	0.450	
	8/27/2004	11.81	11.17	0.64	0.395	
GMA3-12	8/6/2004	12.05	11.64	0.41	1.013	3.262
	8/13/2004	12.03	11.75	0.28	0.692	
	8/20/2004	12.02	11.65	0.37	0.914	
	8/27/2004	11.78	11.52	0.26	0.643	
UB-PZ-3	8/27/2004	12.20	11.92	0.28	0.007	0.007

Total Automated LNAPL Removal at well 51-21 for August 2004: 22.740 liters
6.00 Gallons

Total Manual LNAPL Removal at all other wells for August 2004: 10.649 liters
2.81 Gallons

Total LNAPL Removed for August 2004: 33.389 liters
8.81 Gallons

Notes:

1. ft BMP - feet Below Measuring Point.
2. P indicates that LNAPL or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.

TABLE 23-4
ROUTINE WELL MONITORING
GROUNDWATER MANAGEMENT AREA 3

CONSENT DECREE MONTHLY STATUS REPORT
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
August 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
006B	993.01	8/10/2004	6.38	---	0.00	---	9.27	0.00	986.63
006B-R	NA	8/13/2004	7.75	---	0.00	---	14.60	0.00	NA
016E	992.14	8/12/2004	7.15	---	0.00	---	47.70	0.00	984.99
082B	990.08	8/9/2004	6.06	---	0.00	---	9.88	0.00	984.02
082B-R	NA	8/13/2004	5.78	---	0.00	---	11.59	0.00	NA
095B	988.72	8/24/2004	6.00	---	0.00	---	10.69	0.00	982.72
111A-R	NA	8/13/2004	13.56	---	0.00	---	51.88	0.00	NA
114C	986.68	8/25/2004	4.85	---	0.00	---	90.38	0.00	981.83
51-05	996.44	8/27/2004	11.10	10.12	0.98	---	12.54	0.00	986.25
51-06	997.36	8/27/2004	10.65	---	0.00	---	14.60	0.00	986.71
51-07	997.08	8/27/2004	10.70	---	0.00	---	11.23	0.00	986.38
51-08	997.08	8/6/2004	12.30	10.90	1.40	---	14.65	0.00	986.08
51-08	997.08	8/13/2004	12.48	11.00	1.48	---	14.64	0.00	985.98
51-08	997.08	8/20/2004	12.30	10.95	1.35	---	14.65	0.00	986.04
51-08	997.08	8/27/2004	12.08	10.80	1.28	---	14.66	0.00	986.19
51-09	997.70	8/27/2004	10.38	---	0.00	---	12.00	0.00	987.32
51-14	996.77	8/27/2004	10.65	---	0.00	---	15.00	0.00	986.12
51-15	996.43	8/27/2004	10.24	10.12	0.12	---	14.49	0.00	986.30
51-16R	996.39	8/27/2004	10.17	10.11	0.06	---	14.56	0.00	986.28
51-17	996.43	8/27/2004	11.04	9.86	1.18	---	14.50	0.00	986.49
51-18	997.12	8/27/2004	10.81	---	0.00	---	12.59	0.00	986.31
51-19	996.43	8/27/2004	10.90	10.20	0.70	---	14.05	0.00	986.18
51-21	1,001.49	8/4/2004	15.40	P	< 0.01	---	NM	0.00	986.09
51-21	1,001.49	8/11/2004	15.66	15.65	0.01	---	NM	0.00	985.84
51-21	1,001.49	8/18/2004	15.57	P	< 0.01	---	NM	0.00	985.92
51-21	1,001.49	8/24/2004	15.32	15.31	0.01	---	NM	0.00	986.18
59-01	997.52	8/27/2004	11.25	---	0.00	---	11.36	0.00	986.27
59-03R	997.64	8/27/2004	12.20	11.32	0.88	---	17.04	0.00	986.26
59-07	997.96	8/27/2004	11.60	---	0.00	---	23.55	0.00	986.36
GMA3-10	997.54	8/6/2004	11.90	11.28	0.62	---	18.02	0.00	986.22
GMA3-10	997.54	8/13/2004	12.08	11.36	0.72	---	18.02	0.00	986.13
GMA3-10	997.54	8/20/2004	11.95	11.32	0.63	---	18.02	0.00	986.18
GMA3-10	997.54	8/27/2004	11.81	11.17	0.64	---	18.02	0.00	986.33
GMA3-11	997.25	8/27/2004	10.68	---	0.00	---	18.53	0.00	986.57
GMA3-12	997.84	8/6/2004	12.05	11.64	0.41	---	21.25	0.00	986.17
GMA3-12	997.84	8/13/2004	12.03	11.75	0.28	---	21.25	0.00	986.07
GMA3-12	997.84	8/20/2004	12.02	11.65	0.37	---	21.25	0.00	986.16
GMA3-12	997.84	8/27/2004	11.78	11.52	0.26	---	21.25	0.00	986.30
UB-MW-10	995.99	8/27/2004	10.61	---	0.00	---	15.70	0.00	985.38
UB-PZ-3	998.15	8/27/2004	12.20	11.92	0.28	---	13.37	0.00	986.21

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NM indicates information not measured.
4. P indicates that LNAPL or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.

ITEM 24
GROUNDWATER MANAGEMENT AREAS
PLANT SITE 3 (GMA 4)
(GECD340)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

Submitted Groundwater Quality Interim Report for Spring 2004 (August 30, 2004).

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Initiate semi-annual groundwater elevation monitoring and OPCA-related groundwater quality sampling and analysis for fall 2004.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

ITEM 25
GROUNDWATER MANAGEMENT AREAS
FORMER OXBOWS A & C (GMA 5)
(GECD350)
AUGUST 2004

*** All activities described below for this item were conducted pursuant to the Consent Decree.**

a. Activities Undertaken/Completed

None

b. Sampling/Test Results Received

None

c. Work Plans/Reports/Documents Submitted

None

d. Upcoming Scheduled and Anticipated Activities (next six weeks)

Initiate semi-annual groundwater elevation monitoring for fall 2004.

e. General Progress/Unresolved Issues/Potential Schedule Impacts

No issues

f. Proposed/Approved Work Plan Modifications

None

Attachment A

NPDES Sampling Records and Results
August 2004

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

TABLE A-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

NPDES PERMIT MONITORING
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
NPDES Sampling	001-A5853	8/2/04	Water	SGS	Oil & Grease	8/9/04
NPDES Sampling	001-A5855	8/2/04	Water	SGS	PCB	8/9/04
NPDES Sampling	001-A5862	8/3/04	Water	SGS	TSS	8/10/04
NPDES Sampling	004-A5847	8/1/04	Water	SGS	Oil & Grease	8/9/04
NPDES Sampling	005-A5842/A5844	7/27/04	Water	SGS	PCB	8/3/04
NPDES Sampling	005-A5864/A5865	8/3/04	Water	SGS	PCB, TSS, BOD	8/10/04
NPDES Sampling	005-A5876/A5879	8/9/04	Water	SGS	PCB	8/18/04
NPDES Sampling	005-A5904/A5905	8/17/04	Water	SGS	PCB	8/23/04
NPDES Sampling	005-A5914/A5915	8/24/04	Water	SGS	PCB	8/27/04
NPDES Sampling	005-A5921/A5924	8/30/04	Water	SGS	PCB	
NPDES Sampling	09A-A5843	7/27/04	Water	SGS	TSS, BOD	8/3/04
NPDES Sampling	09A-A5851	8/1/04	Water	SGS	TSS	8/9/04
NPDES Sampling	09A-A5860	8/2/04	Water	SGS	BOD	8/9/04
NPDES Sampling	09A-A5883	8/11/04	Water	SGS	TSS, BOD	8/17/04
NPDES Sampling	09A-A5899	8/16/04	Water	SGS	TSS, BOD	8/24/04
NPDES Sampling	09A-A5917	8/26/04	Water	SGS	TSS, BOD	
NPDES Sampling	09B-A5852	8/1/04	Water	SGS	TSS	8/9/04
NPDES Sampling	09B-A5861	8/2/04	Water	SGS	BOD	8/9/04
NPDES Sampling	09B-A5900	8/16/04	Water	SGS	TSS, BOD	8/24/04
NPDES Sampling	09B-A5925	8/30/04	Water	SGS	TSS, BOD	
NPDES Sampling	09C-A5845	7/27/04	Water	SGS	Oil & Grease	8/3/04
NPDES Sampling	09C-A5849	8/1/04	Water	SGS	Oil & Grease	8/9/04
NPDES Sampling	09C-A5884	8/12/04	Water	SGS	Oil & Grease	8/19/04
NPDES Sampling	09C-A5893	8/16/04	Water	SGS	Oil & Grease	8/24/04
NPDES Sampling	09C-A5926	8/28/04	Water	SGS	Oil & Grease	
NPDES Sampling	64G-A5839	7/26/04	Water	SGS	Oil & Grease	8/3/04
NPDES Sampling	64G-A5858	8/2/04	Water	SGS	Oil & Grease	8/9/04
NPDES Sampling	64G-A5877	8/9/04	Water	SGS	Oil & Grease	8/18/04
NPDES Sampling	64G-A5897	8/16/04	Water	SGS	Oil & Grease	8/24/04
NPDES Sampling	64G-A5910	8/23/04	Water	SGS	Oil & Grease	8/27/04
NPDES Sampling	64G-A5922	8/30/04	Water	SGS	Oil & Grease	
NPDES Sampling	64T-A5837	7/26/04	Water	SGS	Oil & Grease	8/3/04
NPDES Sampling	64T-A5856	8/2/04	Water	SGS	Oil & Grease	8/9/04
NPDES Sampling	64T-A5874	8/9/04	Water	SGS	Oil & Grease	8/18/04
NPDES Sampling	64T-A5895	8/16/04	Water	SGS	Oil & Grease	8/24/04
NPDES Sampling	64T-A5908	8/23/04	Water	SGS	Oil & Grease	8/27/04
NPDES Sampling	64T-A5919	8/30/04	Water	SGS	Oil & Grease	
NPDES Sampling	A5797R	7/19/04	Water	SGS	Acute Toxicity Test	8/2/04
NPDES Sampling	A5797R	7/19/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5798C	7/19/04	Water	SGS	Acute Toxicity Test	8/2/04
NPDES Sampling	A5798C	7/19/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5799R	7/21/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5800C	7/21/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5801R	7/23/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5802C	7/23/04	Water	SGS	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5866R	8/9/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5866RCN	8/9/04	Water	SGS	CN	8/18/04
NPDES Sampling	A5866RTM	8/9/04	Water	SGS	Metals (10)	8/18/04

TABLE A-1
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING AUGUST 2004

NPDES PERMIT MONITORING
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS

Project Name	Field Sample ID	Sample Date	Matrix	Laboratory	Analyses	Date Received
NPDES Sampling	A5867C	8/9/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5867CCN	8/9/04	Water	SGS	CN	8/18/04
NPDES Sampling	A5867CDM	8/9/04	Water	SGS	Filtered Metals (8)	8/18/04
NPDES Sampling	A5867CTM	8/9/04	Water	SGS	Metals (10)	8/18/04
NPDES Sampling	A5868R	8/11/04	Water	SGS	Acute Toxicity Test	8/23/04
NPDES Sampling	A5868R	8/11/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5868RCN	8/11/04	Water	SGS	CN	8/17/04
NPDES Sampling	A5868RTM	8/11/04	Water	SGS	Metals (10)	8/17/04
NPDES Sampling	A5869C	8/11/04	Water	SGS	Acute Toxicity Test	8/23/04
NPDES Sampling	A5869C	8/11/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5869CCN	8/11/04	Water	SGS	CN	8/17/04
NPDES Sampling	A5869CDM	8/11/04	Water	SGS	Filtered Metals (8)	8/17/04
NPDES Sampling	A5869CTM	8/11/04	Water	SGS	Metals (10)	8/17/04
NPDES Sampling	A5870R	8/13/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5870RCN	8/13/04	Water	SGS	CN	8/19/04
NPDES Sampling	A5870RTM	8/13/04	Water	SGS	Metals (10)	8/19/04
NPDES Sampling	A5871C	8/13/04	Water	SGS	Chronic Toxicity Test	8/26/04
NPDES Sampling	A5871CCN	8/13/04	Water	SGS	CN	8/19/04
NPDES Sampling	A5871CDM	8/13/04	Water	SGS	Filtered Metals (8)	8/19/04
NPDES Sampling	A5871CTM	8/13/04	Water	SGS	Metals (10)	8/19/04
NPDES Sampling	AUG04WK1	8/3/04	Water	SGS	Cu, Pb, Zn	8/10/04
NPDES Sampling	AUG04WK3	8/17/04	Water	SGS	Cu, Pb, Zn	8/23/04
NPDES Sampling	AUG04WK4	8/24/04	Water	SGS	Cu, Pb, Zn	8/27/04
NPDES Sampling	JUL04WK5	7/27/04	Water	SGS	Cu, Pb, Zn	8/3/04
NPDES Sampling	SEP04WK1	8/30/04	Water	SGS	Cu, Pb, Zn	
Stormwater Monitoring	001-A5831	7/23/04	Water	SGS	Zinc	8/3/04
Stormwater Monitoring	007-A5832	7/23/04	Water	SGS	Zinc	8/3/04
Stormwater Monitoring	YD12-A5835	7/23/04	Water	SGS	Zinc	8/3/04
Stormwater Monitoring	YD13-A5836	7/23/04	Water	SGS	Zinc	8/3/04
Stormwater Monitoring	YD5-A5833	7/23/04	Water	SGS	Zinc	8/3/04
Stormwater Monitoring	YD9-A5834	7/23/04	Water	SGS	Zinc	8/3/04

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	001-A5853 08/02/04	001-A5855 08/02/04	001-A5862 08/03/04	004-A5847 08/01/04	005-A5842/A5844 07/27/04	005-A5864/A5865 08/03/04	005-A5876/A5879 08/09/04
PCBs-Unfiltered							
Aroclor-1254	NA	0.00046	NA	NA	0.000028 J	ND(0.000065)	ND(0.000065)
Aroclor-1260	NA	0.00024	NA	NA	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	NA	0.00070	NA	NA	0.000028 J	ND(0.000065)	ND(0.000065)
Inorganics-Unfiltered							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Inorganics-Filtered							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Conventionals							
Biological Oxygen Demand (5-day)	NA	NA	NA	NA	NA	ND(2.0)	NA
Oil & Grease	ND(5.0)	NA	NA	ND(5.0)	NA	NA	NA
Total Suspended Solids	NA	NA	7.00	NA	NA	ND(5.00)	NA

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	005-A5904/A5905 08/17/04	005-A5914/A5915 08/24/04	09A-A5843 07/27/04	09A-A5851 08/01/04	09A-A5860 08/02/04	09A-A5883 08/11/04	09A-A5899 08/16/04	09B-A5852 08/01/04
PCBs-Unfiltered								
Aroclor-1254	0.000086	0.000027 J	NA	NA	NA	NA	NA	NA
Aroclor-1260	0.000057 J	0.000018 J	NA	NA	NA	NA	NA	NA
Total PCBs	0.000143	0.000045 J	NA	NA	NA	NA	NA	NA
Inorganics-Unfiltered								
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Filtered								
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Conventionals								
Biological Oxygen Demand (5-day)	NA	NA	ND(2.0)	NA	2.3	ND(2.0)	2.0	NA
Oil & Grease	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	NA	NA	5.00	ND(5.00)	NA	9.00	5.00	7.00

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	09B-A5861 08/02/04	09B-A5900 08/16/04	09C-A5845 07/27/04	09C-A5849 08/01/04	09C-A5884 08/12/04	09C-A5893 08/16/04	64G-A5839 07/26/04	64G-A5858 08/02/04	64G-A5877 08/09/04
PCBs-Unfiltered									
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Unfiltered									
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Filtered									
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventionals									
Biological Oxygen Demand (5-day)	3.3	ND(2.0)	NA	NA	NA	NA	NA	NA	NA
Oil & Grease	NA	NA	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	2.9 B
Total Suspended Solids	NA	10.0	NA	NA	NA	NA	NA	NA	NA

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	64G-A5897 08/16/04	64G-A5910 08/23/04	64T-A5837 07/26/04	64T-A5856 08/02/04	64T-A5874 08/09/04	64T-A5895 08/16/04	64T-A5908 08/23/04	A5866RCN 08/09/04	A5866RTM 08/09/04
PCBs-Unfiltered									
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Unfiltered									
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	0.0560 B
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.00100)
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	20.0
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.00500)
Copper	NA	NA	NA	NA	NA	NA	NA	NA	0.00140 B
Cyanide	NA	NA	NA	NA	NA	NA	NA	ND(0.0200)	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.00500)
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	7.10
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.00500)
Silver	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.00500)
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	0.00440 B
Inorganics-Filtered									
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventionals									
Biological Oxygen Demand (5-day)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	NA
Total Suspended Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	A5867CCN 08/09/04	A5867CDM 08/09/04	A5867CTM 08/09/04	A5868RCN 08/11/04	A5868RTM 08/11/04	A5869CCN 08/11/04	A5869CDM 08/11/04	A5869CTM 08/11/04	A5870RCN 08/13/04
PCBs-Unfiltered									
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Unfiltered									
Aluminum	NA	NA	ND(0.100)	NA	ND(0.100)	NA	NA	ND(0.100)	NA
Cadmium	NA	NA	ND(0.00100)	NA	ND(0.00100)	NA	NA	ND(0.00100)	NA
Calcium	NA	NA	70.0	NA	26.0	NA	NA	81.0	NA
Chromium	NA	NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA
Copper	NA	NA	0.00360 B	NA	ND(0.00500)	NA	NA	0.00240 B	NA
Cyanide	0.0490	NA	NA	ND(0.0200)	NA	0.0460	NA	NA	0.00260 B
Lead	NA	NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA
Magnesium	NA	NA	29.0	NA	8.90	NA	NA	34.0	NA
Nickel	NA	NA	ND(0.00500)	NA	0.00180 B	NA	NA	0.00240 B	NA
Silver	NA	NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA
Zinc	NA	NA	0.00660 B	NA	0.0100 B	NA	NA	0.0140 B	NA
Inorganics-Filtered									
Aluminum	NA	ND(0.100)	NA	NA	NA	NA	ND(0.100)	NA	NA
Cadmium	NA	ND(0.00100)	NA	NA	NA	NA	ND(0.00100)	NA	NA
Chromium	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA
Copper	NA	0.00310 B	NA	NA	NA	NA	0.00220 B	NA	NA
Lead	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA
Nickel	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA
Silver	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA
Zinc	NA	0.0110 B	NA	NA	NA	NA	0.0180 B	NA	NA
Conventionals									
Biological Oxygen Demand (5-day)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A-2
DATA RECEIVED DURING AUGUST 2004

NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	A5870RTM 08/13/04	A5871CCN 08/13/04	A5871CDM 08/13/04	A5871CTM 08/13/04	AUG04WK1 08/03/04	AUG04WK3 08/17/04	AUG04WK4 08/24/04	JUL04WK5 07/27/04
PCBs-Unfiltered								
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics-Unfiltered								
Aluminum	0.180	NA	NA	0.310	NA	NA	NA	NA
Cadmium	ND(0.00100)	NA	NA	0.000750 B	NA	NA	NA	NA
Calcium	23.0	NA	NA	31.0	NA	NA	NA	NA
Chromium	0.00180 B	NA	NA	0.00390 B	NA	NA	NA	NA
Copper	0.00140 B	NA	NA	0.0230	0.00620	0.0120	0.00430 B	0.00430 B
Cyanide	NA	0.0130 B	NA	NA	NA	NA	NA	NA
Lead	0.00420 B	NA	NA	0.00970	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)
Magnesium	7.20	NA	NA	11.0	NA	NA	NA	NA
Nickel	ND(0.00500)	NA	NA	0.00340 B	NA	NA	NA	NA
Silver	0.00210 B	NA	NA	0.00300 B	NA	NA	NA	NA
Zinc	0.00630 B	NA	NA	0.0480	0.0150 B	0.0240	0.0100 B	0.00660 B
Inorganics-Filtered								
Aluminum	NA	NA	0.0870 B	NA	NA	NA	NA	NA
Cadmium	NA	NA	ND(0.00100)	NA	NA	NA	NA	NA
Chromium	NA	NA	0.00290 B	NA	NA	NA	NA	NA
Copper	NA	NA	0.0160	NA	NA	NA	NA	NA
Lead	NA	NA	0.00480 B	NA	NA	NA	NA	NA
Nickel	NA	NA	ND(0.00500)	NA	NA	NA	NA	NA
Silver	NA	NA	0.00180 B	NA	NA	NA	NA	NA
Zinc	NA	NA	0.0350	NA	NA	NA	NA	NA
Conventionals								
Biological Oxygen Demand (5-day)	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1. Samples were collected by General Electric Company, and were submitted to SGS Environmental Services, Inc. for analysis of PCBs, cyanide, TSS, BOD, oil & grease, and metals (filtered and
2. unfiltered).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
   With the exception of inorganics and conventional parameters only those constituents detected in one or more samples are summarized.

Data Qualifiers:

Organics

J - Indicates an estimated value less than the practical quantitation limit (PQL).

Inorganics and Conventional Parameters

TABLE A-3
DATA RECEIVED DURING AUGUST 2004

STORM WATER MONITORING
NPDES PERMIT MONITORING SAMPLING
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Parameter / Sample ID: / Date Collected:	001-A5831 07/23/04	007-A5832 07/23/04	YD5-A5833 07/23/04	YD9-A5834 07/23/04	YD12-A5835 07/23/04	YD13-A5836 07/23/04
Inorganics-Unfiltered						
Zinc	0.0180 B	0.0800	0.310	0.0770	0.110	0.0590

Notes:
1. Samples were collected by General Electric Company and submitted to SGS Environmental Services, Inc. for analysis of zinc.

Data Qualifiers:

Inorganics
B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

Attachment B

NPDES Discharge Monitoring Reports
July 2004

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

MA0003891 — PERMIT NUMBER
001 1 — DISCHARGE NUMBER

MONITORING PERIOD: FROM YEAR 04 MO 07 DAY 01 TO YEAR 04 MO 07 DAY 31

MAJOR
(SUBR W)
F - FINAL
DISCHARGE TO SILVER LAKE

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

Form Approved.
OMB No. 2040-0004

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		7.7	******	8.2	(12) SU	0	01/07	GR
	PERMIT REQUIREMENT	******	******	*******	6.0 MINIMUM	******	9.0 MAXIMUM	SU		WEEKLY	RANG-C
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	18.4	18.4	(26) LBS/DY	******	******	******		0	01/30	CP
	PERMIT REQUIREMENT	138 MO AVG	628 DAILY MX	LBS/DY	******	******	******	*******		ONCE/ MONTH	COMPOS
OIL & GREASE 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	0	(19) MG/L	0	01/30	GR
	PERMIT REQUIREMENT	******	319 DAILY MX	LBS/DY	******	******	15 DAILY MX	MG/L		ONCE/ MONTH	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	0.0001	(26) LBS/DY	******	******	******		0	01/30	GR
	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	*******		ONCE/ MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.094	0.806	(03) MGD	******	******	******		0	99/99	RC
	PERMIT REQUIREMENT	1.10 MO AVG	2.55 DAILY MX	MGD	******	******	******	*******		CONTINUOUS	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 413 (AREA CODE) 494-3500 (NUMBER)
DATE: 2004 (YEAR) 8 (MO) 18 (DAY)

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
SAMPLE AT THE DISCHARGE FROM OIL/WATER SEPERATOR.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

MA0003891 — PERMIT NUMBER
004 1 — DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
DISCHARGE TO SILVER LAKE

*** NO DISCHARGE | | ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PH	SAMPLE MEASUREMENT	******	******		7.7	******	7.9	(12) SU	0	01/DW	GR
00400 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	6.0 MINIMUM	******	9.0 MAXIMUM	SU		WEEKLY	RANG-G
OIL & GREASE	SAMPLE MEASUREMENT	******	1,5	(26) LBS/DY	******	******	2,2	(19) MG/L	0	01/30	GR
00556 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	261 DAILY MX	LBS/DY	******	******	15 DAILY MX	MG/L		ONCE/ MONTH	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	******	NODI [9]	(26)	******	******	******				
39516 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.005	0.069	(03) MGD	******	******	******		0	99/99	RC
50050 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	0.38 MO AVG	2.09 DAILY MX	MGD	******	******	******	**** ****		ONCE/ MONTH	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE	DATE
Michael T. Carroll Mgr. Pittsfield Remediation Prog.	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	413 494-3500	2004 8 17
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE / NUMBER	YEAR / MO / DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
SAMPLE IN PLANT MANHOLE STATION ON 004.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	005 1
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR
(SUBR W)
F - FINAL
WATERS TO HOUSATONIC RIVER

Form Approved.
OMB No. 2040-0004

	MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

*** NO DISCHARGE | _ | ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
BOD, 5-DAY (20 DEG. C)	SAMPLE MEASUREMENT	0	0	(26) LBS/DY	******	******	******		0	01/30	CP
00310 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	70 MO AVG	135 DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0	0	(26) LBS/DY	******	******	******		0	01/30	CP
00530 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	188 MO AVG	270 DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
OIL & GREASE	SAMPLE MEASUREMENT	******	6.2	(26) LBS/DY	******	******	1.5	(19) MG/L	0	01/07	GR
00556 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	135 DAILY MX	LBS/DY	******	******	15 DAILY MX	MG/L		WEEKLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	0.0001	0.0004	(26) LBS/DY	******	******	******		0	01/07	CP
39516 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	0.01 MO AVG	0.03 DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.188	0.435	(03) MGD	******	******	******		0	99/99	RC
50050 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	2.09 MO AVG	2.09 DAILY MX	MGD	******	******	******	**** ****		CONTINUOUS	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	11
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

SEE PAGE 8 + 9 OF PERMIT FOR SAMPLING REQUIREMENTS. SEE DMR(S) 064G + 064T FOR FURTHER PARAMETERS.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER	DISCHARGE NUMBER
MA0003891	064 G

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
GROUNDWATER TREATMENT (005)

*** NO DISCHARGE | _ | ***

NOTE: Read instructions before completing this form.

Form Approved.
OMB No. 2040-0004

PARAMETER		QUANTITY OR LOADING AVERAGE	MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PH	SAMPLE MEASUREMENT	******	******		7.3	******	7.4	(12)	0	99/99	RCDR
00400 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	6.0 MINIMUM	******	9.0 MAXIMUM	SU SU		WEEKLY	RANG-C
BASE NEUTRALS & ACID (METHOD 625), TOTAL	SAMPLE MEASUREMENT	******	******		******	NODI [9]	NODI [9]	(19)			
76030 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	GRAB
VOLATILE COMPOUNDS, (GC/MS)	SAMPLE MEASUREMENT	******	******		******	NODI [9]	NODI [9]	(19)			
78732 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE AREA CODE	NUMBER	DATE YEAR	MO	DAY
413	494-3500	2004	8	18

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

SEE COMMENTS FOR 0051. SEE PAGE 8 + 9 OF PERMIT.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME GENERAL ELECTRIC CORPORATION

ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201

FACILITY GENERAL ELECTRIC COMPANY

LOCATION PITTSFIELD MA 01201

ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	064 T
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

Form Approved.
OMB No. 2040-0004

MAJOR
(SUBR W)
F - FINAL
WASTEWATER TREATMENT (005)

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PH	SAMPLE MEASUREMENT	******	******		7.0	******	8.2	(12) SU	0	99/99	RCDR
00400 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	6.0 MINIMUM	******	9.0 MAXIMUM	SU		WEEKLY	RANG-C
DIBENZOFURAN	SAMPLE MEASUREMENT	******	******		******	NODI [6]	NODI [6]	(22)			
81302 T 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	PPT		ONCE/ MONTH	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	11
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

SEE COMMENTS FOR 0051. SEE PAGE 8 + 9 OF PERMIT.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

PERMIT NUMBER	DISCHARGE NUMBER
MA0003891	007 1

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
DISCHARGE TO HOUSATONIC RIVER

*** NO DISCHARGE |__| ***

Form Approved.
OMB No. 2040-0004

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
TEMPERATURE, WATER DEG. FAHRENHEIT	SAMPLE MEASUREMENT	******	******		******	65	65	(15) DEG.F	0	01/30	GR
00011 W 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	********	******	70 MO AVG	75 DAILY MX	DEG. F		ONCE/ MONTH	GRAB
PH	SAMPLE MEASUREMENT	******	******		6.8	******	7.0	(12) SU	0	01/07	GR
00400 W 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	********	6.0 MINIMUM	******	9.0 MAXIMUM	SU		WEEKLY	RANG-C
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	******	******		******	NODI [9]	NODI [9]	(21)			
39516 W 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	******	******	********	******	REPORT MO AVG	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.025	0.053	(03) MGD	******	******	******		0	22/30	CA
50050 W 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	******	******	******	********		ONCE/ MONTH	CALCTD
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE AREA CODE	TELEPHONE NUMBER	DATE YEAR	DATE MO	DATE DAY
413	494-3500	2004	8	18

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
SAMPLE AT MANHOLE PRIOR TO CITY STORM DRAIN.

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	009 1
PERMIT NUMBER	DISCHARGE NUMBER

	MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
PROCESSES TO UNKAMET BROOK

*** NO DISCHARGE |__| ***

Form Approved.
OMB No. 2040-0004

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
BOD, 5-DAY (20 DEG. C) 00310 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.03	0.1	(26) LBS/DY	******	******	******		0	01/DW	CP
	PERMIT REQUIREMENT	106 MO AVG	438 DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
PH 00400 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	******	******		6.8	******	7.2	(12) SU	0	01/DW	GR
	PERMIT REQUIREMENT	******	******	**** ****	6.0 MINIMUM	******	9.0 MAXIMUM	SU		WEEKLY	RANG-C
SOLIDS, TOTAL SUSPENDED 00530 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.7	2.0	(26) LBS/DY	******	******	******		0	01/DW	CP
	PERMIT REQUIREMENT	213 MO AVG	876 DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
OIL & GREASE 00556 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	0	(19) MG/L	0	01/DW	GR
	PERMIT REQUIREMENT	******	438 DAILY MX	LBS/DY	******	******	15 DAILY MX	MG/L		WEEKLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	******	******		******	NODI [9]	NODI [9]	(19)			
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.011	0.194	(03) MGD	******	******	******		0	99/99	RC
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	******	******	******	**** ****		CONTINUOUS	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	18
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
SEE PAGE 11 OF PERMIT. SEE DMRS 009A + 009B. REPORT SUM OF LOAD 09A + 09B, FOR BOD, TSS, FLOW. SAMPLE AT DISCHARGE POINT TO BROOK FOR PH, OIL & GREASE, AND PCB.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	009 A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
09A SAMPLE POINT BEFORE 009

*** NO DISCHARGE |__| ***

Form Approved.
OMB No. 2040-0004

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
BOD, 5-DAY (20 DEG. C) 00310 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.04	0.1	(26)	******	******	******		0	01/DW	CP
	PERMIT REQUIREMENT	106 MO AVG	438 DAILY MX	LBS/DY LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
SOLIDS, TOTAL SUSPENDED 00530 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.2	0.5	(26)	******	******	******		0	01/DW	CP
	PERMIT REQUIREMENT	213 MO AVG	876 DAILY MX	LBS/DY LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.0002	0.005	(03)	******	******	******		0	99/99	RC
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD MGD	******	******	******	**** ****		CONTINUOUS	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

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Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	16
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
SEE PAGE 11 OF PERMIT. SEE DMR 0091. SAMPLE AT 09A.

EPA Form 3320-1 (Rev. 3/99) Previous editions may be used.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

MA0003891	009 B
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR
(SUBR W)
F - FINAL
09B SAMPLE POINT PRIOR TO 009

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

*** NO DISCHARGE | | ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
BOD, 5-DAY (20 DEG. C) 00310 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0	0	(26) LBS/DY	******	******	******		0	01/DW WEEKLY	CP COMPOS
	PERMIT REQUIREMENT	106 MO AVG	438 DAILY MX	LBS/DY	******	******	******	**** ****			
SOLIDS, TOTAL SUSPENDED 00530 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.8	2.0	(26) LBS/DY	******	******	******		0	01/DW WEEKLY	CP COMPOS
	PERMIT REQUIREMENT	213 MO AVG	876 DAILY MX	LBS/DY	******	******	******	**** ****			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.011	0.189	(03) MGD	******	******	******		0	99/99 CONTINUOUS	RC RECORDR
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	******	******	******	**** ****			
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T Carroll

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
413	494-3500	2004	8	11

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
SEE PAGE 11 OF PERMIT. SEE DMR 0091; SAMPLE AT 09B.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	SUM A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

MAJOR
(SUBR W)
F - FINAL
METALS: 001, 004, 005, 007, 009, 011

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

Form Approved.
OMB No. 2040-0004

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
PHOSPHORUS, TOTAL (AS P) 00665 1 0 0	SAMPLE MEASUREMENT	******	0.05	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
NICKEL TOTAL RECOVERABLE 01074 1 0 0	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
SILVER TOTAL RECOVERABLE 01079 1 0 0	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
ZINC TOTAL RECOVERABLE 01094 1 0 0	SAMPLE MEASUREMENT	******	0.3	(26) LBS/DY	******	******	******		0	01/07	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
ALUMINUM, TOTAL (AS AL) 01105 1 0 0	SAMPLE MEASUREMENT	******	0.1	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
CADMIUM TOTAL RECOVERABLE 01113 1 0 0	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	COMPOS
LEAD TOTAL RECOVERABLE 01114 1 0 0	SAMPLE MEASUREMENT	******	0.10	(26) LBS/DY	******	******	******		0	01/07	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	16
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
COMPOSITE PROPORTIONATE TO FLOW.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

PERMIT NUMBER	DISCHARGE NUMBER
MA0003891	SUM A

MAJOR
(SUBR W)
F - FINAL
METALS: 001, 004, 005, 007, 009, 011

MONITORING PERIOD	YEAR	MO	DAY
FROM	04	07	01
TO	04	07	31

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
CHROMIUM TOTAL RECOVERABLE 01118 1 0 0	SAMPLE MEASUREMENT	******	0	(26) LBS/DY	******	******	******		0	03/30	CP
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COPPER TOTAL RECOVERABLE 01119 1 0 0	SAMPLE MEASUREMENT	******	0.14	(26) LBS/DY	******	******	******		0	01/07	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		WEEKLY	COMPOS
CYANIDE, TOTAL RECOVERABLE 78248 1 0 0	SAMPLE MEASUREMENT	******	0.07	(26) LBS/DY	******	******	******		0	03/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT DAILY MX	LBS/DY	******	******	******	**** ****		ONCE/ MONTH	GRAB
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	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

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Michael T. Carroll

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	16
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

COMPOSITE PROPORTIONATE TO FLOW.

PERMITTEE NAME/ADDRESS *(Include Facility Name/ Location if Different)*

NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

Form Approved.
OMB No. 2040-0004

MA0003891 — PERMIT NUMBER

SUM B — DISCHARGE NUMBER

MAJOR
(SUBR W)
F - FINAL
TOXICS: 001, 004, 005, 007, 009, 011

	MONITORING PERIOD					
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	07	31

*** NO DISCHARGE | _ | ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	MAXIMUM	UNITS	QUALITY OR CONCENTRATION MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
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NOAEL STATRE 48HR AC U D. PULEX	SAMPLE MEASUREMENT	******	******		NODI [9]	******	******	% 23)			
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	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	16
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

MONTHLY DRY WEATHER TESTING. COMPOSITE PROPORTIONATE TO FLOW. FOR JULY, AUG., SEPT. REPORT ACUTE AND CHRONIC. SEE DMR SUMC FOR QUARTERLY WET WEATHER ACUTE. SUBMIT THIS DMR WITH A NODI '9' WHEN SUBMITTING WET WEATHER RESULTS ON DMR SUMC

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME GENERAL ELECTRIC CORPORATION
ADDRESS ATTN: JEFFREY G. RUEBESAM
100 WOODLAWN AVENUE
PITTSFIELD MA 01201
FACILITY GENERAL ELECTRIC COMPANY
LOCATION PITTSFIELD MA 01201
ATTN: MICHAEL T CARROLL, EHS&F

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

MA0003891	SUM C
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	04	07	01	TO	04	09	30

MAJOR
(SUBR W)
F - FINAL
TOXICS: 001, 004, 005, 007, 009, 011

*** NO DISCHARGE | __ | ***

NOTE: Read instructions before completing this form.

Form Approved.
OMB No. 2040-0004

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
NOAEL STATRE 48HR AC J D. PULEX TDM3D 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		100	******	******	(23) %	0	01/30	CP
	PERMIT REQUIREMENT	******	******	********	REPORT DAILY MN	******	******	PER-CENT		QTRLY	COMPOS
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	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Michael T. Carroll
Mgr. Pittsfield Remediation Prog.
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael T. Carroll
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	494-3500	2004	8	18
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
QUARTERLY WET WEATHER ACUTE. COMPOSITE PROPORTIONATE TO FLOW. SEE DMR SUMB FOR DRY WEATHER TESTING.
SUBMIT THIS DMR WITH A NODI '9' WHEN SUBMITTING DRY WEATHER ON DMR SUMB.

Attachment C

Toxicity Evaluation of Wastewaters Discharged From the General Electric Plant; Pittsfield, Massachusetts [Samples Collected in August 2004]

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Toxicity Evaluation of Wastewaters Discharged from The General Electric Plant Pittsfield, Massachusetts

Samples collected in August 2004

Submitted to:

General Electric
Area Environmental & Facility Programs
100 Woodlawn Avenue
Pittsfield, Massachusetts 01201

SGS Sample ID: TA4-H0-P260

Study Director: Ken Holliday

20 August 2004

SGS Environmental Services
1258 Greenbrier Street
Charleston, West Virginia 25311-1002
Tel: 304.346.0725 Fax: 304.346.0761
www.sgs.com

Signatures and Approval

Submitted by: SGS Environmental Services
1258 Greenbrier Street
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Tel: 304.346.0725
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Ken Holliday — August 20, 2004
Ken Holliday — *Date*
Study Director
ken_holliday@sgs.com

Titshina L. Mims — August 20, 2004
Titshina L. Mims — *Date*
Technical Writer

Barbara Hensley — August 20, 2004
Barbara Hensley — *Date*
Project Manager
barbara_hensley@sgs.com

Whole Effluent Toxicity Test
Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on: August 20, 2004
Date

Authorized signature

Jeannie Latterner
Name

QA/QC Manager
Title

SGS Environmental Services
Laboratory

Table of Contents

List of Tables

Summary

Static Acute Toxicity Test with *Daphnia pulex*

Sponsor:	General Electric
Protocol Title:	*Acute Aquatic Toxicity Testing*, SGS Document Control Number 7002, version 4.0
SGS Study Number:	TA4-H0-P260
Test Material:	Composite effluent from the General Electric Company located in Pittsfield, Massachusetts
GE Sample ID:	A5869C
Dilution Water:	Water from the Housatonic River (grab sample)
GE Sample ID:	A5868R
Dates Collected:	August 10, 2004 to August 11, 2004
Date Received:	August 12, 2004
Test Dates:	August 12, 2004 to August 14, 2004
Test Concentrations:	100% effluent 75% effluent 50% effluent 35% effluent 15% effluent 5% effluent dilution water control reference control secondary reference control (sodium thiosulfate)
Results:	The 48-hour LC50 value was determined to be >100% effluent. The No-Observed-Acute-Effect-Level (NOAEL) was observed to be 100% effluent.

1.0 Introduction

1.1 Background

In 1972, amendments were made to the Clean Water Act (CWA) prohibiting the discharge of any pollutant from a point source to waters of the United States, unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Since the passing of the 1972 amendments to the CWA, significant progress has been made in cleaning up industrial process wastewater and municipal sewage.

The purpose of the National Pollutant Discharge Elimination System (NPDES) Program is to protect human health and the environment. The Clean Water Act requires that all point sources discharging pollutants into waters of the United States must obtain an NPDES permit. By point sources, EPA means discrete conveyances such as pipes or man made ditches.

For many years, discharge limits were based on available technology for wastewater treatment. However, in 1984, the U.S. Environmental Protection Agency (EPA) released a national policy statement entitled "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants" (U.S. EPA, 1984) which addresses the control of toxic pollutants beyond technology-based requirements in order to meet water quality standards. To implement the new policy, guidance was provided to the respective state and regional permit personnel in the EPA's "Technical Support Document for Water Quality-Based Toxics Control" (U.S. EPA, 1985; U.S. EPA, 1991). The EPA's policy statement and the support document recommended that, where appropriate, permit limits should be based on effluent toxicity as measured in aquatic toxicity tests.

1.2 Clean Water Act, 33 U.S.C. s/s 1251 et seq. (1977)

The Clean Water Act is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which set the basic structure for regulating discharges of pollutants to waters of the United States. The law gave EPA the authority to set effluent standards on an industry basis (technology-based) and continued the requirements to set water quality standards for all contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit (NPDES) is obtained under the Act. The 1977 amendments focused on toxic pollutants. In 1987, the CWA was reauthorized and again focused on toxic substances, authorized citizen suit provisions, and funded sewage treatment plants (POTWs) under the Construction Grants Program. The CWA provisions for the delegation by EPA of many permitting, administrative, and enforcement aspects of the law to state governments. In states with the authority to implement CWA programs, EPA still retains oversight responsibilities.

1.3 Objective of the General Electric Study

The objective of this study was to measure the acute toxicity of the composite wastewater discharged by the General Electric facility located in Pittsfield, Massachusetts, using *Daphnia pulex* under static conditions. Whereas *D. pulex* are not considered locally important, they are routinely used by regulatory agencies and contract laboratories nationwide for toxicity testing. A toxicity test was conducted from August 12, 2004 to August 14, 2004 at SGS Environmental Services, Charleston, West Virginia. All original raw data and the final report produced for this study are stored in SGS's archives at the above location.

2.0 Materials and Methods

2.1 Protocol

Procedures used in this acute toxicity test followed those described in the SGS Standard Operating Procedure (SOP) entitled *Acute Aquatic Toxicity Testing*, SGS document control number 7002, version 4.0. This SOP generally follows the standard methodology presented in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (U.S. EPA, 1993. Additional SOPs used in this study are outlined below:

Title	Document Number	Version
Culture Waters for Aquatic Toxicity Testing	7005	4.0
Culture of *Daphnia*	7006	5.0
Reference Toxicant Testing	7008	5.0
Sample Handling for Aquatic Toxicity Testing	7009	4.0

Copies of these documents are included in the References section of this report.

2.2 Effluent Sample

The effluent sample (A5869C) was collected by GE personnel August 10, 2004 to August 11, 2004. Upon receipt at SGS on August 12, 2004, the sample temperature was 4.7° C. The effluent sample was characterized as having

Parameter	Result
Total Hardness	390
Alkalinity (as $CaCO_3$)	207
pH	7.34
Specific Conductance	1020
Dissolved Oxygen Concentration*	8.78

*Dissolved oxygen concentration was recorded after sample was aerated and warmed to approximately 20°C).

The effluent sample was observed to be clear and colorless.

2.3 Dilution Water

Dilution water consisted of receiving water collected from the Housatonic River. The receiving water (A5868R) was collected by General Electric personnel on August 11, 2004. Upon receipt at SGS on August 12, 2004, the sample temperature was 4.7°C. The dilution water was characterized as having

Parameter	Result
Total Hardness	120
Alkalinity (as $CaCO_3$)	99
pH	6.73
Specific Conductance	284
Dissolved Oxygen Concentration*	8.63

*Dissolved oxygen concentration was recorded after sample was aerated and warmed to approximately 20°C).

The dilution water sample was observed to be slightly cloudy with a straw color.

2.4 Reference Control Water

Water used in the reference control vessels was deionized (DI) water adjusted to the appropriate hardness (moderately hard reconstituted water) by the addition of reagent grade chemicals (U.S. EPA, 1993). Characterization of this water resulted in:

Parameter	Result
Total Hardness	100
Alkalinity (as $CaCO_3$)	69
pH	7.13
Specific Conductance	320
Dissolved Oxygen	8.84

2.5 Test Organisms

Daphnids (*Daphnia pulex*), less than 24-hours old, were obtained from SGS laboratory cultures maintained in Charleston. The culture system consisted of twenty-four (24) 100 ml disposable plastic beakers each containing 80 ml of culture medium and one (1) daphnid. The culture medium was deionized (DI) water for which the hardness was raised by addition of reagent grade chemicals (U.S. EPA, 1993). Prior to use, the culture water was characterized:

Parameter	Result
Total Hardness	within range of 80-110 mg/L
Alkalinity (as $CaCO_3$)	within range of 60-70 mg/L
pH	within range of 7.0 to 7.2

The culture area was maintained at a temperature of 20°C (± 1°C) with a regulated photoperiod of 16 hours of light and 8 hours of darkness.

Daphnid cultures were fed a combination of green algae (*Selanastrum capricorium*), approximately 4.0 x 10^7 cells/ml) and YCT (yeast, cereal leaves and trout chow). Approximately 1.0 ml of algae and 0.5 ml of YCT was added to each culture vessel daily. Three times per week, daphnids are transferred to fresh culture media.

Approximately twenty-four hours before test initiation, all immature daphnids were removed from the culture flasks. Offspring produced during the period were used in the toxicity test.

2.6 Test Procedures

A subsample of the effluent and the dilution water (approximately 2250 ml) was analyzed by SGS for total phosphorus, chloride, total suspended solids, and total solids. The 48-hour toxicity test was conducted at concentrations of 100%, 75%, 50%, 35%, 15% and 5% effluent. Test concentrations were prepared by

diluting the appropriate volume of effluent with dilution water to a total volume of 250 ml. Test solutions were then divided into replicate (5 replicates per concentration) 30 ml medicine cups, each containing 20 ml of test solution. One set of five control beakers (containing Housatonic River water) and one set of five reference control beakers (containing moderately hard reconstituted water) were established and maintained under the same conditions as the exposure concentrations. A secondary set of five reference control beakers (containing sodium thiosulfate) was also maintained. Test solutions were placed in an incubator to maintain solution temperature of 20°C (± 1°C). Light was provided on a 16-hour light and 8-hour dark photoperiod. Florescent bulbs provided an illumination of 90 to 100 foot-candles in the test area.

Prior to test initiation, daphnids less than 24-hours old were culled individually with a plastic pipette and placed into a 1000 ml holding beaker containing approximately 500 ml of reference water. The test was initiated when daphnids were individually transferred from the holding beaker to the test solutions (4 daphnids per replicate). The daphnids were fed prior to test initiation but were not fed during the exposure period.

2.7 Test Monitoring

The number of mortalities and observations in each replicate vessel were recorded at 24 and 48 hours of exposure and observed mortalities were removed from the test solutions. Biological observations and observations from the physical characteristics of each replicate test solution and control were also made and recorded at 0, 24 and 48 hours. Dissolved oxygen concentrations pH and temperature were measured at test initiation and at 24-hour intervals thereafter, in one replicate vessel (a) for each test concentration in which there were surviving organisms.

Total hardness concentrations were measured by the EDTA titrimetric method and total alkalinity concentrations were determined by potentiometric titration to an endpoint of pH 4.5 (APHA, 1989). Total residual chorine was measured by Hach test. Concentrations of ammonia were determined using a Buchi model 212 distillation unit and titrated automatically with a Brinkman titroprocessor. Specific conductivity was measured with a Cole Palmer Model 71250 salinity-conductivity-temperature meter and probe; pH was measured with a Fisher Scientific Accumet 910 pH meter and combination electrode; dissolved oxygen concentration was measured with an YSI Model 59 dissolved oxygen meter. Daily temperature measurements were performed with a Princo mercury thermometer and a Fisher minimum-maximum thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.8 Reference Toxicity Test

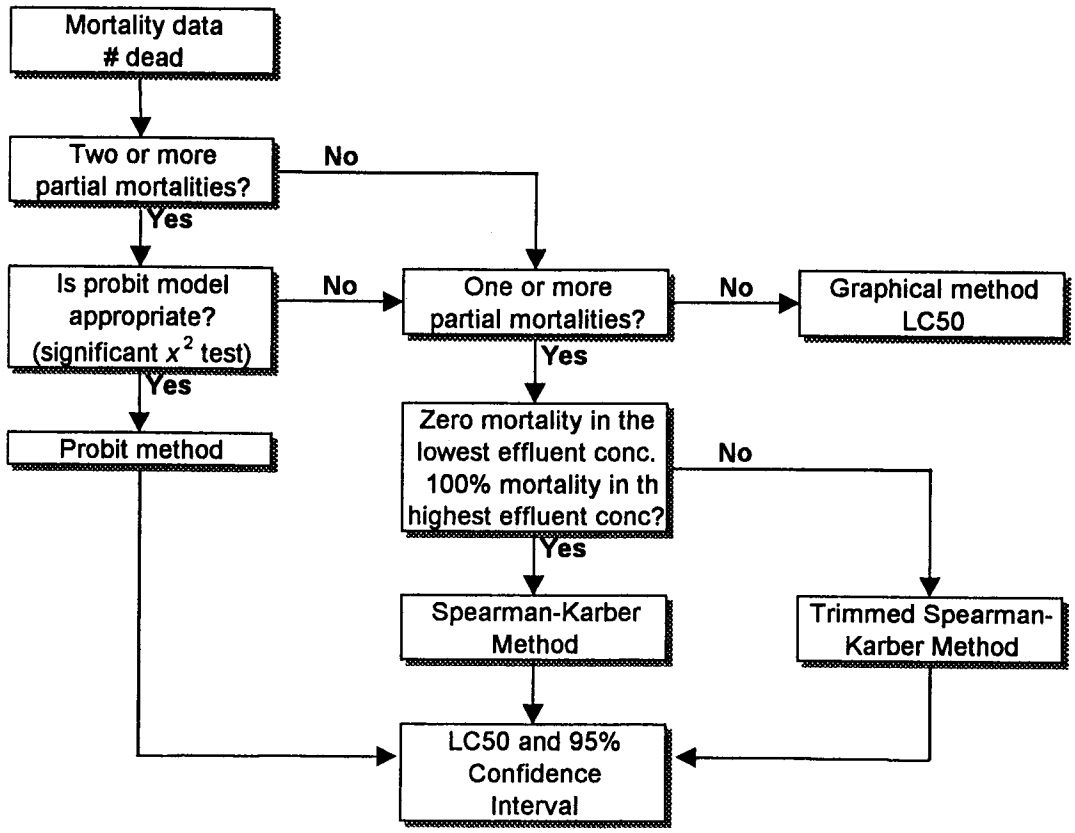
A 48-hour reference toxicity test exposing *Daphnia pulex* to sodium chloride (NaCl) was conducted from August 12, 2004 to August 14, 2004. The reference test was conducted to establish the health of the test organisms. The reference toxicity test included five NaCl concentrations and a dilution water control (moderately hard reconstituted water). The nominal NaCl concentrations for the test with *Daphnia pulex* ranged from 625 to 10,000 mg of NaCl/L. Test methods were the same as those described above for the effluent test.

3.0 Statistics

The concentration-response relationships observed were characterized by the median lethal concentrations (LC50), which is the concentration that is calculated to be lethal to 50 percent of the organisms within the test period. If no concentration caused mortality of 50%, then the LC50 value was determined to be greater than the highest concentration tested and no statistical analysis were performed. If at least one concentration caused mortality of greater than 50% of the test population, then a computer program (TOXSTAT 3.5) was used to calculate the LC50 value. Three statistical methods were available in the computer program: probit analysis, the Trimmed Spearman-Karber, and the Spearman-Karber methods. The graphical method is available if appropriate. Generally, to choose the best estimate of the LC50 value for a particular data set, the U.S. EPA flow chart on page 15 was followed.

The No-Observable-Acute-Effect-Level (NOAEL) was estimated for the acute toxicity test, and is defined as the highest concentration of effluent that produced $\geq$ 90% survival.

Flowchart 1. Determination of the LC50 from a Multi-Effluent-Concentration Acute Toxicity Test



Flowchart for determination of the LC50 for multi-effluent-concentration acute toxicity tests.

4.0 Results

4.1 Effluent Toxicity Test

The methods and detection limits of chemical analyses performed on the composite effluent sample and dilution water are summarized in Table 1. Results of the characterization and analysis of the effluent and the dilution water are presented in Table 2. Water quality parameters measured during the toxicity test are presented in Table 3. Daily and continuous monitoring of the test solutions established the temperature ranged from 19°C to 21°C throughout the exposure period. The effluent concentration was tested (expressed as %) and the corresponding percent mortalities recorded during the 48-hour toxicity test are presented in Table 4. Significant toxicity was not demonstrated in this examination. Based on the results of this study, the 48-hour LC_{50} value was >100% effluent. The NOAEL value for this study was determined to be 100% effluent.

4.2 Reference Toxicity Test

SGS uses sodium chloride (NaCl) as a reference toxicant. The reference test was conducted from August 12, 2004 to August 14, 2004, and the resulting 48-hour LC50 was estimated by Trimmed Spearman-Karber Method to be 2031 mg NaCl/L (95% confidence intervals of 1713 to 2406 mg NaCl/L).

References

American Public Health Association, American Water Works Association, and Water Pollution Control Federation (APHA). 1989. *Standard Methods for the Examination of Water and Wastewater*. 17th Edition.

U.S. Environmental Protection Agency. 1984. Development of water Quality-Based Permit Limitations for Toxic Pollutants. Federal Register 49(48):90160-90190.

U.S. Environmental Protection Agency. 1985. Technical Support Document for Water Quality-Based Toxics Control. Office of Water, Washington, DC.

U.S. Environmental Protection Agency. 1991. Technical Support Document for Water Quality-Based Toxics Control. Office of Water, Washington, DC.

U.S. Environmental Protection Agency. 1993. for *Measuring the Acute Toxicity of Effluents and Receiving Methods Waters to Freshwater and Marine Organisms*. EPA/600/4-90/027F.

Table 1. Methods and detection limits of chemical analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).

Parameters	Method	Detection Limits
Ammonia Nitrogen as N	EPA 350.2	1.0 mg/L
Chloride	EPA 325.2	1.0 mg/L
Total Organic Carbon	EPA 415.1	1.0 mg/L
Total Solids	EPA 160.3	10.0 mg/L
Phosphorus, Total as P	Standard Methods 4500-P	0.02 mg/L
Total Residual Chlorine	Standard Methods 4500-Cl G	0.01 mg/L
Total Suspended Solids	EPA 160.2	5.0 mg/L

Table 2. Results of the characterization and analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).

Parameter	Effluent (A5869C)	Housatonic River (A5868R)
Temperature	19.8°C	19.8°C
pH	7.34	6.73
Alkalinity (as $CaCO_3$)	207 mg/L	99 mg/L
Hardness (as $CaCO_3$)	390 mg/L	120 mg/L
Dissolved Oxygen	8.78 mg/L	8.63 mg/L
Specific Conductivity	1020 µmhos/cm	284 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	18 mg/L
Total Phosphorus as P	0.030 mg/L	0.029 mg/L
Chloride	140 mg/L	16 mg/L
Total Suspended Solids	ND	6.0 mg/L
Total Solids	640 mg/L	150 mg/L
Total Organic Carbon	4.0 mg/L	5.0 mg/L

Dissolved oxygen concentrations recorded after samples were aerated and warmed to approximately 20°C.
N/A = not applicable ND = non detectable

Table 3. The water quality measurements recorded during the 48-hour static toxicity test exposing *Daphnia pulex* to General Electric Pittsfield Plant effluent.

Matrix ↓	pH			Dissolved Oxygen (mg/L)			Temperature (°C)		
	0	24	48	0	24	48	0	24	48
Reference Control	7.13	7.14	7.19	8.84	8.72	8.67	19.8	20.2	20.8
Secondary Ref Control	7.19	7.23	7.25	8.81	8.70	8.62	19.8	20.2	20.8
Dilution Water Control	6.73	6.78	6.80	8.63	8.58	8.51	19.8	20.2	20.8
5% Effluent	6.79	6.84	6.90	8.65	8.58	8.53	19.8	20.2	20.8
15% Effluent	6.89	6.97	7.04	8.67	8.55	8.48	19.8	20.2	20.8
35% Effluent	7.04	7.10	7.14	8.71	8.68	8.55	19.8	20.2	20.8
50% Effluent	7.19	7.23	7.28	8.77	8.67	8.57	19.8	20.2	20.8
75% Effluent	7.27	7.24	7.31	8.75	8.64	8.57	19.8	20.2	20.8
100% Effluent	7.34	7.39	7.36	8.78	8.71	8.62	19.8	20.2	20.8

Dissolved oxygen, pH and temperature were measured in one replicate test chamber (A) for each concentration and controls.
The appearance of the effluent was clear, with some sediment.

Reference Control = moderately hard synthetic water
Secondary Control = moderately hard synthetic water and 0.1 N sodium thiosulfate ($Na_2S_2O_3$)
Dilution Water Control = receiving water collected from the Housatonic River

Table 4. Cumulative percent mortalities recorded during the 48-hour static toxicity test exposing *Daphnia pulex* to General Electric Pittsfield Plant effluent.

Test Matrix ↓	Cumulative Percent Mortality (%)											
	24-Hour						48-Hour					
	A	B	C	D	E	Mean	A	B	C	D	E	Mean
Reference Control	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Ref Control	0	0	0	0	0	0	0	0	0	0	0	0
Dilution Water Control	0	0	0	0	0	0	0	0	0	0	0	0
5% Effluent	0	0	0	0	0	0	0	0	0	0	0	0
15% Effluent	0	0	0	0	0	0	0	0	0	0	0	0
35% Effluent	0	0	0	0	0	0	0	0	0	0	0	0
50% Effluent	0	0	0	0	0	0	0	0	0	0	0	0
75% Effluent	0	0	0	0	0	0	0	0	0	0	0	0
100% Effluent	0	0	0	0	0	0	0	0	0	0	0	0

Reference Control = moderately hard synthetic water
$Na_2S_2O_3$ Control = moderately hard synthetic water and sodium thiosulfate (0.1 N)
Dilution Water Control = receiving water collected from the Housatonic River

Appendix I

References

CT&E Environmental Services Inc.

23

Standard Operating Procedure

Document Title:	**Acute Aquatic Toxicity Testing**
Method Reference:	**CT&E/USEPA**
Document File Name:	**7002-04.DOC**
Revision Number:	**4.0**
Effective Date:	**October 20, 1998**

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Document Control Number: 7002.

Approved by: Ken Holliday (Supervisor) 10/21/98 (Date)

Approved by: Linda M. Work (QA/QC Officer) 10/20/98 (Date)

1.0 SUMMARY

A 24-, 48-, or 96-hour test to determine the toxicity to freshwater aquatic animals of effluents.

2.0 REFERENCES

2.1 Weber, Cornelius I., *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition. EPA-600/4-90/027. U.S.EPA, Cincinnati, Ohio.

2.2 *Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency*, October, 1991.

2.3 *Toxics Management Program's Guidance for Conduction and Reporting the Results of Toxicity Tests in Fulfillment of VPDES Permit Requirements*, Revised July 1992.

3.0 SCREENING

3.1 Test Duration

24 Hours, 48 Hours or 96 Hours.

3.2 Test Preparation

3.2.1 Measure the pH, D.O. and total residual chlorine of the 100% effluent and the control water. If the effluent pH falls outside of the range of 6.0-9.0, two parallel tests are set up in which one effluent is adjusted and the other is not. The pH is adjusted to 7.0 using additions of 1N NaOH and HCl, (other pH adjustment endpoints may be utilized depending on local requirements). The measured amount of acid or base is recorded on the bench sheet. If the D.O. is below 40% saturation or above 100% saturation, the effluent is aerated prior to test initiation. If the total chlorine is above 0.1 mg/L, two parallel tests are set up in which one

effluent is dechlorinated and the other is not (Dechlorination may be prohibited; permit is checked to determine if dechlorination is allowed). The effluent is dechlorinated by the addition of anhydrous sodium thiosulfate. The measured amount is recorded on the bench sheet. Care is taken to add the least amount of sodium thiosulfate needed to decrease the TRC level below 0.10 mg/L. Typically, adjustment of effluent is unnecessary.

3.2.2 Twenty organisms per concentration are used in acute screening tests.

3.2.3 This is a static, non-renewal test, using *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna*, or *Pimephales promelas* (Fathead minnow).

3.2.4 Water quality (D.O., pH, conductivity, hardness, alkalinity and TRC), is measured at the time of test initiation. At test termination, temperature, D.O. conductivity and pH are measured. The final mortality and percent effected counts are recorded. Temperature is maintained at 25°± 1°C for *Daphnia*, and 20° ± 1°C for fathead minnows. Facilities exist to perform both fish and *Daphnia* tests at either temperature.

3.3 Test Results

No statistical analysis is performed on screening data.

4.0 DEFINITIVE TEST

4.1 *Pimephales promelas* (Fathead Minnows)

4.1.1 Test Duration

48-Hours or 96-Hours

4.1.2 Static non-renewal

4.1.3 Test Preparation

4.1.3.1 This test is comprised of a control and an effluent dilution series usually consisting of 100%, 50%, 25%, 12.5% and 6.25% (unless otherwise indicated).

4.1.3.2 The sample is brought up to test temperature in a room temperature water bath. Chemical parameters are checked and

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Standard Operating Procedure

recorded. If the pH, D.O. or chlorine fall outside the acceptable testing range, the effluent may be adjusted (see screening; Test Preparation).

4.1.3.3 The dilutions are prepared in calibrated graduated cylinders using moderately hard synthetic water as dilution water. Other dilution water may be used if specified.

4.1.3.4 Approximately 400 ml of test solution is placed in each of two 800 ml disposable plastic beakers.

4.1.4 Loading

Ten (10) organisms are placed in each beaker. CT&E uses fish which are less than 14 days old and are hatched within the same 24 hour period. A loading limit of 0.8 g/l is observed. Fish are loaded by first transferring them to a shallow dish where they are easily transferred into the test solutions with wide-bore pipettes.

4.1.5 Test Temperature

20° C (± 1)

4.1.6 Daily Procedures

4.1.6.1 At the end of each 24 hours, the pH, D.O. and temperatures are checked and recorded. At this time mortalities are also recorded.

4.1.6.2 If a 96 hour static acute test is required, the test solution may be renewed at 48 hours. Renewal is accomplished by siphoning old test solution and debris and replacing with fresh solution of the appropriate concentration.

4.1.6.3 At the end of 48 hours or 96 hours the final mortalities and percent affected are recorded along with the final water qualities (D.O., pH, conductivity).

4.1.7 Feeding

Organisms are allowed to feed only prior to test initiation, and prior to renewal at 48 hours in a 96 hour test.

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Standard Operating Procedure

4.2 *Ceriodaphnia dubia, Daphnia magna,* and *Daphnia pulex*

4.2.1 Test Duration

48-Hours

4.2.2 Static Non-renewal

4.2.3 Test Preparation

4.2.3.1 This test is comprised of a control and a dilution series consisting of 100%, 50%, 25%, 12.5% and 6.25% of the effluent (unless otherwise indicated).

4.2.3.2 The sample is brought up to test temperature in a room temperature waterbath. Chemical parameters are checked and recorded. If the pH, D.O. or chlorine fall outside the acceptable testing range, the effluent may be adjusted (see screening; Test Preparation).

4.2.3.3 The dilutions are prepared in beakers using moderately hard synthetic water (see Section II; Dilution Waters and Culture Media), unless other dilution water is specified. At least 25 ml. of each dilution are placed in five 30 ml. testing vessels.

4.2.4 Loading

4.2.4.1 Four organisms are placed in each vessel. The *Daphnids* are loaded with a disposable polyethylene transfer pipette and are gently released below the surface of the water to avoid the risk of injury.

4.2.5 Test Temperature

The test is conducted in a constant temperature incubator at 25° ±1° C(To satisfy local requirements tests may be conducted at other temperatures).

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Standard Operating Procedure

4.2.6 Daily Procedure

4.2.6.1 At 24 and 48 hours the mortalities and number adversely effected are noted.

4.2.6.2 Due to the fragile structure of *Daphnia* organisms, dissolved oxygen, hardness alkalinity, specific conductance and pH readings are not taken after the organisms have been added to the sample. These analyses could cause injury to the *Daphnia* organisms.

4.2.7 Photoperiod

16 hours light, 8 hours dark.

4.2.8 Feeding

Organisms are allowed to feed prior to test initiation; they are not fed for the duration of the test.

5.0 TEST DATA

5.1 *Pimephales promelas, Ceriodaphnia dubia, Daphnia magna* and *Daphnia pulex*

5.1.1 Mortality and adverse effects are used as the endpoints for a definitive test.

5.1.2 Chemical parameters checked before test initiation, at 24 hours, 48 hours, 72 hours and 96 hours.

5.1.3 Mortalities recorded at 24 hours, 48 hours, 72 hours and 96 hours.

5.1.4 Any atypical behavior or complications are recorded.

6.0 DATA ANALYSIS

6.1 Introduction

Data from acute effluent toxicity tests are used to estimate the **LC50** and **EC50**. The **LC50** is a point estimate of the effluent concentration that is expected to cause lethality to 50% of the test organisms. The **EC50** is a point estimate of

the effluent concentration that is expected to cause and adverse effects to 50% of the test organisms.

6.2 Methods for Estimating the LC50 & EC50

6.2.1 The flow chart (Figure 6) on page 76 of the manual, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms* (Fourth Edition), EPA-600/4-90-27F, Appendix A, Sections 4.4.1 through 4.4.3. is observed for determination of the LC50 for multi-concentration acute toxicity tests.

6.2.2 Several statistics packages, including Toxstat® 3.4, are available for data analysis.

7.0 REPORT PREPARATION

7.1 CT&E Acute Toxicity Test Reports Typically Contain the Following Information:

7.1.1 Test background information - Includes client, NPDES or state permit number, sampling point reference number, date collected and received, collector's name, type and date of test, dilution water used, test results, and chain of custody forms.

7.1.2 Results - LC50 & EC50 values and analysis method used; Any comments concerning the test results.

7.1.3 Initial Characterization of the Effluent Sample - Raw Data Sheets: Includes dissolved oxygen (DO), pH, specific conductivity, hardness, alkalinity and a description of the sample source.

7.1.4 Reference Toxicity Data

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title: Culture Waters for Aquatic Toxicity Testing
Method Reference: CT&E/USEPA
Document File Name: 7005-04.DOC
Revision Number: 4.0
Effective Date: October 20, 1998

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Document Control Number: 7005

Approved by: Ken Halliday (Supervisor) Date: 10/21/98

Approved by: Lynda M. Work (QA/QC Officer) Date: 10/20/98

1.0 Summary

This document describes the preparation of various waters used for the culture of aquatic organisms.

2.0 Moderately-Hard Synthetic Water

2.1 Place 19 liter of de-ionized, or equivalent, water in a properly cleaned and labeled plastic carboy.

2.2 Add 1.20 g of $MgSO_4$, 1.92 g $NaHCO_3$ and 0.08g KCl to the carboy.

2.3 Aerate overnight.

2.4 Add 1.20 g of $CaSO_4 \cdot 2H_2O$ to 1 liter of de-ionized or equivalent water in a separate flask. Stir on magnetic stirrer until calcium sulfate is dissolved and add to the 19 liter above and mix well.

2.5 Aerate vigorously for 24 hours to stabilize the medium.

3.0 Hard Synthetic Water

3.1 Place 9 liter of de-ionized, or equivalent, water in a properly cleaned and labeled plastic carboy.

3.2 Add 1.20 g of $MgSO_4$, 1.92 g $NaHCO_3$ and 0.08g KCl to the carboy.

3.3 Aerate overnight.

3.4 Add 1.20 g of $CaSO_4 \cdot 2H_2O$ to 1 liter of de-ionized, or equivalent water in a separate flask. Stir on magnetic stirrer until calcium sulfate is dissolved and add to the 9 liter above and mix well.

3.5 Aerate vigorously for 24 hours to stabilize the medium.

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Standard Operating Procedure

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Document Control Number: 7005.

4.0 Synthetic Water Solutions

4.1 KCL Stock Solution

4.1.1 Place 8 g of crystalline, reagent grade KCL in a 1 liter volumetric flask.
4.1.2 Bring the volume to one liter with distilled water.
4.1.3 Aerate vigorously for several hours before using.
4.1.4 Store in a 1 liter polyethylene bottle.

4.2 $MgSO_4$ Stock Solution

4.2.1 Place 120 g of regent water, anhydrous $MgSO_4$ powder in a 1 liter volumetric flask.
4.2.2 Bring the volume to one liter with distilled water.
4.2.3 Aerate vigorously for several hours before using.
4.2.4 Store in a 1 liter polyethylene bottle.

4.3 $NaHCO_3$ Stock Solution

4.3.1 Place 96 g of reagent grade $NaHCO_3$ powder in a 1 liter volumetric flask.
4.3.2 Bring the volume to 1 liter with distilled water
4.3.3 Aerate vigorously for several hours before using.
4.3.4 Store in a 1 liter polyethylene bottle.

5.0 Activated Carbon Treated Tap Water Diluent

5.1 Fill a 5-gallon carboy with water from the treatment system using the attached hose. Water should be allowed to flow slowly through the hose into the sink for 2-3 minutes before filling the carboy. Flow rate to fill the carboy should be slow.

5.2 One or two long airstones are placed in the filled carboy. Water is aerated vigorously for 48-hours.

5.3 Total residual chlorine must be checked on water from newly filled carboys before using.

5.4 Alkalinity, hardness and pH are checked on samples from dechlorinated water carboys according to the Laboratory Procedure Checklist.

5.5 Log information on the Dechlorinated Tap Water and Cechlorimeter log sheet including the carboy number and date filled.

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Standard Operating Procedure

6.0 Synthetic Sea Water Preparation

6.1 Fill a clean carboy with dechlorinated water to approximately the 25-gallon mark.

6.2 The newly filled carboy should be checked for the presence of chlorine and the results recorded on the saltwater carboy log sheet. If chlorine is present, two 4-inch airstones (adjusted to a moderately heavy air flow) should be introduced and the water aerated until a level of <0.01 mg/L is reached.

6.3 A sufficient amount of synthetic salt is added to the carboy to obtain the required salinity (usually 20 ppt).

6.4 All information should be logged on the Saltwater Carboy log sheet.

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Standard Operating Procedure

Document Title: Culture of *Daphnia*
Method Reference: CT&E/USEPA
Document File Name: 7006-05.DOC
Revision Number: 5.0
Effective Date: March 12, 2001

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Document Control Number: 7006

Approved by: Ken Halliday (Supervisor) 3/23/2001 (Date)

Approved by: Cynthia M. Dork (QA/QC Officer) 3/23/2001 (Date)

1.0 Summary

This document describes the procedure for the culture of *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna* that are used in aquatic toxicity testing.

2.0 Mass Stock Cultures of *Ceriodaphnia dubia, Daphnia pulex,* and *Daphnia magna*

2.1 Stock cultures are maintained in 1000 ml beakers/jars with 900 mls of culture media at 20 ± 1° C. These cultures are maintained only as a back-up source of organisms.

2.2 Culture media for *Ceriodaphnia dubia* and *Daphnia pulex* is moderately-hard synthetic water. Culture media for *Daphnia magna* is hard synthetic water (see document control number 7005.04, "Culture Waters for Aquatic Toxicity Testing").

2.3 Many cultures are maintained simultaneously with an informal rotation cycle. New cultures are started with young produced by individual cultures. These cultures are maintained for approximately 3 weeks after which they are discarded.

2.4 Cultures are fed YCT (yeast, cerophyll, digested trout chow/flake food) and algae (*Selanastrum capricorium*) on Monday, Wednesday and Friday. Feeding, as well as culture rotation, temperature and all other relevant data is recorded by species in a log book.

2.5 Stock cultures are also fed algae and YCT. These feedings are recorded in the log book.

3.0 Individual Cultures of *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna*

3.1 Cultures of *Daphnia magna* and *Daphnia pulex* are maintained in 100 ml plastic beakers. Twenty-four (24) beakers with one organism each are kept at all times to ensure continuous availability of neonates for testing. Cultures of individual *Ceriodaphnia dubia* are maintained in 30 ml sterile plastic medicine cups. One to two cultures of approximately 100 organisms each are kept at all times.

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Standard Operating Procedure

3.2 Cultures are renewed three times per week. Organisms are fed daily.

4.0 Obtaining Neonates for Testing

4.1 Cultures of *Ceriodaphnia* are started by placing one neonate into a 30 ml disposable plastic cup containing approximately 20 ml of Moderately Hard Synthetic Water. New *Ceriodaphnia* cultures are started every ten to fourteen days. *D. magna* and *D. pulex* are replaced whenever mortality occurs.

4.2 The individual cultures are transferred to fresh media three times per week. Synthetic water, algae and YCT are mixed prior to pouring into culture vessel to ensure uniformity of media. The old media and neonates are kept for stock cultures for several weeks and then discarded.

4.3 To assure neonates for chronic tests are of a very similar age, transfer of individual brood stock to fresh media should be made the morning of the test. The cultures are then checked approximately every two hours to find an adequate number of neonates all released with an 8 hour period. For acute tests, individuals are either transferred less than 24 hours before a test or the young are separated from adults less than 24 hours before a test.

4.4 Young used in chronic testing are obtained from adults who have produced at least three broods, with no less than 8 neonates in their third or subsequent brood. Neonates are then distributed in a "blocking" procedure, i.e., neonates from the same organism are placed in one replication of each concentration.

5.0 *DAPHNIA* Food

5.1 Digested Flake Food

5.1.1 Add 5g flake food to 1 L deionized water. Mix well in a blender and place in a 2 L separatory funnel. To digest, aerate this mixture at room temperature for one week.

5.1.2 At end of the digestion period, remove aeration and allow to settle.

5.1.3 Drain sediment. Place supernatant in a beaker and allow to settle in refrigerator overnight.

5.1.4 Filter through fine mesh.

CT&E Environmental Services Inc.
Standard Operating Procedure

5.2 Cerophyll®

5.2.1 Add 5g Cerophyll® to 1 L deionized water. Mix in a blender on high speed for 5 minutes.

5.2.2 Remove from blender and allow to settle in refrigerator overnight.

5.2.3 Retain supernatant for combined YCT food.

5.3 Yeast

5.3.1 Add 5g dry yeast to 1 L deionized water. Mix in a blender at low speed.

5.3.2 Do not allow mixture to settle.

5.4 Combined YCT Food

5.4.1 Mix equal parts of each of the above preparations in large clean beakers.

5.4.2 Pour well mixed YCT into small screw cap bottles. Freeze until needed.

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title:	**Reference Toxicant Testing**
Method Reference:	**CT&E/USEPA**
Document File Name:	**7008-05.DOC**
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Page 1 of 2

Document Control Number: 7008

Approved by: Ken Holliday (Supervisor) 3/23/2001 (Date)

Approved by: (QA/QC Officer) 3/23/2001 (Date)

1.0 Summary

To insure that healthy organisms are used in testing, CT&E performs monthly QA/QC tests on all in-house cultured organisms. CT&E uses Sodium Chloride as a reference toxicant.

2.0 *Pimephales promelas*

2.1 48 hour static acute toxicity tests are run at 20°C (±1°C) using fish 1 to 14 days old.

2.2 This test consists of a control and a dilution series of 10g/L, 9g/L, 8g/L, 7g/L, and 6g/L, of sodium chloride. Other dilution series may be used.

2.3 The dilutions are prepared in 800 ml disposable plastic beakers using moderately hard synthetic water. 500 mls of test solution is placed in each of two replications. Water quality values are measured and recorded at this time.

2.4 Ten organisms are placed in each replicate. Fish are loaded by first siphoning them into a shallow pan from which they are transferred to the beakers with a large bore pipette.

2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

3.0 Daphnids *(Ceriodaphnia dubia, Daphnia magna, Daphnia pulex)*

3.1 48 hour static acute tests are performed at 25°C (±1°C) using organisms less than 24 hours old.

3.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.

3.2.1 *Ceriodaphnia dubia, Daphnia pulex:* 10, 5, 2.5, 1.25, 0.625 grams/L

CT&E Environmental Services Inc.
Standard Operating Procedure

3.2.2 *Daphnia magna:* 10, 5, 2.5, 1.25, 0.625 grams/L

3.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.

3.4 Four organisms are placed in each test vessel. The *Daphnids* are loaded with a disposable plastic pipette. Organisms are gently released below the surface of the water to minimize risk of injury.

3.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

4.0 Data Analysis

4.1 Toxicity tests are conducted on a monthly basis.

4.2 The LC_{50} is calculated according to EPA protocols.

4.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title: Sample Handling for Aquatic Toxicity Testing
Method Reference: CT&E/USEPA
Document File Name: 7009-04.DOC
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Document Control Number: 7009.

Approved by: Ken Holliday — Supervisor — Date 10/21/98

Approved by: Lydia M. Dorn — QA/QC Officer — Date 10/20/98

1.0 Summary

This document describes the manner in which sample waters (effluents, wastewaters, etc.) are handled from point of collection to testing.

2.0 Sample Handling

2.1 Sampling Personnel

CT&E's sampling personnel are trained and experienced in the techniques for collecting samples according to NPDES permit requirements. This includes the use of automatic sampling equipment and the measurement of various field parameters.

2.2 Sample Containers

Sample containers used by CT&E are disposable plastic cubitainers®.

2.3 Sample Collection Points

For NPDES permit required tests, the sample will be collected at the point specified in the discharge permit unless otherwise directed by the regulatory agency.

2.4 Sample Shipment

Samples are placed on ice (sufficient to maintain 0-4°C) in a cooler and are transported as quickly as possible to the laboratory.

2.5 Laboratory Handling of Samples

Upon delivery to the laboratory, the effluent samples are inspected, given a sample control number and stored at 4° C until used for testing.

CT&E Environmental Services Inc.
Standard Operating Procedure

2.6 Sample Holding Time

Samples will be tested within 24 hours upon receipt in the laboratory. The maximum lapsed time for collection of a grab or composite sample and the initiation of test, or for test solution renewal, will not exceed 36-hours for Chronic and Acute Testing.

3.0 LABORATORY ENVIRONMENT

3.1 Laboratory Arrangement

The aquatic toxicity testing laboratory is divided into two separate areas: (1) the culturing laboratory and (2) the testing laboratory. See attached diagram for details of laboratory layout.

3.2 Temperature

The aquatic toxicity testing laboratory air temperature is maintained at 20 ± 1° C throughout the year by a central heating and cooling system which is regulated by thermostats. Temperatures are continuously recorded by thermographs.

3.3 Water

Several waters are available for use in the laboratory. CT&E has access to municipally supplied water, well water and reagent water from which synthetic water is prepared. Waters used for culturing and testing are analyzed semiannually for priority pollutants and other contaminants. A detailed report is available.

3.4 Lighting

Ambient laboratory lighting is regulated with a 16 hour day/8 hour night photoperiod controlled by an electronic timing system in the culturing and testing areas.

4.0 LABORATORY EQUIPMENT

4.1 General

Instruments used for the measurement of physical and chemical parameters are calibrated prior to use in testing. Any instrument that exceeds the calibration limits is taken out of service and corrective action is taken.

CT&E Environmental Services Inc.
Standard Operating Procedure

4.2 Balances

Analytical balances are calibrated against standard weights prior to use. All calibration results and adjustments are recorded in bound books.

4.3 Water Quality Meters

Meters are calibrated prior to use using known standards and the manufacturer's instructions. Records of calibration are kept in logbooks. Detailed procedures for the operation of these meters are found in SOP's for each specific instrument.

4.4 Reagents

All reagents are stored in a separate area. Expired reagents and chemicals are discarded.

4.5 Test Containers

All test containers are either clean reusable glassware or new, disposable plastic beakers.

5.0 EQUIPMENT CLEANING PROCEDURES

5.1 Equipment used in culturing or testing is washed in the following manner:

5.1.1 Soak 15 minutes and scrub with detergent in tap water.
5.1.2 Rinse three times with tap water.
5.1.3 Rinse once with 20% nitric acid.
5.1.4 Rinse twice with deionized water.
5.1.5 Rinse once with full-strength, pesticide-grade acetone.
5.1.6 Rinse well with deionized water.
5.1.7 Invert and air dry.
5.1.8 All equipment and test chambers are rinsed with deionized water immediately prior to use for each test.

Appendix II
Chain of Custody

Chain of Custody Record

General Electric Co.

100 Woodlawn Ave. Pittsfield, MA 01201

TA4-H092600-42

Chain of Custody #: OBG08/11/04-01

Split Sample

Dry **Weather Acute Aquatic Toxicity for** Aug 2004

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) Mark Wawrowsky		
Sample #	**Date**	**Time**	**Containers**	**Parameters to be Analyzed**	**Preservative**	**Remarks**
A5869C	8/10 to 8/11/04	11^00 AM	1 Gallon plastic	Definitive Test(LC50 and NOAEL), Static acute toxicity, 48 hr w/ Daphnia pulex	Chilled	(See below)
	~~8/10~~ to ~~8/11/04~~	~~11^00 AM~~	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
	~~8/10~~ to ~~8/11/04~~	~~11^00 AM~~	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
X A5868R	8/11/04	8^30 AM	1 Gallon plastic	Housatonic River water dilution water for definitive test	Chilled	
	~~8/11/04~~	~~8^30 AM~~	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
	~~8/11/04~~	~~8^30 AM~~	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	

Relinquished By:	**Date/Time**	**Received By:**	**Date/Time**
Mark Wawrowsky	8-11-04		8-11-04 1400
Relinquished By:	**Date/Time**	**Received By:**	**Date/Time**
			8/12/04 0920

Additional Comments: The effluent sample being analyzed for toxicity is a flow-proportioned composite. Each outfall sample is a 24-hour composite. The sample collection times for each outfall are as follows:

001- 7^45 AM 004- / 005-64T- 7^00 AM 005-64G- 7^00 AM 007- / 09A- 7^52 AM 09B- / 4.7°C

The time of compositing the final flow-proportioned sample was 11^00 **A.M.**

1 of 1

41A

Appendix III

Bench Data

General Electric – 48-hour Acute Biotoxicity Bench Sheet

Client: General Electric

Project: Dry Weather Acute

Lab. No.: TAH-HO-P260-1/2

Sample Date: 08/10-11/04 Time: 11:00

Date Received: 08/12/04

Source: EFFLUENT

Date Analyzed: 08/12/04

Source of dilution water: Housatonic River Water

Analyst(s): KH

Test Species: *Daphnia pulex* Age: _____ Temp. Range: °C

Type of Test: 48-Hour Static Acute

Total Chlorine: N/D

	Beginning	Ending
Date:	08/12/04	08/14/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 5%	Effluent 15%	Effluent 35%	Effluent 50%	Effluent 75%	Effluent 100%
START									
Temperature	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
Hardness	120	100	110						340
D.O.	8.63	8.84	8.81	8.05	8.67	8.71	8.77	8.75	8.78
pH	6.73	7.13	7.19	6.79	6.89	7.04	7.19	7.27	7.34
Alkalinity	99	69	72						207
Sp. Conduct.	284	320	467	361	462	681	752	754	1020
24 HOUR									
No. Surviving	20	20	20	20	20	20	20	20	20
Temperature	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
D.O.	8.58	8.72	8.70	8.58	8.55	8.68	8.67	8.64	8.71
pH	6.78	7.14	7.23	6.84	6.97	7.10	7.23	7.24	7.39
Sp. Conduct.	285	341	477	368	478	689	754	767	1004
48 HOUR									
No. Surviving	20	20	20	20	20	20	20	20	20
Temperature	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
D.O.	8.51	8.67	8.62	8.53	8.48	8.55	8.57	8.57	8.62
pH	6.80	7.19	7.25	6.90	7.04	7.14	7.28	7.31	7.36
Sp. Conduct.	282	372	486	570	497	690	743	787	997

Method Reference: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition. EPA-600/4-90/027F. U.S.EPA, Cincinnati, Ohio.

f:\public\forms\bioassay\GE bench sheet-acute.doc

Acute Biotoxicity Bench Sheet

Client: QC

Project: Reference Toxicant Lab. No.:

Date Received:

Sample Date: Time: Date Analyzed:

Source: NaCl Analyst:

Source of dilution water:

Test Species: Daphnia pulex Age: < 24 Hours Temp. Range: °C

Type of Test: 48 hour Static Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	8/12/04	8/14/04
Time:	1400	1400

Concentration	Control		625	1250	2500	5000	10,000
START							
Temperature	20.8		20.8	20.8	20.8	20.8	20.8
Hardness	110						100
D.O.	8.9		8.9	8.9	8.9	8.9	8.9
pH	7.0		7.1	7.1	7.2	7.2	7.2
Alkalinity	73						77
Sp. Conduct.	357		1130	2240	3980	7140	11240
24 HOUR							
Temperature	20.1		20.1	20.1	20.1	20.1	20.1
No. Surviving	20		20	20	16	7	0
48 HOUR							
Temperature	20.7		20.7	20.7	20.7	20.7	20.7
No. Surviving	20		20	18	6	0	0

Note: All results expressed in mg/L unless otherwise designated. < = less than

Note: Number in parenthesis equals number not adversely effected (EC_{50}). This number is used in calculating EC_{50} value.

Note: Due to fragile structure of *Daphnia* organisms, dissolved oxygen (DO), hardness, alkalinity, specific conductance, and pH reading could not be taken after the organisms are added to the sample. Doing so would cause injury to the organisms.

Method Reference: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine*

TRIMMED SPEARMAN-KARBER METHOD. MONTANA STATE UNIV

FOR REFERENCE, CITE:
HAMILTON, M.A., R.C. RUSSO, AND R.V. THURSTON, 1977.
TRIMMED SPEARMAN-KARBER METHOD FOR ESTIMATING MEDIAN
LETHAL CONCENTRATIONS IN TOXICITY BIOASSAYS.
ENVIRON. SCI. TECHNOL. 11(7): 714-719;
CORRECTION 12(4):417 (1978).

DATE: 08/12/04 TEST NUMBER: - DURATION: 48 HOURS
CHEMICAL: NaCl SPECIES: PULEX

RAW DATA:

CONCENTRATION(MG/L)	625.00	1250.00	2500.00	5000.00	*******
NUMBER EXPOSED:	20	20	20	20	20
MORTALITIES:	0	2	14	20	20

SPEARMAN-KARBER TRIM: 0.00%

SPEARMAN-KARBER ESTIMATES: LC50: 2030.63
95% LOWER CONFIDENCE: 1713.54
95% UPPER CONFIDENCE: 2406.40

Appendix IV

U.S. EPA Region I Toxicity Test Summary

Toxicity Test Summary Sheet

Facility Name: General Electric Co. Test Start Date: August 12, 2004
NPDES Permit Number: MA 000 3891 Pipe Number: 001, 005-64T, 005-64G, 09A, 09B

Test Type	Test Species	Sample Type	Sample Method
☑ Acute	☐ Fathead minnow	☐ Prechlorinated	☐ Grab
☐ Chronic	☐ Ceriodaphnia	☐ Dechlorinated	☑ Composite
☐ Modified*	☑ Daphnia pulex	☐ Chlorine	☐ Flow thru
☐ 24-hour Screening	☐ Mysid Shrimp	☐ Spiked at lab	☐ Other
	☐ Menidia	☑ Chlorinated on-site	
	☐ Sea Urchin	☐ Unchlorinated	
	☐ Champia		
	☐ Selenastrum		
	☐ other		

*Modified (Chronic reporting acute values)

Dilution Water

X Receiving waters collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination (Receiving water name: Housatonic River);

____ Alternate surface water of known quality and a harness, etc. to generally reflect the characteristics of the receiving water;

____ Synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;

____ or artificial sea salts mixed with deionized water;

____ Deionized water and hypersaline brine; or

____ other

Effluent sampling date(s): August 10, 2004 to August 11, 2004

Effluent concentrations tested (in %): 100 75 50 35 15 5
*(Permit limit concentration): N/A

Was effluent salinity adjusted? No
If yes, to what value? N/A ppt
With sea salts? N/A Hypersaline brine solution? N/A

Actual effluent concentrations tested after salinity adjustment (in %): N/A N/A N/A N/A N/A N/A
Reference Toxicant Test Date: August 12, 2004 to August 14, 2004

N/A= not applicable

Permit Limits & Test Results

Test Acceptability Criteria

MEAN CONTROL SURVIVAL: 100% MEAN CONTROL REPRODUCTION: N/A

MEAN CONTROL WEIGHT: N/A MEAN CONTROL CELL COUNT: N/A

Limits		Results	
LC50	N/A	48-hr LC50	>100%
		Upper Value	N/A
		Lower Value	N/A
		Data Analysis Method used:	N/A
A-NOEC	N/A	A-NOEC	100%
C-NOEC	N/A	C-NOEC	N/A
		LOEC	N/A
IC25	N/A	IC25	N/A
IC50	N/A	IC50	N/A

N/A = not applicable

Attachment D

Chronic Effects of the Process Wastewaters Discharged from the General Electric Plant; Pittsfield, Massachusetts [Samples Collected in August 2004]

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Chronic Effects of the Process Wastewaters Discharged from The General Electric Plant Pittsfield, Massachusetts

Samples collected in August 2004

Submitted to:

General Electric
Area Environmental & Facility Programs
100 Woodlawn Avenue
Pittsfield, Massachusetts 01201

SGS Sample ID: TA4-H0-P209

Study Director: Ken Holliday

26 August 2004

SGS Environmental Services
1258 Greenbrier Street
Charleston, West Virginia 25311-1002
Tel: 304.346.0725 Fax: 304.346.0761
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Signatures and Approval

Submitted by: SGS Environmental Services
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26 August 2004
Date

Titshina L. Mims
Technical Writer

26 August 2004
Date

Barbara Hensley
Project Manager
barbara_hensley@sgs.com

26 August 2004
Date

Whole Effluent Toxicity Test
Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on: 26 August 2004
Date

Jeannie Latterner
Authorized signature

Jeannie Latterner
Name

QA/QC Manager
Title

SGS Environmental Services
Laboratory

jlatterner@sgs.com

Table of Contents

Table of Contents

List of Tables

Executive Summary

The following is a summary of the toxicity results exposing *Ceriodaphnia dubia* to effluent collected from the General Electric Company, Pittsfield, Massachusetts. Effluent samples were collected from August 08, 2004 to August 13, 2004. The freshwater species, *Ceriodaphnia dubia*, was exposed to the effluent under static-renewal conditions. Acute endpoints were derived 48-hours into the chronic studies.

Acute Toxicity Evaluation

Species	Exposure Period	LC_{50} % effluent	NOAEL % effluent
Ceriodaphnia dubia	48 hours	>100%	100%

Chronic Toxicity Evaluation

Species	Endpoint	Exposure Period	NOCEL % effluent	LOCEL % effluent	MAWC % effluent
Ceriodaphnia dubia	Survival	7 days	100%	>100%	≥100%
Ceriodaphnia dubia	Reproduction	7 days	100%	>100%	≥100%

Summary of Test Conditions and Test Results

Static Renewal Short-Term Toxicity Test with *Ceriodaphnia dubia*

Sponsor:	General Electric
Protocol Title:	*Chronic Aquatic Toxicity Testing*, SGS Document Control Number 7003, version 4.0
Study Number:	TA4-H0-P209
Test Material:	Composite effluent from the General Electric Company located in Pittsfield, Massachusetts
GE Sample ID:	A5867C, A5869C and A5871C
Dilution Water:	Water from the Housatonic River
Dilution Water ID:	A5866R, A5868R and A5870R

Dates Collected:

Effluent	Dilution Water
8/08/04 to 8/09/04 (A5867C)	8/09/04 (A5866R)
8/10/04 to 8/11/04 (A5869C)	8/11/04 (A5868R)
8/12/04 to 8/13/04 (A5871C)	8/13/04 (A5870R)

Dates Received:	8/10/04, 8/12/04, 8/14/04
Test Dates:	8/10/04 to 8/17/04
Test Concentrations:	100% effluent 75% effluent 50% effluent 25% effluent 12.5 effluent 6.25% effluent Dilution water control (Housatonic River) Reference control (moderately hard reconstituted water) Secondary reference control (sodium thiosulfate)

Test Type:	Chronic static renewal
Temperature:	25°C (± 1°C)
Light Intensity:	90 to 100 foot-candles
Photoperiod:	16 hours light, 8 hours dark
Size of Test Chamber:	30 ml medicine cups
Test Solution Volume:	20 ml per medicine cup
Renewal of solutions:	Test solutions were renewed daily using the most recently collected effluent sample.
Age of Organisms:	The test organisms were less than 24-hours old and were all hatched within an 8-hour period of each other.
Number of Neonates per test chamber:	1 daphnid per test chamber (replicate)
Number of Replicate Test Chambers per treatment:	10 test chambers (replicates) per concentration
Feeding regime:	Daphnid cultures were fed a combination of green algae (*Selenastrum capricorium*) and YCT (yeast, cereal leaves and trout chow).
Aeration:	The effluent sample was supersaturated by aeration prior to use in the test.
Results:	LC_{50} The 48-hour LC_{50} value was determined to be >100% effluent.
	NOAEL The No-Observed-Acute-Effect-Level (NOAEL), based on survival, was observed to be 100% effluent
	NOCEL The No-Observed-Chronic-Effect-Level, based on reproduction, was determined to be 100% effluent

LOCEL The Lowest-Observed-Chronic-Effect-Level, based on reproduction, was determined to be >100% effluent

MAWC The Maximum Acceptable Wastewater Concentration was calculated to be ≥100% effluent.

1.0 Introduction

1.1 Background

In 1972, amendments were made to the Clean Water Act (CWA) prohibiting the discharge of any pollutant from a point source to waters of the United States, unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Since the passing of the 1972 amendments to the CWA, significant progress has been made in cleaning up industrial process wastewater and municipal sewage.

The purpose of the National Pollutant Discharge Elimination System (NPDES) Program is to protect human health and the environment. The Clean Water Act requires that all point sources discharging pollutants into waters of the United States must obtain an NPDES permit. By point sources, EPA means discrete conveyances such as pipes or man made ditches.

For many years, discharge limits were based on available technology for wastewater treatment. However, in 1984, the U.S. Environmental Protection Agency (EPA) released a national policy statement entitled "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants" (U.S. EPA, 1984) which addresses the control of toxic pollutants beyond technology-based requirements in order to meet water quality standards. To implement the new policy, guidance was provided to the respective state and regional permit personnel in the EPA's "Technical Support Document for Water Quality-Based Toxics Control" (U.S. EPA, 1985; U.S. EPA, 1991). The EPA's policy statement and the support document recommended that, where appropriate, permit limits should be based on effluent toxicity as measured in aquatic toxicity tests.

1.2 Clean Water Act, 33 U.S.C. s/s 1251 et seq. (1977)

The Clean Water Act is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which set the basic structure for regulating discharges of pollutants to waters of the United States. The law gave EPA the authority to set effluent standards on an industry basis (technology-based) and continued the requirements to set water quality standards for all contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit (NPDES) is obtained under the Act. The 1977 amendments focused on toxic pollutants. In 1987, the CWA was reauthorized and again focused on toxic substances, authorized citizen suit provisions, and funded sewage treatment plants (POTWs) under the Construction Grants Program. The CWA provisions for the delegation by EPA of many permitting, administrative, and enforcement aspects of the law to state governments. In states with the authority to implement CWA programs, EPA still retains oversight responsibilities.

1.3 The Chronic Toxicity Test

The acute toxicity test is used for predicting the maximum allowable concentrations of industrial wastewaters that can be discharged into a receiving system. Chronic toxicity tests produce data that is useful in predicting the wastewater concentrations not likely to harm a resident population of invertebrates or fish.

1.4 Objective of the General Electric Study

The objective of this study was to measure the chronic toxicity of the composite process wastewater discharged by the General Electric facility located in Pittsfield, Massachusetts, using *Ceriodaphnia dubia* under static renewal conditions. Whereas *Ceriodaphnia dubia* are not considered locally important, they are routinely used by regulatory agencies and contract laboratories nationwide for

toxicity testing. A short-term chronic toxicity test was conducted from August 10, 2004 to August 17, 2004 at SGS Environmental Services, Charleston, West Virginia. All original raw data and the final report produced for this study are stored in SGS's archives at the above location.

2.0 Materials and Methods

2.1 Protocol

Procedures used in this chronic toxicity test followed those described in the SGS Standard Operating Procedure (SOP) entitled *Chronic Aquatic Toxicity Testing*, SGS document control number 7003, version 4.0. This SOP generally follows the standard methodology described by the U.S. Environmental Protection Agency.

Additional SOPs used in this study are outlined below:

Title	Document Number	Version
Culture Waters for Aquatic Toxicity Testing	7005	4.0
Daphnia, Culture of	7006	5.0
Reference Toxicant Testing	7008	5.0
Sample Handling for Aquatic Toxicity Testing	7009	4.0

Copies of these documents are included in the References section of this report.

2.2 Effluent Sample

The first effluent sample (A5867C) was collected by GE personnel from August 08, 2004 to August 09, 2004, and was used to initiate the short-term chronic test and renewal of the test solutions on Day 1 and Day 2. Upon receipt at SGS on August 10, 2004, the sample temperature was 4.4° C. The effluent sample was characterized as having

Sample #1 – collected from 8/08/04 TO 8/09/04

Parameter	Result
Total Hardness	320
Alkalinity (as $CaCO_3$)	196
pH	7.69
Specific Conductance	1030

Sample #1 – collected from 8/08/04 TO 8/09/04

Parameter	Result
Dissolved Oxygen Concentration*	8.71
Appearance	Clear

The second effluent sample (A5869C) was collected by GE personnel from August 10, 2004 to August 11, 2004, and was used for renewal of test solutions on Day 3 and Day 4. Upon receipt at SGS on August 12, 2004, the sample temperature was 4.7° C. The effluent sample was characterized as having

Sample #2 – collected from 8/10/04 TO 8/11/04

Parameter	Result
Total Hardness	400
Alkalinity (as $CaCO_3$)	317
pH	7.27
Specific Conductance	1238
Dissolved Oxygen Concentration*	8.67
Appearance	Clear

The third effluent sample (A5871C) was collected by GE personnel from August 12, 2004 to August 13, 2004, and was used for renewal of test solutions on Days 5, 6 and 7. Upon receipt at SGS on August 14, 2004, the sample temperature was 4.4° C. The effluent sample was characterized as having

Sample #3 – collected from 8/12/04 TO 8/13/04

Parameter	Result
Total Hardness	260
Alkalinity (as $CaCO_3$)	124
pH	6.59
Specific Conductance	498
Dissolved Oxygen Concentration*	8.68
Appearance	Clear

*Dissolved oxygen concentration was recorded after sample was aerated and warmed to approximately 20°C).

2.3 Dilution Water

Dilution water consisted of receiving water collected from the Housatonic River and was collected as a "grab" sample. The first dilution water sample (A5866R) was collected by General Electric personnel on August 09, 2004, and was used with the Day 1 and Day 2 test. Upon receipt at SGS, the sample temperature was 4.4°C. The dilution water sample was characterized as having

Dilution Water #1	**Collected 08/09/04**
Parameter	**Result**
Total Hardness	200
Alkalinity (as $CaCO_3$)	87
pH	6.82
Specific Conductance	253
Dissolved Oxygen Concentration*	8.62
Appearance:	Slight yellow color

The second dilution water sample (A5868R) was collected by General Electric personnel on August 11, 2004, and was used with the Day 3 and Day 4 tests. Upon receipt at SGS, the sample temperature was 4.7°C. The dilution water sample was characterized as having

Dilution Water #2	**Collected 08/11/04**
Parameter	**Result**
Total Hardness	160
Alkalinity (as $CaCO_3$)	87
pH	6.73
Specific Conductance	285
Dissolved Oxygen Concentration*	8.52
Appearance:	Slight yellow color

The third dilution water sample (A5870R) was collected by General Electric personnel on August 13, 2004, and was used with the Day 5, 6 and 7 tests. Upon receipt at SGS, the sample temperature was 4.4°C. The dilution water sample was characterized as having

Dilution Water #3	Collected 8/13/04
Parameter	**Result**
Total Hardness	240
Alkalinity (as $CaCO_3$)	87
pH	6.94
Specific Conductance	257
Dissolved Oxygen Concentration*	8.52
Appearance:	Slight yellow color

*Dissolved oxygen concentration was recorded after sample was aerated and warmed to approximately 25°C).

2.4 Reference Control Water

Water used in the reference control vessels was deionized (DI) water adjusted to the appropriate hardness (moderately hard reconstituted water) by the addition of reagent grade chemicals (U.S. EPA, 1993). Characterization of this water resulted in:

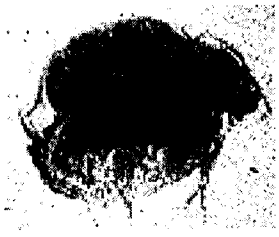
Parameter	Result
Total Hardness	100 – 110
Alkalinity (as $CaCO_3$)	69 – 76
pH	6.9 – 7.1
Specific Conductance	338 – 360

2.5 Secondary Reference Control

A secondary reference control consisted of deionized (DI) water adjusted to the appropriate hardness (moderately hard reconstituted water) and sodium thiosulfate (0.1 N).

2.6 Test Organisms

Ceriodaphnia dubia→



Daphnids (*Ceriodaphnia dubia*), less than 24-hours old, were obtained from SGS laboratory cultures maintained in Charleston. The culture system consisted of twenty-four (24) 100 ml disposable plastic beakers each containing 80 ml of culture medium and one (1) daphnid. The culture medium was deionized (DI) water for which the

hardness was raised by addition of reagent grade chemicals (U.S. EPA, 1993). Prior to use, the culture water was characterized:

Parameter	Result
Total Hardness	within range of 80-110 mg/L
Alkalinity (as $CaCO_3$)	within range of 60-75 mg/L
pH	within range of 7.0 to 7.2

The culture area was maintained at a temperature of 25°C (±1°C) with a regulated photoperiod of 16 hours of light and 8 hours of darkness.

Daphnid cultures were fed a combination of green algae (*Selenastrum capricorium*), approximately 4.0 x 10^7 cells/ml and YCT (yeast, cereal leaves and trout chow). Approximately 1.0 ml of algae and 0.5 ml of YCT was added to each culture vessel daily. Three times per week, daphnids are transferred to fresh culture media.

Approximately twenty-four hours before test initiation, all immature daphnids were removed from the culture flasks. Offspring produced during the period were used in the toxicity test. All Ceriodaphnia dubia were used in the test were ≤24 hours old and all were produced within an 8-hour period.

2.7 Test Procedures

A subsample of the effluent and the dilution water (approximately 2250 ml), from each of the three sampling events, was analyzed by SGS for total phosphorus, chloride, total suspended solids, and total solids. The short-term chronic toxicity test was conducted at concentrations of 100%, 75%, 50%, 25%, 12.5% and 6.25% effluent. Test concentrations were prepared from this solution by diluting the appropriate volume of effluent with dilution water to a total volume of 800 ml. Test solutions were then divided into replicate (10 replicates per concentration) 30 ml medicine cups, each containing 20 ml of test solution. One

set of ten control beakers (containing Housatonic River water), one set of ten reference control beakers (containing moderately hard reconstituted water), and one set of ten secondary reference control beakers (containing moderately hard reconstituted water and sodium thiosulfate) were established and maintained under the same conditions as the exposure concentrations. Test solutions were placed in an incubator to maintain solution temperature of 25°C (± 1°C). Light was provided on a 16-hour light and 8-hour dark photoperiod. Florescent bulbs provided an illumination of 90 to 100 foot-candles in the test area.

Prior to test initiation, daphnids less than 24-hours old were culled individually with a plastic pipette and placed into a 1000 ml holding beaker containing approximately 500 ml of reference water. The test was initiated when daphnids were individually transferred from the holding beaker to the test solutions (5 daphnids per replicate). The renewal of the test solutions was conducted daily by transferring the adult organisms to freshly prepared solutions. The daphnids were fed prior to test initiation and immediately following renewal of the test solutions.

2.8 Test Monitoring

The number of mortalities and observations in each replicate vessel were recorded at 0, 24, 48, 72, 96, 120, 144 and 168 hours of exposure and observed mortalities were removed from the test solutions. Biological observations and observations from the physical characteristics of each replicate test solution and control were also made and recorded at 0, 24, 48, 72, 96, 120, 144 and 168 hours. Dissolved oxygen concentrations pH and temperature were measured at test initiation and at 24-hour intervals thereafter, in one replicate vessel (a) for each test concentration in which there were surviving organisms.

Total hardness concentrations were measured by the EDTA titrimetric method and total alkalinity concentrations were determined by potentiometric titration to an endpoint of pH 4.5 (APHA, 1989). Total residual chorine was measured by Hach test. Concentrations of ammonia were determined using a Buchi model 212 distillation unit and titrated automatically with a Brinkman titroprocessor. Specific conductivity was measured with a Cole Palmer Model 71250 salinity-conductivity-temperature meter and probe; pH was measured with a Fisher Scientific Accumet 910 pH meter and combination electrode; dissolved oxygen concentration was measured with an YSI Model 59 dissolved oxygen meter. Daily temperature measurements were performed with a Princo mercury thermometer and a Fisher minimum-maximum thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.9 Reference Toxicity Test

A chronic reference toxicity test exposing *Ceriodaphnia dubia* to sodium chloride (NaCl) was conducted from August 03, 2004 to August 10, 2004. The reference test was conducted to establish the health of the test organisms. The reference toxicity test included five NaCl concentrations and a dilution water control (moderately hard reconstituted water). The nominal NaCl concentrations for the test with *Ceriodaphnia dubia* was 500, 1000, 2000, 3000 and 4000 mg of NaCl/L. Test methods were the same as those described above for the effluent test.

3.0 Statistics

All data generated during the test was tabulated, summarized and analyzed by SGS. The data generated at the end of 48 hours were analyzed and when appropriate a median lethal concentration (LC_{50}) was calculated. This value was derived using a computerized statistical method (TOXSTAT 3.5), which was also used to calculate confidence levels were possible for each test organism.

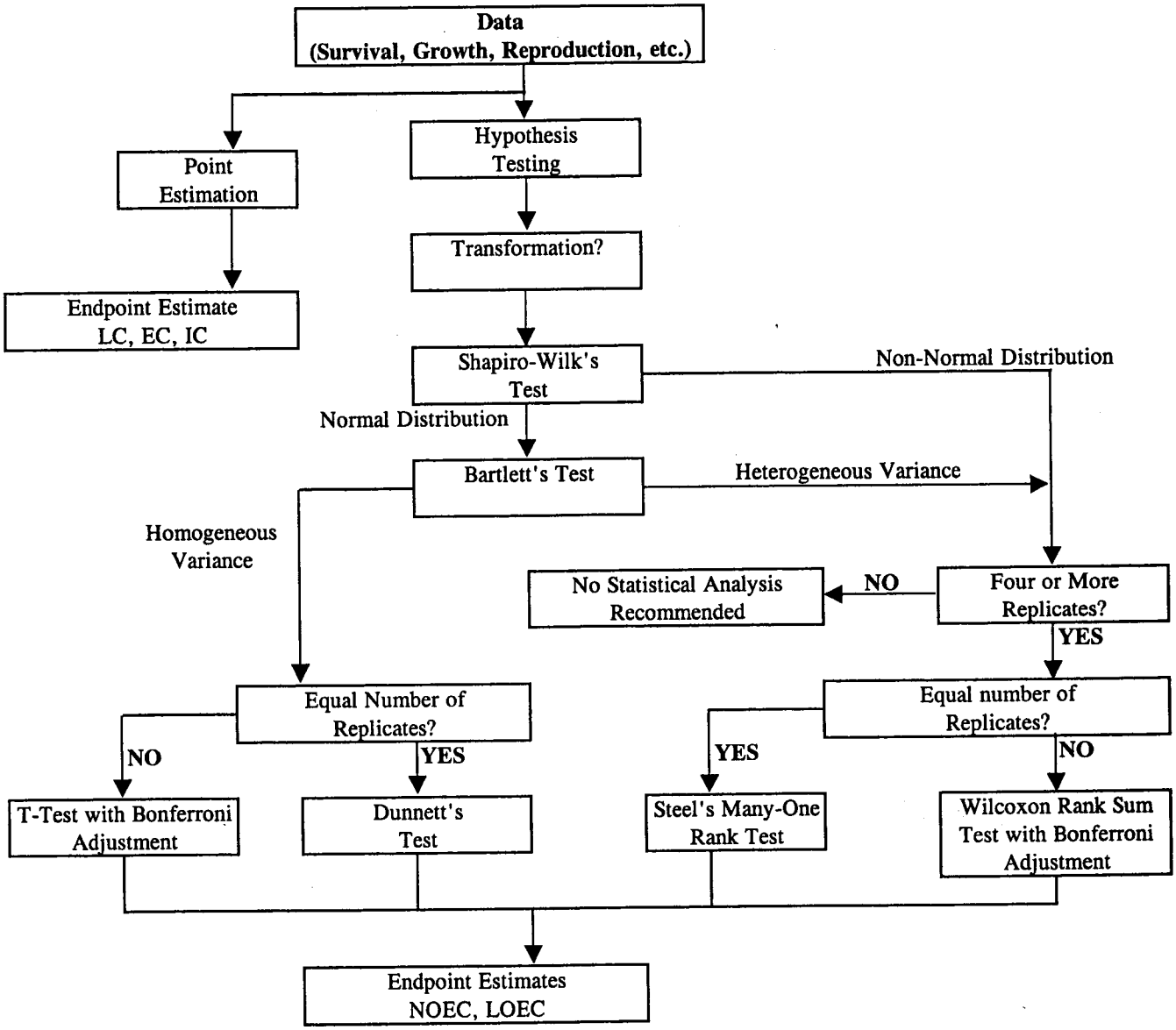
If partial mortalities were observed in at least two concentrations, the probit analysis, which yields LC_{50} values and 95 percent confidence levels, was used. When fewer than two partial mortalities were observed, the moving average method, binomial method, or non-linear interpolation, was used to generate LC_{50}s. The final report specifies the statistical methods used.

The Shapiro-Wilk's test and Bartlett's test are performed on all other chronic data to test for normality of data distribution and homogeneity of variance between treatments.

Concentrations above the NOECL for survival were excluded from the hypothesis tests for reproduction and growth. If assumptions of parametric analysis (Shapiro-Wilk's test and Bartlett's test) are met, the reproduction data will be analyzed using Dunnett's procedure or the T-test with Bonferroni Adjustment. If assumptions are not met, Steel's Many-One Rank test or Wilcoxon Rank Sum test with Bonferroni Adjustment (non-parametric analyses) are used to analyze data. Fisher's Exact is used to analyze Ceriodaphnia survival data. The final report specifies the statistical methods used.

Generally, to choose the best estimate values for a particular data set, the U.S. EPA flow chart on page 21 was followed.

Flowchart for Statistical Analysis of Data



4.0 Results

4.1 Effluent Toxicity Test

The methods and detection limits of chemical analyses performed on the composite effluent sample and dilution water are summarized in Table 1. Results of the characterization and analysis of the effluent and the dilution water are presented in Table 2. Water quality parameters measured during the toxicity test are presented in Table 3. Daily and continuous monitoring of the test solutions established the temperature ranged from 24°C to 26°C throughout the exposure period. The effluent concentration was tested (expressed as %) and the corresponding percent mortalities recorded during the 48-hour toxicity test are presented in Table 4.

The percent survival and number of offspring produced during the 7-day exposure to *C. dubia* are presented in Table 4. The 48-hour LC_{50} value was determined to be >100% effluent, since no concentrations caused ≥50% mortality during the first 48 hours of the study. At test termination, 100% survival was observed among *C. dubia* exposed to all effluent concentrations and the controls. Based on statistical analysis of the survival data, the NOCEL was determined to be 100% effluent.

By day seven, ≥60% of the reference control organisms had produced at least three broods with a minimum of 15 young per female.

	Mean Number of Offspring per Effluent Concentration								
	Effluent Concentration (%)						Dilution water Control	Reference Control	Secondary Reference Control
	6.25	12.5	25	50	75	100			
Mean →	24.2	25.6	22.4	27.5	25.1	27.4	25.0	24.4	22.2

(Secondary reference control = sodium thiosulfate)

Statistical analyses of *C. dubia* reproduction using Dunnett's did not established a difference between the 100% effluent concentration and the control group. The NOCEL, based on reproduction, was therefore determined to be 100% effluent. The Lowest-Observed-Chronic-Effect-Level (LOCEL), based on reproduction, was determined to be >100% effluent. The Maximum-Acceptable-Wastewater-Concentration (MAWC) was calculated to be 100% effluent.

4.2 Reference Toxicity Test

SGS uses sodium chloride (NaCl) as a reference toxicant. The reference test was conducted from August 03, 2004 to August 05, 2004, and the resulting 48-hour LC_{50} was estimated by Spearman-Karber Trim to be 1423 mg of NaCl/L (95% confidence intervals of 1227 to 1649 mg NaCl/L).

5.0 References

American Public Health Association, American Water Works Association, and Water Pollution Control Federation (APHA). 1989. *Standard Methods for the Examination of Water and Wastewater. 17th Edition.*

U.S. Environmental Protection Agency. 1984. *Development of water Quality-Based Permit Limitations for Toxic Pollutants.* Federal Register 49(48):90160-90190.

U.S. Environmental Protection Agency. 1985. *Technical Support Document for Water Quality-Based Toxics Control.* Office of Water, Washington, DC.

U.S. Environmental Protection Agency. 1991. Technical Support Document for Water Quality-Based Toxics Control. Office of Water, Washington, DC.

Weber, Cornelius I., et al., *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition. EPA-600/4-91/002. U.S.EPA, Cincinnati, Ohio.

Table 1. Methods and detection limits of chemical analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).

Parameters	Method	Detection Limits
Ammonia Nitrogen as N	EPA 350.2	1.0 mg/L
Chloride	EPA 325.2	10.0 mg/L
Total Organic Carbon	EPA 415.1	1.0 mg/L
Total Solids	EPA 160.3	10.0 mg/L
Phosphorus, Total as P	EPA 365.2	0.02 mg/L
Total Residual Chlorine	Standard Methods 4500-Cl G	0.01 mg/L
Total Suspended Solids	EPA 160.2	5.0 mg/L

**Table 2a. Sample #1 – collected from 08/08/04 TO 08/09/04
Dilution water collected on 08/09/04
Results of the characterization and analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).**

Parameter	Effluent (A5867C)	Housatonic River (A5866R)
Temperature	24.8°C	24.8°C
pH	7.69	6.82
Alkalinity (as $CaCO_3$)	196	87
Hardness (as $CaCO_3$)	320	200
Dissolved Oxygen*	8.71	8.62
Specific Conductivity	1030	253
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	0.058 mg/L	0.065 mg/L
Chloride	140 mg/L	16 mg/L
Total Suspended Solids	ND	8.0
Total Solids	630 mg/L	140 mg/L
Total Organic Carbon	5.5 mg/L	5.7 mg/L
Description	clear	slight yellow color

*Dissolved oxygen concentrations recorded after samples were aerated and warmed to approximately 20°C.
N/A = not applicable ND = non detectable

Table 2b. Sample #2 – collected from 8/10/04 to 08/11/04
Dilution water collected on 08/11/04
Results of the characterization and analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).

Parameter	Effluent (A5869C)	Housatonic River (A5868R)
Temperature	25.1°C	25.1°C
pH	8.67	6.73
Alkalinity (as $CaCO_3$)	317 mg/L	87 mg/L
Hardness (as $CaCO_3$)	400 mg/L	160 mg/L
Dissolved Oxygen	8.67 mg/L	8.52 mg/L
Specific Conductivity	1238 µmhos/cm	285 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	18 mg/L
Total Phosphorus as P	0.030 mg/L	0.029 mg/L
Chloride	140 mg/L	16 mg/L
Total Suspended Solids	ND	6.0 mg/L
Total Solids	640 mg/L	150 mg/L
Total Organic Carbon	4.0 mg/L	5.0 mg/L
Description	Clear	Slight yellow color

Dissolved oxygen concentrations recorded after samples were aerated and warmed to approximately 20°C.
N/A = not applicable ND = non detectable

**Table 2c. Sample #3 – collected from 8/12/04 to 08/13/04
Dilution water collected on 08/13/04
Results of the characterization and analyses of the General Electric Pittsfield Plant effluent and the dilution water (Housatonic River).**

Parameter	Effluent (A5871C)	Housatonic River (A5870R)
Temperature	25.6°C	25.6°C
pH	6.59	6.94
Alkalinity (as $CaCO_3$)	124	87
Hardness (as $CaCO_3$)	260	240
Dissolved Oxygen	8.68	8.52
Specific Conductivity	498	257
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	0.074 mg/L	0.029 mg/L
Chloride	69 mg/L	16 mg/L
Total Suspended Solids	18 mg/L	11 mg/L
Total Solids	290 mg/L	160 mg/L
Total Organic Carbon	4.7 mg/L	6.0 mg/L
Description	Clear	Slight yellow color

Dissolved oxygen concentrations recorded after samples were aerated and warmed to approximately 20°C. N/A = not applicable ND = non detectable

Table 3. The water quality measurements (ranges) recorded during the 7-day short-term chronic toxicity test exposing *Ceriodaphnia dubia* to General Electric Pittsfield Plant effluent.

Sample ↓	pH	Dissolved Oxygen mg/L	Temperature (°C)	Conductivity µmhos/cm
Dilution Water Control	6.68-7.01	8.52-8.67	24.7-25.6	250-290
Reference Control	7.04-7.10	8.77-8.89	24.7-25.6	322-338
$Na_2S_2O_3$ Control	7.10-7.16	8.80-8.91	24.7-25.6	334-343
6.25% effluent	6.71-7.07	8.54-8.70	24.7-25.6	277-408
12.5% effluent	6.81-7.22	8.55-8.71	24.7-25.6	281-513
25% effluent	6.73-7.34	8.59-8.72	24.7-25.6	342-734
50% effluent	6.68-7.49	8.60-8.73	24.7-25.6	386-810
75% effluent	6.63-7.58	8.53-8.73	24.7-25.6	430-1122
100% effluent	6.59-7.73	8.52-8.74	24.7-25.6	487-1238

Dilution Water Control = receiving water collected from the Housatonic River
Reference Control = moderately hard synthetic water
$Na_2S_2O_3$ Control = moderately hard synthetic water and sodium thiosulfate (0.1 N)

Table 4. Summary of the mean survival and reproduction recorded during the 7-day short-term chronic toxicity test exposing *Ceriodaphnia dubia* to General Electric Pittsfield Plant effluent.

Effluent Concentration (%)	Days 1	2	3	4	5	6	7
Reference Control	100%	100%	100%	100%	100%	100%	100%
$Na_2S_2O_3$ Control	100%	100%	100%	100%	100%	100%	100%
Control	100%	100%	100%	100%	100%	100%	100%
6.25	100%	100%	100%	100%	100%	100%	100%
12.5	100%	100%	100%	100%	100%	100%	100%
25	100%	100%	100%	100%	100%	100%	100%
50	100%	100%	100%	100%	100%	100%	100%
75	100%	100%	100%	100%	100%	100%	100%
100	100%	100%	100%	100%	100%	100%	100%

	Number of Offspring Produced							Mean
Reference Control	0	0	0	36	18	66	124	24.4
$Na_2S_2O_3$ Control	0	0	0	43	11	79	89	22.2
Control	0	0	0	35	15	76	124	25.0
6.25	0	0	0	41	18	86	97	24.2
12.5	0	0	0	43	15	84	114	25.6
25	0	0	0	38	13	82	91	22.4
50	0	0	0	43	9	100	123	27.5
75	0	0	0	42	22	90	97	25.1
100	0	0	0	41	13	99	121	27.4

Actual number of mortalities (if any) is presented in parentheses.

Reference Control = moderately hard synthetic water
$Na_2S_2O_3$ Control = moderately hard synthetic water and sodium thiosulfate (0.1 N)
Dilution Water Control = receiving water collected from the Housatonic River

Appendix I

References

CT&E Environmental Services Inc.

Standard Operating Procedure

Document Title:	**Acute Aquatic Toxicity Testing**
Method Reference:	**CT&E/USEPA**
Document File Name:	**7002-04.DOC**
Revision Number:	**4.0**
Effective Date:	**October 20, 1998**

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Page 1 of 6

Document Control Number: 7002.

Approved by: Ken Holliday (Supervisor) Date: 10/21/98

Approved by: Linda M. Work (QA/QC Officer) Date: 10/20/98

1.0 SUMMARY

A 24-, 48-, or 96-hour test to determine the toxicity to freshwater aquatic animals of effluents.

2.0 REFERENCES

2.1 Weber, Cornelius I., *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition. EPA-600/4-90/027. U.S.EPA, Cincinnati, Ohio.

2.2 *Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency*, October, 1991.

2.3 *Toxics Management Program's Guidance for Conduction and Reporting the Results of Toxicity Tests in Fulfillment of VPDES Permit Requirements*, Revised July 1992.

3.0 SCREENING

3.1 Test Duration

24 Hours, 48 Hours or 96 Hours.

3.2 Test Preparation

3.2.1 Measure the pH, D.O. and total residual chlorine of the 100% effluent and the control water. If the effluent pH falls outside of the range of 6.0-9.0, two parallel tests are set up in which one effluent is adjusted and the other is not. The pH is adjusted to 7.0 using additions of 1N NaOH and HCl, (other pH adjustment endpoints may be utilized depending on local requirements). The measured amount of acid or base is recorded on the bench sheet. If the D.O. is below 40% saturation or above 100% saturation, the effluent is aerated prior to test initiation. If the total chlorine is above 0.1 mg/L, two parallel tests are set up in which one

CT&E Environmental Services Inc.
Standard Operating Procedure

effluent is dechlorinated and the other is not (Dechlorination may be prohibited; permit is checked to determine if dechlorination is allowed). The effluent is dechlorinated by the addition of anhydrous sodium thiosulfate. The measured amount is recorded on the bench sheet. Care is taken to add the least amount of sodium thiosulfate needed to decrease the TRC level below 0.10 mg/L. Typically, adjustment of effluent is unnecessary.

3.2.2 Twenty organisms per concentration are used in acute screening tests.

3.2.3 This is a static, non-renewal test, using *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna*, or *Pimephales promelas* (Fathead minnow).

3.2.4 Water quality (D.O., pH, conductivity, hardness, alkalinity and TRC), is measured at the time of test initiation. At test termination, temperature, D.O. conductivity and pH are measured. The final mortality and percent effected counts are recorded. Temperature is maintained at 25°± 1°C for *Daphnia*, and 20° ± 1°C for fathead minnows. Facilities exist to perform both fish and *Daphnia* tests at either temperature.

3.3 Test Results

No statistical analysis is performed on screening data.

4.0 DEFINITIVE TEST

4.1 *Pimephales promelas* (Fathead Minnows)

4.1.1 Test Duration

48-Hours or 96-Hours

4.1.2 Static non-renewal

4.1.3 Test Preparation

4.1.3.1 This test is comprised of a control and an effluent dilution series usually consisting of 100%, 50%, 25%, 12.5% and 6.25% (unless otherwise indicated).

4.1.3.2 The sample is brought up to test temperature in a room temperature water bath. Chemical parameters are checked and

CT&E Environmental Services Inc.
Standard Operating Procedure

recorded. If the pH, D.O. or chlorine fall outside the acceptable testing range, the effluent may be adjusted (see screening; Test Preparation).

4.1.3.3 The dilutions are prepared in calibrated graduated cylinders using moderately hard synthetic water as dilution water. Other dilution water may be used if specified.

4.1.3.4 Approximately 400 ml of test solution is placed in each of two 800 ml disposable plastic beakers.

4.1.4 Loading

Ten (10) organisms are placed in each beaker. CT&E uses fish which are less than 14 days old and are hatched within the same 24 hour period. A loading limit of 0.8 g/l is observed. Fish are loaded by first transferring them to a shallow dish where they are easily transferred into the test solutions with wide-bore pipettes.

4.1.5 Test Temperature

20° C (± 1)

4.1.6 Daily Procedures

4.1.6.1 At the end of each 24 hours, the pH, D.O. and temperatures are checked and recorded. At this time mortalities are also recorded.

4.1.6.2 If a 96 hour static acute test is required, the test solution may be renewed at 48 hours. Renewal is accomplished by siphoning old test solution and debris and replacing with fresh solution of the appropriate concentration.

4.1.6.3 At the end of 48 hours or 96 hours the final mortalities and percent affected are recorded along with the final water qualities (D.O., pH, conductivity).

4.1.7 Feeding

Organisms are allowed to feed only prior to test initiation, and prior to renewal at 48 hours in a 96 hour test.

4.2 *Ceriodaphnia dubia, Daphnia magna,* and *Daphnia pulex*

4.2.1 Test Duration

48-Hours

4.2.2 Static Non-renewal

4.2.3 Test Preparation

4.2.3.1 This test is comprised of a control and a dilution series consisting of 100%, 50%, 25%, 12.5% and 6.25% of the effluent (unless otherwise indicated).

4.2.3.2 The sample is brought up to test temperature in a room temperature waterbath. Chemical parameters are checked and recorded. If the pH, D.O. or chlorine fall outside the acceptable testing range, the effluent may be adjusted (see screening; Test Preparation).

4.2.3.3 The dilutions are prepared in beakers using moderately hard synthetic water (see Section II; Dilution Waters and Culture Media), unless other dilution water is specified. At least 25 ml. of each dilution are placed in five 30 ml. testing vessels.

4.2.4 Loading

4.2.4.1 Four organisms are placed in each vessel. The *Daphnids* are loaded with a disposable polyethylene transfer pipette and are gently released below the surface of the water to avoid the risk of injury.

4.2.5 Test Temperature

The test is conducted in a constant temperature incubator at 25° ±1° C(To satisfy local requirements tests may be conducted at other temperatures).

CT&E Environmental Services Inc.
Standard Operating Procedure

4.2.6 Daily Procedure

4.2.6.1 At 24 and 48 hours the mortalities and number adversely effected are noted.

4.2.6.2 Due to the fragile structure of *Daphnia* organisms, dissolved oxygen, hardness alkalinity, specific conductance and pH readings are not taken after the organisms have been added to the sample. These analyses could cause injury to the *Daphnia* organisms.

4.2.7 Photoperiod

16 hours light, 8 hours dark.

4.2.8 Feeding

Organisms are allowed to feed prior to test initiation; they are not fed for the duration of the test.

5.0 TEST DATA

5.1 *Pimephales promelas*, *Ceriodaphnia dubia*, *Daphnia magna* and *Daphnia pulex*

5.1.1 Mortality and adverse effects are used as the endpoints for a definitive test.

5.1.2 Chemical parameters checked before test initiation, at 24 hours, 48 hours, 72 hours and 96 hours.

5.1.3 Mortalities recorded at 24 hours, 48 hours, 72 hours and 96 hours.

5.1.4 Any atypical behavior or complications are recorded.

6.0 DATA ANALYSIS

6.1 Introduction

Data from acute effluent toxicity tests are used to estimate the **LC50** and **EC50**. The **LC50** is a point estimate of the effluent concentration that is expected to cause lethality to 50% of the test organisms. The **EC50** is a point estimate of

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Standard Operating Procedure

the effluent concentration that is expected to cause and adverse effects to 50% of the test organisms.

6.2 Methods for Estimating the LC50 & EC50

6.2.1 The flow chart (Figure 6) on page 76 of the manual, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms* (Fourth Edition), EPA-600/4-90-27F, Appendix A, Sections 4.4.1 through 4.4.3. is observed for determination of the LC50 for multi-concentration acute toxicity tests.

6.2.2 Several statistics packages, including Toxstat® 3.4, are available for data analysis.

7.0 REPORT PREPARATION

7.1 CT&E Acute Toxicity Test Reports Typically Contain the Following Information:

7.1.1 Test background information - Includes client, NPDES or state permit number, sampling point reference number, date collected and received, collector's name, type and date of test, dilution water used, test results, and chain of custody forms.

7.1.2 Results - **LC50 & EC50** values and analysis method used; Any comments concerning the test results.

7.1.3 Initial Characterization of the Effluent Sample - Raw Data Sheets: Includes dissolved oxygen (DO), pH, specific conductivity, hardness, alkalinity and a description of the sample source.

7.1.4 Reference Toxicity Data

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title: Culture Waters for Aquatic Toxicity Testing
Method Reference: CT&E/USEPA
Document File Name: 7005-04.DOC
Revision Number: 4.0
Effective Date: October 20, 1998

Document Control Number: 7005.

Approved by: Ken Halliday, Supervisor — Date: 10/21/98

Approved by: Wade M. Davis, QA/QC Officer — Date: 10/20/98

1.0 Summary

This document describes the preparation of various waters used for the culture of aquatic organisms.

2.0 Moderately-Hard Synthetic Water

2.1 Place 19 liter of de-ionized, or equivalent, water in a properly cleaned and labeled plastic carboy.

2.2 Add 1.20 g of $MgSO_4$, 1.92 g $NaHCO_3$ and 0.08g KCl to the carboy.

2.3 Aerate overnight.

2.4 Add 1.20 g of $CaSO_4 \cdot 2H_2O$ to 1 liter of de-ionized or equivalent water in a separate flask. Stir on magnetic stirrer until calcium sulfate is dissolved and add to the 19 liter above and mix well.

2.5 Aerate vigorously for 24 hours to stabilize the medium.

3.0 Hard Synthetic Water

3.1 Place 9 liter of de-ionized, or equivalent, water in a properly cleaned and labeled plastic carboy.

3.2 Add 1.20 g of $MgSO_4$, 1.92 g $NaHCO_3$ and 0.08g KCl to the carboy.

3.3 Aerate overnight.

3.4 Add 1.20 g of $CaSO_4 \cdot 2H_2O$ to 1 liter of de-ionized, or equivalent water in a separate flask. Stir on magnetic stirrer until calcium sulfate is dissolved and add to the 9 liter above and mix well.

3.5 Aerate vigorously for 24 hours to stabilize the medium.

CT&E Environmental Services Inc.
Standard Operating Procedure

4.0 Synthetic Water Solutions

4.1 KCL Stock Solution

4.1.1 Place 8 g of crystalline, reagent grade KCL in a 1 liter volumetric flask.
4.1.2 Bring the volume to one liter with distilled water.
4.1.3 Aerate vigorously for several hours before using.
4.1.4 Store in a 1 liter polyethylene bottle.

4.2 $MgSO_4$ Stock Solution

4.2.1 Place 120 g of regent water, anhydrous $MgSO_4$ powder in a 1 liter volumetric flask.
4.2.2 Bring the volume to one liter with distilled water.
4.2.3 Aerate vigorously for several hours before using.
4.2.4 Store in a 1 liter polyethylene bottle.

4.3 $NaHCO_3$ Stock Solution

4.3.1 Place 96 g of reagent grade $NaHCO_3$ powder in a 1 liter volumetric flask.
4.3.2 Bring the volume to 1 liter with distilled water
4.3.3 Aerate vigorously for several hours before using.
4.3.4 Store in a 1 liter polyethylene bottle.

5.0 Activated Carbon Treated Tap Water Diluent

5.1 Fill a 5-gallon carboy with water from the treatment system using the attached hose. Water should be allowed to flow slowly through the hose into the sink for 2-3 minutes before filling the carboy. Flow rate to fill the carboy should be slow.

5.2 One or two long airstones are placed in the filled carboy. Water is aerated vigorously for 48-hours.

5.3 Total residual chlorine must be checked on water from newly filled carboys before using.

5.4 Alkalinity, hardness and pH are checked on samples from dechlorinated water carboys according to the Laboratory Procedure Checklist.

5.5 Log information on the Dechlorinated Tap Water and Cechlorimeter log sheet including the carboy number and date filled.

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title:	**Culture Waters for Aquatic Toxicity Testing**
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Effective Date:	**October 20, 1998**

Document Control Number: **7005**

6.0 Synthetic Sea Water Preparation

6.1 Fill a clean carboy with dechlorinated water to approximately the 25-gallon mark.

6.2 The newly filled carboy should be checked for the presence of chlorine and the results recorded on the saltwater carboy log sheet. If chlorine is present, two 4-inch airstones (adjusted to a moderately heavy air flow) should be introduced and the water aerated until a level of <0.01 mg/L is reached.

6.3 A sufficient amount of synthetic salt is added to the carboy to obtain the required salinity (usually 20 ppt).

6.4 All information should be logged on the Saltwater Carboy log sheet.

CT&E Environmental Services Inc.
Standard Operating Procedure

Document Title: Culture of *Daphnia*
Method Reference: CT&E/USEPA
Document File Name: 7006-05.DOC
Revision Number: 5.0
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Document Control Number: 7006

Approved by: Ken Halliday Supervisor 3/23/2001 Date

Approved by: Cynthia M. Work QA/QC Officer 3/23/2001 Date

1.0 Summary

This document describes the procedure for the culture of *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna* that are used in aquatic toxicity testing.

2.0 Mass Stock Cultures of *Ceriodaphnia dubia, Daphnia pulex,* and *Daphnia magna*

2.1 Stock cultures are maintained in 1000 ml beakers/jars with 900 mls of culture media at 20 ± 1° C. These cultures are maintained only as a back-up source of organisms.

2.2 Culture media for *Ceriodaphnia dubia* and *Daphnia pulex* is moderately-hard synthetic water. Culture media for *Daphnia magna* is hard synthetic water (see document control number 7005.04, "Culture Waters for Aquatic Toxicity Testing").

2.3 Many cultures are maintained simultaneously with an informal rotation cycle. New cultures are started with young produced by individual cultures. These cultures are maintained for approximately 3 weeks after which they are discarded.

2.4 Cultures are fed YCT (yeast, cerophyll, digested trout chow/flake food) and algae (*Selanastrum capricorium*) on Monday, Wednesday and Friday. Feeding, as well as culture rotation, temperature and all other relevant data is recorded by species in a log book.

2.5 Stock cultures are also fed algae and YCT. These feedings are recorded in the log book.

3.0 Individual Cultures of *Ceriodaphnia dubia, Daphnia pulex, Daphnia magna*

3.1 Cultures of *Daphnia magna* and *Daphnia pulex* are maintained in 100 ml plastic beakers. Twenty-four (24) beakers with one organism each are kept at all times to ensure continuous availability of neonates for testing. Cultures of individual *Ceriodaphnia dubia* are maintained in 30 ml sterile plastic medicine cups. One to two cultures of approximately 100 organisms each are kept at all times.

3.2 Cultures are renewed three times per week. Organisms are fed daily.

4.0 Obtaining Neonates for Testing

4.1 Cultures of *Ceriodaphnia* are started by placing one neonate into a 30 ml disposable plastic cup containing approximately 20 ml of Moderately Hard Synthetic Water. New *Ceriodaphnia* cultures are started every ten to fourteen days. *D. magna* and *D. pulex* are replaced whenever mortality occurs.

4.2 The individual cultures are transferred to fresh media three times per week. Synthetic water, algae and YCT are mixed prior to pouring into culture vessel to ensure uniformity of media. The old media and neonates are kept for stock cultures for several weeks and then discarded.

4.3 To assure neonates for chronic tests are of a very similar age, transfer of individual brood stock to fresh media should be made the morning of the test. The cultures are then checked approximately every two hours to find an adequate number of neonates all released with an 8 hour period. For acute tests, individuals are either transferred less than 24 hours before a test or the young are separated from adults less than 24 hours before a test.

4.4 Young used in chronic testing are obtained from adults who have produced at least three broods, with no less than 8 neonates in their third or subsequent brood. Neonates are then distributed in a "blocking" procedure, i.e., neonates from the same organism are placed in one replication of each concentration.

5.0 *DAPHNIA* Food

5.1 Digested Flake Food

5.1.1 Add 5g flake food to 1 L deionized water. Mix well in a blender and place in a 2 L separatory funnel. To digest, aerate this mixture at room temperature for one week.

5.1.2 At end of the digestion period, remove aeration and allow to settle.

5.1.3 Drain sediment. Place supernatant in a beaker and allow to settle in refrigerator overnight.

5.1.4 Filter through fine mesh.

CT&E Environmental Services Inc.
Standard Operating Procedure

5.2 Cerophyll®

5.2.1 Add 5g Cerophyll® to 1 L deionized water. Mix in a blender on high speed for 5 minutes.

5.2.2 Remove from blender and allow to settle in refrigerator overnight.

5.2.3 Retain supernatant for combined YCT food.

5.3 Yeast

5.3.1 Add 5g dry yeast to 1 L deionized water. Mix in a blender at low speed.

5.3.2 Do not allow mixture to settle.

5.4 Combined YCT Food

5.4.1 Mix equal parts of each of the above preparations in large clean beakers.

5.4.2 Pour well mixed YCT into small screw cap bottles. Freeze until needed.

CT&E Environmental Services Inc.

Standard Operating Procedure

Document Title:	**Reference Toxicant Testing**
Method Reference:	**CT&E/USEPA**
Document File Name:	**7008-05.DOC**
Revision Number:	**5.0**
Effective Date:	**March 12, 2001**

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Document Control Number: 7008

Approved by: Ken Holliday (Supervisor) Date: 3/23/2001

Approved by: (QA/QC Officer) Date: 3/23/2001

1.0 Summary

To insure that healthy organisms are used in testing, CT&E performs monthly QA/QC tests on all in-house cultured organisms. CT&E uses Sodium Chloride as a reference toxicant.

2.0 *Pimephales promelas*

2.1 48 hour static acute toxicity tests are run at 20°C (±1°C) using fish 1 to 14 days old.

2.2 This test consists of a control and a dilution series of 10g/L, 9g/L, 8g/L, 7g/L, and 6g/L, of sodium chloride. Other dilution series may be used.

2.3 The dilutions are prepared in 800 ml disposable plastic beakers using moderately hard synthetic water. 500 mls of test solution is placed in each of two replications. Water quality values are measured and recorded at this time.

2.4 Ten organisms are placed in each replicate. Fish are loaded by first siphoning them into a shallow pan from which they are transferred to the beakers with a large bore pipette.

2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

3.0 Daphnids *(Ceriodaphnia dubia, Daphnia magna, Daphnia pulex)*

3.1 48 hour static acute tests are performed at 25°C (±1°C) using organisms less than 24 hours old.

3.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.

3.2.1 *Ceriodaphnia dubia, Daphnia pulex:* 10, 5, 2.5, 1.25, 0.625 grams/L

CT&E Environmental Services Inc.
Standard Operating Procedure

3.2.2 *Daphnia magna:* 10, 5, 2.5, 1.25, 0.625 grams/L

3.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.

3.4 Four organisms are placed in each test vessel. The *Daphnids* are loaded with a disposable plastic pipette. Organisms are gently released below the surface of the water to minimize risk of injury.

3.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

4.0 Data Analysis

4.1 Toxicity tests are conducted on a monthly basis.

4.2 The LC_{50} is calculated according to EPA protocols.

4.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

CT&E Environmental Services Inc.

Standard Operating Procedure

Document Title: Sample Handling for Aquatic Toxicity Testing
Method Reference: CT&E/USEPA
Document File Name: 7009-04.DOC
Revision Number: 4.0
Effective Date: October 20, 1998

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Document Control Number: 7009.

Approved by: Ken Holliday Supervisor — Date: 10/21/98

Approved by: Lydia M. O'Dowd QA/QC Officer — Date: 10/20/98

1.0 Summary

This document describes the manner in which sample waters (effluents, wastewaters, etc.) are handled from point of collection to testing.

2.0 Sample Handling

2.1 Sampling Personnel

CT&E's sampling personnel are trained and experienced in the techniques for collecting samples according to NPDES permit requirements. This includes the use of automatic sampling equipment and the measurement of various field parameters.

2.2 Sample Containers

Sample containers used by CT&E are disposable plastic cubitainers®.

2.3 Sample Collection Points

For NPDES permit required tests, the sample will be collected at the point specified in the discharge permit unless otherwise directed by the regulatory agency.

2.4 Sample Shipment

Samples are placed on ice (sufficient to maintain 0-4°C) in a cooler and are transported as quickly as possible to the laboratory.

2.5 Laboratory Handling of Samples

Upon delivery to the laboratory, the effluent samples are inspected, given a sample control number and stored at 4° C until used for testing.

CT&E Environmental Services Inc.
Standard Operating Procedure

2.6 Sample Holding Time

Samples will be tested within 24 hours upon receipt in the laboratory. The maximum lapsed time for collection of a grab or composite sample and the initiation of test, or for test solution renewal, will not exceed 36-hours for Chronic and Acute Testing.

3.0 LABORATORY ENVIRONMENT

3.1 Laboratory Arrangement

The aquatic toxicity testing laboratory is divided into two separate areas: (1) the culturing laboratory and (2) the testing laboratory. See attached diagram for details of laboratory layout.

3.2 Temperature

The aquatic toxicity testing laboratory air temperature is maintained at 20 ± 1° C throughout the year by a central heating and cooling system which is regulated by thermostats. Temperatures are continuously recorded by thermographs.

3.3 Water

Several waters are available for use in the laboratory. CT&E has access to municipally supplied water, well water and reagent water from which synthetic water is prepared. Waters used for culturing and testing are analyzed semiannually for priority pollutants and other contaminants. A detailed report is available.

3.4 Lighting

Ambient laboratory lighting is regulated with a 16 hour day/8 hour night photoperiod controlled by an electronic timing system in the culturing and testing areas.

4.0 LABORATORY EQUIPMENT

4.1 General

Instruments used for the measurement of physical and chemical parameters are calibrated prior to use in testing. Any instrument that exceeds the calibration limits is taken out of service and corrective action is taken.

CT&E Environmental Services Inc.
Standard Operating Procedure

4.2 Balances

Analytical balances are calibrated against standard weights prior to use. All calibration results and adjustments are recorded in bound books.

4.3 Water Quality Meters

Meters are calibrated prior to use using known standards and the manufacturer's instructions. Records of calibration are kept in logbooks. Detailed procedures for the operation of these meters are found in SOP's for each specific instrument.

4.4 Reagents

All reagents are stored in a separate area. Expired reagents and chemicals are discarded.

4.5 Test Containers

All test containers are either clean reusable glassware or new, disposable plastic beakers.

5.0 EQUIPMENT CLEANING PROCEDURES

5.1 Equipment used in culturing or testing is washed in the following manner:

5.1.1 Soak 15 minutes and scrub with detergent in tap water.
5.1.2 Rinse three times with tap water.
5.1.3 Rinse once with 20% nitric acid.
5.1.4 Rinse twice with deionized water.
5.1.5 Rinse once with full-strength, pesticide-grade acetone.
5.1.6 Rinse well with deionized water.
5.1.7 Invert and air dry.
5.1.8 All equipment and test chambers are rinsed with deionized water immediately prior to use for each test.

Appendix II

Chains of Custody

Chain of Custody Record

General Electric Co.

100 Woodlawn Ave. Pittsfield, MA 01201

Chain of Custody #: OBG080904

AUG 2004 Chronic Toxicity - Comp. # 1

TA4-H09209-Y2

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) Mark Wasniewski		
Sample #	**Date**	**Time**	**Containers**	**Parameters to be Analyzed**	**Preservative**	**Remarks**
1 A5867C	8/8/04 to 8/9/04	11^00 AM	1 Gallon plastic	Definitive Test(NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
1 A5867C	8/8/04 to 8/9/04	11^00 AM	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
1 A5867C	8/8/04 to 8/9/04	11^00 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
2 A5866R	8/9/04	8^30 AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
2 A5866R	8/9/04	8^30 AM	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
2 A5866R	8/9/04	8^30 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	

Relinquished By: Mark Wasniewski	**Date/Time** 8-9-04	**Received By:**	**Date/Time** 8-9-04 1400
Relinquished By:	**Date/Time**	**Received By:**	**Date/Time** 8/10/04 09:30 4.4°C

Additional Comments: The effluent sample being analyzed for toxicity is a flow-proportioned composite. Each outfall sample is a 24-hour composite. The sample collection times for each outfall are as follows:

001- 7^40 AM 004- 7^35 AM 005-64T- 7^00 AM 005-64G- 7^00 AM 007- / 09A- / 09B- /

The time of compositing the final flow-proportioned sample was 11^00 **A.M.**

Chain of Custody Record
General Electric Co.
100 Woodlawn Ave. Pittsfield, MA 01201

TA4-HOP209-3/4

Chain of Custody #: OBG081104

AUG. 2004 Chronic Toxicity - Comp. # 2

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) Mark Wasnewsky		
Sample #	Date	Time	Containers	Parameters to be Analyzed	Preservative	Remarks
A5869C	8/10/04 to 8/11/04	11^00 AM	1 Gallon plastic	Definitive Test(NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
A5869C	8/10/04 to 8/11/04	11^00 AM	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5869C	8/10/04 to 8/11/04	11^00 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
A5868R	8/11/04	8^30 AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
A5868R	8/11/04	8^30 AM	1000 ml. plastic	Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5868R	8/11/04	8^30 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	

Relinquished By:	Date/Time	Received By:	Date/Time
Mark Wasnewsky	8-11-04	[signature]	8-11-04 1400
Relinquished By:	Date/Time	Received By:	Date/Time
		[signature]	8/12/04 0920

Additional Comments: The effluent sample being analyzed for toxicity is a flow-proportioned composite. Each outfall sample is a 24-hour composite. The sample collection times for each outfall are as follows:

001- 7^45 AM 004- / 005-64T- 7^00 AM 005-64G- 7^00 AM 007- / 09A- 7^50 AM 09B- /

4.7°

The time of compositing the final flow-proportioned sample was 11^00 **A.M.**

Chain of Custody Record

General Electric Co.

100 Woodlawn Ave. Pittsfield, MA 01201

TA4-HO-P209-005/006

Chain of Custody #: OBG081304

AUG 2004 Chronic Toxicity - Comp. # 3

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.				Sampled By: (Print) Mark Wasnewsky		
Sample #	**Date**	**Time**	**Containers**		**Parameters to be Analyzed**	**Preservative**	**Remarks**
A5871C	8/12/04 to 8/13/04	1100 AM	1 Gallon plastic		Definitive Test(NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
A5871C	8/12/04 to 8/13/04	1100 AM	1000 ml. plastic		Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5871C	8/12/04 to 8/13/04	1100 AM	500 ml. plastic		Total Phosphorus, TOC, NH3	H2SO4	
A5870R	8/13/04	830 AM	1 Gallon plastic		Housatonic River water dilution water for chronic test	Chilled	
A5870R	8/13/04	830 AM	1000 ml. plastic		Chloride, TSS,Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5870R	8/13/04	830 AM	500 ml. plastic		Total Phosphorus, TOC, NH3	H2SO4	

Relinquished By:	**Date/Time**	**Received By:**	**Date/Time**
Mark Wasnewsky	8-13-04		8-13-04 1402
Relinquished By:	**Date/Time**	**Received By:**	**Date/Time**
		Jeannie Latterner	8-14-04 0940

Additional Comments: The effluent sample being analyzed for toxicity is a flow-proportioned composite. Each outfall sample is a 24-hour composite. The sample collection times for each outfall are as follows:

001- 740 AM 004- 735 AM 005-64T- 700 AM 005-64G- 700 AM 007- 745 AM 09A- 755 AM 09B- 755 AM

The time of compositing the final flow-proportioned sample was 1100 A.M. rec. @ 4.4° C

Appendix III

Bench Data

General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric
Project:
Lab. No.: TM-HO-P209-1/2
Date Received: 8/10/04
Sample Date: 8/8-9/04 Time: 11:00
Date Analyzed: 8/10/04
Source: Effluent composite
Analyst(s): KH/JH
Source of dilution water: Housatonic River
Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C
Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/10/04	8/11/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
Hardness	200	110	116						320
D.O.	8.62	8.81	8.90	8.60	8.65	8.67	8.66	8.70	8.71
pH	6.82	7.08	7.14	6.97	7.08	7.28	7.44	7.58	7.69
Alkalinity	87	67	72						196
Sp. Conduct.	253	328	339	297	381	574	744	882	1030
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
D.O.	8.51	8.71	8.77	8.52	8.50	8.58	8.55	8.48	8.50
pH	6.95	7.13	7.19	7.04	7.15	7.35	7.51	7.60	7.71
Sp. Conduct.	258	343	347	292	397	581	747	898	1048

DAY 1

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition EPA-600/4-91/002. U.S EPA, Cincinnati, Ohio

f:\public\forms\bioassay\GE bench sheet-chronic.doc

General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric
Project: _____ Lab. No.: TA4-HO-P109-1/2
Date Received: 8/10/04
Sample Date: 8/8-9/04 Time: 11:00 Date Analyzed: 8/11/04
Source: Effluent composite Analyst(s): KH/JH
Source of dilution water: Housatonic River
Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C
Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/11/04	8/12/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
Hardness	180	100	110						310
D.O.	8.54	8.84	8.91	8.57	8.58	8.60	8.60	8.61	8.64
pH	6.91	7.07	7.12	7.07	7.22	7.34	7.49	7.51	7.73
Alkalinity	84	69	73						190
Sp. Conduct.	250	331	338	282	397	566	748	864	1014
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
D.O.	8.60	8.77	8.78	8.48	8.49	8.44	8.43	8.42	8.58
pH	6.92	7.12	7.19	7.13	7.31	7.28	7.52	7.58	7.78
Sp. Conduct.	258	339	347	296	408	572	758	872	1028

DAY 2

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition EPA-600/4-91/002 U.S.EPA, Cincinnati, Ohio.

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General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric
Project:
Lab. No.: TA4-HO-P209-3/4
Date Received: 8/12/04
Sample Date: 8/10-11/04 Time: 1100
Date Analyzed: 8/12/04
Source: Effluent composite
Analyst(s): KH/JH
Source of dilution water: Housatonic River
Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C
Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/12/04	8/12/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
Hardness	160	100	110						400
D.O.	8.52	8.78	8.86	8.54	8.57	8.59	8.61	8.64	8.67
pH	6.73	7.04	7.11	6.81	6.91	6.95	7.09	7.14	7.27
Alkalinity	87	70	73						317
Sp. Conduct.	285	331	340	391	496	722	781	1122	1238

End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
D.O.	8.42	8.61	8.70	8.44	8.45	8.41	8.45	8.52	8.50
pH	6.81	7.09	7.15	6.87	6.97	7.04	7.12	7.16	7.31
Sp. Conduct.	297	342	348	348	510	710	797	1138	1249

DAY 3

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*., Fourth Edition EPA-600/4-91/002. U.S.EPA, Cincinnati, Ohio.

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General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric
Project: _____ Lab. No.: TA4-HO-P209-3/4
Date Received: 8/12/04
Sample Date: 8/10-11/04 Time: 1100 Date Analyzed: 8/13/04
Source: Effluent composite Analyst(s): KH/JH
Source of dilution water: Housatonic River
Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C
Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/12/04	8/14/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Hardness	180	110	110						380
D.O.	8.67	8.77	8.82	8.70	8.71	8.72	8.73	8.73	8.74
pH	6.68	7.10	7.16	6.71	6.89	6.98	7.14	7.22	7.31
Alkalinity	91	72	75						322
Sp. Conduct.	290	322	334	408	513	734	810	1100	1204
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6	24.6
D.O.	8.54	8.68	8.71	8.61	8.63	8.60	8.63	8.61	8.62
pH	6.73	7.13	7.22	6.75	6.95	7.07	7.22	7.28	7.35
Sp. Conduct.	299	328	344	412	517	748	832	1120	1223

DAY 4

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition EPA-600/4-91/002. U.S.EPA, Cincinnati, Ohio.

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General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric
Project:
Lab. No.: TAA-HO-P209-5/6
Date Received: 8/14/04
Sample Date: 8/12-13/04 Time: 1100
Date Analyzed: 8/14/04
Source: Effluent composite
Analyst(s): KH/JH
Source of dilution water: Housatonic River
Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C
Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/14/04	8/15/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6	25.6
Hardness	240	110	116						260
D.O.	8.52	8.83	8.80	8.54	8.55	8.59	8.61	8.64	8.68
pH	6.94	7.10	7.15	6.91	6.81	6.77	6.68	6.63	6.59
Alkalinity	87	73	76						124
Sp. Conduct.	257	334	341	277	294	348	395	447	498
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3
D.O.	8.42	8.77	8.70	8.41	8.40	8.46	8.50	8.49	8.49
pH	7.05	7.15	7.21	6.98	6.94	6.83	6.72	6.70	6.62
Sp. Conduct.	266	340	352	274	302	358	412	453	513

DAY 5

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*., Fourth Edition EPA-600/4-91/002 U.S.EPA, Cincinnati, Ohio.

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General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric

Project: _____ Lab. No.: TAA-HO-P209-5/6

Date Received: 8/14/04

Sample Date: 8/12-13/04 Time: 1100 Date Analyzed: 8/15/04

Source: Effluent composite Analyst(s): KH/JH

Source of dilution water: Housatonic River

Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C

Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/15/04	8/16/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
Hardness	230	100	100						270
D.O.	8.61	8.89	8.91	8.63	8.64	8.67	8.69	8.72	8.73
pH	6.90	7.04	7.10	6.82	6.81	6.73	6.68	6.65	6.63
Alkalinity	83	66	70						130
Sp. Conduct.	263	338	343	284	310	361	390	430	487
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
D.O.	8.52	8.70	8.72	8.51	8.50	8.48	8.50	8.60	8.61
pH	6.92	7.08	7.14	6.91	6.97	6.78	6.74	6.71	6.71
Sp. Conduct.	268	341	348	297	318	372	398	442	491

DAY DAY 6

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*., Fourth Edition. EPA-600/4-91/002. U.S EPA, Cincinnati, Ohio.

General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric

Project: _____ Lab. No.: TA4-HO-P209-5/6

Date Received: 8/14/04

Sample Date: 8/12-13/04 Time: 1100 Date Analyzed: 8/16/04

Source: Effluent composite Analyst(s): KH/JH

Source of dilution water: Housatonic River

Test Species: *Ceriodaphnia dubia* Age: < 24 hrs Temp. Range: °C

Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	8/16/04	8/17/04
Time:	1100	1100

Concentration→	Housatonic River Control	MHSW Control	MHSW $Na_2S_2O_3$ Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
Hardness	210	110	100						240
D.O.	8.63	8.81	8.84	8.62	8.65	8.66	8.60	8.53	8.52
pH	7.01	7.09	7.12	6.97	6.82	6.77	6.70	6.68	6.63
Alkalinity	86	71	76				68	68	114
Sp. Conduct.	250	334	341	284	281	342	386	442	490
End									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
D.O.	8.50	8.72	8.75	8.51	8.49	8.48	8.44	8.40	8.38
pH	7.11	7.13	7.19	7.04	6.95	6.81	6.73	6.71	6.68
Sp. Conduct.	259	341	351	292	294	353	396	451	498

DAY 7

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*., Fourth Edition EPA-600/4-91/002 U.S.EPA, Cincinnati, Ohio.

f:\public\forms\bioassay\GE bench sheet-chronic.doc

Biotoxicity Bench Sheet

Lab. No. TAH-10-P209 Test Organism CD Start Date: 8/10/04 Time: 1100
Client: GE Lot No. End Date: 8/17/04 End Time 1100
Effluent/Sample Effluent Age: <24 hours Investigators KH

Conc. Control	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	5	3	4	0	4	2	4	5	4			
	5	0	0	1	0	5	0	9	0	0	0			
	6	8	7	10	8	10	9	0	8	7	9			
	7	13	12	13	13	12	12	11	13	12	13			
	8													
	total	25	24	27	25	27	25	22	25	24	26	250	10	25.0

Conc. 20 C ~~6.25%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	3	4	4	4	3	4	3	4	3	4			
	5	0	1	0	0	0	0	8	0	9	0			
	6	9	11	10	9	0	10	0	7	0	10			
	7	11	13	14	12	12	13	14	12	11	12			
	8													
	total	23	29	28	25	15	27	25	23	23	20	244	10	24.4

Conc. 2°C + ~~12.5%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	5	4	5	4	5	4	3	4	5	4			
	5	1	0	0	0	0	10	0	0	0	0			
	6	13	9	7	10	0	0	12	8	7	13			
	7	0	10	10	13	13	10	9	13	11	0			
	8													
	total	19	23	22	27	18	24	24	25	23	17	222	10	22.2

Biotoxicity Bench Sheet

Lab. No. TA4-HO-P204 Test Organism CD Start Date: 8/10/04 Time: 11:00
Client: GE Lot No. End Date: 8/19/04 End Time 11:00
Effluent/Sample Effluent Age: <24 Hours Investigators KH

6.25

Conc. ~~Control~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	6	4	5	5	4	2	5	3	4	3			
	5	0	0	0	0	0	2	0	10	6	0			
	6	9	10	12	11	12	9	12	0	0	11			
	7	12	13	8	11	10	0	10	9	11	13			
	8				27			27	22			246	1	
	total	27	27	25	~~26~~	26	13	~~17~~	~~23~~	21	27	~~132~~	10	24.2

12.5

Conc. ~~6.25%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	5	4	5	4	5	3	4	4	5			
	5	6	0	0	0	0	9	0	0	0	0			
	6	0	8	9	13	9	0	8	12	13	12			
	7	10	12	11	12	11	12	13	12	11	10			
	8													
	total	20	25	24	30	24	26	24	28	28	27	256	10	25.6

25%

Conc. ~~12.5%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	4	5	4	4	3	4	3	2	5			
	5	0	0	0	0	0	6	0	7	0	0			
	6	10	11	12	9	10	0	10	0	7	13			
	7	12	13	0	11	12	13	10	9	11	0			
	8													22.4 KH
	total	26	28	17	24	26	22	24	19	20	18	224	10	~~25.6~~

Biotoxicity Bench Sheet

Lab. No. TA4-HO-P209 Test Organism CD Start Date: 8/10/04 Time: 11:00
Client: GE Lot No. End Date: 8/17/04 End Time 11:00
Effluent/Sample Effluent Age: < 24 hours Investigators KH

50%

Conc. ~~25%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	4	5	3	5	4	5	5	4	4			
	5	0	0	0	2	0	6	0	0	1	0			
	6	11	12	12	10	13	0	9	12	11	10			
	7	12	13	10	14	11	15	12	14	10	12			
	8													
	total	27	29	27	29	29	25	26	31	26	26	275	10	27.5

75%

Conc. ~~50%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	5	3	5	4	3	5	3	4	5	5			
	5	0	0	1	12	0	0	2	0	7	0			
	6	12	11	12	0	10	9	11	12	0	13			
	7	13	10	0	13	11	14	0	14	12	10			
	8													
	total	30	24	18	29	24	28	16	30	24	28	251	10	25.1

100%

Conc. ~~100%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	5	4	5	4	3	6	3	5	3			
	5	0	0	0	1	10	0	0	0	0	2			
	6	9	9	13	12	0	11	13	10	12	10			
	7	15	10	11	12	13	10	14	9	13	14			
	8													
	total	28	24	28	30	27	24	32	22	30	29	274	10	27.4

Appendix IV

Statistical Sheets

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

Kolmogorov Test for Normality

D = 0.1034 (p-value = 0.0188)
D* = 0.9891

Critical D* = 1.035 (alpha = 0.01 , N = 90)
= 0.895 (alpha = 0.05 , N = 90)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

Bartlett's Test for Homogeneity of Variance

Calculated B1 statistic = 17.2716 (p-value = 0.0274)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

Critical B = 20.0902 (alpha = 0.01, df = 8)
= 15.5073 (alpha = 0.05, df = 8)

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

ANOVA Table

SOURCE	DF	SS	MS	F
Between	8	278.2000	34.7750	2.8854
Within (Error)	81	976.2000	12.0519	
Total	89	1254.4000		

(p-value = 0.0070)

Critical F = 2.7390 (alpha = 0.01, df = 8,81)
= 2.0549 (alpha = 0.05, df = 8,81)

Since F > Critical F REJECT Ho: All equal (alpha = 0.05)

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

Dunnett's Test - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	CONTROL	25.0000	25.0000		
2	CONTROL+	22.2000	22.2000	1.8035	
3	2' CONTROL	24.4000	24.4000	0.3865	
4	6.25%	24.2000	24.2000	0.5153	
5	12.5%	25.6000	25.6000	-0.3865	
6	25%	22.4000	22.4000	1.6747	
7	50%	27.5000	27.5000	-1.6103	
8	75%	25.1000	25.1000	-0.0644	
9	100%	27.4000	27.4000	-1.5459	

Dunnett critical value = 2.4400 (1 Tailed, alpha = 0.05, df [used] = 8,60)
(Actual df = 8,81)

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

Dunnett's Test - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	CONTROL	10			
2	CONTROL+	10	3.7882	15.2	2.8000
3	2' CONTROL	10	3.7882	15.2	0.6000
4	6.25%	10	3.7882	15.2	0.8000
5	12.5%	10	3.7882	15.2	-0.6000
6	25%	10	3.7882	15.2	2.6000
7	50%	10	3.7882	15.2	-2.5000
8	75%	10	3.7882	15.2	-0.1000
9	100%	10	3.7882	15.2	-2.4000

Title: GE AUGUST 2004
File: GECDREP .804 Transform: NO TRANSFORMATION

GRP	IDENTIFICATION	MEAN	SMOOTHED MEAN	CONCENTRATION
1	CONTROL	25.0000	25.0000	0.0000
2	CONTROL+	22.2000	24.8500	0.0000
3	2' CONTROL	24.4000	24.8500	2.0000
4	6.25%	24.2000	24.8500	6.2500
5	12.5%	25.6000	24.8500	12.5000
6	25%	22.4000	24.8500	25.0000
7	50%	27.5000	24.8500	50.0000
8	75%	25.1000	24.8500	75.0000
9	100%	27.4000	24.8500	100.0000

ICp estimate with p = 25 is > 100.0000

Appendix V

U.S. EPA Region I Toxicity Test Summary

Toxicity Test Summary Sheet

Facility Name: General Electric Co. Test Start Date: August 10, 2004
NPDES Permit Number: MA 000 3891 Pipe Number: 001, 005-64T, 005-64G, 09A, 09B

Test Type	Test Species	Sample Type	Sample Method
☐ Acute	☐ Fathead minnow	☐ Prechlorinated	☐ Grab
☑ Chronic	☐ Ceriodaphnia	☐ Dechlorinated	☑ Composite
☐ Modified*	☑ Ceriodaphnia dubia	☐ Chlorine	☐ Flow thru
☐ 24-hour Screening	☐ Mysid Shrimp	☐ Spiked at lab	☐ Other
	☐ Menidia	☑ Chlorinated on-site	
	☐ Sea Urchin	☐ Unchlorinated	
	☐ Champia		
	☐ Selenastrum		
	☐ other		

*Modified (Chronic reporting acute values)

Dilution Water

_X_ Receiving waters collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination (Receiving water name: Housatonic River);

____ Alternate surface water of known quality and a harness, etc. to generally reflect the characteristics of the receiving water;

____ Synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;

____ or artificial sea salts mixed with deionized water;

____ Deionized water and hypersaline brine; or

____ other

Effluent sampling date(s): _____

_____

Effluent concentrations tested (in %): 100 75 50 25 12.5 6.25
*(Permit limit concentration): N/A

Was effluent salinity adjusted? No
If yes, to what value? N/A ppt
With sea salts? N/A Hypersaline brine solution? N/A

Actual effluent concentrations tested after salinity adjustment (in %): N/A N/A N/A N/A N/A N/A
Reference Toxicant Test Date: August 03, 2004 to August 10, 2004

Permit Limits & Test Results

Test Acceptability Criteria

MEAN CONTROL SURVIVAL: ≥90% MEAN CONTROL REPRODUCTION: N/A

MEAN CONTROL WEIGHT: N/A MEAN CONTROL CELL COUNT: N/A

Limits		Results	
LC_{50}	N/A	48-hr LC_{50}	>100%
		Upper Value	N/A
		Lower Value	N/A
		Data Analysis Method used:	N/A
A-NOEC	N/A	A-NOEC	100%
C-NOEC	N/A	C-NOEC	100%
		LOEC	100%
IC25	N/A	IC25	N/A
IC50	N/A	IC50	N/A

N/A = not applicable

Appendix VI
7-Day Chronic Reference
Toxicity Test Data

Biotoxicity Bench Sheet

Lab. No. QC | Test Organism CD | Start Date: 8/3/04 | Time: 1400
Client: | Lot No. | End Date: 8/10/04 | End Time 1400
Effluent/Sample NaCl | Age: <24HRS | Investigators KH

Conc. 1000 mg/l ~~25%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	2	0	0	3	0	3	5	0	0	3			
	5	0	X-2	4	0	0	0	X-0	3	2	0			
	6	0	↓	0	2	X-3	4	↓	0	2	2			
	7	0	↓	2	0	↓	0	↓	2	0	0			
	8													
	total	2	X-2	6	5	X-3	7	X-5	5	4	5	44	7	4.4

Conc. 2000 mg/l ~~50%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	0	0	2	0	0	0	0	0	0	0			
	5	X-0	0	0	2	0	2	X-0	3	0	X-0			
	6	↓	X-0	X-0	X-0	0	0	↓	0	2	↓			
	7	↓	↓	↓	↓	X-0	0	↓	X-0	0	↓			
	8	↓	↓	↓	↓	↓		↓	↓		↓			
	total	X-0	X-0	X-2	X-2	X-0	2	X-0	X-3	2	X-0	11	2	1.1

Conc. 4000 mg/l ~~100%~~	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3	X-0		X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0			
	4	↓	X-0	↓	↓	↓	↓	↓	↓	↓	↓			
	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
	6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
	7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			
	total	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	0	0	0

Biotoxicity Bench Sheet

Lab. No. QC | Test Organism CD | Start Date: 8/3/04 | Time: 1400
Client: | Lot No. | End Date: 8/10/04 | End Time 1400
Effluent/Sample NaCl | Age: <24 HRS | Investigators KH

Conc. Control	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	3	4	4	5	4	5	5	4	0	4			
	5	0	1	0	0	0	0	0	0	5	0			
	6	9	7	10	7	8	10	7	8	12	10			
	7	11	0	13	0	12	11	13	12	13	12			
	8													
	total	23	12	27	12	24	26	25	24	30	26	229	10	22.9

Conc. ~~6.25%~~ 250 mg/L	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	4	5	4	4	3	4	4	5	4	5			
	5	0	0	0	1	7	0	0	0	0	0			
	6	0	13	8	10	0	9	8	7	8	12			
	7	9	0	14	12	12	12	10	13	10	0			
	8													
	total	13	18	26	27	22	25	22	25	22	17	217	10	21.7

Conc. ~~12.5%~~ 500 mg/L	Day	Replicate 1	2	3	4	5	6	7	8	9	10	No. of Young	No. of Adults	Young per Adult
	1													
	2													
	3													
	4	3	4	5	4	5	4	5	4	5	4			
	5	9	1	0	0	0	0	0	0	0	0			
	6	0	6	10	9	7	0	11	8	9	8			
	7	11	10	12	13	12	10	13	13	12	13			
	8													
	total	23	21	27	26	24	14	29	25	26	25	240	10	24.0

Fisher's Exact Test

IDENTIFICATION	NUMBER OF ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
250 MG/L	10	0	10
TOTAL	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6.0. b value is 10. Since b is greater than 6.0 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test

IDENTIFICATION	NUMBER OF ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
500 MG/L	10	0	10
TOTAL	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6.0. b value is 10. Since b is greater than 6.0 there is no significant difference between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test

IDENTIFICATION	NUMBER OF ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
1000 MG/L	7	3	10

Title: CD REFTOX AUGUST 2004
File: QCCDREP.804 Transform: NO TRANSFORMATION

Steel's Many-One Rank Test - Ho: Control<Treatment

GROUP	IDENTIFICATION	MEAN IN ORIGINAL UNITS	RANK SUM	CRIT. VALUE	DF	SIG 0.05
1	CONTROL	22.9000				
2	250 MG/L	21.7000	93.50	76.00	10.00	
3	500 MG/L	24.0000	108.00	76.00	10.00	
4	1000 MG/L	4.4000	55.00	76.00	10.00	*
5	2000 MG/L	1.1000	55.00	76.00	10.00	*

Critical values are 1 tailed (k = 4)

Title: CD REFTOX AUGUST 2004
File: QCCDREP.804 Transform: NO TRANSFORMATION

Kolmogorov Test for Normality

D = 0.1857 (p-value = 0.0002)
D* = 1.3335

Critical D* = 1.035 (alpha = 0.01 , N = 50)
= 0.895 (alpha = 0.05 , N = 50)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The first three homogeneity tests are sensitive to non-normality and should not be performed with this data as is.

Acute Biotoxicity Bench Sheet

Client: QC
Project: Reference Toxicant
Lab. No.:
Date Received:
Sample Date: Time: Date Analyzed:
Source: NaCl Analyst: KH
Source of dilution water: Moderately Hard Synthetic Water
Test Species: Ceriodaphnia dubia Age: <24 Hours Temp. Range: °C
Type of Test: 48 Hour Static Acute

Total Chlorine:

	Beginning	Ending
Date:	8/3/04	8/5/04
Time:	1600	1600

Concentration	Control		500	1000	2000	3000	4000
START							
Temperature	25.6		25.6	25.6	25.6	25.6	25.6
Hardness	110						120
D.O.	8.9		8.9	8.9	8.9	8.9	8.9
pH	7.0		7.0	7.1	7.2	7.2	7.2
Alkalinity	71						75
Sp. Conduct.	343		2260	3380	4420	5820	7610
24 HOUR							
Temperature	25.1		25.1	25.1	25.1	25.1	25.1
No. Surviving	20		20	20	~~16~~ 15	3	0
48 HOUR							
Temperature	24.8		24.8	24.8	24.8	24.8	24.8
No. Surviving	20		20	17	4	0	0

Note: All results expressed in mg/L unless otherwise designated. < = less than
Note: Number in parenthesis equals number not adversely effected (EC_{50}). This number is used in calculating EC_{50} value.
Note: Due to fragile structure of *Daphnia* organisms, dissolved oxygen (DO), hardness, alkalinity, specific conductance, and pH reading could not be taken after the organisms are added to the sample. Doing so would cause injury to the organisms.
Method Reference: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine*

TRIMMED SPEARMAN-KARBER METHOD. MONTANA STATE UNIV

FOR REFERENCE, CITE:
HAMILTON, M.A., R.C. RUSSO, AND R.V. THURSTON, 1977.
TRIMMED SPEARMAN-KARBER METHOD FOR ESTIMATING MEDIAN
LETHAL CONCENTRATIONS IN TOXICITY BIOASSAYS.
ENVIRON. SCI. TECHNOL. 11(7): 714-719;
CORRECTION 12(4):417 (1978).

DATE: 08/03/04 TEST NUMBER: - DURATION: 48 HOURS
CHEMICAL: NaCl SPECIES: CD

RAW DATA:

CONCENTRATION(MG/L)	500.00	1000.00	2000.00	3000.00	4000.00
NUMBER EXPOSED:	20	20	20	20	20
MORTALITIES:	0	3	16	20	20
SPEARMAN-KARBER TRIM:		0.00%			

SPEARMAN-KARBER ESTIMATES:	LC50:	1422.57
95% LOWER CONFIDENCE:		1226.85
95% UPPER CONFIDENCE:		1649.50
