



GE  
159 Plastics Avenue  
Pittsfield, MA 01201  
USA

*Transmitted via Overnight Courier*

October 7, 2005

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

Ms. Susan Steenstrup  
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 September 2005 (GECD900)**

Dear Mr. Tagliaferro and Ms. Steenstrup:

Enclosed are copies of General Electric's (GE's) monthly progress report for September 2005 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 November 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,

A handwritten signature in blue ink that reads "John F. Novotny / NME".

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

Enclosure

V:\GE\_Pittsfield\_General\_Confidential\Reports and Presentations\Monthly Reports\2005\09-05 CD Monthly-Draft\Letter.doc

cc: Robert Cianciarulo, EPA (cover letter only)  
Tim Conway, EPA (cover letter only)  
Sharon Hayes, EPA  
William Lovely, EPA (Items 7, 8, 9, 10, 11, 12, 16/17, 22, 23, and 25 only)  
Rose Howell, EPA (cover letter only)  
Holly Inglis, EPA (hard copy and CD-ROM of report)  
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 EOE  
Mayor James Ruberto, City of Pittsfield  
Thomas Hickey, Director, Pittsfield Economic Development Authority  
Linda Palmieri, 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, Goodwin Procter  
Jim Rhea, QEA (narrative only)  
Teresa Bowers, Gradient  
Public Information Repositories (1 hard copy, 5 copies of CD-ROM)  
GE Internal Repository (1 hard copy)

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

***SEPTEMBER 2005***

**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  
(GEC900)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Attended Citizens Coordinating Council (CCC) meeting (September 7, 2005).
- Continued GE-EPA electronic data exchanges for the Housatonic River Watershed and Areas Outside the River.\*
- Continued discussions with Western Massachusetts Electric Company (WMECo) regarding subordination agreements for WMECo easements on GE properties that will be subject to Grants of Environmental Restrictions and Easements (EREs).\*

**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 August 1 through August 31, 2005, 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 September 2005)* 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 September 2005]* was prepared for GE by SGS. A copy of that report is provided in Attachment D.

**c. Work Plans/Reports/Documents Submitted**

Submitted *Final Notification of On-Plant Excavations* (September 12, 2005), providing final notification to EPA and MDEP for several excavations performed by GE at the Pittsfield Plant pursuant to GE's *Protocols for the Management of Excavation Activities*. This notification letter referred to previously submitted sampling results and did not contain any sampling data that had not previously been submitted to EPA and MDEP. This notification letter is referenced under the appropriate areas discussed in subsequent items of this monthly report.

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

- Continue discussions with WMECo regarding subordination agreements for WMECo easements on GE properties that will be subject to EREs.\*
- Continue NPDES sampling and monitoring activities.
- Attend public, CCC, and Pittsfield Economic Development Authority (PEDA) meetings, as appropriate.

**GENERAL ACTIVITIES (cont'd)**  
**GE-PITTSFIELD/HOUSATONIC RIVER SITE**  
**(GECD900)**  
**SEPTEMBER 2005**

e. **General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

f. **Proposed/Approved Work Plan Modifications**

None

**ITEM 1  
PLANT AREA  
20s, 30s, 40s COMPLEXES  
(GEC120)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Continued demolition activities at Buildings 42 and 43.
- Conducted wipe sampling as identified in Table 1-1.
- Conducted air monitoring for particulates and PCBs, as identified in Table 1-1.
- Conducted site inspections with EPA and MDEP on September 7, 2005 at former 30s Complex to view minor asphalt sinkhole outside of the Building 31 engineered barrier area. EPA and MDEP are in agreement that PEDDA should asphalt-patch sinkhole area.

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

Submitted *Final Notification of On-Plant Excavations* covering a minor excavation to set a telephone pole near Building 43A (September 12, 2005).

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

Continue demolition activities at Buildings 42 and 43.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

None



**TABLE 1-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W1	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W10	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W11	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W2	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W3	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W4	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W5	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W6	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W7	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W8	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2504-W9	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W1	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W10	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W11	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W2	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W3	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W4	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W5	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W6	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W7	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W8	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2602-W9	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W1	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W10	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W11	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W2	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W3	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W4	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W5	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W6	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W7	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W8	9/6/05	Wipe	SGS	PCB	9/12/05
Building 31W - Roll-Off Wipe Sampling	Bldg31W-2712-W9	9/6/05	Wipe	SGS	PCB	9/12/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Background Location	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05

**TABLE 1-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	Background Location	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	Background Location	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	Background Location	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/22/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05

**TABLE 1-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Background Location	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	W3 - West of 40s Complex	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Background Location	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
PCB Ambient Air Sampling	S2 - Woodlawn Avenue	9/20 - 9/21/05	Air	Berkshire Environmental	PCB	9/30/05
PCB Ambient Air Sampling	M2 - South of Bldg. 5	9/20 - 9/21/05	Air	Berkshire Environmental	PCB	9/30/05
PCB Ambient Air Sampling	MC3 - Near Bldg. 16 & 19	9/20 - 9/21/05	Air	Berkshire Environmental	PCB	9/30/05
PCB Ambient Air Sampling	MC3-CO-Colocated - near Bldgs. 16 & 19	9/20 - 9/21/05	Air	Berkshire Environmental	PCB	9/30/05
PCB Ambient Air Sampling	BK3-Background - East of Building 9B	9/20 - 9/21/05	Air	Berkshire Environmental	PCB	9/30/05

**TABLE 1-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 31W ROLL-OFF WIPE SAMPLING  
20s, 30s, 40s COMPLEX  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in mg/100cm<sup>2</sup>)**

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
BLDG31W-2504-W1	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W2	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W3	9/6/2005	ND(1.0)	5.3	ND(1.0)	5.3
BLDG31W-2504-W4	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W5	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W6	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W7	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W8	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W9	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W10	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2504-W11	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W1	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W2	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W3	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W4	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W5	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W6	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W7	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W8	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W9	9/6/2005	ND(1.0)	2.8	1.4	4.2
BLDG31W-2602-W10	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2602-W11	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W1	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W2	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W3	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W4	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W5	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W6	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W7	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W8	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W9	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W10	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
BLDG31W-2712-W11	9/6/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

**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 parenthesis is the associated detection limit.

**TABLE 1-3  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>Sampler Location</b>	<b>Average Site Concentration (mg/m<sup>3</sup>)</b>	<b>Background Site Concentration (mg/m<sup>3</sup>)</b>	<b>Average Period (Hours:Min)</b>	<b>Predominant Wind Direction</b>
09/01/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.046 0.017* 0.033* 0.036	0.016*	12:00 12:00 12:00 12:00	WNW
09/02/05 <sup>1</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/05/05 <sup>2</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/06/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.005 0.015* 0.013* 0.021	0.006*	11:30 10:30 10:30 11:15	Calm
09/07/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.029 0.016* 0.017* 0.026	0.005*	11:15 11:30 11:00 11:15	Variable
09/08/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.043 0.021* 0.024* 0.034	0.019*	10:45 10:30 10:30 10:30	WSW
09/09/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.025 0.007* 0.052* 0.019 <sup>3</sup>	0.007*	11:00 10:45 10:45 8:15 <sup>3</sup>	NNW
09/12/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.033 0.035* 0.077* 0.060	0.037*	10:30 10:45 10:45 10:45	WNW
09/13/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.076 <sup>4</sup> 0.073 <sup>4</sup> 0.122 <sup>4</sup> 0.157 <sup>4</sup>	0.099 <sup>4</sup>	11:00 11:00 11:00 11:00	Variable
09/14/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.047 0.052* 0.074* 0.099	0.056*	10:45 10:30 10:30 10:30	SSW
09/15/05 <sup>5</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/16/05 <sup>5</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/19/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.007 <sup>6</sup> 0.014 <sup>6</sup> 0.018 <sup>6</sup> 0.022 <sup>6</sup>	0.009 <sup>6</sup>	9:15 <sup>6</sup> 9:15 <sup>6</sup> 9:00 <sup>6</sup> 9:00 <sup>6</sup>	WNW, NNW

**TABLE 1-3  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>Sampler Location</b>	<b>Average Site Concentration (mg/m<sup>3</sup>)</b>	<b>Background Site Concentration (mg/m<sup>3</sup>)</b>	<b>Average Period (Hours:Min)</b>	<b>Predominant Wind Direction</b>
09/20/05 <sup>5</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/21/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.013 0.007* 0.021* 0.008	0.003*	6:30 <sup>7</sup> 10:15 10:15 10:15	NNW
09/22/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.013 0.018* 0.017* 0.025	0.010*	11:00 10:45 10:45 11:00	SSW
09/23/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.004 0.021* 0.040* 0.032	0.028*	10:00 <sup>8</sup> 9:45 <sup>8</sup> 9:45 <sup>8</sup> 9:45 <sup>8</sup>	WNW
09/26/05 <sup>5</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/27/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.015 0.004* 0.003* 0.005	0.001*	11:15 11:15 11:15 11:00	WNW, NNW
09/28/05	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	0.027 0.010* 0.012* 0.004	0.009*	10:45 9:45 <sup>9</sup> 10:30 10:45	SSW, Variable
09/29/05 <sup>5</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
09/30/05 <sup>1</sup>	W3 - West of 40s Complex MC3 - Near Bldg. 16 & 19 M2 - South of Bldg. 5 S2 - Woodlawn Avenue	NA	NA	NA	NA
Notification Level		0.120			

**Notes:**

NA - Not Available.

\* Measured with DR-2000 or DR-4000. All others measured with pDR-1000.

Background monitoring location east of Building 9B, between 9B and New York Avenue.

Predominant wind direction determined using hourly wind direction data from the Pittsfield Municipal Airport Weather Station.

<sup>1</sup> Sampling was not performed due to lack of site activity.

<sup>2</sup> Sampling was not performed due to lack of site activity on the Labor Day holiday.

<sup>3</sup> Sampling data were modified to delete invalid recordings due to interference from an insect (fly).

<sup>4</sup> Instrument reading is biased high due to high humidity levels and foggy conditions.

<sup>5</sup> Sampling was not performed due to precipitation/threat of precipitation.

<sup>6</sup> Sampling data were modified to delete invalid recordings due to morning fog.

<sup>7</sup> Sampling period was shortened due to equipment malfunction.

<sup>8</sup> Sampling period was shortened due to precipitation/threat of precipitation.

<sup>9</sup> Sampling period was shortened due to equipment malfunction (dead battery).

**TABLE 1-4  
 AMBIENT AIR PCB DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>W3 - West of 40s Complex (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>S2 - Woodlawn Avenue (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>M2 - South of Bldg. 5 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>MC3 - Near Bldg. 16 &amp; 19 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>MC3-CO Co-located Near Bldgs. 16 &amp; 19 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>BK3 Background - East of Building 9B (<math>\mu\text{g}/\text{m}^3</math>)</b>
09/20 - 09/21/05	0.0400	0.0080	0.0180	0.0369	0.0335	0.0034
Notification Level	0.05	0.05	0.05	0.05	0.05	0.05

**ITEM 2  
PLANT AREA  
EAST STREET AREA 2-SOUTH  
(GECD150)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Performed sludge sampling at Building 64T, Liquid Phase Carbon Absorption (LPCA) sampling at Building 64G, and miscellaneous bucket wipe sampling, as identified in Table 2-1.
- Performed additional sampling activities proposed in GE's October 22, 2004 Interim Letter Report (approved by EPA on August 2, 2005) and in GE's August 15, 2005 Addendum to Interim Letter Report.\*

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

Submitted *Final Notification of On-Plant Excavations* covering a minor excavation to set a telephone pole near Gate 64 (September 12, 2005).

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

- Continue routine process sampling at Buildings 64G and/or 64T.
- Continue development of Final Completion Report for City Recreational Area.\*

**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 SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Depth (feet)</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Additional Pre-Design Soil Investigation Sampling	RAA4-16NW	9/23/05	1-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-206-SE	9/13/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-206-SN	9/13/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-206-SS	9/13/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-206-SW	9/13/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-211S-E	9/26/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-211S-N	9/26/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-211S-S	9/26/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-211S-W	9/26/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-A36	9/23/05	1-6	Soil	SGS	SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-A36	9/23/05	6-15	Soil	SGS	SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-A36	9/23/05	12-14	Soil	SGS	VOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-A36	9/23/05	4-6	Soil	SGS	VOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-A36	9/23/05	0-1	Soil	SGS	VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750	9/14/05	1-3	Soil	SGS	SVOC	9/26/05
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750	9/14/05	3-6	Soil	SGS	SVOC	9/26/05
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750E	9/14/05	1-3	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750E	9/14/05	3-6	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750N	9/14/05	1-3	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750N	9/14/05	3-6	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750S	9/14/05	1-3	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750S	9/14/05	3-6	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750W	9/14/05	1-3	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-BH000750W	9/14/05	3-6	Soil	SGS	SVOC	Extract and hold
Additional Pre-Design Soil Investigation Sampling	RAA4-C25N	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-C27N	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-D21N	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-D26	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-DUP#1 (RAA4-L23)	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-DUP#2 (RAA4-O18)	9/16/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-DUP-3 (RAA4-P21)	9/26/05	0-1	Soil	SGS	PCB, SVOC, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-E15N	9/20/05	1-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-E17N	9/20/05	1-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-F11N	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-F9	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-G23	9/21/05	3-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-G27E	9/23/05	1-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-G7N	9/21/05	1-6	Soil	SGS	PCB	9/29/05
Additional Pre-Design Soil Investigation Sampling	RAA4-H4N	9/23/05	1-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-HH30	9/12/05	0-1	Soil	SGS	PCB	9/20/05
Additional Pre-Design Soil Investigation Sampling	RAA4-I28	9/12/05	0-1	Soil	SGS	PCB	9/20/05
Additional Pre-Design Soil Investigation Sampling	RAA4-I30E	9/13/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-I30N	9/13/05	0-1	Soil	SGS	PCDD/PCDF	

**TABLE 2-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Depth (feet)</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Additional Pre-Design Soil Investigation Sampling	RAA4-I30S	9/13/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-I30W	9/13/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-J27	9/13/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-K26	9/12/05	0-1	Soil	SGS	PCB	9/20/05
Additional Pre-Design Soil Investigation Sampling	RAA4-L10	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-L18	9/20/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-L19	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-L23	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-L24	9/28/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-L25	9/12/05	0-1	Soil	SGS	PCB	9/20/05
Additional Pre-Design Soil Investigation Sampling	RAA4-L26	9/13/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-L9	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-M18	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-M20	9/26/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-M22	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-M23E	9/15/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-M23N	9/15/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-M23S	9/15/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-M23W	9/15/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-M25	9/13/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-N17	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N17	9/20/05	1-3	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N17	9/20/05	3-6	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N18	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N19	9/20/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-N20	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N21	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N22	9/16/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N23	9/15/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N24	9/15/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N25	9/15/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-N27	9/12/05	0-1	Soil	SGS	PCB	9/20/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N28	9/13/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-N3	9/14/05	0-1	Soil	SGS	PCB	9/22/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N4	9/14/05	0-1	Soil	SGS	PCB, SVOC	9/22/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N4	9/14/05	0-1	Soil	SGS	VOC, Inorganics	9/30/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N4	9/14/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-N6	9/14/05	0-1	Soil	SGS	PCB, SVOC	9/22/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N6	9/14/05	0-1	Soil	SGS	VOC, Inorganics	9/30/05
Additional Pre-Design Soil Investigation Sampling	RAA4-N6	9/14/05	0-1	Soil	SGS	PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-O18	9/16/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-O19E	9/20/05	1-3	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-O19N	9/16/05	0-1	Soil	SGS	SVOC	

**TABLE 2-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Depth (feet)</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Additional Pre-Design Soil Investigation Sampling	RAA4-O19N	9/20/05	1-3	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-O19S	9/16/05	0-1	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-O19S	9/20/05	1-3	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-O19W	9/20/05	1-3	Soil	SGS	SVOC	
Additional Pre-Design Soil Investigation Sampling	RAA4-O22	9/16/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-O24	9/15/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-P21	9/26/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-P22	9/20/05	0-1	Soil	SGS	PCB	
Additional Pre-Design Soil Investigation Sampling	RAA4-P24	9/15/05	0-1	Soil	SGS	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Pre-Design Soil Investigation Sampling	RAA4-P25	9/15/05	0-1	Soil	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-01	9/6/05	NA	Water	SGS	VOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-02	9/6/05	NA	Water	SGS	SVOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-03	9/6/05	NA	Water	SGS	PCB	9/22/05
Building 64G LPCA Monitoring	I5-64G-04	9/6/05	NA	Water	SGS	Oil & Grease	9/22/05
Building 64G LPCA Monitoring	I5-64G-05	9/6/05	NA	Water	SGS	VOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-06	9/6/05	NA	Water	SGS	SVOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-07	9/6/05	NA	Water	SGS	PCB	9/22/05
Building 64G LPCA Monitoring	I5-64G-08	9/6/05	NA	Water	SGS	Oil & Grease	9/22/05
Building 64G LPCA Monitoring	I5-64G-09	9/6/05	NA	Water	SGS	VOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-10	9/6/05	NA	Water	SGS	SVOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-11	9/6/05	NA	Water	SGS	PCB	9/22/05
Building 64G LPCA Monitoring	I5-64G-12	9/6/05	NA	Water	SGS	Oil & Grease	9/22/05
Building 64G LPCA Monitoring	I5-64G-13	9/6/05	NA	Water	SGS	VOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-14	9/6/05	NA	Water	SGS	SVOC	9/22/05
Building 64G LPCA Monitoring	I5-64G-15	9/6/05	NA	Water	SGS	PCB	9/22/05
Building 64G LPCA Monitoring	I5-64G-16	9/6/05	NA	Water	SGS	Oil & Grease	9/22/05
Building 64G LPCA Monitoring	I5-64G-17	9/23/05	NA	Water	SGS	VOC	
Building 64G LPCA Monitoring	I5-64G-18	9/23/05	NA	Water	SGS	SVOC	
Building 64G LPCA Monitoring	I5-64G-19	9/23/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-20	9/23/05	NA	Water	SGS	Oil & Grease	
Building 64G LPCA Monitoring	I5-64G-21	9/23/05	NA	Water	SGS	VOC	
Building 64G LPCA Monitoring	I5-64G-22	9/23/05	NA	Water	SGS	SVOC	
Building 64G LPCA Monitoring	I5-64G-23	9/23/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-24	9/23/05	NA	Water	SGS	Oil & Grease	
Building 64G LPCA Monitoring	I5-64G-25	9/23/05	NA	Water	SGS	VOC	
Building 64G LPCA Monitoring	I5-64G-26	9/23/05	NA	Water	SGS	SVOC	
Building 64G LPCA Monitoring	I5-64G-27	9/23/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-28	9/23/05	NA	Water	SGS	Oil & Grease	
Building 64G LPCA Monitoring	I5-64G-29	9/23/05	NA	Water	SGS	VOC	
Building 64G LPCA Monitoring	I5-64G-30	9/23/05	NA	Water	SGS	SVOC	
Building 64G LPCA Monitoring	I5-64G-31	9/23/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-32	9/23/05	NA	Water	SGS	Oil & Grease	
Building 64G LPCA Monitoring	I5-64G-33	9/29/05	NA	Water	SGS	PCB	

**TABLE 2-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Depth (feet)</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Building 64G LPCA Monitoring	I5-64G-34	9/29/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-35	9/29/05	NA	Water	SGS	PCB	
Building 64G LPCA Monitoring	I5-64G-36	9/29/05	NA	Water	SGS	PCB	
Building 64T Sludge Sampling	I5-64T-01	9/3/05	NA	Sludge	SGS	PCB	9/16/05
Lenox Construction Bucket Wipe Sampling	LENOX-BUCKET-W1	9/14/05	NA	Wipe	SGS	PCB	9/19/05
Lenox Construction Bucket Wipe Sampling	LENOX-BUCKET-W2	9/14/05	NA	Wipe	SGS	PCB	9/19/05
Lenox Construction Bucket Wipe Sampling	LENOX-BUCKET-W3	9/14/05	NA	Wipe	SGS	PCB	9/19/05

Note:

1. Field duplicate sample locations are presented in parenthesis.

**TABLE 2-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016, -1221, -1232, -1242, -1248</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
I5-64T-01	9/3/2005	ND(12)	80	35	115

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 parenthesis is the associated detection limit.

**TABLE 2-3  
DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 64G LPCA MONITORING  
EAST STREET AREA 2 - SOUTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

<b>Parameter</b>	<b>Sample ID: Date Collected:</b>	<b>I5-64G-01 09/06/05</b>	<b>I5-64G-02 09/06/05</b>	<b>I5-64G-03 09/06/05</b>	<b>I5-64G-04 09/06/05</b>	<b>I5-64G-05 09/06/05</b>	<b>I5-64G-06 09/06/05</b>	<b>I5-64G-07 09/06/05</b>	<b>I5-64G-08 09/06/05</b>
<b>Volatile Organics</b>									
1,1,1-Trichloroethane		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
1,1-Dichloroethane		ND(0.0050)	NA	NA	NA	0.0031 J	NA	NA	NA
Benzene		0.029	NA	NA	NA	ND(0.0050)	NA	NA	NA
Chlorobenzene		0.12	NA	NA	NA	ND(0.0050)	NA	NA	NA
Chloroform		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
Ethylbenzene		0.057	NA	NA	NA	ND(0.0050)	NA	NA	NA
Vinyl Chloride		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1221		NA	NA	ND(0.000065)	NA	NA	NA	ND(0.000065)	NA
Aroclor-1254		NA	NA	0.00033	NA	NA	NA	0.00034	NA
Total PCBs		NA	NA	0.00033	NA	NA	NA	0.00034	NA
<b>Semivolatile Organics</b>									
1,3-Dichlorobenzene		NA	0.00076 J	NA	NA	NA	ND(0.010)	NA	NA
1,4-Dichlorobenzene		NA	0.0017 J	NA	NA	NA	ND(0.010)	NA	NA
Acenaphthene		NA	0.0096 J	NA	NA	NA	ND(0.010)	NA	NA
Fluorene		NA	0.0012 J	NA	NA	NA	ND(0.010)	NA	NA
<b>Conventionals</b>									
Oil & Grease		NA	NA	NA	4.1 B	NA	NA	NA	3.1 B

**TABLE 2-3  
DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 64G LPCA MONITORING  
EAST STREET AREA 2 - SOUTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	I5-64G-09 09/06/05	I5-64G-10 09/06/05	I5-64G-11 09/06/05	I5-64G-12 09/06/05	I5-64G-13 09/06/05	I5-64G-14 09/06/05	I5-64G-15 09/06/05	I5-64G-16 09/06/05
<b>Volatile Organics</b>									
1,1,1-Trichloroethane		0.025	NA	NA	NA	ND(0.0050)	NA	NA	NA
1,1-Dichloroethane		0.028	NA	NA	NA	ND(0.0050)	NA	NA	NA
Benzene		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
Chlorobenzene		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
Chloroform		0.010	NA	NA	NA	ND(0.0050)	NA	NA	NA
Ethylbenzene		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
Vinyl Chloride		0.0036 J	NA	NA	NA	ND(0.0050)	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1221		NA	NA	ND(0.000065)	NA	NA	NA	0.00071	NA
Aroclor-1254		NA	NA	0.00026	NA	NA	NA	0.00011	NA
Total PCBs		NA	NA	0.00026	NA	NA	NA	0.00082	NA
<b>Semivolatile Organics</b>									
1,3-Dichlorobenzene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
1,4-Dichlorobenzene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
Acenaphthene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
Fluorene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
<b>Conventionals</b>									
Oil & Grease		NA	NA	NA	1.4 B	NA	NA	NA	1.3 B

Notes:

1. Samples were collected by General Electric Company and submitted to SGS Environmental Services, Inc. for analysis of volatiles, PCBs, semivolatiles, and oil & grease.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles)

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

Conventional Parameters

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

**TABLE 2-4  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**LENOX CONSTRUCTION BUCKET WIPE SAMPLING  
EAST STREET AREA 2 - SOUTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in  $\text{mg}/100\text{cm}^2$ )**

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016</b>	<b>Aroclor-1221</b>	<b>Aroclor-1232</b>	<b>Aroclor-1242</b>	<b>Aroclor-1248</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
LENOX-BUCKET-W1	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
LENOX-BUCKET-W2	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
LENOX-BUCKET-W3	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

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 parenthesis is the associated detection limit.



**TABLE 2-5  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**ADDITIONAL PRE-DESIGN SOIL INVESTIGATION SAMPLING  
EAST STREET AREA 2 - SOUTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA4-C25N	1-6	9/21/2005	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
RAA4-C27N	1-6	9/21/2005	ND(0.034)	ND(0.034)	ND(0.034)	ND(0.034)	ND(0.034)	0.26	0.41	0.67
RAA4-D21N	1-6	9/21/2005	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.037	0.037
RAA4-D26	1-6	9/21/2005	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.028 J	0.060	0.088
RAA4-F9	1-6	9/21/2005	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.23	0.21	0.44
RAA4-F11N	1-6	9/21/2005	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.027 J	0.027 J
RAA4-G7N	1-6	9/21/2005	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.029 J	0.060	0.089
RAA4-G23	3-6	9/21/2005	ND(18)	ND(18)	ND(18)	ND(18)	ND(18)	78	200	278
RAA4-HH30	0-1	9/12/2005	ND(3.5)	ND(3.5)	ND(3.5)	ND(3.5)	ND(3.5)	9.7	23	32.7
RAA4-I28	0-1	9/12/2005	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5.1	5.1
RAA4-K26	0-1	9/12/2005	ND(36)	ND(36)	ND(36)	ND(36)	ND(36)	ND(36)	170	170
RAA4-L25	0-1	9/12/2005	ND(180)	ND(180)	ND(180)	ND(180)	ND(180)	2200	ND(180)	2200
RAA4-N3	0-1	9/14/2005	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.87	1.3	2.17
RAA4-N4	0-1	9/14/2005	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.82	0.50	1.32
RAA4-N6	0-1	9/14/2005	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.021 J	0.051	0.072
RAA4-N27	0-1	9/12/2005	ND(36)	ND(36)	ND(36)	ND(36)	ND(36)	140	240	380

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 parenthesis is the associated detection limit.

Data Qualifiers:

Organics

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

**TABLE 2-6  
DATA RECEIVED DURING SEPTEMBER 2005**

**ADDITIONAL PRE-DESIGN SOIL INVESTIGATION SAMPLING  
EAST STREET AREA 2 - SOUTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA4-BH000750 1-3 09/14/05	RAA4-BH000750 3-6 09/14/05	RAA4-N4 0-1 09/14/05	RAA4-N6 0-1 09/14/05
<b>Volatile Organics</b>				
Toluene	NA	NA	ND(0.0053)	0.0064
Trichlorofluoromethane	NA	NA	ND(0.0053)	0.0062
<b>Semivolatile Organics</b>				
2-Methylnaphthalene	0.41 J	ND(0.36)	0.11 J	0.10 J
4-Nitrophenol	ND(18)	ND(1.9)	ND(1.8)	0.66 J
Acenaphthene	2.2 J	ND(0.36)	0.38	0.64
Aniline	ND(3.5)	ND(0.36)	0.14 J	ND(0.35)
Anthracene	5.1	ND(0.36)	0.74	1.2
Benzo(a)anthracene	10	0.58	1.4	1.9
Benzo(a)pyrene	9.0	0.93	1.4	1.8
Benzo(b)fluoranthene	8.5	2.3	1.2	1.4
Benzo(g,h,i)perylene	4.2	1.7	0.62	0.80
Benzo(k)fluoranthene	8.4	1.3	1.1	1.6
bis(2-Chloroethyl)ether	ND(3.5)	ND(0.36)	0.15 J	ND(0.35)
Chrysene	10	1.2	1.4	1.9
Dibenzo(a,h)anthracene	ND(3.5)	0.50	ND(0.35)	ND(0.35)
Dibenzofuran	1.2 J	ND(0.36)	0.17 J	0.27 J
Di-n-Butylphthalate	0.33 J	ND(0.36)	ND(0.35)	ND(0.35)
Fluoranthene	21	0.63	3.0	4.1
Fluorene	1.6 J	ND(0.36)	0.31 J	0.54
Indeno(1,2,3-cd)pyrene	3.7	1.3	0.56	0.73
Naphthalene	0.74 J	ND(0.36)	0.20 J	0.18 J
Phenanthrene	16	0.12 J	2.4	3.3
Phenol	0.72 J	ND(0.36)	ND(0.35)	0.044 J
Pyrene	20	0.59	2.7	3.5
<b>Inorganics</b>				
Antimony	NA	NA	1.20 B	ND(6.00)
Arsenic	NA	NA	8.10	3.20
Barium	NA	NA	68.0	230
Beryllium	NA	NA	0.370 B	0.270 B
Cadmium	NA	NA	0.380 B	0.120 B
Chromium	NA	NA	20.0	11.0
Cobalt	NA	NA	11.0	12.0
Copper	NA	NA	97.0	12.0
Cyanide	NA	NA	0.0940 B	0.210
Lead	NA	NA	43.0	7.40
Mercury	NA	NA	0.0650 B	ND(0.100)
Nickel	NA	NA	17.0	13.0
Sulfide	NA	NA	80.0	10.0
Thallium	NA	NA	2.60	1.30
Tin	NA	NA	10.0	2.40 B
Vanadium	NA	NA	21.0	9.60
Zinc	NA	NA	120	39.0

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of volatiles, semivolatiles and metals.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Only those constituents detected in one or more samples are summarized.

Data Qualifiers:

Organics (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 PQL.

**ITEM 3  
PLANT AREA  
EAST STREET AREA 2-NORTH  
(GEC140)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Conducted sampling of material from catch basins (stored in drums at Building 78) and miscellaneous wipe sampling, as identified in Table 3-1.
- Completed site restoration of Buildings 4, 5, and 6.
- Continued asbestos removal activities at Buildings 15, 15A, 15B, and 15W.
- Continued asbestos removal activities at Buildings 1, 2, 3, and 3B.
- Conducted air monitoring for particulate matter on September 1, 2005, as identified in Table 3-1.
- Awarded the contract for the performance of demolition and site restoration activities at Buildings 15, 15A, 15B, and 15W (September 12, 2005).
- Distributed a Request for Proposal (RFP) to prospective contractors for the performance of demolition and site restoration activities at Buildings 1, 1A, 2, 3, 3B, and 100 Annex (September 30, 2005).
- Collected and tankered approximately 14,500 gallons of groundwater from Building 9 to Building 64G for treatment.
- Received EPA conditional approval of GE's Conceptual Removal Design/Removal Action (RD/RA) Work Plan (September 13, 2005).\*

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

- Submitted *Final Notification of On-Plant Excavations* (September 12, 2005) covering major excavations for utility cutting and capping and minor excavations to set telephone poles.
- Submitted a letter to EPA notifying EPA of certain results of pre-demolition PCB sampling of oil from equipment in Buildings 1, 2, and 3 (September 22, 2005).

**ITEM 3  
(cont'd)  
PLANT AREA  
EAST STREET AREA 2-NORTH  
(GEC140)  
SEPTEMBER 2005**

**c. Work Plans/Reports/Documents Submitted (cont'd)**

- Submitted a letter to EPA and accompanying figures and attachments notifying EPA of GE's proposed plans for the consolidation of certain building demolition debris at GE's On-Plant Consolidation Areas (OPCAs) (September 22, 2005).
- Submitted letter notifying EPA of approximate locations for PCB and particulate matter air monitoring stations at Buildings 1, 1A, 2, 3, 3B, and 100 Annex (September 30, 2005).

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

- Complete asbestos removal activities at Buildings 15, 15A, 15B, and 15W.
- Initiate and complete equipment/liquids removal activities at Buildings 15, 15A, 15B, and 15W.
- Continue asbestos removal activities at Buildings 1, 2, 3, and 3B.
- Initiate demolition of Buildings 15, 15A, 15B, and 15W.
- Award contract for the performance of demolition and site restoration activities at Buildings 1, 1A, 2, 3, 3B, and 100 Annex.
- Submit supplement to Conceptual RD/RA Work Plan to EPA (due by October 11, 2005).\*

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

- Received EPA conditional approval of GE's Conceptual RD/RA Work Plan (September 13, 2005).\*
- Received EPA approval to continue to provide verbal notification, followed by written notification, of all TSCA exceedances encountered during the equipment-draining activities at Buildings 1, 2, and 3. As noted above, GE provided written notification to EPA on September 22, 2005.

**TABLE 3-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Building 16 Drawing Sampling	128A802-A-W2	9/14/05	Wipe	SGS	PCB	9/16/05
Building 16 Drawing Sampling	3917D200-W1	9/14/05	Wipe	SGS	PCB	9/16/05
Building 16 Drawing Sampling	NP234915-W3	9/14/05	Wipe	SGS	PCB	9/16/05
Building 16 Drawing Sampling	P-92622302-W4	9/14/05	Wipe	SGS	PCB	9/16/05
Building 16 Micro-Film Sampling	80-011-MICRO-W2	8/30/05	Wipe	SGS	PCB	9/1/05
Building 16 Micro-Film Sampling	C186-MICRO-W1	8/30/05	Wipe	SGS	PCB	9/1/05
Building 78 Drum Sampling - Catch Basins	CB-SE-DUP-1 (CB76-SE-C1)	9/6/05	Sediment	SGS	PCB, VOC, SVOC, TCLP	
Building 78 Drum Sampling - Catch Basins	CB60-SE-C1	9/6/05	Sediment	SGS	PCB, VOC, SVOC, TCLP	
Building 78 Drum Sampling - Catch Basins	CB60-W-C1	9/6/05	Water	SGS	PCB, VOC, SVOC, Total Metals, Flashpoint	
Building 78 Drum Sampling - Catch Basins	CB65-SE-C1	9/6/05	Sediment	SGS	PCB, VOC, SVOC, TCLP	
Building 78 Drum Sampling - Catch Basins	CB74-SE-C-1	9/6/05	Sediment	SGS	PCB, VOC, SVOC, TCLP	
Building 78 Drum Sampling - Catch Basins	CB76-SE-C1	9/6/05	Sediment	SGS	PCB, VOC, SVOC, TCLP	
Building 78 Drum Sampling - Catch Basins	CB76-W-C1	9/6/05	Water	SGS	PCB, VOC, SVOC, Total Metals, Flashpoint	
Buildings 1, 2, 3 Oil Sampling	71173	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71374	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71375	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71376	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71377	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71378	9/9/05	Oil	SGS	PCB	9/13/05
Buildings 1, 2, 3 Oil Sampling	71379	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71380	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71381	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71482	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71483	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71484	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71485	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71486	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71487	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71488	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71489	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	715100	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	715101	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	715102	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	715103	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	715104	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71590	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71591	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71592	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71593	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71594	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71595	8/1/05	Oil	SGS	PCB	9/7/05

**TABLE 3-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Buildings 1, 2, 3 Oil Sampling	71596	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71597	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71598	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	71599	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718105	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718106	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718107-1	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718107-2	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718108	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718109	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718110	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718111	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718112	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718113	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718114	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718115-1	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718115-2	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718116	8/2/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718118	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718118	8/1/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	718119	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	719120	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	719121	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720122	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720123	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720124	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720125	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720126	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720127	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720128	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720129	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720130	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720131	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720132	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720133	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720134	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720135	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	720137	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	721138	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	721139	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	721140	8/10/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	721141	8/10/05	Oil	SGS	PCB	9/7/05

**TABLE 3-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Buildings 1, 2, 3 Oil Sampling	722142	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	722143	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	723144	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	723145	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	723146	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725147	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725148	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725149	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725150	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725151	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725152	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725153	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725154	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725155	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725156	8/4/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	725157	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	72605-LQ-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	726158	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	726159	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	726160	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	726161	8/5/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	72705-OIL-1	8/25/05	Oil	SGS	PCB, VOC, SVOC, Metals	9/19/05
Buildings 1, 2, 3 Oil Sampling	728168-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	729170-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	801171-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	802173-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	802174-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	802175-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	80402-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	810176-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	816178-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	C0333-C0343-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	C1060-OIL-1	8/9/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	C1067-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	C1074-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	C1091-OIL-1	8/25/05	Oil	SGS	PCB	9/19/05
Buildings 1, 2, 3 Oil Sampling	C1365-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	C1366-1	8/3/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	C1370-OIL-1	8/24/05	Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1734-1	8/22/05	Oil/Liquid	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1734-2	8/22/05	Oil/Liquid	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1734-3	8/22/05	Oil/Liquid	SGS	PCB	9/7/05

**TABLE 3-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Buildings 1, 2, 3 Oil Sampling	F1734-4	8/22/05	Oil/Liquid	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1735-1	8/22/05	Water/Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1735-2	8/22/05	Water/Oil	SGS	PCB	9/7/05
Buildings 1, 2, 3 Oil Sampling	F1735-3	8/22/05	Water/Oil	SGS	PCB	9/7/05
Ambient Air Particulate Matter Sampling	MC3 - Near Bldg. 16 & 19	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	M2 - South of Bldg. 5	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	S2 - Woodlawn Avenue	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Background Location	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05

Note:

1. Field duplicate sample locations are presented in parenthesis.



**TABLE 3-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDINGS 1, 2, 3 OIL 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	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
71173	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71374	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71375	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71376	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71377	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	10	10
71378	9/9/2005	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)	ND(2.9)
71379	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	2.0	2.0
71380	8/3/2005	ND(1.0)	ND(1.0)	0.44 J	ND(1.0)	0.44 J
71381	8/3/2005	ND(1.0)	ND(1.0)	6.2	1.6	7.8
71482	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71483	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71484	8/1/2005	ND(3.6)	ND(3.6)	ND(3.6)	12	12
71485	8/1/2005	ND(3.9)	ND(3.9)	16	ND(3.9)	16
71486	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71487	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71488	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71489	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71590	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71591	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	15	15
71592	8/2/2005	ND(4.0)	ND(4.0)	5.6	ND(4.0)	5.6
71593	8/1/2005	ND(1.0)	ND(1.0)	21	19	40
71594	8/1/2005	ND(1.0)	ND(1.0)	3.5	5.2	8.7
71595	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71596	8/2/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
71597	8/1/2005	ND(1.0)	ND(1.0)	14	8.8	22.8
71598	8/2/2005	ND(1.0)	ND(1.0)	0.43 J	0.77 J	1.2 J
71599	8/1/2005	ND(1.0)	ND(1.0)	26	9.0	35
715100	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.3	1.3
715101	8/2/2005	ND(3.9)	ND(3.9)	12	ND(3.9)	12
715102	8/1/2005	ND(77)	ND(77)	110	ND(77)	110
715103	8/1/2005	ND(1.0)	ND(1.0)	1.0	ND(1.0)	1.0
715104	8/1/2005	ND(1.0)	ND(1.0)	0.71 J	1.1	1.81
718105	8/1/2005	ND(3.9)	ND(3.9)	38	24	62
718106	8/2/2005	ND(1.0)	ND(1.0)	15	13	28
718108	8/10/2005	ND(1.0)	ND(1.0)	ND(1.0)	16	16
718109	8/10/2005	ND(1.0)	ND(1.0)	8.5	5.7	14.2
718110	8/10/2005	ND(1.0)	ND(1.0)	3.4	2.8	6.2
718111	8/2/2005	ND(1.0)	ND(1.0)	12	34	46
718112	8/2/2005	ND(4.0)	ND(4.0)	ND(4.0)	150	150
718113	8/10/2005	ND(1.0)	ND(1.0)	1.1	ND(1.0)	1.1
718114	8/1/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
718116	8/2/2005	ND(1.0)	ND(1.0)	ND(1.0)	16	16
718118	8/1/2005	ND(1.0)	ND(1.0)	9.9	17	26.9
718118	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	2.4	2.4
718119	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	5.7	5.7
719120	8/5/2005	ND(48)	ND(48)	ND(48)	ND(48)	ND(48)
719121	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.4	1.4
720122	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.2	1.2
720123	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.1	1.1
720124	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	3.4	3.4
720125	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	3.5	3.5
720126	8/10/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
720127	8/5/2005	ND(4.0)	ND(4.0)	4.0	5.9	9.9
720128	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.1	1.1
720129	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	0.83 J	0.83 J
720130	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	2.9	2.9

**TABLE 3-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDINGS 1, 2, 3 OIL 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	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
720131	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
720132	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
720133	8/10/2005	ND(1.0)	ND(1.0)	2.0	1.9	3.9
720134	8/10/2005	ND(1.0)	ND(1.0)	ND(1.0)	4.0	4.0
720135	8/10/2005	ND(1.0)	ND(1.0)	ND(1.0)	4.0	4.0
720137	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	8.5	8.5
721138	8/10/2005	ND(8.0)	ND(8.0)	ND(8.0)	130	130
721139	8/10/2005	ND(1.0)	ND(1.0)	7.7	ND(1.0)	7.7
721140	8/10/2005	ND(1.0)	ND(1.0)	3.4	ND(1.0)	3.4
721141	8/10/2005	ND(1.0)	ND(1.0)	1.2	ND(1.0)	1.2
722142	8/3/2005	ND(1.0)	ND(1.0)	6.0	3.6	9.6
722143	8/3/2005	ND(1.0)	ND(1.0)	2.5	2.6	5.1
723144	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
723145	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
723146	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725147	8/4/2005	ND(7.9)	ND(7.9)	ND(7.9)	83	83
725148	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	4.0	4.0
725149	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725150	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725151	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725152	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	31	31
725153	8/3/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725154	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
725155	8/4/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.9	1.9
725156	8/4/2005	ND(1.0)	ND(1.0)	1.2	0.90 J	2.1
725157	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.7	1.7
726158	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
726159	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
726160	8/5/2005	ND(1.0)	ND(1.0)	ND(1.0)	1.7	1.7
726161	8/5/2005	ND(1.0)	ND(1.0)	0.67 J	0.91 J	1.58 J
718107-1	8/2/2005	ND(1.0)	ND(1.0)	19	17	36
718107-2	8/2/2005	ND(1.0)	ND(1.0)	16	14	30
718115-1	8/2/2005	ND(1.0)	ND(1.0)	ND(1.0)	15	15
718115-2	8/2/2005	ND(1.0)	ND(1.0)	ND(1.0)	14	14
72605-LQ-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
728168-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	1.4	2.9	4.3
729170-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
801171-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
802173-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	11	ND(1.0)	11
802174-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	4.5	ND(1.0)	4.5
802175-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
80402-OIL-1	8/25/2005	ND(1.0)	5.6	4.2	ND(1.0)	9.8
810176-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
816178-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	ND(1.0)	15	15
C0333-C0343-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	ND(1.0)	11	11
C1060-OIL-1	8/9/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
C1067-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
C1074-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	6.2	6.2
C1091-OIL-1	8/25/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
C1365-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
C1366-1	8/3/2005	ND(1.0)	ND(1.0)	5.4	0.98 J	6.38
C1370-OIL-1	8/24/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
F1734-1	8/22/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
F1734-2	8/22/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

**TABLE 3-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDINGS 1, 2, 3 OIL 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	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
F1734-3	8/22/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
F1734-4	8/22/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
F1735-1	8/22/2005	ND(0.00025)	ND(0.00025)	ND(0.00025)	0.00054	0.00054
F1735-2	8/22/2005	ND(0.00025)	ND(0.00025)	ND(0.00025)	ND(0.00025)	ND(0.00025)
F1735-3	8/22/2005	ND(1.0)	ND(1.0)	2.4	ND(1.0)	2.4

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 parenthesis is the associated detection limit.

Data Qualifiers:

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

**TABLE 3-3  
DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDINGS 1, 2, 3 OIL SAMPLING  
EAST STREET AREA 2 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

<b>Parameter</b>	<b>Sample ID: Date Collected:</b>	<b>72705-OIL-1 08/25/05</b>
<b>Volatile Organics</b>		
Toluene		10
<b>PCBs</b>		
Aroclor-1248		5.4
Aroclor-1254		5.4
Total PCBs		10.8
<b>Semivolatile Organics</b>		
Di-n-Butylphthalate		97 J
Phenol		13 J
<b>Inorganics</b>		
Barium		0.400
Cadmium		11.0
Chromium		1.00
Lead		17.0
Selenium		2.10 B
Silver		0.160 B

Notes:

1. Sample was collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of volatiles, PCBs, semivolatiles, and metals.
2. Only detected constituents are summarized.

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 PQL.

**TABLE 3-4  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 16 MICRO-FILM SAMPLING  
EAST STREET AREA 2 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in mg/100cm<sup>2</sup>)**

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016</b>	<b>Aroclor-1221</b>	<b>Aroclor-1232</b>	<b>Aroclor-1242</b>	<b>Aroclor-1248</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
80-011-MICRO-W2	8/30/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
C186-MICRO-W1	8/30/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

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 parenthesis is the associated detection limit.

**TABLE 3-5  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 16 DRAWING SAMPLING  
EAST STREET AREA 2 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in mg/100cm<sup>2</sup>)**

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016</b>	<b>Aroclor-1221</b>	<b>Aroclor-1232</b>	<b>Aroclor-1242</b>	<b>Aroclor-1248</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
128A802-A-W2	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
3917D200-W1	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
NP234915-W3	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.4	ND(1.0)	1.4
P-92622302-W4	9/14/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

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 parenthesis is the associated detection limit.

**TABLE 3-6  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDINGS 4, 5, AND 6 DEMOLITION ACTIVITIES  
 EAST STREET AREA 2 - NORTH  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

<b>Date</b>	<b>Sampler Location</b>	<b>Average Site Concentration (mg/m<sup>3</sup>)</b>	<b>Background Site Concentration (mg/m<sup>3</sup>)</b>	<b>Average Period (Hours:Min)</b>	<b>Predominant Wind Direction</b>
09/01/05	MC3 - Near Bldg. 16 & 19	0.017*	0.016*	12:00	WNW
	M2 - South of Bldg. 5	0.033*		12:00	
	S2 - Woodlawn Avenue	0.036		12:00	
Notification Level		0.120			

Notes:

NA - Not Available.

\* Measured with DR-2000 or DR-4000. All others measured with pDR-1000.

Background monitoring location east of Building 9B, between Building 9B and New York Avenue.

Predominant wind direction determined using hourly wind direction data from the Pittsfield Municipal Airport Weather Station.

Buildings 4, 5, & 6 demolition completed September 1, 2005.

**ITEM 4  
PLANT AREA  
EAST STREET AREA 1-NORTH  
(GEC130)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Participated in pre-certification inspection (September 7, 2005).
- Received EPA approval and MDEP acceptance of ERE for GE-owned properties.
- Recorded ERE for GE-owned properties and associated Plan of Land, and Plan of Restricted Area in the Berkshire Middle District Registry of Deeds (September 27, 2005).
- Received EPA approval of Final Completion Report (dated September 29, 2005) and EPA Certificate of Completion for the East Street Area 1-North Removal Action (dated September 30, 2005).

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

- Submitted revised draft of Final Completion Report (September 15, 2005).
- Submitted Final Completion Report (September 22, 2005).

**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



**ITEM 5  
PLANT AREA  
HILL 78 & BUILDING 71 CONSOLIDATION AREAS  
(GECD210/220)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Completed construction of the base liner system for the third cell of the Building 71 OPCA.
- Conducted ambient air monitoring for particulates and PCBs, as identified in Table 5-1.
- Continued transfer of leachate from Building 71 OPCA to Building 64G for treatment. The total amount transferred in September 2005 was 76,000 gallons (see Table 5-4).
- Transferred to the OPCAs soils and sediments from removal activities at the 1½ Mile floodplain properties; demolition materials from the 40s Complex and Buildings 4, 5, and 6; excavated materials from Newell Street Area I (Moldmaster property) and Newell Street Area II removal activities; and various facility-related materials.
- Continued construction of the Building 71 OPCA final cover system for Cell 1 and a portion of Cell 2.

**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 to the OPCAs of building demolition debris from various ongoing demolition projects, excavated material from removal activities in the 1½ Mile Reach and 1½ Mile floodplain properties, and excavated materials from Newell Street Area I and II removal activities.

**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 SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Ambient Air Particulate Matter Sampling	North of OPCAs	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Background Location	9/1/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	Background Location	9/2/05	Air	Berkshire Environmental	Particulate Matter	9/7/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/6/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/7/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/8/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05
Ambient Air Particulate Matter Sampling	Background Location	9/9/05	Air	Berkshire Environmental	Particulate Matter	9/14/05

**TABLE 5-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Ambient Air Particulate Matter Sampling	North of OPCAs	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Background Location	9/12/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Background Location	9/13/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	Background Location	9/14/05	Air	Berkshire Environmental	Particulate Matter	9/20/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/19/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/21/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/22/05	Air	Berkshire Environmental	Particulate Matter	9/30/05

**TABLE 5-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Ambient Air Particulate Matter Sampling	North of OPCAs	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	Background Location	9/23/05	Air	Berkshire Environmental	Particulate Matter	9/30/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Background Location	9/27/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Background Location	9/28/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	North of OPCAs	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Pittsfield Generating Co.	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southeast of OPCAs	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Southwest of OPCAs	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	West of OPCAs	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
Ambient Air Particulate Matter Sampling	Background Location	9/30/05	Air	Berkshire Environmental	Particulate Matter	10/5/05
PCB Ambient Air Sampling	Southwest of OPCAs	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	Southwest of OPCAs Co-located	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	West of OPCAs	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	North of OPCAs	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	Southeast of OPCAs	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	Pittsfield Generating (PGE)	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05
PCB Ambient Air Sampling	Background East of Building 9B	9/01 - 9/2/05	Air	Berkshire Environmental	PCB	9/15/05

**TABLE 5-2  
 AMBIENT AIR PCB DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>Southwest of OPCAs (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Southwest of OPCAs Co-located (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>West of OPCAs (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>North of OPCAs (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Southeast of OPCAs (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Pittsfield Generating (PGE) (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Background East of Building 9B (<math>\mu\text{g}/\text{m}^3</math>)</b>
09/01 - 09/02/05	0.0220	0.0269	0.0025	0.0015	0.0372	0.0309	0.0010
Notification Level	0.05	0.05	0.05	0.05	0.05	0.05	0.05

**TABLE 5-3  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

**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 <sup>3</sup> )	Background Site Concentration (mg/m <sup>3</sup> )	Average Period (Hours:Min)	Predominant Wind Direction
09/01/05	North of OPCAs	0.011	0.016*	10:45	WNW
	Pittsfield Generating Co.	0.023*		10:45	
	Southeast of OPCAs	0.034		10:45	
	Southwest of OPCAs	0.035*		10:15	
	West of OPCAs	0.029		10:45	
09/02/05	North of OPCAs	0.018	0.015*	11:00	SSW, WSW
	Pittsfield Generating Co.	0.021*		10:30	
	Southeast of OPCAs	0.031		11:00	
	Southwest of OPCAs	0.031*		10:15	
09/05/05 <sup>1</sup>	North of OPCAs	NA	NA	NA	NA
	Pittsfield Generating Co.				
	Southeast of OPCAs				
	Southwest of OPCAs				
	West of OPCAs				
09/06/05	North of OPCAs	0.001	0.006*	11:30	Calm
	Pittsfield Generating Co.	0.014*		10:45	
	Southeast of OPCAs	0.032		11:30	
	Southwest of OPCAs	0.019*		10:45	
	West of OPCAs	0.017		11:30	
09/07/05	North of OPCAs	0.004	0.005*	11:15	Variable
	Pittsfield Generating Co.	0.020*		11:00	
	Southeast of OPCAs	0.032		11:15	
	Southwest of OPCAs	0.027*		11:00	
	West of OPCAs	0.022		11:15	
09/08/05	North of OPCAs	0.016	0.019*	9:45 <sup>2</sup>	WSW
	Pittsfield Generating Co.	0.026*		11:00	
	Southeast of OPCAs	0.033		11:00	
	Southwest of OPCAs	0.032*		11:00	
	West of OPCAs	0.037		11:00	
09/09/05	North of OPCAs	0.005	0.007*	10:45	NNW
	Pittsfield Generating Co.	0.014*		10:45	
	Southeast of OPCAs	0.016		10:45	
	Southwest of OPCAs	0.011*		10:30	
	West of OPCAs	0.014		10:45	
09/12/05	North of OPCAs	0.026	0.037*	10:45	WNW
	Pittsfield Generating Co.	0.049*		10:45	
	Southeast of OPCAs	0.094		10:45	
	Southwest of OPCAs	0.080*		10:30	
	West of OPCAs	0.054		10:45	
09/13/05	North of OPCAs	0.062 <sup>3</sup>	0.099* <sup>3</sup>	11:00	Variable
	Pittsfield Generating Co.	0.105* <sup>3</sup>		11:00	
	Southeast of OPCAs	0.151 <sup>3</sup>		11:00	
	Southwest of OPCAs	0.193* <sup>3</sup>		11:00	
	West of OPCAs	0.128 <sup>3</sup>		11:00	
09/14/05	North of OPCAs	0.042	0.056*	10:30	SSW
	Pittsfield Generating Co.	0.065*		10:30	
	Southeast of OPCAs	0.084		10:30	
	Southwest of OPCAs	0.114*		10:30	
	West of OPCAs	0.080		10:30	

**TABLE 5-3  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>Sampler Location</b>	<b>Average Site Concentration (mg/m<sup>3</sup>)</b>	<b>Background Site Concentration (mg/m<sup>3</sup>)</b>	<b>Average Period (Hours:Min)</b>	<b>Predominant Wind Direction</b>
09/15/05 <sup>4</sup>	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	NA	NA	NA	NA
09/16/05 <sup>4</sup>	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	NA	NA	NA	NA
09/19/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.005 <sup>5</sup> 0.020* <sup>5</sup> 0.010 <sup>5</sup> 0.022* <sup>5</sup> 0.017 <sup>5</sup>	0.009* <sup>5</sup>	9:15 <sup>5</sup> 9:15 <sup>5</sup> 9:15 <sup>5</sup> 9:00 <sup>5</sup> 9:15 <sup>5</sup>	WNW, NNW
09/20/05 <sup>6</sup>	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	NA	NA	NA	NA
09/21/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.004 0.015* 0.016 0.009* 0.006	0.003*	6:30 <sup>2</sup> 10:45 10:45 10:45 10:45	NNW
09/22/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.012 0.020* 0.020 0.023* 0.014	0.010*	11:00 11:00 11:00 10:45 11:00	SSW
09/23/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.025 0.027* 0.040 0.054* 0.041	0.028*	9:45 <sup>7</sup> 9:45 <sup>7</sup> 9:45 <sup>7</sup> 9:30 <sup>7</sup> 9:45 <sup>7</sup>	WNW
09/26/05 <sup>6</sup>	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	NA	NA	NA	NA
09/27/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.007 0.016* 0.000 0.001* 0.002	0.001*	11:00 11:00 10:45 11:00 11:00	WNW, NNW
09/28/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.018 0.014* 0.012 0.006* 0.015	0.009*	10:30 10:30 10:30 6:30 <sup>8</sup> 10:30	SSW, Variable

**TABLE 5-3  
 AMBIENT AIR PARTICULATE MATTER DATA RECEIVED DURING SEPTEMBER 2005**

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

<b>Date</b>	<b>Sampler Location</b>	<b>Average Site Concentration (mg/m<sup>3</sup>)</b>	<b>Background Site Concentration (mg/m<sup>3</sup>)</b>	<b>Average Period (Hours:Min)</b>	<b>Predominant Wind Direction</b>
09/29/05 <sup>4</sup>	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	NA	NA	NA	NA
09/30/05	North of OPCAs Pittsfield Generating Co. Southeast of OPCAs Southwest of OPCAs West of OPCAs	0.034 0.005* 0.003 0.004* 0.005	0.003*	10:45 10:30 10:45 10:30 10:45	NNW
Notification Level		0.120			

Notes:

NA - Not Available.

\* Measured with DR-2000 or DR-4000. All others measured with pDR-1000.

Background monitoring location east of Building 9B, between Building 9B and New York Avenue.

Predominant wind direction determined using hourly wind direction data from the Pittsfield Municipal Airport Weather Station.

<sup>1</sup> Sampling was not performed due to lack of site activity on the Labor Day holiday.

<sup>2</sup> Sampling period was shortened due to instrument malfunction.

<sup>3</sup> Instrument reading is biased high due to high humidity levels and foggy conditions.

<sup>4</sup> Sampling was not performed due to precipitation/threat of precipitation.

<sup>5</sup> Sampling data were modified to delete invalid recordings due to morning fog.

<sup>6</sup> Sampling was not performed due to lack of site activity.

<sup>7</sup> Sampling period was shortened due to precipitation/threat of precipitation.

<sup>8</sup> Sampling period was shortened due to technician error.



**TABLE 5-4**  
**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**  
**September 2005**

Month / Year	Total Volume of Leachate Transferred (Gallons)
September 2004	230,000
October 2004	177,000
November 2004	138,000
December 2004	146,000
January 2005	136,000
February 2005	116,500
March 2005	174,500
April 2005	192,000
May 2005	89,500
June 2005	130,000
July 2005	127,500
August 2005	55,000
September 2005	46,000

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

**ITEM 6  
PLANT AREA  
HILL 78 AREA - REMAINDER  
(GEC160  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Completed preparation of Pre-Design Investigation Report, including a preliminary evaluation of City of Pittsfield storm drains and sewer lines extending beneath Hill 78.\*
- Conducted miscellaneous drum sampling, as identified in Table 6-1.

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

Submitted Pre-Design Investigation Report (September 7, 2005) and certain boring logs that were omitted from the Pre-Design Investigation Report (September 22, 2005).\*

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

Coordinate with the City of Pittsfield to arrange for draining of the storm and sanitary sewer pipes beneath Hill 78 to allow the completion of video inspections. A meeting was held between GE and the City of Pittsfield on September 19, 2005. GE is awaiting City approval to conduct pipe cleanout activities.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

Additional soil sampling activities were proposed in the Pre-Design Investigation Report and will be performed following EPA approval.\*

**TABLE 6-1**  
**DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**HILL 78 AREA-REMAINDER**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Building 78 Drum Sampling	78-Compactor	9/9/05	Oil	SGS	PCB	9/19/05
Building 78 Drum Sampling	B1541	9/9/05	Water	SGS	PCB	9/19/05
Building 78 Drum Sampling	C1122	9/9/05	Oil	SGS	PCB	9/19/05

**TABLE 6-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**BUILDING 78 DRUM SAMPLING  
HILL 78 AREA REMAINDER  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016</b>	<b>Aroclor-1221</b>	<b>Aroclor-1232</b>	<b>Aroclor-1242</b>	<b>Aroclor-1248</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
78-COMPACTOR	9/9/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
B1541	9/9/2005	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.0015	0.0015
C1122	9/9/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

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 parenthesis is the associated detection limit.

**ITEM 7  
PLANT AREA  
UNKAMET BROOK AREA  
(GECD170)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Completed preparation of Pre-Design Investigation Report.\*
- Conducted equipment wipe sampling, as identified in Table 7-1.

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

- Submitted Pre-Design Investigation Report (September 6, 2005).\*
- Submitted *Final Notification of On-Plant Excavations* covering various major and minor excavations within this area (September 12, 2005).

**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**

- In a letter dated August 15, 2005, GE proposed to remove Parcel L12-1-2 from the Unkamet Brook Area RAA. That proposal is pending approval from the EPA.\*
- Additional soil sampling activities were proposed in the Pre-Design Investigation Report and will be performed following EPA approval.\*

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**UNKAMET BROOK AREA  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
SABRE Equipment Wipe Sampling	EXCAVATOR-BUCKET-W7	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-BUCKET-W8	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-BUCKET-W9	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-HAMMER-W1	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W1	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W2	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W3	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W4	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W5	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	EXCAVATOR-TRACK-W6	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	S175-BUCKET-W1	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	S175-BUCKET-W2	9/15/05	Wipe	SGS	PCB	9/19/05
SABRE Equipment Wipe Sampling	S175-BUCKET-W3	9/15/05	Wipe	SGS	PCB	9/19/05

**TABLE 7-2  
PCB DATA RECEIVED DURING SEPTEMBER 2005**

**SABRE EQUIPMENT WIPE SAMPLING  
UNKAMET BROOK AREA  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in  $\text{mg}/100\text{cm}^2$ )**

Sample ID	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
EXCAVATOR-BUCKET-W7	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-BUCKET-W8	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-BUCKET-W9	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-HAMMER-W1	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W1	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W2	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W3	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W4	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W5	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
EXCAVATOR-TRACK-W6	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
S175-BUCKET-W1	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
S175-BUCKET-W2	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
S175-BUCKET-W3	9/15/2005	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

**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 parenthesis is the associated detection limit.

**ITEM 8  
FORMER OXBOW AREAS A & C  
(GECD410)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

Completed preparation of an Addendum to the Final RD/RA Work Plan.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

Submitted the Addendum to the Final RD/RA Work Plan (September 26, 2005).

**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



**ITEM 9  
LYMAN STREET AREA  
(GEC430)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

Completed preparation of Final RD/RA Work Plan.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

Submitted the Final RD/RA Work Plan to EPA (September 1, 2005).

**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

**ITEM 10  
NEWELL STREET AREA I  
(GEC440)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Continued remediation of Parcel J9-23-13.
- Initiated remediation of Parcels J9-23-19, -20, and -21.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

None

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

- Complete remediation of Parcel J9-23-13.
- Continue remediation of Parcels J9-23-19, -20, and -21.
- Record ERE and Notice of Completion for Parcel J9-23-24 following receipt of EPA approval and MDEP acceptance of same.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

None

**ITEM 11  
NEWELL STREET AREA II  
(GEC450)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- Continued soil remediation.\*
- During soil removal activities, encountered drums in subsurface soil at Parcel J9-23-8, some of which were crushed or in pieces and some of which appeared to be intact or partially intact. Consistent with previously reported response activities, GE: (1) properly removed the drums; (2) sent the crushed drums and drums observed to contain solid material to GE's OPCAs for disposition there; and (3) overpacked the intact or partially intact drums that contained liquid material, sent those drums to GE's on-plant TSCA storage area, and implemented a program to characterize their contents to facilitate the appropriate off-site disposition of these drums, as identified on Table 11-1.
- During soil removal activities, encountered capacitors in subsurface soil at Parcel J9-23-8. In response, GE placed these capacitors into drums and sent those drums to GE's on-plant TSCA storage area for subsequent appropriate off-site disposal.
- Initiated geophysical survey activities at Parcel J9-23-8.

**b. Sampling/Test Results Received**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

Submitted a Proposal for Geophysical Survey at Parcel J9-23-8 (September 6, 2005).

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

- Submit analytical results for proposed topsoil source once received from the laboratory.\*
- Based on sampling results for liquid contents of drums from Parcel J9-23-8 that contained liquid, arrange for appropriate off-site disposal of those drums.
- Arrange for appropriate disposal of drummed capacitors.
- Complete geophysical survey activities and discuss results, as well as next steps, with EPA.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

Issues relating to drums and capacitors at Parcel J9-23-8 are under discussion with EPA.

**ITEM 11  
(cont'd)  
NEWELL STREET AREA II  
(GEC450)  
SEPTEMBER 2005**

**f. Proposed/Approved Work Plan Modifications**

Received conditional approval from EPA of geophysical survey proposal (September 14, 2005).

**TABLE 11-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Drum Sampling	A1913-O	8/31/05	Oil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	A2523-LIQUID	8/31/05	Oil	SGS	PCB, VOC, SVOC, Flashpoint, Total Metals	9/20/05
Drum Sampling	A2524-LIQUID	8/31/05	Oil	SGS	PCB, VOC, SVOC, Flashpoint, Total Metals	9/20/05
Drum Sampling	A2524-O	8/31/05	Oil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0561-LIQUID	8/31/05	Water	SGS	PCB	9/20/05
Drum Sampling	D0561-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0562-O	8/30/05	Oil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0563-LIQUID	8/31/05	Oil	SGS	PCB, VOC, SVOC, Flashpoint, Total Metals	9/20/05
Drum Sampling	D0563-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0564-LIQUID	8/31/05	Water	SGS	PCB	9/20/05
Drum Sampling	D0564-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0577-LIQUID	8/30/05	Oil	SGS	PCB, VOC, SVOC, Flashpoint, Total Metals	9/20/05
Drum Sampling	D0577-SOLID	8/30/05	Soil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0581-LIQUID	9/22/05	Liquid	SGS	PCB	9/29/05
Drum Sampling	D0581-LIQUID	9/22/05	Liquid	SGS	VOC, SVOC, Total Metals, Flashpoint	
Drum Sampling	D0581-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0581-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0582-LIQUID	9/22/05	Liquid	SGS	PCB	9/29/05
Drum Sampling	D0582-LIQUID	9/22/05	Liquid	SGS	VOC, SVOC, Total Metals, Flashpoint	
Drum Sampling	D0582-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0582-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0583-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0583-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0584-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0584-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0585-SOLID	9/20/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0585-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0586-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0586-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0591-SOLID	9/21/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0591-SOLID	9/21/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0592-SOLID	9/20/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0592-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0593-SOLID	9/20/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0593-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0594-SOLID	9/20/05	Solid	SGS	PCB	9/28/05

**TABLE 11-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Drum Sampling	D0594-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0595-SOLID	9/20/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0595-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0596-SOLID	9/20/05	Solid	SGS	PCB	9/28/05
Drum Sampling	D0596-SOLID	9/20/05	Solid	SGS	VOC, SVOC, TCLP (Exc-Pest/Herb)	
Drum Sampling	D0597-LIQUID	8/31/05	Oil	SGS	PCB, VOC, SVOC, Flashpoint, Total Metals	9/20/05
Drum Sampling	D0597-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0598-LIQUID	8/31/05	Water	SGS	PCB	9/20/05
Drum Sampling	D0598-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0599-SOLID	8/31/05	Solid	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	D0600-SOLID	8/30/05	Soil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Drum Sampling	NSAII-DRUM-DUP-1 (D0562-O)	8/30/05	Soil	SGS	PCB, VOC, SVOC, TCLP	9/20/05
Top Soil Sampling	NSAII-TOPSOIL-1	8/24/05	Soil	SGS	PCB, VOC, SVOC, Metals	9/16/05

Note:

1. Field duplicate sample locations are presented in parenthesis.

**TABLE 11-2  
DATA RECEIVED DURING SEPTEMBER 2005**

**DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	A1913-O 08/31/05	A2523-LIQUID 08/31/05	A2524-LIQUID 08/31/05	A2524-O 08/31/05	D0561-LIQUID 08/31/05	D0561-SOLID 08/31/05	D0562-O 08/30/05	D0563-LIQUID 08/31/05
<b>Volatile Organics</b>									
1,1,2-Trichloroethane		ND(5.0)	ND(100)	1400	ND(1200)	NA	ND(130)	ND(6200) [ND(62000)]	410 J
Ethylbenzene		8.3	ND(100)	ND(1200)	ND(1200)	NA	ND(130)	ND(6200) [ND(62000)]	ND(1800)
Tetrachloroethene		ND(5.0)	ND(100)	ND(1200)	ND(1200)	NA	ND(130)	ND(6200) [ND(62000)]	ND(1800)
Toluene		8.8	ND(100)	ND(1200)	ND(1200)	NA	97 J	ND(6200) [ND(62000)]	ND(1800)
Trichloroethene		19	110	100000	42000	NA	8400	270000 [160000]	37000
Xylenes (total)		31	ND(100)	ND(1200)	ND(1200)	NA	130	ND(6200) [ND(62000)]	ND(1800)
<b>PCBs</b>									
Aroclor-1254		740	190	760000	400000	390	65000	380000 [430000]	780000
Total PCBs		740	190	760000	400000	390	65000	380000 [430000]	780000
<b>Semivolatile Organics</b>									
1,2,4-Trichlorobenzene		ND(5100)	ND(2100)	ND(80000)	ND(610000)	NA	490 J	ND(320000) [ND(490000)]	ND(86000)
2-Methylnaphthalene		ND(5100)	ND(2100)	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
Anthracene		ND(5100)	ND(2100)	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
Fluorene		ND(5100)	ND(2100)	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
Naphthalene		ND(5100)	660 J	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
Phenanthrene		ND(5100)	540 J	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
Pyrene		ND(5100)	430 J	ND(80000)	ND(610000)	NA	ND(1600)	ND(320000) [ND(490000)]	ND(86000)
<b>Inorganics</b>									
Arsenic		NA	0.580 B	ND(0.750)	NA	NA	NA	NA	0.370 B
Barium		NA	10.0	0.300	NA	NA	NA	NA	2.00
Cadmium		NA	0.0670 B	ND(0.150)	NA	NA	NA	NA	0.130 B
Chromium		NA	2.60	0.760	NA	NA	NA	NA	5.20
Lead		NA	14.0	3.50	NA	NA	NA	NA	9.80
Mercury		NA	1.40	0.240	NA	NA	NA	NA	1.20
Selenium		NA	0.870 B	1.30 B	NA	NA	NA	NA	1.60 B
Silver		NA	0.200 B	0.180 B	NA	NA	NA	NA	0.200 B
<b>Conventionals</b>									
Flash Point (°F)		NA	>180	>180	NA	NA	NA	NA	>180

**TABLE 11-2  
DATA RECEIVED DURING SEPTEMBER 2005**

**DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	D0563-SOLID 08/31/05	D0564-LIQUID 08/31/05	D0564-SOLID 08/31/05	D0577-LIQUID 08/30/05	D0577-SOLID 08/30/05	D0581-LIQUID 09/22/05	D0582-LIQUID 09/22/05	D0597-LIQUID 08/31/05	D0597-SOLID 08/31/05
<b>Volatile Organics</b>										
1,1,2-Trichloroethane		100 J	NA	ND(120)	ND(1000)	19 J	NA	NA	ND(10)	ND(5.2)
Ethylbenzene		ND(550)	NA	ND(120)	ND(1000)	ND(28)	NA	NA	30	6.0
Tetrachloroethene		ND(550)	NA	ND(120)	ND(1000)	ND(28)	NA	NA	ND(10)	ND(5.2)
Toluene		62 J	NA	ND(120)	ND(1000)	ND(28)	NA	NA	30	6.3
Trichloroethene		8600	NA	8400	13000	2500	NA	NA	370	32
Xylenes (total)		200 J	NA	ND(120)	ND(1000)	ND(28)	NA	NA	110	22
<b>PCBs</b>										
Aroclor-1254		150000	65	140000	530000	31000	2.5	2.3	10	170
Total PCBs		150000	65	140000	530000	31000	2.5	2.3	10	170
<b>Semivolatile Organics</b>										
1,2,4-Trichlorobenzene		620 J	NA	220 J	ND(150000)	620 J	NA	NA	ND(2700)	ND(190)
2-Methylnaphthalene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	1900 J	330
Anthracene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	ND(2700)	20 J
Fluorene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	ND(2700)	27 J
Naphthalene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	640 J	96 J
Phenanthrene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	500 J	93 J
Pyrene		ND(1800)	NA	ND(1300)	ND(150000)	ND(2000)	NA	NA	440 J	77 J
<b>Inorganics</b>										
Arsenic		NA	NA	NA	ND(0.750)	NA	NA	NA	1.00	NA
Barium		NA	NA	NA	2.00	NA	NA	NA	0.680	NA
Cadmium		NA	NA	NA	0.170	NA	NA	NA	0.0950 B	NA
Chromium		NA	NA	NA	15.0	NA	NA	NA	0.750	NA
Lead		NA	NA	NA	21.0	NA	NA	NA	16.0	NA
Mercury		NA	NA	NA	5.00	NA	NA	NA	0.320	NA
Selenium		NA	NA	NA	1.40 B	NA	NA	NA	1.10 B	NA
Silver		NA	NA	NA	0.260 B	NA	NA	NA	0.380 B	NA
<b>Conventionals</b>										
Flash Point (°F)		NA	NA	NA	>180	NA	NA	NA	>180	NA



**TABLE 11-2  
DATA RECEIVED DURING SEPTEMBER 2005**

**DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	D0598-LIQUID 08/31/05	D0598-SOLID 08/31/05	D0599-SOLID 08/31/05	D0600-SOLID 08/30/05	D0581-SOLID 09/21/05	D0582-SOLID 09/21/05	D0583-SOLID 09/21/05	D0584-SOLID 09/21/05	D0585-SOLID 09/20/05
<b>Volatile Organics</b>										
1,1,2-Trichloroethane		NA	ND(600)	ND(1600)	ND(28)	NA	NA	NA	NA	NA
Ethylbenzene		NA	ND(600)	ND(1600)	ND(28)	NA	NA	NA	NA	NA
Tetrachloroethene		NA	220 J	ND(1600)	ND(28)	NA	NA	NA	NA	NA
Toluene		NA	240 J	ND(1600)	ND(28)	NA	NA	NA	NA	NA
Trichloroethene		NA	7800	16000	170	NA	NA	NA	NA	NA
Xylenes (total)		NA	140 J	ND(1600)	190	NA	NA	NA	NA	NA
<b>PCBs</b>										
Aroclor-1254		3.2	34000	47000	65000	88000	21000	420000	340000	3000
Total PCBs		3.2	34000	47000	65000	88000	21000	420000	340000	3000
<b>Semivolatile Organics</b>										
1,2,4-Trichlorobenzene		NA	3800	2800	ND(4000)	NA	NA	NA	NA	NA
2-Methylnaphthalene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
Anthracene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
Fluorene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
Naphthalene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
Phenanthrene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
Pyrene		NA	ND(1200)	ND(1500)	ND(4000)	NA	NA	NA	NA	NA
<b>Inorganics</b>										
Arsenic		NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium		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
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Conventionals</b>										
Flash Point (°F)		NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 11-2  
DATA RECEIVED DURING SEPTEMBER 2005**

**DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	DO586-SOLID 09/21/05	DO591-SOLID 09/21/05	DO592-SOLID 09/20/05	DO593-SOLID 09/20/05	DO594-SOLID 09/20/05	DO595-SOLID 09/20/05	DO596-SOLID 09/20/05
<b>Volatile Organics</b>								
1,1,2-Trichloroethane		NA	NA	NA	NA	NA	NA	NA
Ethylbenzene		NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene		NA	NA	NA	NA	NA	NA	NA
Toluene		NA	NA	NA	NA	NA	NA	NA
Trichloroethene		NA	NA	NA	NA	NA	NA	NA
Xylenes (total)		NA	NA	NA	NA	NA	NA	NA
<b>PCBs</b>								
Aroclor-1254		12000	12000	75000	1200	430000	84000	4400
Total PCBs		12000	12000	75000	1200	430000	84000	4400
<b>Semivolatile Organics</b>								
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA	NA	NA
<b>Inorganics</b>								
Arsenic		NA	NA	NA	NA	NA	NA	NA
Barium		NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA
Mercury		NA	NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA
<b>Conventionals</b>								
Flash Point (°F)		NA	NA	NA	NA	NA	NA	NA

Notes:

1. Samples were collected by ONYX Environmental Services, and submitted to SGS Environmental Services, Inc. for analysis of PCBs, volatiles, semivolatiles, metals, flash point, and TCLP constituents.
2. Please refer to Table 11-3 for a summary of TCLP constituents.
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
5. Field duplicate sample results are presented in brackets.
6. Only those constituents detected in one or more samples are summarized.
7. Solid matrix samples are presented in dry weight.

Data Qualifiers:

Organics (volatiles, PCBs, 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 PQL.

TABLE 11-3  
TCLP DATA RECEIVED DURING SEPTEMBER 2005

DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	TCLP Regulatory Limits	A1913-O 8/31/2005	A2524-O 8/31/2005	D0561-SOLID 8/31/2005	D0562-O 8/30/2005	D0563-SOLID 8/31/2005	D0564-SOLID 8/31/2005	D0577-SOLID 8/30/2005
<b>Volatile Organics</b>									
1,1-Dichloroethene		0.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
1,2-Dichloroethane		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
2-Butanone		200	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Benzene		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Carbon Tetrachloride		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Chlorobenzene		100	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform		6	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene		0.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
Trichloroethene		0.5	19	320	52	230 [190]	93	84	140
Vinyl Chloride		0.2	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0) [ND(5.0)]	ND(5.0)	ND(5.0)	ND(5.0)
<b>Semivolatile Organics</b>									
1,4-Dichlorobenzene		7.5	ND(0.050)	ND(0.050)	0.075	0.0038 J [ND(0.050)]	0.015 J	ND(0.050)	ND(0.050)
2,4,5-Trichlorophenol		400	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
2,4,6-Trichlorophenol		2	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
2,4-Dinitrotoluene		0.13	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Cresol		200	ND(0.050)	0.0064 J	0.026 J	0.022 J [ND(0.050)]	0.57	ND(0.050)	ND(0.050)
Hexachlorobenzene		0.13	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Hexachlorobutadiene		0.5	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Hexachloroethane		3	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Nitrobenzene		2	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Pentachlorophenol		100	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	ND(0.050)
Pyridine		5	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050) [ND(0.050)]	ND(0.050)	ND(0.050)	0.49
<b>Inorganics</b>									
Arsenic		5	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100) [ND(0.100)]	0.00510 B	ND(0.100)	ND(0.100)
Barium		100	0.260	0.400	0.770	0.0990 B [0.0650 B]	0.230	0.660	0.540
Cadmium		1	0.00570 B	0.0100 B	0.0230	0.00600 B [0.00410 B]	0.0330	0.0870	0.0360
Chromium		5	0.00540 B	0.00290 B	0.0110 B	0.00350 B [0.00220 B]	0.0120 B	0.00400 B	0.00420 B
Lead		5	0.180	1.40	16.0	0.660 [0.460]	15.0	3.20	7.40
Mercury		0.2	0.00200 B	ND(0.00200)	ND(0.00200)	0.000130 B [0.000150 B]	0.000110 B	ND(0.00200)	ND(0.00200)
Selenium		1	0.0100 B	0.00760 B	0.00900 B	0.0120 B [0.00800 B]	0.00970 B	0.00600 B	0.00740 B
Silver		5	ND(0.0200)	ND(0.0200)	ND(0.0200)	ND(0.0200) [ND(0.0200)]	ND(0.0200)	ND(0.0200)	ND(0.0200)

TABLE 11-3  
TCLP DATA RECEIVED DURING SEPTEMBER 2005

DRUM SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	TCLP Regulatory Limits	D0597-SOLID 8/31/2005	D0598-SOLID 8/31/2005	D0599-SOLID 8/31/2005	D0600-SOLID 8/30/2005
<b>Volatile Organics</b>						
1,1-Dichloroethene		0.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
1,2-Dichloroethane		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Butanone		200	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Carbon Tetrachloride		0.5	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chlorobenzene		100	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform		6	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene		0.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Trichloroethene		0.5	27	110	140	130
Vinyl Chloride		0.2	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
<b>Semivolatile Organics</b>						
1,4-Dichlorobenzene		7.5	ND(0.050)	0.052	0.064	ND(0.050)
2,4,5-Trichlorophenol		400	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
2,4,6-Trichlorophenol		2	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
2,4-Dinitrotoluene		0.13	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Cresol		200	ND(0.050)	0.029 J	0.24	ND(0.050)
Hexachlorobenzene		0.13	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Hexachlorobutadiene		0.5	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Hexachloroethane		3	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Nitrobenzene		2	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Pentachlorophenol		100	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Pyridine		5	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
<b>Inorganics</b>						
Arsenic		5	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)
Barium		100	0.190	0.690	0.130	0.0830 B
Cadmium		1	0.00830 B	0.0480	0.0290	0.190
Chromium		5	0.00500 B	0.00550 B	0.00600 B	0.00900 B
Lead		5	0.120	1.20	4.40	2.80
Mercury		0.2	ND(0.00200)	ND(0.00200)	ND(0.00200)	0.00170 B
Selenium		1	0.00990 B	0.00950 B	0.00640 B	0.0120 B
Silver		5	ND(0.0200)	ND(0.0200)	ND(0.0200)	ND(0.0200)

Notes:

1. Samples were collected by ONYX Environmental Services, and submitted to SGS Environmental Services, Inc. for analysis of PCBs, volatiles, semivolatiles, metals, flashpoint, and TCLP constituents.
2. Please refer to Table 11-2 for a summary of PCBs, volatiles, semivolatiles and flashpoint.
3. ND - Analyte was not detected. The number in parenthesis is the associated detection limit.
4. Field duplicate sample results are presented in brackets.
5. Shading indicates that value exceeds the TCLP Regulatory Limits.

Data Qualifiers:

Organics (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 PQL.

TABLE 11-4  
DATA RECEIVED DURING SEPTEMBER 2005

**TOP SOIL SAMPLING  
NEWELL STREET AREA II  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Date Collected:	NSAII-TOPSOIL-1 08/24/05
<b>Volatile Organics</b>		
None Detected		--
<b>PCBs</b>		
None Detected		--
<b>Semivolatile Organics</b>		
None Detected		--
<b>Inorganics</b>		
Antimony		1.00 B
Arsenic		15.0
Barium		32.0
Beryllium		0.400 B
Cadmium		0.340 B
Chromium		7.10
Cobalt		8.80
Copper		11.0
Lead		8.10
Mercury		0.0240 B
Nickel		12.0
Thallium		0.980 B
Tin		1.50 B
Vanadium		11.0
Zinc		50.0

Notes:

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

Data Qualifiers:

Inorganics

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

**ITEM 12  
FORMER OXBOW AREAS J & K  
(GEC420)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

Completed preparation of Final RD/RA Work Plan.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

Submitted Final RD/RA Work Plan to EPA (September 13, 2005).

**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

**ITEM 13  
HOUSATONIC RIVER AREA  
UPPER ½ MILE REACH  
(GEC800)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

On September 29, 2005, BBL (on GE's behalf) performed a round of water column monitoring at nine locations along the Housatonic River (discussed further in Items 14 and 15 below). This sampling was performed during a storm event. As such, the sampling at two of these locations also served as storm event sampling for the ½ Mile Reach of the river. These two locations were: (1) Lyman Street Bridge (Location 4), situated just downstream of the ½ Mile Reach (also discussed in Item 14); and (2) Newell Street Bridge (Location 2), situated just upstream of the ½ Mile Reach (also discussed in Item 15). Composite grab samples were collected for analysis of PCBs (total – filtered and unfiltered), TSS, POC, and chlorophyll-a, as identified in Table 13-1. (Note that the samples identified in this table are also identified in Table 14-1 for Location 4 and in Table 15-1 for Location 2.)

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

None

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

- Submit draft trip reports detailing results of summer 2005 restored bank vegetation inspection and 2005 aquatic habitat structures inspection.
- Submit revised draft proposal for modification of restored bank vegetation monitoring program incorporating Trustee comments.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

- Seepage meter monitoring has not occurred due to increased water levels. EPA and GE have agreed to postpone installation of seepage meters until after the completion of EPA activities in the 1½ Mile Reach.
- Issues relating to total organic carbon (TOC) content in isolation layer remain unresolved. 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.

**ITEM 13  
(cont'd)  
HOUSATONIC RIVER AREA  
UPPER ½ MILE REACH  
(GEC800)  
SEPTEMBER 2005**

**f. Proposed/Approved Work Plan Modifications**

None



**TABLE 13-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**HOUSATONIC RIVER - UPPER 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/Upper 1/2 Mile Reach Storm Event Sampling	Location-2	9/29/05	Water	NEA	PCB, PCB(f), TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling/Upper 1/2 Mile Reach Storm Event Sampling	Location-4	9/29/05	Water	NEA	PCB, PCB(f), TSS, POC, Chlorophyll-A	

Note:

1. (f) - Indicates filtered analysis requested.

**ITEM 14  
HOUSATONIC RIVER AREA  
1½-MILE REACH  
(GEC820)  
SEPTEMBER 2005**

**(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 September 29, 2005, 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, as identified in 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.

**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 SEPTEMBER 2005**

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

Project Name	Field Sample ID	Sample			Laboratory	Analyses	Date Received
		Date	Matrix				
Monthly Water Column Sampling	Location-4	8/30/05	Water		NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling/Upper 1/2 Mile Reach Storm Event Sampling	Location-4	9/29/05	Water		NEA	PCB, PCB (f), TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-6A	8/30/05	Water		NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-6A	9/29/05	Water		NEA	PCB, TSS, POC, Chlorophyll-A	

Note:

1. (f) - Indicates filtered analysis requested.

**TABLE 14-2  
SAMPLE DATA RECEIVED DURING SEPTEMBER 2005**

**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	8/30/2005	ND(0.0000220)	ND(0.0000220)	0.0000420 AF	0.0000370 AG	0.0000790	0.638	13.0	0.0026
LOCATION-6A	Pomeroy Ave. Bridge	8/30/2005	ND(0.0000220)	0.0000290 PE	0.000190 AF	0.000130 AG	0.0003490	1.28	22.4	0.0019

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 parenthesis is the associated detection limit.

Data Qualifiers:

AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PE - Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCBs present in a sample that has undergone environmental alteration.

**ITEM 15  
HOUSATONIC RIVER AREA  
REST OF THE RIVER  
(GECD850)  
SEPTEMBER 2005**

**a. Activities Undertaken/Completed**

- On September 29, 2005, 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 September 29, 2005 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, as identified in Table 15-1.
- Completed routine maintenance activities at Woods Pond Dam.\*
- Continued work on repairs to gate stem at Rising Pond Dam.\*
- In conjunction with EPA, completed collection of cross-section (geometry) data for numerous transects located on the Housatonic River between Woods Pond Dam and Rising Pond Dam. These data will be used to expand EPA's current model of the Housatonic River from Woods Pond Dam downstream to Rising Pond Dam.\*
- Performed maintenance of the biota consumption advisory signs posted along the Housatonic River. Missing signs were noted and replaced.\*

**b. Sampling/Test Results**

See attached tables.

**c. Work Plans/Reports/Documents Submitted**

- Submitted Interim Media Protection Goals (IMPG) Proposal (September 6, 2005).\*
- Submitted letter report summarizing the soil PCB data collected during 2005 from three properties located adjacent to the Housatonic River in the reach between Woods Pond and Rising Pond (Reach 7) (September 12, 2005).

**ITEM 15**  
**(cont'd)**  
**HOUSATONIC RIVER AREA**  
**REST OF THE RIVER**  
**(GEC850)**  
**SEPTEMBER 2005**

**c. Work Plans/Reports/Documents Submitted (cont'd)**

- Submitted report from Academy of Natural Sciences of Philadelphia (on GE's behalf) on 2004 fish sampling and 2005 benthic insect sampling in Connecticut portion of River (September 13, 2005).

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

- Continue Housatonic River monthly water column monitoring.
- Continue work on repairs to gate stem at Rising Pond Dam.\*

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

None

**TABLE 15-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

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

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Monthly Water Column Sampling	HR-D1 (Location-12)	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	HR-D1 (Location-12)	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-1	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-1	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-10	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-10	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-12	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-12	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-13	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-13	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling/Upper 1/2 Mile Reach Storm Event Sampling	Location-2	9/29/05	Water	NEA	PCB, PCB (f), TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-2	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-7	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	
Monthly Water Column Sampling	Location-7	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-9	8/30/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	9/16/05
Monthly Water Column Sampling	Location-9	9/29/05	Water	NEA	PCB, TSS, POC, Chlorophyll-A	

Notes:

1. Field duplicate sample locations are presented in parenthesis.
2. (f) - Indicates filtered analysis requested.

**TABLE 15-2  
SAMPLE DATA RECEIVED DURING SEPTEMBER 2005**

**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 Avenue Bridge	8/30/2005	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.387	2.60	0.0014
LOCATION-2	Newell Street Bridge	8/30/2005	ND(0.0000220)	ND(0.0000220)	0.0000230 AF	0.0000230 AG	0.0000460	0.830	13.7	0.0030
LOCATION-7	Holmes Road Bridge	8/30/2005	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.000290 AG	0.000290	0.923	24.0	0.0065
LOCATION-9	New Lenox Road Bridge	8/30/2005	ND(0.0000220)	0.0000250 PE	0.0000340 AF	0.0000530 AG	0.000112	1.39	4.60	0.0028
LOCATION-10	Headwaters of Woods Pond	8/30/2005	ND(0.0000220)	0.0000250 PE	0.0000350 AF	0.0000320 AG	0.0000920	0.312	2.00	0.0083
LOCATION-12	Schweitzer Bridge	8/30/2005	ND(0.0000220)	ND(0.0000220)	0.0000310 AF	0.0000370 AG	0.0000680	0.325	1.80	0.0176
		8/30/2005	[ND(0.0000220)]	[0.0000330 PE]	[0.0000400 AF]	[0.0000470 AG]	[0.000120]	[0.391]	[2.20]	[0.0175]
LOCATION-13	Division Street Bridge	8/30/2005	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.241	1.50	0.0068

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 parenthesis is the associated detection limit.
4. Field duplicate sample results are presented in brackets.

Data Qualifiers:

AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PE - Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCBs.  
present in a sample that has undergone environmental alteration.



**ITEMS 16 & 17  
HOUSATONIC RIVER FLOODPLAIN  
RESIDENTIAL AND NON-RESIDENTIAL  
PROPERTIES ADJACENT TO 1½-MILE REACH  
(GEC710 AND GEC720)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Continued remediation at the Group 3A, 3B, and 3D floodplain properties.
- Initiated remediation at the Group 3C floodplain properties.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

None

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

- Continue remediation at Group 3A, 3B, 3C, and 3D properties.
- Select Remediation Contractor for Phase 4 properties.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

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

**f. Proposed/Approved Work Plan Modifications**

None

**ITEM 18**  
**HOUSATONIC RIVER FLOODPLAIN**  
**CURRENT RESIDENTIAL PROPERTIES**  
**DOWNSTREAM OF CONFLUENCE**  
**(ACTUAL/POTENTIAL LAWNS)**  
**(GEC730)**  
**SEPTEMBER 2005**

**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  
(GEC600)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Performed water level monitoring at Silver Lake staff gauge and monitoring wells surrounding the lake (see Item 21.a).
- Continued performance of Stage 3 of the Bench-Scale study for sediments in accordance with the Bench-Scale Study Work Plan.
- Conducted monthly bench-scale overburden water sampling for PCB analysis, as identified in Table 20-1.

**b. Sampling/Test Results Received**

None

**c. Work Plans/Reports/Documents Submitted**

None

**d. Upcoming Scheduled Activities (next six weeks)**

- Continue water level monitoring at well pairs surrounding the lake.
- Continue Bench-Scale study for sediments in accordance with the Bench-Scale Study Work Plan.
- Initiate supplemental soil sampling at certain properties adjacent to lake in accordance with GE's Second Interim Pre-Design Investigation Report for Soils Adjacent to Silver Lake, as conditionally approved by EPA on August 30, 2005.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

None

**TABLE 20-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**SILVER LAKE AREA  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
Silver Lake Bench Scale Study	SL-BS-D10-2	9/26/05	Water	NEA	PCB	
Silver Lake Bench Scale Study	SL-BS-D11-2	9/26/05	Water	NEA	PCB	
Silver Lake Bench Scale Study	SL-BS-D12-2	9/26/05	Water	NEA	PCB	
Silver Lake Bench Scale Study	SL-BS-D14-2	9/26/05	Water	NEA	PCB	
Silver Lake Bench Scale Study	SL-BS-D16-2	9/26/05	Water	NEA	PCB	

**ITEM 21  
GROUNDWATER MANAGEMENT AREAS  
PLANT SITE 1 (GMA 1)  
(GECD310)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

**General**

- Conducted routine groundwater elevation and NAPL monitoring.
- Conducted the semi-annual bailing round at all wells found to contain NAPL during the prior year.
- Performed inspections of wells to be sampled in fall 2005 that have not been otherwise monitored recently.
- Performed minor repairs to certain wells, as identified during well inspections.

**East Street Area 1-North and South:**

- Continued automated groundwater and NAPL pumping at North Side and South Side Caissons. Approximately 4 gallons of LNAPL were recovered from the North Side Caisson, and approximately 9 gallons of LNAPL were recovered from the South Side Caisson in September.
- Collected approximately 5.016 liters (1.324 gallons) of LNAPL from wells in this area in September.

**East Street Area 2-South:**

- Continued automated groundwater and LNAPL removal activities. A total of approximately 2,629,649 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 749 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 40 gallons of DNAPL from pumping system RW-3(X).
- Continued routine well monitoring and manual NAPL removal activities. Approximately 16.442 liters (4.338 gallons) of LNAPL and 3.214 liters (0.848 gallon) of DNAPL were removed from wells in this area during September.
- Treated/discharged 2,873,230 gallons of water through 64G Groundwater Treatment Facility.

**ITEM 21**  
**(cont'd)**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 1 (GMA 1)**  
**(GEC310)**  
**SEPTEMBER 2005**

**a. Activities Undertaken/Completed (cont'd)**

**East Street Area 2-North:**

- Continued routine well monitoring and NAPL removal activities. Approximately 1.043 liters (0.275 gallon) of LNAPL and 0.056 liter (0.015 gallon) of DNAPL were removed from wells in this area during September.

**20s, 30s, and 40s Complexes:**

- Continued routine well monitoring and manual NAPL removal activities. Approximately 0.019 liter (0.005 gallon) of LNAPL was removed from wells in this area during September.

**Lyman Street Area:**

- Continued automated groundwater and NAPL removal activities. A total of approximately 198,753 gallons of groundwater was recovered from pumping systems RW-1R, RW-2, and RW-3. No LNAPL was removed from the automated recovery system during September.
- Continued routine well monitoring and manual NAPL removal activities. Approximately 1.647 liters (0.435 gallon) of LNAPL and 4.967 liters (1.311 gallons) of DNAPL were removed from wells in this area during September.

**Newell Street Area II:**

- Continued routine well monitoring and manual NAPL removal activities. Approximately 1.483 liters (0.391 gallon) of LNAPL and 2.630 liter (0.694 gallon) of DNAPL were removed from wells in this area during September.
- Collected samples of DNAPL from two wells in this area (MW-1S and N2SC-8) for flashpoint analysis, as identified in Table 21-1.

**Silver Lake Area:**

- Continued routine monitoring of monitoring well pairs around lake and staff gauge in lake.

**b. Sampling/Test Results Received**

See attached tables.

**ITEM 21  
(cont'd)  
GROUNDWATER MANAGEMENT AREAS  
PLANT SITE 1 (GMA 1)  
(GECD310)  
SEPTEMBER 2005**

**c. Work Plans/Reports/Documents Submitted**

None

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

- Continue routine monitoring activities.
- Conduct fall 2005 groundwater elevation/NAPL monitoring event.
- Initiate fall 2005 interim groundwater quality monitoring activities.
- Following EPA approval of proposed activities contained in GE's Spring 2005 NAPL Monitoring Report (submitted on August 30, 2005), GE will:
  - Install LNAPL monitoring wells GMA1-22, GMA1-23, and GMA1-24 in East Street Area 2-South.
  - Remove oil skimmer from well 40R and place it in well GMA1-17W.
  - Decommission 31 wells at the Lyman Street Area.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

The automated DNAPL recovery systems for Newell Street Area II were shut down on July 25, 2005 pursuant to EPA approval of GE's June 7 and 23, 2005 proposals. Each system has been disconnected from the associated recovery wells and the System 1 control shed has been removed. Pipelines scheduled for replacement have been drained and removed. Two replacement recovery wells (N2SC-1I(R) and N2SC-3I(R)) have been installed and developed. The upgraded recovery system will be completed and activated approximately 2 to 3 months after completion of the EPA-approved soil remediation activities in this area.

**f. Proposed/Approved Work Plan Modifications**

Several program modifications were proposed in the Spring 2005 NAPL Monitoring Report (see Item 21.d above).

**TABLE 21-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
DNAPL Sampling	MW-1S-DNAPL-1	9/7/05	DNAPL	SGS	Flashpoint	9/13/05
DNAPL Sampling	N2SC-08-DNAPL-1	9/7/05	DNAPL	SGS	Flashpoint	9/13/05



TABLE 21-2  
DATA RECEIVED DURING SEPTEMBER 2005

DNAPL SAMPLING  
GROUNDWATER MANAGEMENT AREA 1  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Parameter	Sample ID: Date Collected:	MW-1S-DNAPL-1 09/07/05	N2SC-08-DNAPL-1 09/07/05
<b>Conventional Parameters</b>			
Flash Point (°F)		>180	>180

Note:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of flashpoint.

**TABLE 21-3**  
**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**  
**September 2005**

<b>Caisson</b>	<b>Month</b>	<b>Vol. LNAPL Collected (gallon)</b>	<b>Vol. Water Recovered (gallon)</b>	<b>Percent Downtime</b>
Northside	September 2004	4.0	24,300	
	October 2004	0.0	25,000	0.30
	November 2004	0.0	18,300	0.31 - Power Outage
	December 2004	35.0	32,200	
	January 2005	2.0	32,600	
	February 2005	3.0	24,700	
	March 2005	1.0	34,700	
	April 2005	0.0	37,100	1.72 - Power Outage
	May 2005	20.0	16,300	
	June 2005	22.0	21,000	8.57 - Maintenance
	June 2005	0.0	16,600	
	July 2005	1.0	16,000	
September 2005	4.0	10,400	4.91	
Southside	September 2004	0.0	102,700	
	October 2004	2.0	82,700	0.30
	November 2004	2.0	69,600	0.31 - Power Outage
	December 2005	4.0	98,300	
	January 2005	1.0	77,400	
	February 2005	1.0	76,500	
	March 2005	1.0	98,200	
	April 2005	0.0	99,900	1.72 - Power Outage
	May 2005	0.0	86,600	
	June 2005	2.0	100,300	
	July 2005	0.0	45,800	
	August 2005	1.0	37,100	
September 2005	9.0	56,300	4.91	

**TABLE 21-4**  
**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**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	September 2005 Removal (liters)
<b>GMA 1 - East Street Area 1 - North</b>						
49	9/28/2005	6.80	6.78	0.02	0.074	0.074
105	9/28/2005	10.17	8.25	1.92	1.185	1.185
106	9/28/2005	12.44	10.30	2.14	1.320	1.320
131	9/28/2005	5.72	5.65	0.07	0.024	0.024
<b>GMA 1 - East Street Area 1 - South</b>						
34	9/28/2005	7.50	7.45	0.05	0.031	0.031
35	9/28/2005	7.05	7.02	0.03	0.019	0.019
45	9/28/2005	9.00	6.80	2.20	1.357	1.357
72	9/28/2005	8.62	8.09	0.53	0.377	0.377
76	9/28/2005	8.91	7.89	1.02	0.629	0.629

**Total LNAPL Removal East Street Area 1 - North for September 2005: 2.603 liters**  
**0.687 gallons**

**Total LNAPL Removal East Street Area 1 - South for September 2005: 2.413 liters**  
**0.637 gallons**

**Total Manual LNAPL Removal for September 2005: 5.016 liters**  
**1.324 gallons**

Note:

1. ft BMP - feet Below Measuring Point.

**TABLE 21-5  
ROUTINE WELL MONITORING  
EAST STREET AREA 1 - NORTH & SOUTH  
GROUNDWATER MANAGEMENT AREA 1  
CONSENT DECREE MONTHLY STATUS REPORT  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
September 2005**

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)
<b>GMA 1 - East Street Area 1 - North</b>									
49	999.90	9/28/2005	6.80	6.78	0.02	---	20.60	0.00	993.12
105	1002.85	9/28/2005	10.17	8.25	1.92	---	17.40	0.00	994.47
106	1004.06	9/28/2005	12.44	10.30	2.14	---	12.50	0.00	993.61
131	1001.18	9/28/2005	5.72	5.65	0.07	---	6.33	0.00	995.53
140	1000.30	9/28/2005	8.88	---	0.00	---	15.84	0.00	991.42
ES1-08	1000.85	9/28/2005	7.96	---	0.00	---	13.48	0.00	992.89
North Caisson	997.84	9/8/2005	17.40	P	< 0.01	---	19.80	0.00	980.44
North Caisson	997.84	9/14/2005	13.25	13.23	0.02	---	19.80	0.00	984.61
North Caisson	997.84	9/23/2005	18.50	18.49	0.01	---	19.80	0.00	979.35
North Caisson	997.84	9/28/2005	18.40	18.38	0.02	---	19.80	0.00	979.46
<b>GMA 1 - East Street Area 1 - South</b>									
31R	1,000.23	9/19/2005	10.61	---	0.00	---	15.05	0.00	989.62
33	999.50	9/28/2005	8.98	---	0.00	---	21.36	0.00	990.52
34	999.90	9/28/2005	7.50	7.45	0.05	---	21.02	0.00	992.45
35	1000.15	9/28/2005	7.05	7.02	0.03	---	9.60	0.00	993.13
45	1000.10	9/28/2005	9.00	6.80	2.20	---	27.40	0.00	993.15
72	1000.62	9/28/2005	8.62	8.09	0.53	---	21.95	0.00	992.49
72R	1000.92	9/19/2005	7.83	---	0.00	---	13.31	0.00	993.09
76	1000.45	9/28/2005	8.91	7.89	1.02	---	18.73	0.00	992.49
139R	986.91	9/16/2005	13.47	---	0.00	---	14.20	0.00	973.44
GMA1-6	1000.44	9/15/2005	8.87	---	0.00	---	15.09	0.00	991.57
South Caisson	1001.11	9/8/2005	12.60	12.55	0.05	---	15.00	0.00	988.56
South Caisson	1001.11	9/14/2005	14.32	14.25	0.07	---	15.00	0.00	986.86
South Caisson	1001.11	9/23/2005	14.30	14.29	0.01	---	15.00	0.00	986.82
South Caisson	1001.11	9/28/2005	14.53	14.50	0.03	---	15.00	0.00	986.61

**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 NAPL is present at a thickness < 0.01 feet, the corresponding thickness is recorded as such.

**TABLE 21-6**  
**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**  
**September 2005**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
40R	September 2004	0		
	October 2004	0		0.30 - Power Outage
	November 2004	0		0.31 - Power Outage
	December 2004	0		
	January 2005	0		
	February 2005	0		
	March 2005	0		
	April 2005	0		1.72 - Power Outage
	May 2005	0		0.96 - Maintenance
	June 2005	0		0.36 - Power Outage
	July 2005	0		
	August 2005	0		
	September 2005	0		
64R	September 2004	350	675,600	
	October 2004	175	472,200	0.30 - Power Outage
	November 2004	150	566,100	0.31 - Power Outage
	December 2004	350	630,500	
	January 2005	575	357,900	
	February 2005	400	228,400	
	March 2005	175	292,400	
	April 2005	575	1,071,000	1.72 - Power Outage
	May 2005	550	931,300	0.96 - Maintenance
	June 2005	325	643,200	0.36 - Power Outage
	July 2005	225	260,800	
	August 2005	250	73,300	
	September 2005	50	10,200	4.91
64S System	September 2004	479	681,275	
	October 2004	324	1,034,272	0.30 - Power Outage
	November 2004	625	902,053	0.31 - Power Outage
	December 2004	91	1,147,526	
	January 2005	75	844,225	
	February 2005	97	821,010	
	March 2005	282	905,525	
	April 2005	499	1,039,179	1.72 - Power Outage
	May 2005	300	660,761	0.96 - Maintenance
	June 2005	275	527,949	0.36 - Power Outage
	July 2005	10	330,937	
	August 2005	218	271,691	13.73 - Maintenance
	September 2005	321	172,650	4.91

**TABLE 21-6**  
**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**  
**September 2005**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
64V <sup>1</sup>	September 2004	1,170	1,385,900	
	October 2004	920	1,221,100	0.30 - Power Outage
	November 2004	551	1,108,200	0.31 - Power Outage
	December 2004	832	1,460,100	
	January 2005	747	1,103,300	
	February 2005	622	1,095,400	
	March 2005	675	1,342,900	
	April 2005	785	1,221,000	1.72 - Power Outage
	May 2005	254	996,400	0.96 - Maintenance
	June 2005	515	1,177,700	0.36 - Power Outage
	July 2005	465	922,700	
	August 2005	581	993,100	
September 2005	349	714,700	4.91	
64X	September 2004	51	518,400	
	October 2004	5	403,200	0.30 - Power Outage
	November 2004	10	388,800	0.31 - Power Outage
	December 2004	10	518,400	
	January 2005	5	388,800	
	February 2005	5	403,200	
	March 2005	5	532,800	
	April 2005	0	417,600	1.72 - Power Outage
	May 2005	0	374,400	0.96 - Maintenance
	June 2005	5	504,000	3.21 - Maint. & Power Outage
	July 2005	15	417,600	3.45 - Maintenance
	August 2005	20	489,600	
September 2005	25	403,200		
RW-2(X)	September 2004	0	1,138,800	0.93
	October 2004	0	911,800	0.30 - Power Outage
	November 2004	0	836,300	0.31 - Power Outage
	December 2004	0	1,111,700	
	January 2005	0	822,500	
	February 2005	0	825,200	
	March 2005	0	1,019,600	
	April 2005	0	859,500	1.72 - Power Outage
	May 2005	0	730,600	0.96 - Maintenance
	June 2005	0	972,100	3.21 - Maint. & Power Outage
	July 2005	0	747,100	
	August 2005	0	982,100	
September 2005	0	721,200	4.91	

**TABLE 21-6**  
**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**  
**September 2005**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
RW-1(S) <sup>2</sup>	September 2004	159	914,647	9.72
	October 2004	1	1,092,740	0.30 - Power Outage
	November 2004	0	977,271	0.31 - Power Outage
	December 2004	11	1,362,634	0.35 - Maintenance
	January 2005	50	998,655	
	February 2005	41	934,203	
	March 2005	43	1,117,949	
	April 2005	1	864,198	22.41 - Maint. & Power Outage
	May 2005	0	912,416	0.96 - Maintenance
	June 2005	0	1,107,860	0.36 - Power Outage
	July 2005	17	813,490	
	August 2005	32	780,217	1.96 - Maintenance
	September 2005	4	527,699	4.91
RW-1(X)	September 2004	10	500,500	
	October 2004	0	501,400	0.30 - Power Outage
	November 2004	0	402,900	0.31 - Power Outage
	December 2004	0	443,700	4.17 - Maintenance
	January 2005	0	389,000	
	February 2005	0	330,400	
	March 2005	0	399,300	
	April 2005	0	354,700	1.72 - Power Outage
	May 2005	0	233,700	0.96 - Maintenance
	June 2005	0	328,300	3.21 - Maint. & Power Outage
	July 2005	0	109,800	
	August 2005	0	142,000	
	September 2005	0	80,000	4.91
RW-3(X)	September 2004	67		
	October 2004	52		0.30 - Power Outage
	November 2004	46		0.31 - Power Outage
	December 2004	66		
	January 2005	53		
	February 2005	37		
	March 2005	64		
	April 2005	53		1.72 - Power Outage
	May 2005	51		0.96 - Maintenance
	June 2005	62		0.36 - Power Outage
	July 2005	44		
	August 2005	51		11.76 - Maintenance
	September 2005	40		

**TABLE 21-6**  
**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**  
**September 2005**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
<b>Summary of Total Automated Removal</b>				
	<b>Water:</b>	<b>2,629,649</b>	<b>Gallons</b>	
	<b>LNAPL:</b>	<b>749</b>	<b>Gallons</b>	
	<b>DNAPL:</b>	<b>40</b>	<b>Gallons</b>	

Notes:

1. The flow meter at recovery well 64V was reset in December 2004.
2. The flow meter at recovery well RW-1(S) was reset in February 2005.



**TABLE 21-7**  
**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**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	September 2005 Removal (liters)
<b>20's Complex</b>						
CC	9/27/2005	22.00	21.97	0.03	0.019	0.019
<b>East Street Area 2 - North</b>						
05-N	9/27/2005	24.91	24.90	0.01	0.006	0.006
14-N	9/27/2005	24.80	23.96	0.84	0.518	0.518
16-N	9/27/2005	33.57	33.50	0.07	0.043	0.043
17-N	9/27/2005	33.92	33.17	0.75	0.463	0.463
23-N	9/27/2005	33.58	33.56	0.02	0.012	0.012
<b>East Street Area 2 - South</b>						
02	9/26/2005	21.17	21.14	0.03	0.019	0.019
05	9/26/2005	17.21	17.18	0.03	0.019	0.019
13	9/26/2005	18.90	18.71	0.19	0.117	0.117
14	9/26/2005	19.40	18.74	0.66	0.407	0.407
25R	9/26/2005	24.60	22.92	1.68	1.036	1.036
26RR	9/27/2005	25.45	24.81	0.64	0.395	0.395
29	9/26/2005	21.15	19.38	1.77	1.092	1.092
30	9/26/2005	16.55	14.55	2.00	1.234	1.234
43	9/26/2005	16.09	16.06	0.03	0.019	0.019
47	9/26/2005	21.00	18.85	2.15	1.326	1.326
48	9/26/2005	19.20	16.82	2.38	1.468	1.468
50	9/26/2005	11.60	11.35	0.25	0.154	0.154
55	9/26/2005	19.60	17.50	2.10	1.296	1.296
58	9/26/2005	14.50	14.15	0.35	0.216	0.216
95-04	9/26/2005	17.92	15.82	2.10	0.731	0.731
95-05	9/26/2005	17.80	16.98	0.82	0.506	0.506
95-07	9/26/2005	23.60	21.20	2.40	0.836	0.836
GMA1-15	9/26/2005	17.30	16.25	1.05	0.648	0.648
GMA1-16	9/26/2005	14.97	14.34	0.63	0.389	0.389
GMA1-17E	9/12/2005	16.60	16.38	0.22	0.136	0.136
GMA1-17W	9/26/2005	22.58	17.30	5.28	3.258	3.258
GMA1-19	9/8/2005	12.15	11.65	0.50	0.308	0.006
	9/16/2005	12.30	11.98	0.32	0.197	
	9/21/2005	12.30	11.95	0.35	0.216	
	9/26/2005	12.30	12.10	0.20	0.123	
M-R	9/26/2005	21.53	21.41	0.12	0.074	0.074

**Total LNAPL Removal East Street Area 2 - South for September 2005: 15.381 liters**  
**4.058 gallons**

**Total LNAPL Removal East Street Area 2 - North for September 2005: 1.043 liters**  
**0.275 gallons**

**Total LNAPL Removal 20's, 30's & 40's Complexs for September 2005: 0.019 liters**  
**0.005 gallons**

**Total LNAPL Removal for September 2005: 16.442 liters**  
**4.338 gallons**

Note:

1. ft BMP - feet Below Measuring Point.

**TABLE 21-8**  
**WELL MONITORING AND RECOVERY OF DNAPL**  
**EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	September 2005 Removal (liters)
<b>East Street Area 2 - North</b>						
05-N	9/27/2005	24.91	27.41	0.09	0.056	0.056
<b>East Street Area 2 - South</b>						
E2SC-03I	9/27/2005	10.50	--	5.12	3.159	3.159

**Total DNAPL Removal East Street Area 2 - South for September 2005: 3.159 liters**  
**0.833 gallons**

**Total DNAPL Removal East Street Area 2 - North for September 2005: 0.056 liters**  
**0.015 gallons**

**Total LNAPL Removal 20's, 30's & 40's Complexes for September 2005: 0.000 liters**  
**0.000 gallons**

**Total DNAPL Removal for September 2005: 3.214 liters**  
**0.848 gallons**

Note:

1. ft BMP - feet Below Measuring Point.

**TABLE 21-9**  
**64G TREATMENT PLANT DISCHARGE DATA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

<b>Date</b>	<b>Housatonic River Discharge (gallons)</b>	<b>Recharge Pond Discharge (gallons)</b>	<b>Total Discharge (gallons)</b>
September 2004	5,075,190	248,505	5,323,695
October 2004	6,097,384	260,847	6,358,231
November 2004	5,521,300	180,462	5,701,762
December 2004	5,656,177	152,428	5,808,605
January 2005	5,650,380	112,791	5,763,171
February 2005	4,576,005	195,380	4,771,385
March 2005	5,005,313	235,153	5,240,466
April 2005	5,759,380	172,867	5,932,247
May 2005	4,962,650	288,751	5,251,401
June 2005	4,057,780	318,355	4,376,135
July 2005	3,212,250	389,015	3,601,265
August 2005	2,778,090	356,961	3,135,051
September 2005	2,537,520	335,710	2,873,230

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 21-10  
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  
September 2005**

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)
<b>20's Complex</b>									
CC	998.84	9/27/2005	22.00	21.97	0.03	---	27.20	0.00	976.87
EE	1,004.27	9/27/2005	26.65	---	0.00	---	33.65	0.00	977.62
FF	1,005.70	9/27/2005	26.68	---	0.00	---	32.74	0.00	979.02
II	1,007.26	9/27/2005	30.56	30.50	0.06	---	31.70	0.00	976.76
U	998.89	9/27/2005	22.96	---	0.00	---	26.56	0.00	975.93
<b>30's Complex</b>									
95-15	986.38	9/12/2005	9.09	---	0.00	---	16.67	0.00	977.29
GMA1-10	984.86	9/12/2005	8.60	---	0.00	---	19.82	0.00	976.26
GMA1-12	992.26	9/12/2005	16.55	---	0.00	---	22.14	0.00	975.71
RF-02	982.43	9/12/2005	6.73	---	0.00	---	18.30	0.00	975.70
RF-03	985.40	9/12/2005	9.90	---	0.00	---	18.44	0.00	975.50
RF-03D	985.31	9/12/2005	8.60	---	0.00	---	36.00	0.00	976.71
RF-16	987.91	9/12/2005	10.35	---	0.00	---	20.73	0.00	977.56
<b>40s Complex</b>									
95-17	1,007.67	9/12/2005	24.45	---	0.00	---	28.32	0.00	983.22
RF-4	1,011.99	9/12/2005	17.30	---	0.00	---	23.95	0.00	994.69
<b>East Street Area 2 - North</b>									
05-N	1,009.23	9/27/2005	24.91	24.90	0.01	27.41	27.50	0.09	984.33
11-N	1,010.85	9/27/2005	33.38	---	0.00	---	25.70	0.00	977.47
14-N	1,010.53	9/27/2005	24.80	23.96	0.84	---	30.35	0.00	986.51
16-N	1,010.65	9/27/2005	33.57	33.50	0.07	---	37.41	0.00	977.15
17-N	1,010.49	9/27/2005	33.92	33.17	0.75	---	38.81	0.00	977.27
23-N	1,011.13	9/27/2005	33.58	33.56	0.02	---	38.30	0.00	977.57
24-N	1,010.50	9/27/2005	32.61	---	0.00	---	35.30	0.00	977.89
ES1-05	1,023.33	9/14/2005	41.62	---	0.00	---	44.27	0.00	981.71
ES1-27R	1,023.19	9/14/2005	10.55	---	0.00	---	19.15	0.00	1,012.64
<b>East Street Area 2 - South</b>									
02	995.64	9/26/2005	21.17	21.14	0.03	---	23.38	0.00	974.50
05	996.10	9/26/2005	17.21	17.18	0.03	---	23.44	0.00	978.92
09R	986.88	9/26/2005	14.70	---	0.00	---	19.58	0.00	972.18
13	990.88	9/26/2005	18.90	18.71	0.19	---	22.60	0.00	972.16
14	991.61	9/26/2005	19.40	18.74	0.66	---	25.68	0.00	972.82
19	983.59	9/8/2005	11.60	---	0.00	---	19.93	0.00	971.99
19	983.59	9/12/2005	11.73	---	0.00	---	19.90	0.00	971.86
19	983.59	9/21/2005	11.80	---	0.00	---	19.90	0.00	971.79
19	983.59	9/27/2005	11.74	---	0.00	---	19.90	0.00	971.85
25R	998.31	9/26/2005	24.60	22.92	1.68	---	30.80	0.00	975.27
26RR	1,000.58	9/27/2005	25.45	24.81	0.64	---	28.54	0.00	975.73
28	991.86	9/26/2005	18.30	---	0.00	---	21.70	0.00	973.56
29	991.59	9/26/2005	21.15	19.38	1.77	---	22.05	0.00	972.09
30	989.34	9/26/2005	16.55	14.55	2.00	---	20.41	0.00	974.65
40R	991.60	9/8/2005	19.85	19.55	0.30	---	NM	0.00	972.03
40R	991.60	9/14/2005	20.20	19.80	0.40	---	NM	0.00	971.77

**TABLE 21-10  
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  
September 2005**

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)
40R	991.60	9/23/2005	18.73	18.73	0.00	---	NM	0.00	972.87
40R	991.60	9/28/2005	20.70	20.25	0.45	---	NM	0.00	971.32
43	989.67	9/26/2005	16.09	16.06	0.03	---	22.50	0.00	973.61
47	991.09	9/26/2005	21.00	18.85	2.15	---	23.06	0.00	972.09
48	992.39	9/26/2005	19.20	16.82	2.38	---	22.67	0.00	975.40
49R	988.71	9/12/2005	18.60	---	0.00	---	24.83	0.00	970.11
49RR	989.80	9/12/2005	17.60	---	0.00	---	23.05	0.00	972.20
50	985.79	9/26/2005	11.60	11.35	0.25	---	23.46	0.00	974.42
52	985.18	9/15/2005	12.91	---	0.00	---	23.91	0.00	972.27
55	989.45	9/26/2005	19.60	17.50	2.10	---	30.05	0.00	971.80
58	985.79	9/26/2005	14.50	14.15	0.35	---	24.15	0.00	971.62
64R	993.37	9/8/2005	17.30	P	< 0.01	---	19.00	0.00	976.07
64R	993.37	9/14/2005	17.32	P	< 0.01	---	19.00	0.00	976.05
64R	993.37	9/23/2005	17.48	17.48	0.00	---	19.00	0.00	975.89
64R	993.37	9/28/2005	17.65	17.63	0.02	---	19.00	0.00	975.74
64S	984.48	9/8/2005	19.61	19.60	0.01	---	28.70	0.00	964.88
64S	984.48	9/14/2005	19.56	P	< 0.01	---	28.70	0.00	964.92
64S	984.48	9/23/2005	19.15	---	0.00	---	28.70	0.00	965.33
64S	984.48	9/28/2005	18.93	18.92	0.01	---	28.70	0.00	965.56
64S-Caisson	NA	9/8/2005	10.60	10.58	0.02	---	14.55	0.00	NA
64S-Caisson	NA	9/14/2005	10.90	10.89	0.01	---	14.55	0.00	NA
64S-Caisson	NA	9/23/2005	11.10	11.00	0.10	---	14.55	0.00	NA
64S-Caisson	NA	9/28/2005	11.12	11.11	0.01	---	14.55	0.00	NA
64V	987.29	9/8/2005	21.80	21.20	0.60	---	29.60	0.00	966.05
64V	987.29	9/14/2005	22.00	21.30	0.70	---	29.60	0.00	965.94
64V	987.29	9/23/2005	22.10	21.60	0.50	P	29.60	< 0.01	965.66
64V	987.29	9/28/2005	22.00	21.35	0.65	P	29.60	< 0.01	965.89
64X(N)	984.83	9/8/2005	13.18	13.17	0.01	---	15.85	0.00	971.66
64X(N)	984.83	9/14/2005	13.48	13.45	0.03	---	15.85	0.00	971.38
64X(N)	984.83	9/23/2005	13.31	13.30	0.01	---	15.85	0.00	971.53
64X(N)	984.83	9/28/2005	13.49	13.48	0.01	---	15.85	0.00	971.35
64X(S)	981.56	9/8/2005	16.08	16.03	0.05	---	23.82	0.00	965.53
64X(S)	981.56	9/14/2005	16.20	16.15	0.05	---	23.82	0.00	965.41
64X(S)	981.56	9/23/2005	16.12	16.10	0.02	---	23.82	0.00	965.46
64X(S)	981.56	9/28/2005	16.25	16.20	0.05	---	23.82	0.00	965.36
64X(W)	984.87	9/8/2005	19.25	19.23	0.02	---	24.35	0.00	965.64
64X(W)	984.87	9/14/2005	19.41	19.37	0.04	---	24.35	0.00	965.50
64X(W)	984.87	9/23/2005	19.40	19.37	0.03	---	24.35	0.00	965.50
64X(W)	984.87	9/28/2005	19.45	19.43	0.02	---	24.35	0.00	965.44
95-01	983.77	9/12/2005	10.95	---	0.00	---	17.20	0.00	972.82
95-04	988.70	9/26/2005	17.92	15.82	2.10	---	21.71	0.00	972.73
95-05	989.45	9/26/2005	17.80	16.98	0.82	---	20.66	0.00	972.41
95-07	994.91	9/26/2005	23.60	21.20	2.40	---	29.45	0.00	973.54
3-6C-EB-22	986.94	9/12/2005	14.63	---	0.00	---	20.01	0.00	972.31

**TABLE 21-10  
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  
September 2005**

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)
E2SC-03I	982.12	9/27/2005	10.50	---	0.00	37.26	42.38	5.12	971.62
E2SC-17	985.38	9/27/2005	12.58	---	0.00	---	25.75	0.00	972.80
E2SC-23	992.07	9/12/2005	18.70	---	0.00	---	21.15	0.00	973.37
E2SC-24	987.90	9/12/2005	16.53	---	0.00	---	21.60	0.00	971.37
ES2-02A	979.63	9/15/2005	7.70	---	0.00	---	17.49	0.00	971.93
ES2-06	986.00	9/15/2005	14.37	---	0.00	---	34.36	0.00	971.63
ES2-06	986.00	9/12/2005	14.50	---	0.00	---	34.35	0.00	971.50
GMA1-13	991.41	9/12/2005	19.21	---	0.00	---	27.18	0.00	972.20
GMA1-14	997.43	9/12/2005	21.25	---	0.00	---	23.50	0.00	976.18
GMA1-15	988.59	9/26/2005	17.30	16.25	1.05	---	17.83	0.00	972.27
GMA1-16	986.82	9/26/2005	14.97	14.34	0.63	---	20.00	0.00	972.44
GMA1-17E	993.03	9/12/2005	16.60	16.38	0.22	---	17.30	0.00	976.63
GMA1-17W	992.63	9/26/2005	22.58	17.30	5.28	---	23.25	0.00	974.96
GMA1-19	984.28	9/8/2005	12.15	11.65	0.50	---	17.13	0.00	972.60
GMA1-19	984.28	9/16/2005	12.30	11.98	0.32	---	17.13	0.00	972.28
GMA1-19	984.28	9/21/2005	12.30	11.95	0.35	---	17.13	0.00	972.31
GMA1-19	984.28	9/26/2005	12.30	12.10	0.20	---	17.14	0.00	972.17
GMA1-20	983.49	9/8/2005	11.14	---	0.00	---	17.30	0.00	972.35
GMA1-20	983.49	9/12/2005	11.34	---	0.00	---	17.30	0.00	972.15
GMA1-20	983.49	9/21/2005	11.40	---	0.00	---	17.30	0.00	972.09
GMA1-20	983.49	9/27/2005	11.41	---	0.00	---	17.30	0.00	972.08
GMA1-21	985.68	9/8/2005	13.32	---	0.00	---	19.53	0.00	972.36
GMA1-21	985.68	9/12/2005	13.48	---	0.00	---	19.53	0.00	972.20
GMA1-21	985.68	9/21/2005	13.55	---	0.00	---	19.48	0.00	972.13
GMA1-21	985.68	9/27/2005	13.53	---	0.00	---	19.53	0.00	972.15
HR-C-RW-1	NA	9/27/2005	7.93	---	0.00	---	22.70	0.00	NA
HR-G1-MW-3	980.21	9/15/2005	9.10	---	0.00	---	17.86	0.00	971.11
HR-G2-MW-1	982.60	9/12/2005	11.44	---	0.00	---	18.24	0.00	971.16
HR-G2-MW-2	981.39	9/12/2005	9.60	---	0.00	---	17.66	0.00	971.79
HR-G2-MW-3	987.14	9/12/2005	15.50	---	0.00	---	22.00	0.00	971.64
HR-G2-RW-1	976.88	9/12/2005	7.25	---	0.00	---	18.69	0.00	971.46
M-R	998.19	9/26/2005	21.53	21.41	0.12	---	29.22	0.00	976.77
P3	989.25	9/26/2005	5.00	---	0.00	---	13.09	0.00	984.25
RW-1(S)	987.23	9/8/2005	19.30	19.20	0.10	---	28.60	0.00	968.02
RW-1(S)	987.23	9/14/2005	19.60	19.00	0.60	---	28.60	0.00	968.19
RW-1(S)	987.23	9/23/2005	19.20	19.05	0.15	---	28.60	0.00	968.17
RW-1(S)	987.23	9/28/2005	19.20	18.90	0.30	---	28.60	0.00	968.31
RW-1(X)	982.68	9/8/2005	14.15	---	0.00	---	20.80	0.00	968.53
RW-1(X)	982.68	9/14/2005	11.50	---	0.00	---	20.80	0.00	971.18
RW-1(X)	982.68	9/23/2005	14.21	---	0.00	---	20.80	0.00	968.47
RW-1(X)	982.68	9/28/2005	14.00	---	0.00	---	20.80	0.00	968.68
RW-2(X)	985.96	9/8/2005	16.20	---	0.00	---	15.30	0.00	969.76
RW-2(X)	985.96	9/14/2005	16.40	---	0.00	---	15.30	0.00	969.56
RW-2(X)	985.96	9/23/2005	16.40	---	0.00	---	15.30	0.00	969.56

**TABLE 21-10  
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  
September 2005**

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)
RW-2(X)	985.96	9/28/2005	16.40	---	0.00	---	15.30	0.00	969.56
RW-3(X)	980.28	9/8/2005	8.20	---	0.00	41.82	44.40	2.58	972.08
RW-3(X)	980.28	9/14/2005	8.25	---	0.00	41.75	44.40	2.65	972.03
RW-3(X)	980.28	9/23/2005	9.90	---	0.00	41.90	44.40	2.50	970.38
RW-3(X)	980.28	9/28/2005	9.80	---	0.00	42.10	44.40	2.30	970.48
<b>Housatonic River</b>									
SG-HR-1	990.73	9/6/2005	19.08	See Note 7 regarding depth to water					971.65
SG-HR-1	990.73	9/14/2005	20.10	See Note 7 regarding depth to water					970.63
SG-HR-1	990.73	9/21/2005	19.96	See Note 7 regarding depth to water					970.77
SG-HR-1	990.73	9/29/2005	18.30	See Note 7 regarding depth to water					972.43

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. NM indicates information not measured.
5. P indicates that LNAPL is present at a thickness that is < 0.01 feet, the corresponding thickness is recorded as such.
6. 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 of the well casing.
7. 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 reference point to the water surface.

**TABLE 21-11**  
**ACTIVE RECOVERY SYSTEMS MONTHLY SUMMARY**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

<b>Month / Year</b>	<b>Volume Water Pumped (gallon)</b>	<b>RW-1 DNAPL Recovered (gallon)</b>	<b>RW-1R LNAPL Recovered (gallon)</b>	<b>RW-3 LNAPL Recovered (gallon)</b>
September 2003	309,162	--	--	20
October 2003	485,653	--	--	20
November 2003	363,979	--	--	--
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	--	--	--
September 2004	499,209	--	1	20
October 2004	426,078	--	--	--
November 2004	421,409	--	--	12
December 2004	539,528	--	--	10
January 2005	443,634	--	--	10
February 2005	409,113	--	--	5
March 2005	455,192	--	--	5
April 2005	425,145	--	--	5
May 2005	357,497	--	--	--
June 2005	422,006	--	--	10
July 2005	310,647	--	5	10
August 2005	310,647	--	--	--
September 2005	198,753	--	--	--

**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 7 hours of downtime for RW-1/RW-1R during September 2005.



**TABLE 21-12**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

<b>Well Name</b>	<b>Date</b>	<b>Depth to Water (ft BMP)</b>	<b>Depth to LNAPL (ft BMP)</b>	<b>LNAPL Thickness (feet)</b>	<b>LNAPL Removed (liters)</b>	<b>September 2005 Removal (liters)</b>
LS-21	9/28/2005	12.35	11.30	1.05	0.648	0.648
LS-23	9/28/2005	12.75	12.28	0.47	0.290	0.290
LS-30	9/28/2005	14.42	14.41	0.010	0.006	0.006
LS-31	9/28/2005	14.86	14.24	0.620	0.197	0.197
LS-35	9/28/2005	15.22	14.76	0.46	0.284	0.284
LSSC-06	9/28/2005	11.99	11.63	0.36	0.222	0.222

**Total Manual LNAPL Removal for September 2005: 1.647 liters**

**0.435 gallons**

Note:

1. ft BMP - feet Below Measuring Point.

**TABLE 21-13  
 MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL  
 LYMAN STREET AREA  
 GROUNDWATER MANAGEMENT AREA 1  
 CONSENT DECREE MONTHLY STATUS REPORT  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	September 2005 Removal (liters)
LS-04	9/28/2005	12.41	17.55	0.59	0.364	0.364
LS-30	9/28/2005	14.42	17.75	4.45	2.745	2.745
LS-31	9/28/2005	14.86	22.50	0.82	0.506	0.506
LS-34	9/28/2005	13.83	28.10	0.43	0.265	0.265
LS-38	9/28/2005	15.52	25.02	0.03	0.019	0.019
LSSC-07	9/8/2005	10.70	24.75	0.33	0.204	0.777
	9/16/2005	11.01	24.80	0.28	0.173	
	9/21/2005	10.90	25.08	0.00	0.204	
	9/28/2005	10.81	24.76	0.32	0.197	
LSSC-08I	9/16/2005	12.41	23.37	0.01	0.006	0.019
	9/28/2005	12.02	23.36	0.02	0.013	
LSSC-34I	9/28/2005	13.19	28.04	0.44	0.271	0.271

**Total Manual DNAPL Removal for September 2005: 4.967 liters**

**1.311 gallons**

Note:

1. ft BMP - feet Below Measuring Point.

**TABLE 21-14**  
**ROUTINE WELL MONITORING**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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	9/19/2005	8.40	---	0.00	---	19.70	0.00	974.47	
EPA-01	983.04	9/19/2005	12.30	---	0.00	---	22.65	0.00	970.74	
LS-04	984.51	9/28/2005	12.41	---	0.00	17.55	18.14	0.59	972.10	
LS-13	984.65	9/28/2005	Buried Under Rockpile							NA
LS-21	983.42	9/28/2005	12.35	11.30	1.05	---	12.48	0.00	972.05	
LS-23	984.38	9/28/2005	12.75	12.28	0.47	---	15.30	0.00	972.07	
LS-24	986.58	9/19/2005	Unable to gauge; pile of bricks on well							NA
LS-29	988.25	9/19/2005	15.09	---	0.00	---	34.55	0.00	973.16	
LS-30	986.440	9/28/2005	14.42	14.41	0.010	17.75	22.20	4.45	972.03	
LS-31	987.090	9/28/2005	14.86	14.24	0.620	22.50	23.32	0.82	972.81	
LS-32	985.75	9/28/2005	14.15	---	0.00	---	22.62	0.00	971.60	
LS-34	985.79	9/28/2005	13.83	---	0.00	28.10	28.53	0.43	971.96	
LS-35	986.80	9/28/2005	15.22	14.76	0.46	---	21.65	0.00	972.01	
LS-38	986.95	9/28/2005	15.52	---	0.00	25.02	25.05	0.03	971.43	
LS-44	980.78	9/19/2005	9.85	---	0.00	---	24.76	0.00	970.93	
LSSC-06	984.91	9/28/2005	11.99	11.63	0.36	---	19.33	0.00	973.25	
LSSC-07	982.48	9/8/2005	10.70	---	0.00	24.75	25.08	0.33	971.78	
LSSC-07	982.48	9/16/2005	11.01	---	0.00	24.80	25.08	0.28	971.47	
LSSC-07	982.48	9/21/2005	10.90	---	0.00	24.75	25.08	0.33	971.58	
LSSC-07	982.48	9/28/2005	10.81	---	0.00	24.76	25.08	0.32	971.67	
LSSC-08I	983.13	9/8/2005	12.18	---	0.00	---	23.36	0.00	970.95	
LSSC-08I	983.13	9/16/2005	12.41	---	0.00	23.37	23.38	0.01	970.72	
LSSC-08I	983.13	9/21/2005	12.20	---	0.00	---	23.38	0.00	970.93	
LSSC-08I	983.13	9/28/2005	12.02	---	0.00	23.36	23.38	0.02	971.11	
LSSC-08S	983.11	9/19/2005	12.50	---	0.00	---	14.68	0.00	970.61	
LSSC-16I	980.88	9/28/2005	9.10	---	0.00	---	28.53	0.00	971.78	
LSSC-16S	981.37	9/15/2005	9.65	---	0.00	---	14.12	0.00	971.72	
LSSC-18	987.32	9/19/2005	15.28	---	0.00	---	18.52	0.00	972.04	
LSSC-32	980.68	9/19/2005	9.50	---	0.00	---	35.21	0.00	971.18	
LSSC-33	980.49	9/19/2005	9.32	---	0.00	---	29.75	0.00	971.17	
LSSC-34I	984.74	9/28/2005	13.19	---	0.00	28.04	28.48	0.44	971.55	
MW-4R	980.82	9/15/2005	9.46	---	0.00	---	14.04	0.00	971.36	
MW-6R	985.14	9/19/2005	11.78	---	0.00	---	13.92	0.00	973.36	
RW-1	984.88	9/8/2005	12.73	---	0.00	P	21.00	< 0.01	972.15	
RW-1	984.88	9/14/2005	12.97	---	0.00	20.90	21.00	0.10	971.91	
RW-1	984.88	9/23/2005	12.89	P	< 0.01	---	21.00	0.00	971.99	
RW-1	984.88	9/28/2005	13.00	---	0.00	P	21.00	< 0.01	971.88	
RW-1 (R)	985.07	9/8/2005	15.85	---	0.00	P	20.42	< 0.01	969.22	
RW-1 (R)	985.07	9/14/2005	15.65	---	0.00	---	20.42	0.00	969.42	
RW-1 (R)	985.07	9/23/2005	15.72	---	0.00	P	20.42	< 0.01	969.35	
RW-1 (R)	985.07	9/28/2005	15.50	---	0.00	P	20.42	< 0.01	969.57	
RW-2	987.82	9/8/2005	14.55	---	0.00	---	21.75	0.00	973.27	
RW-2	987.82	9/14/2005	14.70	---	0.00	P	21.75	< 0.01	973.12	
RW-2	987.82	9/23/2005	14.80	---	0.00	---	21.75	0.00	973.02	
RW-2	987.82	9/28/2005	17.60	---	0.00	---	21.75	0.00	970.22	
RW-3	984.08	9/8/2005	16.65	16.45	0.20	---	21.57	0.00	967.62	
RW-3	984.08	9/14/2005	16.54	16.52	0.02	---	21.57	0.00	967.56	

**TABLE 21-14**  
**ROUTINE WELL MONITORING**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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)	
RW-3	984.08	9/23/2005	16.35	16.31	0.04	---	21.57	0.00	967.77	
RW-3	984.08	9/28/2005	16.55	16.45	0.10	---	21.57	0.00	967.62	
<b>Housatonic River (Lyman Street Bridge)</b>										
BM-2A	986.32	9/6/2005	14.41	See Note 5 regarding depth to water						971.91
BM-2A	986.32	9/14/2005	15.98	See Note 5 regarding depth to water						970.34
BM-2A	986.32	9/21/2005	15.58	See Note 5 regarding depth to water						970.74
BM-2A	986.32	9/29/2005	13.85	See Note 5 regarding depth to water						972.47

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. 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 water surface.

**TABLE 21-15**  
**ACTIVE DNAPL RECOVERY SYSTEMS MONTHLY SUMMARY**  
**NEWELL STREET AREA II**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

Recovery System	Date	Total Gallons Recovered
<b>System 1 <sup>(1)</sup></b>	September 2004	16.5
	October 2004	11.0
	November 2004	15.4
	December 2004	15.4
	January 2005 <sup>(3)</sup>	8.8
	February 2005	13.2
	March 2005	17.3
	April 2005	24.2
	May 2005	9.9
	June 2005	18.7
	July 2005	14.3
	August 2005	-- <sup>(4)</sup>
September 2005	-- <sup>(4)</sup>	
<b>System 2 <sup>(2)</sup></b>	September 2004	129.6
	October 2004	78.2
	November 2004	81.0
	December 2004	64.8
	January 2005 <sup>(3)</sup>	157.2
	February 2005	126.9
	March 2005	16.2
	April 2005	16.2
	May 2005	145.8
	June 2005	32.4
	July 2005	48.6
	August 2005	-- <sup>(4)</sup>
September 2005	-- <sup>(4)</sup>	
<b>Total Automated DNAPL Removal for September 2005:</b>		<b>0.0 Gallons</b>

**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. In January 2005, System 2 malfunctioned during weeks 2 and 3 pumping mostly water. The volume reported for those two weeks is an estimated quantity that was included in the total volume removed.
4. The DNAPL recovery systems for the Newell Street Area II were shut down on July 25, 2005. The upgraded system will be completed and activated approximately 2 to 3 months after completion of the EPA-approved soil remediation activities in this area.

**TABLE 21-16**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GROUNDWATER MANAGEMENT AREA 1 - NEWELL STREET AREA II**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	September 2005 Removal (liters)
NS-10	9/29/2005	11.34	10.74	0.60	1.483	1.483

**Total LNAPL Removal for September 2005: 1.483 liters**

**0.391 gallons**

Note:

1. ft BMP - feet Below Measuring Point

**TABLE 21-17**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GROUNDWATER MANAGEMENT AREA 1 - NEWELL STREET AREA II**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	September 2005 Removal (liters)
MW-1D	9/29/2005	15.01	39.25	0.27	0.167	0.167
MW-1S	9/29/2005	14.47	24.71	0.52	0.321	0.321
N2SC-07	9/29/2005	12.78	38.06	0.09	0.056	0.056
N2SC-08	9/29/2005	13.51	40.94	1.62	0.999	0.999
N2SC-13I	9/29/2005	12.27	40.58	0.44	1.088	1.088

**Total DNAPL Removal for September 2005: 2.630 liters**  
**0.694 gallons**

Note:

1. ft BMP - feet Below Measuring Point

**TABLE 21-18**  
**ROUTINE WELL MONITORING**  
**NEWELL STREET AREA II**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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)
MW-1D	987.20	9/29/2005	15.01	---	0.00	39.25	39.52	0.27	972.19
MW-1S	986.60	9/29/2005	14.47	---	0.00	24.71	25.23	0.52	972.13
N2SC-01I	984.99	9/29/2005	13.50	---	0.00	38.35	41.68	3.33	971.49
N2SC-01I(R)	984.99	9/8/2005	14.01	---	0.00	---	38.41	0.00	970.98
N2SC-01I(R)	984.99	9/16/2005	14.40	---	0.00	---	38.35	0.00	970.59
N2SC-01I(R)	984.99	9/21/2005	14.24	---	0.00	---	38.33	0.00	970.75
N2SC-01I(R)	984.99	9/29/2005	13.86	---	0.00	---	38.20	0.00	971.13
N2SC-02	985.56	9/29/2005	13.78	---	0.00	---	40.55	0.00	971.78
N2SC-03I	985.33	9/29/2005	13.70	---	0.00	37.80	40.68	2.88	971.63
N2SC-03I(R)	985.33	9/8/2005	13.95	---	0.00	---	39.58	0.00	971.38
N2SC-03I(R)	985.33	9/16/2005	Well Inaccessible due to excavation activities						NA
N2SC-03I(R)	985.33	9/21/2005	Well Inaccessible due to excavation activities						NA
N2SC-03I(R)	985.33	9/29/2005	Well Inaccessible due to excavation activities						NA
N2SC-07	984.61	9/29/2005	12.78	---	0.00	38.06	38.15	0.09	971.83
N2SC-07S	982.93	9/14/2005	11.46	---	0.00	---	19.91	0.00	971.47
N2SC-08	986.07	9/29/2005	13.51	---	0.00	40.94	42.56	1.62	972.56
N2SC-09I	987.77	9/29/2005	Well is Obstructed						NA
N2SC-13I	984.75	9/29/2005	12.27	---	0.00	40.58	41.02	0.44	972.48
N2SC-14	985.06	9/29/2005	14.75	---	0.00	38.35	40.11	1.76	970.31
N2SC-16	985.62	9/29/2005	Well is Obstructed						NA
NS-10	984.59	9/29/2005	11.34	10.74	0.60	---	19.16	0.00	973.81
NS-15	982.76	9/29/2005	Well is Damaged						NA
NS-17	984.64	9/14/2005	13.06	---	0.00	---	18.72	0.00	971.58
NS-30	985.99	9/29/2005	Well is Damaged						NA
NS-32	986.20	9/29/2005	13.48	---	0.00	39.95	40.24	0.29	972.72

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.



TABLE 21-19  
ROUTINE WELL MONITORING  
SILVER LAKE AREA  
GROUNDWATER MANAGEMENT AREA 1  
CONSENT DECREE MONTHLY STATUS REPORT  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
September 2005

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)
<b>Monitoring Wells Adjacent to Silver Lake</b>									
SLGW-01D	983.13	9/20/2005	5.81	---	0.00	---	36.95	0.00	977.32
SLGW-01S	982.94	9/20/2005	7.29	---	0.00	---	16.25	0.00	975.65
SLGW-02D	985.10	9/20/2005	8.40	---	0.00	---	36.85	0.00	976.70
SLGW-03D	979.14	9/20/2005	2.60	---	0.00	---	32.08	0.00	976.54
SLGW-03S	980.21	9/20/2005	4.58	---	0.00	---	14.60	0.00	975.63
SLGW-04D	983.51	9/20/2005	7.40	---	0.00	---	37.08	0.00	976.11
SLGW-04S	984.02	9/20/2005	8.60	---	0.00	---	16.60	0.00	975.42
SLGW-05D	979.30	9/20/2005	3.62	---	0.00	---	34.90	0.00	975.68
SLGW-05S	979.12	9/20/2005	3.50	---	0.00	---	11.68	0.00	975.62
SLGW-06D	981.63	9/20/2005	7.08	---	0.00	---	35.00	0.00	974.55
SLGW-06S	981.66	9/20/2005	6.26	---	0.00	---	13.75	0.00	975.40
<b>Staff Gauge within Silver Lake</b>									
Silver Lake Gauge	NA	9/6/2000	4.73	See Note 4 regarding depth to water				NA	
Silver Lake Gauge	NA	9/14/2005	4.71	See Note 4 regarding depth to water				NA	
Silver Lake Gauge	NA	9/20/2005	4.71	See Note 4 regarding depth to water				NA	
Silver Lake Gauge	NA	9/29/2005	4.51	See Note 4 regarding depth to water				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)**  
**SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

Continued routine well monitoring and monthly river elevation monitoring.

**b. Sampling/Test Results Received**

See attached table.

**c. Work Plans/Reports/Documents Submitted**

None

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

- Conduct monthly river elevation monitoring.
- Conduct annual interim groundwater monitoring.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

None

**TABLE 22-1**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 2**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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)
<b>Former Oxbow Area J</b>									
GMA 2-1	991.36	9/16/2005	16.58	---	0.00	---	27.17	0.00	974.78
<b>Former Oxbow Area K</b>									
GMA 2-4	983.41	9/16/2005	9.76	---	0.00	---	17.97	0.00	973.65
GMA 2-9	981.29	9/16/2005	8.30	---	0.00	---	17.11	0.00	972.99
<b>Housatonic River (Foot Bridge)</b>									
GMA2-SG-1	989.82	9/19/2005	17.25	See Note 3 regarding depth to water					972.57

Notes:

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. A survey reference point was established on the Oxbow J & K foot bridge. The "Depth to Water" value(s) provided in the above table refers to the vertical distance from the surveyed reference point to the water surface.

**ITEM 23**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 2 (GMA 3)**  
**(GEC330)**  
**SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Conducted routine groundwater elevation monitoring and NAPL monitoring/removal activities, including completion of summer 2005 quarterly monitoring round. Approximately 382.03 liters (100.80 gallons) of LNAPL were removed by the automatic skimmer located in well 51-21 and 14.628 additional liters (3.86 gallons) of LNAPL were manually removed from the wells in this area (see Table 23-1).
- Inspected wells 39D, 51-17, GMA3-6, OBG-2, UB-PZ-1, and UB-PZ-2, which were not located or were found to be damaged during recent monitoring rounds.
- Conducted semi-annual bailing round at all wells found to contain NAPL during the prior year (see Table 23-2).

**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 ongoing groundwater and NAPL monitoring and recovery activities.
- Redevelop well 16C-R.
- Repair certain monitoring wells, as identified during well inspections.
- Replace piezometer UB-PZ-2 with a new well to be designated as GMA3-15.
- Conduct fall 2005 groundwater elevation/NAPL monitoring event.
- Conduct fall 2005 baseline groundwater sampling activities.

**ITEM 23**  
**(cont'd)**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 2 (GMA 3)**  
**(GECD330)**  
**SEPTEMBER 2005**

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

- Following EPA approval of proposed activities contained in GE's Spring 2005 Baseline Groundwater Quality and NAPL Monitoring Interim Report (submitted on August 30, 2005):
  - Sample wells 39B-R and 114A as part of the fall 2005 sampling round.
  - Collect a groundwater sample from well 51-8 and, if necessary, a NAPL-saturated soil sample.
  - Perform desktop modeling of the potential volatilization of constituents observed at well 51-8.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

Natural attenuation well 39D was found to be destroyed during recent inspections. GE plans to examine the prior data from this location and will discuss with EPA whether a replacement for this well is necessary.

**f. Proposed/Approved Work Plan Modifications**

Several program modifications were proposed in the Spring 2005 Baseline Groundwater Quality and NAPL Monitoring Interim Report (see Item 23.d above).

**TABLE 23-1**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**GROUNDWATER MANAGEMENT AREA 3**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	September 2005 Removal (liters)
51-05	9/29/2005	11.80	11.56	0.24	0.148	0.148
51-08	9/8/2005	13.30	11.80	1.50	0.925	3.609
	9/16/2005	13.45	11.89	1.56	0.962	
	9/21/2005	13.43	11.96	1.47	0.907	
	9/29/2005	13.30	11.98	1.32	0.814	
51-15	9/29/2005	12.20	11.28	0.92	0.568	0.568
51-16R	9/29/2005	12.05	11.30	0.75	0.814	0.814
51-19	9/29/2005	12.40	11.40	1.00	0.617	0.617
51-21	9/8/2005	16.28	16.25	0.03	25.014	382.032
	9/14/2005	16.38	16.36	0.02	26.151	
	9/23/2005	17.60	16.38	1.22	35.247	
	9/28/2005	16.55	16.54	0.01	295.62	
59-03R	9/29/2005	13.55	12.54	1.01	0.623	0.623
59-07	9/29/2005	13.45	12.78	0.67	0.413	0.413
GMA3-10	9/8/2005	12.70	12.15	0.55	0.339	1.259
	9/16/2005	12.90	12.25	0.65	0.401	
	9/29/2005	13.23	12.39	0.84	0.518	
GMA3-12	9/16/2005	13.40	12.56	0.84	2.076	6.500
	9/21/2005	13.50	12.61	0.89	2.200	
	9/29/2005	13.60	12.70	0.90	2.224	
UB-PZ-3	9/29/2005	---	13.10	>0.12	0.077	0.077

**Total Automated LNAPL Removal at well 51-21 for September 2005: 382.032 liters**  
**100.80 Gallons**

**Total Manual LNAPL Removal at all other wells for September 2005: 14.628 liters**  
**3.86 Gallons**

**Total LNAPL Removed for September 2005: 396.660 liters**  
**104.66 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 23-2**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 3**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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)
016C-R	993.23	9/14/2005	9.16	---	0.00	---	101.24	0.00	984.07
039D	992.16	9/14/2005	Destroyed	NM	NM	NM	NM	NM	NA
078B-R	988.83	9/29/2005	2.98	---	0.00	---	11.74	0.00	985.85
51-05	996.44	9/29/2005	11.80	11.56	0.24	---	12.54	0.00	984.86
51-06	997.36	9/20/2005	11.83	---	0.00	---	14.60	0.00	985.53
51-07	997.08	9/20/2005	11.09	---	0.00	---	11.20	0.00	985.99
51-08	997.08	9/8/2005	13.30	11.80	1.50	---	14.66	0.00	985.18
51-08	997.08	9/16/2005	13.45	11.89	1.56	---	14.66	0.00	985.08
51-08	997.08	9/21/2005	13.43	11.96	1.47	---	14.67	0.00	985.02
51-08	997.08	9/29/2005	13.30	11.98	1.32	---	14.66	0.00	985.01
51-11	994.37	9/20/2005	9.80	---	0.00	---	13.50	0.00	984.57
51-12	996.55	9/20/2005	8.00	---	0.00	---	13.31	0.00	988.55
51-14	996.77	9/20/2005	11.90	---	0.00	---	14.94	0.00	984.87
51-15	996.43	9/29/2005	12.20	11.28	0.92	---	14.49	0.00	985.09
51-16R	996.39	9/29/2005	12.05	11.30	0.75	---	14.56	0.00	985.04
51-17	996.43	9/14/2005	Well has been paved over		NM	NM	NM	NM	NA
51-18	997.12	9/20/2005	12.01	---	0.00	---	12.60	0.00	985.11
51-19	996.43	9/29/2005	12.40	11.40	1.00	---	14.02	0.00	984.96
51-21	1001.49	9/8/2005	16.28	16.25	0.03	---	NM	0.00	985.24
51-21	1001.49	9/14/2005	16.38	16.36	0.02	---	NM	0.00	985.13
51-21	1001.49	9/23/2005	17.60	16.38	1.22	---	NM	0.00	985.02
51-21	1001.49	9/28/2005	16.55	16.54	0.01	---	NM	0.00	984.95
59-03R	997.64	9/29/2005	13.55	12.54	1.01	---	17.03	0.00	985.03
59-07	997.96	9/20/2005	10.00	---	0.00	---	11.24	0.00	987.96
59-07	997.96	9/29/2005	13.45	12.78	0.67	---	23.53	0.00	985.13
GMA3-10	997.54	9/8/2005	12.70	12.15	0.55	---	18.00	0.00	985.35
GMA3-10	997.54	9/16/2005	12.90	12.25	0.65	---	18.00	0.00	985.24
GMA3-10	997.54	9/21/2005	12.42	12.30	0.12	---	18.00	0.00	985.23
GMA3-10	997.54	9/29/2005	13.23	12.39	0.84	---	18.02	0.00	985.09
GMA3-11	997.25	9/20/2005	11.85	---	0.00	---	18.36	0.00	985.40
GMA3-12	997.84	9/8/2005	13.25	12.45	0.80	---	21.24	0.00	985.33
GMA3-12	997.84	9/16/2005	13.40	12.56	0.84	---	21.24	0.00	985.22
GMA3-12	997.84	9/21/2005	13.50	12.61	0.89	---	21.20	0.00	985.17
GMA3-12	997.84	9/29/2005	13.60	12.70	0.90	---	21.24	0.00	985.08
GMA3-13	997.73	9/8/2005	12.35	---	0.00	---	17.80	0.00	985.38
GMA3-13	997.73	9/16/2005	12.46	---	0.00	---	17.80	0.00	985.27
GMA3-13	997.73	9/21/2005	12.58	---	0.00	---	17.80	0.00	985.15
GMA3-13	997.73	9/29/2005	12.84	---	0.00	---	17.80	0.00	984.89
GMA3-14	997.42	9/29/2005	11.66	---	0.00	---	17.06	0.00	985.76
OBG-2	992.20	9/14/2005	7.39	---	0.00	---	15.35	0.00	984.81
UB-MW-10	995.99	9/20/2005	10.85	---	0.00	---	15.65	0.00	985.14
UB-PZ-1	999.70	9/14/2005	Obstructed	NM	NM	NM	1.27	NM	NA
UB-PZ-2	994.77	9/14/2005	Destroyed	NM	NM	NM	NM	NM	NA
UB-PZ-3	998.15	9/29/2005	---	13.10	>0.12	---	13.40	0.00	< 984.75

**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. NM indicates information not measured.

**ITEM 24  
GROUNDWATER MANAGEMENT AREAS  
PLANT SITE 3 (GMA 4)  
(GEC340)  
SEPTEMBER 2005**

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

**a. Activities Undertaken/Completed**

- Conducted routine groundwater elevation monitoring at well GMA4-3 (see Table 24-1).
- Inspected wells H78B-16 and H78B-17R prior to fall sampling round.

**b. Sampling/Test Results Received**

See attached table.

**c. Work Plans/Reports/Documents Submitted**

None

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

- Continue routine monitoring at well GMA4-3.
- Conduct fall 2005 groundwater elevation monitoring event.
- Conduct fall 2005 interim groundwater quality sampling activities (see Item 24.f).

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

In the Spring 2005 Groundwater Quality Monitoring Interim Report (submitted on August 30, 2005), GE proposed that wells GMA4-5 and H78B-13R no longer be sampled under the interim groundwater monitoring program.



**TABLE 24-1**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 4**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**September 2005**

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)
GMA4-3	1,003.95	9/20/2005	18.75	---	0.00	---	26.26	0.00	985.20
H78B-16	999.33	9/14/2005	13.68	---	0.00	---	16.98	0.00	985.65
H78B-17R	1,000.31	9/14/2005	14.24	---	0.00	---	24.97	0.00	986.07

Notes:

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

**ITEM 25  
GROUNDWATER MANAGEMENT AREAS  
FORMER OXBOWS A & C (GMA 5)  
(GEC350)  
SEPTEMBER 2005**

\* 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)**

Conduct semi-annual groundwater elevation monitoring.

**e. General Progress/Unresolved Issues/Potential Schedule Impacts**

No issues

**f. Proposed/Approved Work Plan Modifications**

EPA's November 10, 2004 letter to GE states that interim groundwater quality sampling activities are to be postponed until groundwater elevation monitoring data demonstrate that groundwater flow is not being artificially influenced by the temporary dam that is being maintained as part of the remediation along the 1½ Mile Reach of the Housatonic River. Since those remediation activities are ongoing, and the temporary dam is still in place, no groundwater sampling will be conducted at GMA 5 in fall 2005.

***Attachment A***

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***NPDES Sampling Records and Results  
September 2005***

**TABLE A-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**NPDES PERMIT MONITORING  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
NPDES Sampling	001-A6714	9/5/05	Water	SGS	Oil & Grease	9/22/05
NPDES Sampling	001-A6716	9/5/05	Water	SGS	PCB	Cancelled
NPDES Sampling	001-A6724	9/6/05	Water	SGS	TSS	9/22/05
NPDES Sampling	001-A6758	9/22/05	Water	SGS	PCB	
NPDES Sampling	005-A6678/A6679	8/15/05	Water	SGS	PCB	9/8/05
NPDES Sampling	005-A6699/A6700	8/23/05	Water	SGS	PCB	9/2/05
NPDES Sampling	005-A6706/A6709	8/29/05	Water	SGS	PCB	9/9/05
NPDES Sampling	005-A6722/A6723	9/6/05	Water	SGS	PCB, TSS, BOD	9/16/05
NPDES Sampling	005-A6734/A6737	9/12/05	Water	SGS	PCB	9/23/05
NPDES Sampling	005-A6753/A6754	9/20/05	Water	SGS	PCB	
NPDES Sampling	005-A6770/A6771	9/27/05	Water	SGS	PCB	
NPDES Sampling	06A-A6711	8/30/05	Water	SGS	Oil & Grease	9/12/05
NPDES Sampling	09B-A6682	8/15/05	Water	SGS	TSS, BOD	9/8/05
NPDES Sampling	09B-A6710	8/29/05	Water	SGS	TSS, BOD	9/9/05
NPDES Sampling	09B-A6738	9/13/05	Water	SGS	TSS, BOD	9/20/05
NPDES Sampling	09B-A6757	9/21/05	Water	SGS	BOD	9/29/05
NPDES Sampling	09B-A6768	9/26/05	Water	Columbia	TSS, BOD	
NPDES Sampling	09C-A6701	8/28/05	Water	SGS	Oil & Grease	9/9/05
NPDES Sampling	09C-A6742	9/15/05	Water	SGS	Oil & Grease	9/29/05
NPDES Sampling	09C-A6755	9/20/05	Water	SGS	Oil & Grease	
NPDES Sampling	09C-A6765	9/26/05	Water	Columbia	Oil & Grease	
NPDES Sampling	64G-A6696	8/22/05	Water	SGS	Oil & Grease	9/2/05
NPDES Sampling	64G-A6707	8/29/05	Water	SGS	Oil & Grease	9/9/05
NPDES Sampling	64G-A6719	9/5/05	Water	SGS	Oil & Grease	9/16/05
NPDES Sampling	64G-A6735	9/12/05	Water	SGS	Oil & Grease	9/23/05
NPDES Sampling	64G-A6750	9/19/05	Water	SGS	Oil & Grease	
NPDES Sampling	64G-A6759	9/26/05	Water	Columbia	Oil & Grease	
NPDES Sampling	64T-A6694	8/22/05	Water	SGS	Oil & Grease	9/2/05
NPDES Sampling	64T-A6704	8/29/05	Water	SGS	Oil & Grease	9/9/05
NPDES Sampling	64T-A6717	9/5/05	Water	SGS	Oil & Grease	9/16/05
NPDES Sampling	64T-A6732	9/12/05	Water	SGS	Oil & Grease	9/23/05
NPDES Sampling	64T-A6748	9/19/05	Water	SGS	Oil & Grease	
NPDES Sampling	64T-A6762	9/26/05	Water	Columbia	Oil & Grease	
NPDES Sampling	A6667RCN	8/15/05	Water	SGS	CN	9/8/05
NPDES Sampling	A6667RTM	8/15/05	Water	SGS	Metals (10)	9/8/05
NPDES Sampling	A6668CCN	8/15/05	Water	SGS	CN	9/8/05

**TABLE A-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING SEPTEMBER 2005**

**NPDES PERMIT MONITORING  
GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**

<b>Project Name</b>	<b>Field Sample ID</b>	<b>Sample Date</b>	<b>Matrix</b>	<b>Laboratory</b>	<b>Analyses</b>	<b>Date Received</b>
NPDES Sampling	A6668CDM	8/15/05	Water	SGS	Filtered Metals (8)	9/22/05
NPDES Sampling	A6668CTM	8/15/05	Water	SGS	Metals (10)	9/8/05
NPDES Sampling	A6725R	9/12/05	Water	SGS	Acute and Chronic Toxicity Test	9/29/05
NPDES Sampling	A6725RCN	9/12/05	Water	SGS	CN	9/23/05
NPDES Sampling	A6725RTM	9/12/05	Water	SGS	Metals (10)	9/23/05
NPDES Sampling	A6726C	9/12/05	Water	SGS	Acute and Chronic Toxicity Test	9/29/05
NPDES Sampling	A6726CCN	9/12/05	Water	SGS	CN	9/23/05
NPDES Sampling	A6726CDM	9/12/05	Water	SGS	Filtered Metals (8)	9/23/05
NPDES Sampling	A6726CTM	9/12/05	Water	SGS	Metals (10)	9/23/05
NPDES Sampling	A6727R	9/14/05	Water	SGS	Chronic Toxicity Test	9/29/05
NPDES Sampling	A6727RCN	9/14/05	Water	SGS	CN	9/26/05
NPDES Sampling	A6727RTM	9/14/05	Water	SGS	Metals (10)	9/26/05
NPDES Sampling	A6728C	9/14/05	Water	SGS	Chronic Toxicity Test	9/29/05
NPDES Sampling	A6728CCN	9/14/05	Water	SGS	CN	9/26/05
NPDES Sampling	A6728CDM	9/14/05	Water	SGS	Filtered Metals (8)	9/26/05
NPDES Sampling	A6728CTM	9/14/05	Water	SGS	Metals (10)	9/26/05
NPDES Sampling	A6729R	9/16/05	Water	SGS	Chronic Toxicity Test	9/29/05
NPDES Sampling	A6729RCN	9/16/05	Water	SGS	CN	9/29/05
NPDES Sampling	A6729RTM	9/16/05	Water	SGS	Metals (10)	9/29/05
NPDES Sampling	A6730C	9/16/05	Water	SGS	Chronic Toxicity Test	9/29/05
NPDES Sampling	A6730CCN	9/16/05	Water	SGS	CN	9/29/05
NPDES Sampling	A6730CDM	9/16/05	Water	SGS	Filtered Metals (8)	9/29/05
NPDES Sampling	A6730CTM	9/16/05	Water	SGS	Metals (10)	9/29/05
NPDES Sampling	AUG05WK4	8/23/05	Water	SGS	Cu, Pb, Zn	9/2/05
NPDES Sampling	OCT05WK1	9/27/05	Water	Columbia	Cu, Pb, Zn	
NPDES Sampling	SEP05WK1	8/29/05	Water	SGS	Cu, Pb, Zn	9/9/05
NPDES Sampling	SEP05WK2	9/6/05	Water	SGS	Cu, Pb, Zn	9/16/05
NPDES Sampling	SEP05WK4	9/20/05	Water	SGS	Cu, Pb, Zn	

**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	001-A6714 09/05/05	001-A6724 09/06/05	005-A6678/A6679 08/15/05	005-A6699/A6700 08/23/05	005-A6706/A6709 08/29/05	005-A6722/A6723 09/06/05	005-A6734/A6737 09/12/05
<b>PCBs-Unfiltered</b>								
Aroclor-1254		NA	NA	ND(0.000065)	ND(0.000065)	0.000033 J	0.00031	0.000077
Aroclor-1260		NA	NA	0.000014 J	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000059 J
Total PCBs		NA	NA	0.000014 J	ND(0.000065)	0.000033 J	0.00031	0.000136
<b>Inorganics-Unfiltered</b>								
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
<b>Inorganics-Filtered</b>								
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
<b>Conventionals</b>								
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	NA	ND(2.0)	NA
Oil & Grease		ND(5.0)	NA	NA	NA	NA	NA	NA
Total Suspended Solids		NA	6.00	NA	NA	NA	6.00	NA

**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	06A-A6711 08/30/05	09B-A6682 08/15/05	09B-A6710 08/29/05	09B-A6738 09/13/05	09B-A6757 09/21/05	09C-A6701 08/28/05	09C-A6742 09/15/05	64G-A6696 08/22/05
<b>PCBs-Unfiltered</b>									
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
<b>Inorganics-Unfiltered</b>									
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
<b>Inorganics-Filtered</b>									
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
<b>Conventionals</b>									
Biological Oxygen Demand (5-day)		NA	2.8	3.7	4.1	2.4	NA	NA	NA
Oil & Grease		4.5 B	NA	NA	NA	NA	1.7 B	1.1 B	1.0 B
Total Suspended Solids		NA	19.0	23.0	7.00	NA	NA	NA	NA

**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	64G-A6707 08/29/05	64G-A6719 09/05/05	64G-A6735 09/12/05	64T-A6694 08/22/05	64T-A6704 08/29/05	64T-A6717 09/05/05	64T-A6732 09/12/05	A6667RCN 08/15/05
<b>PCBs-Unfiltered</b>									
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
<b>Inorganics-Unfiltered</b>									
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	0.00520 B
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
<b>Inorganics-Filtered</b>									
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
<b>Conventionals</b>									
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		1.3 B	3.1 B	0.90 B	1.7 B	2.3 B	4.4 B	0.80 B	NA
Total Suspended Solids		NA	NA	NA	NA	NA	NA	NA	NA



**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	A6667RTM 08/15/05	A6668CCN 08/15/05	A6668CDM 08/15/05	A6668CTM 08/15/05	A6725RCN 09/12/05	A6725RTM 09/12/05	A6726CCN 09/12/05	A6726CDM 09/12/05
<b>PCBs-Unfiltered</b>									
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
<b>Inorganics-Unfiltered</b>									
Aluminum		ND(0.100)	NA	NA	0.400	NA	ND(0.100)	NA	NA
Cadmium		0.00350	NA	NA	ND(0.00100)	NA	0.00170	NA	NA
Calcium		38.0	NA	NA	43.0	NA	48.0	NA	NA
Chromium		0.00300 B	NA	NA	0.00140 B	NA	0.00170 B	NA	NA
Copper		0.00460 B	NA	NA	0.0250	NA	0.00170 B	NA	NA
Cyanide		NA	0.0190 B	NA	NA	0.00670 B	NA	0.0550	NA
Lead		0.00370 B	NA	NA	0.00740	NA	0.00280 B	NA	NA
Magnesium		13.0	NA	NA	18.0	NA	18.0	NA	NA
Nickel		0.00310 B	NA	NA	0.00280 B	NA	ND(0.00500)	NA	NA
Silver		0.00310 B	NA	NA	ND(0.00500)	NA	ND(0.00500)	NA	NA
Zinc		0.0110 B	NA	NA	0.0370	NA	0.00370 B	NA	NA
<b>Inorganics-Filtered</b>									
Aluminum		NA	NA	ND(0.100)	NA	NA	NA	NA	ND(0.100)
Cadmium		NA	NA	ND(0.00100)	NA	NA	NA	NA	ND(0.00100)
Chromium		NA	NA	ND(0.00500)	NA	NA	NA	NA	0.000800 B
Copper		NA	NA	0.0170	NA	NA	NA	NA	0.00260 B
Lead		NA	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)
Nickel		NA	NA	0.00220 B	NA	NA	NA	NA	ND(0.00500)
Silver		NA	NA	ND(0.00500)	NA	NA	NA	NA	ND(0.00500)
Zinc		NA	NA	0.0290	NA	NA	NA	NA	0.0120 B
<b>Conventionals</b>									
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

**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	A6726CTM 09/12/05	A6727RCN 09/14/05	A6727RTM 09/14/05	A6728CCN 09/14/05	A6728CDM 09/14/05	A6728CTM 09/14/05	A6729RCN 09/16/05	A6729RTM 09/16/05
<b>PCBs-Unfiltered</b>									
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
<b>Inorganics-Unfiltered</b>									
Aluminum		ND(0.100)	NA	ND(0.100)	NA	NA	ND(0.100)	NA	ND(0.100)
Cadmium		0.000900 B	NA	ND(0.00100)	NA	NA	ND(0.00100)	NA	ND(0.00100)
Calcium		83.0	NA	48.0	NA	NA	80.0	NA	40.0
Chromium		0.000970 B	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Copper		0.00250 B	NA	ND(0.00500)	NA	NA	0.00210 B	NA	ND(0.00500)
Cyanide		NA	0.00680 B	NA	0.0610	NA	NA	0.00690 B	NA
Lead		0.00290 B	NA	0.00260 B	NA	NA	ND(0.00500)	NA	0.00200 B
Magnesium		35.0	NA	17.0	NA	NA	33.0	NA	14.0
Nickel		ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Silver		ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Zinc		0.00400 B	NA	ND(0.0200)	NA	NA	0.00310 B	NA	ND(0.0200)
<b>Inorganics-Filtered</b>									
Aluminum		NA	NA	NA	NA	ND(0.100)	NA	NA	NA
Cadmium		NA	NA	NA	NA	ND(0.00100)	NA	NA	NA
Chromium		NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Copper		NA	NA	NA	NA	0.00160 B	NA	NA	NA
Lead		NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Nickel		NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Silver		NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Zinc		NA	NA	NA	NA	0.0120 B	NA	NA	NA
<b>Conventionals</b>									
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

**TABLE A-2  
DATA RECEIVED DURING SEPTEMBER 2005**

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

Parameter	Sample ID: Date Collected:	A6730CCN 09/16/05	A6730CDM 09/16/05	A6730CTM 09/16/05	AUG05WK4 08/23/05	SEP05WK1 08/29/05	SEP05WK2 09/06/05
<b>PCBs-Unfiltered</b>							
Aroclor-1254		NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>							
Aluminum		NA	NA	0.0600 B	NA	NA	NA
Cadmium		NA	NA	ND(0.00100)	NA	NA	NA
Calcium		NA	NA	79.0	NA	NA	NA
Chromium		NA	NA	ND(0.00500)	NA	NA	NA
Copper		NA	NA	0.00540	0.00840	0.0310	0.00230 B
Cyanide		0.0600	NA	NA	NA	NA	NA
Lead		NA	NA	0.00350 B	0.0110	0.00410 B	ND(0.00500)
Magnesium		NA	NA	35.0	NA	NA	NA
Nickel		NA	NA	ND(0.00500)	NA	NA	NA
Silver		NA	NA	ND(0.00500)	NA	NA	NA
Zinc		NA	NA	0.00620 B	0.0210	0.0340	0.00580 B
<b>Inorganics-Filtered</b>							
Aluminum		NA	ND(0.100)	NA	NA	NA	NA
Cadmium		NA	ND(0.00100)	NA	NA	NA	NA
Chromium		NA	ND(0.00500)	NA	NA	NA	NA
Copper		NA	0.00710	NA	NA	NA	NA
Lead		NA	ND(0.00500)	NA	NA	NA	NA
Nickel		NA	ND(0.00500)	NA	NA	NA	NA
Silver		NA	ND(0.00500)	NA	NA	NA	NA
Zinc		NA	0.0140 B	NA	NA	NA	NA
<b>Conventionals</b>							
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	NA	NA
Oil & Grease		NA	NA	NA	NA	NA	NA
Total Suspended Solids		NA	NA	NA	NA	NA	NA

Notes:

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

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

***Attachment B***

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***NPDES Discharge Monitoring Reports  
August 2005***

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

005 1  
DISCHARGE NUMBER

MONITORING PERIOD  
YEAR MO DAY FROM TO  
05 08 01 TO 05 08 31

MAJOR (SUBRW)  
F - FINAL  
WATERS TO HOUSATONIC RIVER

Form Approved.  
OMB No. 2040-0004

\*\*\* NO DISCHARGE \*\*\*  
NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, 5-DAY (20 DEG. C) 00310 T 0 0 SEE COMMENTS BELOW	0	0	( 26 )	*****	*****	*****	*****	0	01/30	CP	
	PERMIT REQUIREMENT	90 MO AVG	135 DAILY MX	LBS/DY	*****	*****	*****	*****	ONCE / MONTH	COMPOS	
SOLIDS, TOTAL SUSPENDED 00530 T 0 0 SEE COMMENTS BELOW	0	0	( 26 )	*****	*****	*****	*****	0	01/30	CP	
	PERMIT REQUIREMENT	188 MO AVG	270 DAILY MX	LBS/DY	*****	*****	*****	*****	ONCE / MONTH	COMPOS	
OIL & GREASE 00556 T 0 0 SEE COMMENTS BELOW	*****	10.1	( 26 )	*****	*****	2.7	( 19 )	0	01/07	GR	
	PERMIT REQUIREMENT	*****	135 DAILY MX	LBS/DY	*****	*****	15 DAILY MX	MG/L	WEEKLY	GRAB	
POLYCHLORINATED BIPHENYLS (PCBS) 09516 T 0 0 SEE COMMENTS BELOW	0.00001	0.00002	( 26 )	*****	*****	*****	*****	0	01/07	CP	
	PERMIT REQUIREMENT	0.01 MO AVG	0.03 DAILY MX	LBS/DY	*****	*****	*****	*****	WEEKLY	COMPOS	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 T 0 0 SEE COMMENTS BELOW	0.109	0.256	( 03 )	*****	*****	*****	*****	0	99/99	RC	
	PERMIT REQUIREMENT	2.09 MO AVG	2.09 DAILY MX	MGD	*****	*****	*****	*****	CONT IN RECORD	DOCS	
	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.

*M. T. Carroll*  
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 413 448-5902  
DATE 2005 9 21  
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)

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER


064 G  
 DISCHARGE NUMBER

MAJOR (SUBRW)  
 F - FINAL  
 GROUNDWATER TREATMENT (005)

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
05	08	01		05	08	31

\*\*\* NO DISCHARGE [ ] \*\*\*  
 NOTE: Read Instructions before completing this form.

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
Michael T. Carroll Mgr. Pittsfield Remediation Prog.			413 448-5902	2005	9	21
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO

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)

Form Approved.  
 OMB No. 2040-0004

MA00003891  
 PERMIT NUMBER


064 T  
 DISCHARGE NUMBER

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

MONITORING PERIOD  
 FROM 05 08 01 TO 05 08 31

\*\*\* NO DISCHARGE \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		6.9	*****	7.5	( 12 )	0	99/99	RCDR
00400 T O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-O
DIBENZOFURAN	SAMPLE MEASUREMENT	*****	*****		*****	NODI [6]	NODI [6]	( 22 )			
81302 T O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MD AVG	REPORT DAILY MX	PPT		ONCE/ MONTH	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE			
Michael T. Carroll Mgr. Pittsfield Remediation Prog.			413 448-5902	2005	9	21	
TYPED OR PRINTED			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)

Form Approved.  
 OMB No. 2040-0004

MA0003881 PERMIT NUMBER  
 007 1 DISCHARGE NUMBER

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


MONITORING PERIOD  
 YEAR MO DAY YEAR MO DAY  
 FROM 05 08 01 TO 05 08 31

\*\*\* NO DISCHARGE \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT / PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE, WATER DEG. FAHRENHEIT 00011 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****			( 15)			
	PERMIT REQUIREMENT	*****	*****	****	*****	70 MO AVG	75 DAILY MX	DEG F		ONCE / MONTH	GRAB
PH 00400 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****					( 12)			
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU /		WEEKLY	RANG-C
POLYCHLORINATED BIPHENYLS (PCBS) 39516 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****			( 21)			
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	PPB		STRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT			( 03)	*****	*****	*****				
	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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  


TELEPHONE \* DATE  
 413 448-5902 2005 9 21  
 AREA CODE NUMBER YEAR MO DAY

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)

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER

009 1  
 DISCHARGE NUMBER

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

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
05	08	01		05	08	31

\*\*\* NO DISCHARGE  \*\*\*  
 NOTE: Read Instructions before completing this form.

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, 5-DAY (20 DEG. C) 00310 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.1	0.3	( 26 )	*****	*****	*****		0	01/DW ERROR MTC	CP
	PERMIT REQUIREMENT	105 MO AVG	438 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
PH 00400 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****	( 12 )	7.6	*****	7.6		0	01/DW	GR
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU /		WEEKLY	TRANG-C
SOLIDS, TOTAL SUSPENDED 00530 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.6	1.8	( 26 )	*****	*****	*****		0	01/DW ERROR MTC	CP
	PERMIT REQUIREMENT	213 MO AVG	876 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
OIL & GREASE 00556 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI "E"	( 26 )	*****	*****	NODI "E"	( 19 )			
	PERMIT REQUIREMENT	*****	438 DAILY MX	LBS/DY	*****	*****	15 DAILY MX	MG/L		WEEKLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	NODI [9]	NODI [9]	( 19 )			
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	MG/L		STRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.003	0.040	( 03 )	*****	*****	*****		0	99/99	RC
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		CONTIN	RECORD
	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.

*M.T. Carroll*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
413	448-5902	2005	9	21
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)

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER

009 A  
 DISCHARGE NUMBER

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

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
05	08	01	05	08	31

FROM

TO

\*\*\* NO DISCHARGE  \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, 5-DAY (20 DEG. C) 00310 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT			( 26 )	*****	*****	*****				
	PERMIT REQUIREMENT	106 MO AVG	438 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
SOLIDS, TOTAL SUSPENDED 00530 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT			( 26 )	*****	*****	*****				
	PERMIT REQUIREMENT	213 MO AVG	376 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V 0 0 SEE COMMENTS BELOW	SAMPLE MEASUREMENT			( 03 )	*****	*****	*****				
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		CONTIN	RECORD
	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.

*M. T. Carroll*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
	413 448-5902	2005	9	21

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

PERMITTEE NAME/ADDRESS (Includes 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

009 B  
 DISCHARGE NUMBER

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

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
05	08	01		05	08	31

\*\*\* NO DISCHARGE 1-1 \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, 5-DAY (20 DEG. C) 00310 V 0 0 SEE COMMENTS BELOW	0.1 MTC	0.3 MTC	LBS/DY	*****	*****	*****	MTC	0	01/DW	CP	
	PERMIT REQUIREMENT	106 MD AVG	438 DAILY MX	LBS/DY	*****	*****	*****	****	WEEKLY	COMPOS	
SOLIDS, TOTAL SUSPENDED 00530 V 0 0 SEE COMMENTS BELOW	0.6 MTC	1.8 MTC	LBS/DY	*****	*****	*****	MTC	0	01/DW	CP	
	PERMIT REQUIREMENT	213 MD AVG	376 DAILY MX	LBS/DY	*****	*****	*****	****	WEEKLY	COMPOS	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V 0 0 SEE COMMENTS BELOW	0.003 MTC	0.040 MTC	MGD	*****	*****	*****	MTC	0	99/99	RC	
	PERMIT REQUIREMENT	REPORT MTC	REPORT MTC	MGD	*****	*****	*****	****	CONTIN	RECORD	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 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.

*M.T. Carroll*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 413 448-5902  
 DATE 2005 9 21  
 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 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)

Form Approved.  
 OMB No. 2040-0004


MA0003891  
 PERMIT NUMBER

SUM A  
 DISCHARGE NUMBER

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

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
05	08	01	05	08	31

\*\*\* NO DISCHARGE 1-1 \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
PHOSPHORUS, TOTAL (AS P) 00665 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.4	( 26 ) LBS/DY	*****	*****	*****	*****	0	03/30	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		ONCE / MONTH	COMPOS	
NICKEL TOTAL RECOVERABLE 01074 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.01	( 26 ) LBS/DY	*****	*****	*****	*****	0	03/30	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		ONCE / MONTH	COMPOS	
SILVER TOTAL RECOVERABLE 01079 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	03/30	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		ONCE / MONTH	COMPOS	
ZINC TOTAL RECOVERABLE 01094 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.1	( 26 ) LBS/DY	*****	*****	*****	*****	0	02/07	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		WEEKLY	COMPOS	
ALUMINUM, TOTAL (AS AL) 01105 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	1.2	( 26 ) LBS/DY	*****	*****	*****	*****	0	03/30	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		ONCE / MONTH	COMPOS	
CADMIUM TOTAL RECOVERABLE 01113 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	03/30	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		ONCE / MONTH	COMPOS	
LEAD TOTAL RECOVERABLE 01114 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.02	( 26 ) LBS/DY	*****	*****	*****	*****	0	02/07	CP	
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	*****		WEEKLY	COMPOS	
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.				 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			TELEPHONE		DATE		
Michael T. Carroll Mgr. Pittsfield Remediation Prog.								AREA CODE	NUMBER	YEAR	MO	DAY
TYPED OR PRINTED	413		448-5902		2005	9	21					

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


MAD0003891 PERMIT NUMBER  
 SUM A DISCHARGE NUMBER

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

MONITORING PERIOD  
 YEAR MO DAY YEAR MO DAY  
 FROM 05 08 01 TO 05 08 31

\*\*\* NO DISCHARGE \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
CHROMIUM TOTAL RECOVERABLE 01118 1 0 0 EFFLUENT GROSS VALUE	MEASUREMENT	*****	0.004	( 26 )	*****	*****	*****		0	03/30	CP
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE / MONTH	COMPOSITE
COPPER TOTAL RECOVERABLE 01119 1 0 0 EFFLUENT GROSS VALUE	MEASUREMENT	*****	0.08	( 26 )	*****	*****	*****		0	02/07	CP
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOSITE
CYANIDE, TOTAL RECOVERABLE 78248 1 0 0 EFFLUENT GROSS VALUE	MEASUREMENT	*****	0.08	( 26 )	*****	*****	*****		0	03/30	CP
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE / MONTH	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE			
Michael T. Carroll Mgr. Pittsfield Remediation Prog.			413 448-5902	2005	9	21	
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO	DAY

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

PERMITTEE NAME/ADDRESS (Includes 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	TO	YEAR	MO	DAY
05	08	01		05	08	31

\*\*\* NO DISCHARGE 1-1 \*\*\*  
 NOTE: Read instructions before completing this form.

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
NOEL STAT 7DAY CHR CERIODAPHNIA	SAMPLE MEASUREMENT	*****	*****		100	*****	*****	(%23)	0	01/30	CP
TBD3B 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT DAILY MN	*****	*****	PER-CENT		ONCE / MONTH	COMPOS
NOEL STAT 48HR ACU CERIODAPHNIA	SAMPLE MEASUREMENT	*****	*****		NODI [8]	*****	*****	( 23)			
TDA3B 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT DAILY MN	*****	*****	PER-CENT		ONCE / MONTH	COMPOS
NOEL STATRE 48HR ACU D. PULEX	SAMPLE MEASUREMENT	*****	*****		NODI [9]	*****	*****	(%23)			
TDM3D 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	35 DAILY MN	*****	*****	PER-CENT		ONCE / MONTH	COMPOS
	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.

*M. T. Carroll*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 413 448-5902  
 DATE 2005 9 21  
 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)

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER

SUM C  
 DISCHARGE NUMBER

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

MONITORING PERIOD  
 FROM YEAR MO DAY TO YEAR MO DAY  
 05 07 01 TO 05 09 30

\*\*\* NO DISCHARGE  \*\*\*  
 NOTE: Read instructions before completing this form.

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

*M. T. Carroll*  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 413 448-5902  
 DATE 2005 9 21  
 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 September 2005]***



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

Samples collected in September 2005

Submitted to:

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

SGS Sample ID: TA5-I0-P243

Study Director: Ken Holliday

28 September 2005

**SGS Environmental Services  
1258 Greenbrier Street  
Charleston, West Virginia 25311-1002  
Tel: 304.346.0725 Fax: 304.346.0761  
[www.sgs.com](http://www.sgs.com)**

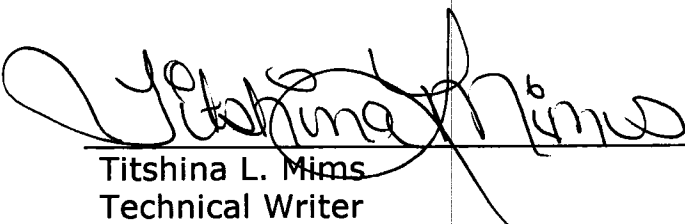
## Signatures and Approval

**Submitted by:** SGS Environmental Services  
1258 Greenbrier Street  
Charleston, West Virginia 25311-1002

Tel: 304.346.0725  
Fax: 304.346.0761  
www.sgs.com

  
\_\_\_\_\_  
Ken Holliday  
Study Director  
Ken.holliday@sgs.com

September 28, 2005  
*Date*

  
\_\_\_\_\_  
Titshina L. Mims  
Technical Writer

September 28, 2005  
*Date*

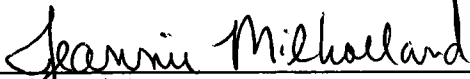
  
\_\_\_\_\_  
Barbara Hensley  
Project Manager  
Barbara.hensley@sgs.com

September 28, 2005  
*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: September 28, 2005  
Date

  
Authorized signature  
Jeannie Milholland  
Name  
QA/QC Manager  
Title  
SGS Environmental Services  
Laboratory

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## Summary

### Static Acute Toxicity Test with *Daphnia pulex*

Sponsor: General Electric

Protocol Title: *Acute Aquatic Toxicity Testing*, SGS Document Control Number 7002, version 5.0

SGS Study Number: TA5-I0-P243

Test Material: Composite effluent from the General Electric Company located in Pittsfield, Massachusetts

GE Sample ID: A6726C

Dilution Water: Water from the Housatonic River (grab sample)

GE Sample ID: A6725R

Dates Collected: September 11, 2005 to September 12, 2005

Date Received: September 13, 2005

Test Dates: September 13, 2005 to September 15, 2005

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 September 13, 2005 to September 15, 2005 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 5.0. 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* (5th Edition EPA-821-R-02-012 U.S. EPA, Cincinnati, Ohio.) Additional SOPs used in this study are outlined below:

<u>Title</u>	<u>Document Number</u>	<u>Version</u>
Culture Waters for Aquatic Toxicity Testing	7005	4.0
Culture of <i>Daphnia</i>	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 (A6726C) was collected by GE personnel September 11, 2005 to September 12, 2005. Upon receipt at SGS on September 13, 2005, the sample temperature was 3.8° C. The effluent sample was characterized as having

<b>Parameter</b>	<b>Result</b>
Total Hardness	340
Alkalinity (as CaCO <sub>3</sub> )	167
pH	7.09
Specific Conductance	1238
Dissolved Oxygen Concentration*	8.32

\*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 (A6725R) was collected by General Electric personnel on September 12, 2005. Upon receipt at SGS on September 13, 2005, the sample temperature was 3.8° C. The dilution water was characterized as having

<b>Parameter</b>	<b>Result</b>
Total Hardness	310
Alkalinity (as CaCO <sub>3</sub> )	193
pH	7.25
Specific Conductance	443
Dissolved Oxygen Concentration*	8.51

\*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:

<b>Parameter</b>	<b>Result</b>
Total Hardness	100
Alkalinity (as CaCO <sub>3</sub> )	63
pH	7.08
Specific Conductance	314
Dissolved Oxygen	8.74

## 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 <sub>3</sub> )	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  $4.0 \times 10^7$  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 ( $\pm 1^\circ\text{C}$ ). 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 chlorine 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**

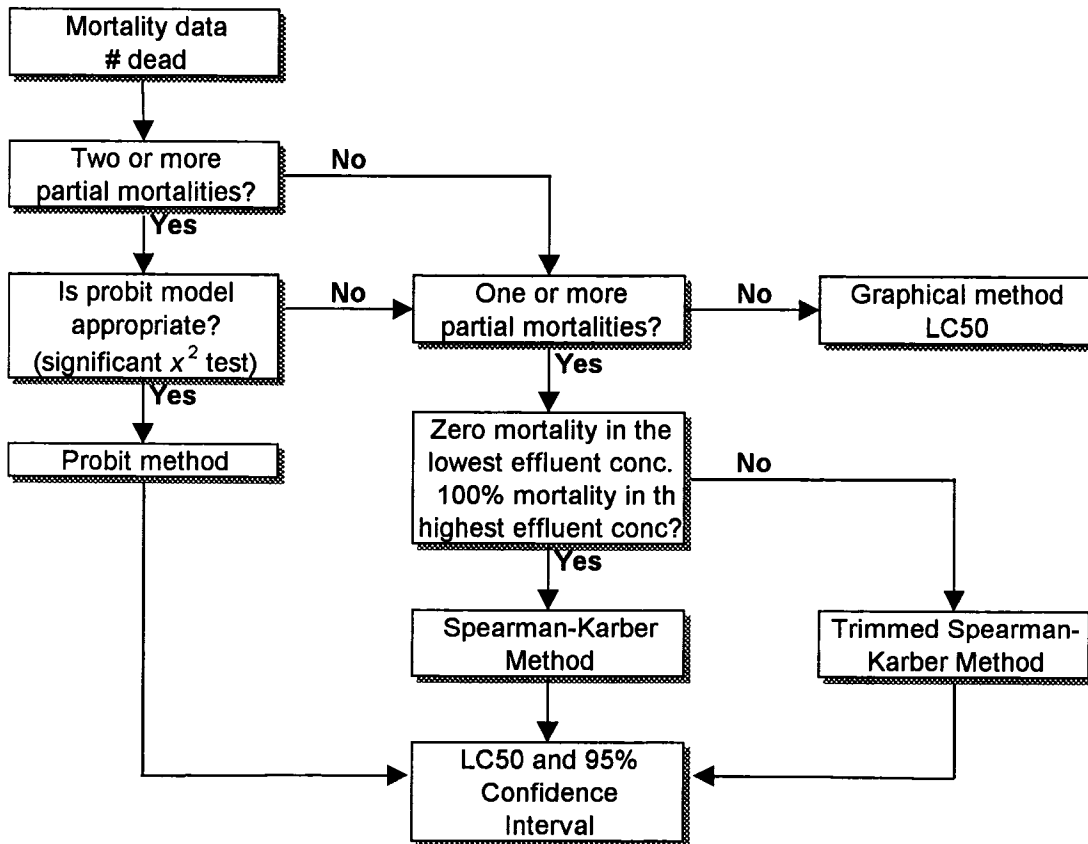
A 48-hour reference toxicity test exposing *Daphnia pulex* to sodium chloride (NaCl) was conducted from September 13, 2005 to September 15, 2005. The reference test was conducted to establish the health of the test organisms. The reference toxicity test included five NaCl concentrations and a dilution 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<sub>50</sub> 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 September 13, 2005 to September 15, 2005, and the resulting 48-hour LC<sub>50</sub> was estimated by Trimmed Spearman-Kärber Method to be 2176 mg NaCl/L (95% confidence intervals of 1849 to 2560 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*. 17<sup>th</sup> 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. 5th Edition. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*. EPA-821-R-02-012.

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

<u>Parameters</u>	<u>Method</u>	<u>Detection Limits</u>
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	0.020 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).**

<b>Parameter</b>	<b>Effluent (A6726C)</b>	<b>Housatonic River (A6725R)</b>
Temperature	20.2°C	20.2°C
pH	7.09	7.25
Alkalinity (as CaCO <sub>3</sub> )	340 mg/L	193 mg/L
Hardness (as CaCO <sub>3</sub> )	340 mg/L	310 mg/L
Dissolved Oxygen	8.32 mg/L	8.51 mg/L
Specific Conductivity	1238 µmhos/cm	443 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	ND	ND
Chloride	160 mg/L	26 mg/L
Total Suspended Solids	ND	ND
Total Solids	630 mg/L	250 mg/L
Total Organic Carbon	ND	1.6 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	7.08	7.12	7.15	8.74	8.70	8.67	20.2	20.8
Secondary Ref Control	7.13	7.19	7.18	8.77	8.75	8.70	20.2	20.8	19.5
Dilution Water Control	7.25	7.29	7.30	8.51	8.47	8.40	20.2	20.8	19.5
5% Effluent	7.23	7.26	7.28	8.50	8.46	8.41	20.2	20.8	19.5
15% Effluent	7.20	7.19	7.24	8.45	8.37	8.40	20.2	20.8	19.5
35% Effluent	7.17	7.19	7.26	8.40	8.35	8.38	20.2	20.8	19.5
50% Effluent	7.15	7.21	7.26	8.36	8.31	8.32	20.2	20.8	19.5
75% Effluent	7.10	7.14	7.19	8.34	8.27	8.31	20.2	20.8	19.5
100% Effluent	7.09	7.13	7.17	8.32	8.30	8.26	20.2	20.8	19.5

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<sub>2</sub>S<sub>2</sub>O<sub>3</sub>)
- 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<sub>2</sub>S<sub>2</sub>O<sub>3</sub> Control = moderately hard synthetic water and sodium thiosulfate (0.1 N)  
 Dilution Water Control = receiving water collected from the Housatonic River

## **Appendix I**

## **References**

# SGS Environmental Services Inc.

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Document Title: Acute Aquatic Toxicity Testing  
Method Reference: SGS/USEPA  
Document File Name: 7002-05.DOC  
Revision Number: 5.0  
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17/05

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Document Control Number: 7002.05

Approved by: [Signature] Supervisor 5-17-05 Date  
Approved by: [Signature] QA/QC Officer 5-17-05 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.*, Fifth Edition. EPA-821-R-02-012. 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

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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  $25^{\circ} \pm 1^{\circ}\text{C}$  for *Daphnia*, and  $20^{\circ} \pm 1^{\circ}\text{C}$  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 recorded. If the pH, D.O. or chlorine fall outside the acceptable



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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. SGS 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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### 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  $25^{\circ} \pm 1^{\circ}$  C (To satisfy local requirements tests may be conducted at other temperatures).

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### 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.

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### 6.2 Methods for Estimating the LC50 & EC50

- 6.2.1 The flow chart (Figure 6) on page 73 of the manual, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms* (Fifth Edition), EPA-821-R-02-012, Appendix A 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 SGS 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

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Document Title: Culture Waters for Aquatic Toxicity Testing  
Method Reference: SGS/USEPA  
Document File Name: 7005-04.DOC  
Revision Number: 4.0  
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Review Date: May 17, 2005

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Document Control Number: 7005.04

Approved by: *Scott McMill*  
Supervisor  
Date: 5-17-05

Approved by: *Jeanine Lettner*  
QA/QC Officer  
Date: 5-17-05

### 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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### 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<sub>4</sub> Stock Solution

- 4.2.1 Place 120 g of reagent water, anhydrous MgSO<sub>4</sub> 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<sub>3</sub> Stock Solution

- 4.3.1 Place 96 g of reagent grade NaHCO<sub>3</sub> 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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### 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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Document Title: Culture of *Daphnia*  
Method Reference: SGS/USEPA  
Document File Name: 7006-05.DOC  
Revision Number: 5.0  
Effective Date: March 12, 2001  
Review Date: May 17, 2005

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Document Control Number: 7006

Approved by: [Signature]  
Supervisor5-17-05  
DateApproved by: [Signature]  
QA/QC Officer5-17-05  
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 ml of culture media at  $20 \pm 1^\circ$  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 (*Selenastrum 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.



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### 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.

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- 
- 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.

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Method Reference: SGS/USEPA  
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Document Control Number: 7008

Approved by: [Signature] Date: 5-17-05  
Supervisor

Approved by: [Signature] Date: 5-17-05  
QA/QC Manager

### 1.0 Summary

To insure that healthy organisms are used in testing, SGS performs monthly QA/QC tests on all in-house cultured organisms. SGS uses sodium chloride as a reference toxicant.

### 2.0 Apparatus

- 2.1 Disposable plastic beakers
- 2.2 Disposable plastic medicine cups
- 2.3 Pipettes
- 2.4 pH meter
- 2.5 Dissolved oxygen (DO) meter

### 3.0 Reagents

- 3.1 Moderately hard synthetic water (refer to document control number 7005, *Culture Waters for Aquatic Toxicity Testing*)
- 3.2 Sodium Chloride (NaCl), reagent grade, Baker

### 4.0 Method

#### 4.1 *Pimephales promelas* (fathead minnows)

- 4.1.1 48-hour static acute toxicity tests are run at 20°C ( $\pm 1^\circ\text{C}$ ) using fish that are from 1 to 14 days old.
- 4.1.2 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.

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- 4.1.3 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.
- 4.1.4 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.
- 4.1.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

#### 4.2 Daphnids (*Ceriodaphnia dubia*, *Daphnia magna*, *Daphnia pulex*)

- 4.2.1 48-hour static acute tests are performed at 25°C ( $\pm 1^\circ\text{C}$ ) using organisms less than 24 hours old.
- 4.2.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.
- 4.2.2.1 *Ceriodaphnia dubia*, *Daphnia pulex*:  
dilutions of 3.0 g/L, 2.5 g/L, 2.0 g/L, 1.5 g/L, 1.0 g/L
- 4.2.2.2 *Daphnia magna*:  
dilutions of 5.0 g/L, 4.0 g/L, 3.0 g/L, 2.0 g/L, 1.0 g/L
- 4.2.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.
- 4.2.4 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.
- 4.2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

#### 5.0 Data Analysis

- 5.1 Toxicity tests are conducted on a monthly basis.

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- 5.2 The median lethal concentration ( $LC_{50}$ ) is calculated according to EPA protocols.
- 5.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

### **6.0 Definitions**

- 6.1 Median lethal concentrations ( $LC_{50}$ ) -- the concentration that is calculated to be lethal to 50 percent of the organisms within the test period.

# SGS Environmental Services Inc.

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Document Title: Sample Handling for Aquatic Toxicity Testing  
Method Reference: SGS/USEPA  
Document File Name: 7009-04.DOC  
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Approved by:

*R. H. G. M. M. d.*  
Supervisor

5-17-05  
Date

Approved by:

*Jeanine Patterson*  
QA/QC Officer

5-17-05  
Date

### 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

SGS'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 SGS 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.

# SGS Environmental Services Inc.

## Standard Operating Procedure

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**Document Title:** Sample Handling for Aquatic Toxicity Testing  
**Method Reference:** SGS/USEPA  
**Document File Name:** 7009-04.DOC  
**Revision Number:** 4.0  
**Effective Date:** October 20, 1998  
**Review Date:** May 17, 2005

UNCLASSIFIED  
COPY

**Document Control Number:** 7009.04

**Page 2 of 3**

### 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  $20 \pm 1^\circ \text{C}$  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. SGS 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.

# SGS Environmental Services Inc.

## Standard Operating Procedure

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**Document Title:** Sample Handling for Aquatic Toxicity Testing  
**Method Reference:** SGS/USEPA  
**Document File Name:** 7009-04.DOC  
**Revision Number:** 4.0  
**Effective Date:** October 20, 1998  
**Review Date:** May 17, 2005

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**Document Control Number:** 7009.04

**Page 3 of 3**

### 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

TAB-IO-P243-1/2

Chain of Custody #: OBG091205

Dry Weather Acute Aquatic Toxicity for Sept 2005

Split Sample

AD TOX Sept 2005  
C.TOX # 1 Sept 2005

Project #	Analytical Lab:		Sampled By:	Preservative	Remarks
NPDES PERMIT	CT&E Environmental Services Inc.		(Print) <u>Mark Wasniewsky</u>		
Sample #	Date	Time	Containers	Parameters to be Analyzed	
1	<u>9/11</u>	<u>to 9/12/05</u>	<u>11:00 AM</u>	<u>1 Gallon plastic</u>	<u>Definitive Test(LC50 and NOAEL), Static acute toxicity, 48 hr w/ Daphnia pulex</u>
	<u>to</u>	<u>to</u>	<u>11:00 AM</u>	<u>1000 ml. plastic</u>	<u>Chloride, TSS, Total Solids, Alkalinity</u>
	<u>to</u>	<u>to</u>	<u>11:00 AM</u>	<u>500 ml. plastic</u>	<u>Specific Conductance, CL2</u>
					<u>Total Phosphorus, TOC, NH3</u>
					<u>H2SO4</u>
2	<u>9/12/05</u>	<u>8:15 AM</u>	<u>1 Gallon plastic</u>	<u>Housatonic River water</u>	<u>Chilled</u>
				<u>dilution water for definitive test</u>	
				<u>1000 ml. plastic</u>	<u>Chloride, TSS, Total Solids, Alkalinity</u>
				<u>500 ml. plastic</u>	<u>Specific Conductance, CL2</u>
					<u>Total Phosphorus, TOC, NH3</u>
					<u>H2SO4</u>
Relinquished By:	Date/Time	Received By:	Date/Time		
<u>Mark Wasniewsky</u>	<u>9-12-05</u>	<u>AM Jim</u>	<u>9-12-05 12:31</u>		
Relinquished By:	Date/Time	Received By:	Date/Time		
		<u>Robert Hambrick</u>	<u>9-13-05 11:05</u>		
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:					
<u>001- 7:45 AM 004</u>	<u>005-64T- 7:00 AM</u>	<u>005-64G- 7:00 AM 007</u>	<u>09A- /</u>	<u>09B- /</u>	<u>UPS</u>
The time of compositing the final flow-proportioned sample was <u>11:00 A.M.</u>					<u>3.8°C</u>

## **Appendix III**

### **Bench Data**

# General Electric - 48-hour Acute Biotoxicity Bench Sheet

Client: General Electric Lab. No.: TAS-10-P243-002  
 Project: DRY WEATHER ACUTE Date Received: 09/13/05  
 Sample Date: 09/12/05 Time: 11:00 Date Analyzed: 09/13/05  
 Source: EFFLUENT COMPOSITE Analyst(s): KH  
 Source of dilution water: Housatonic River Water  
 Test Species: Daphnia pulex Age: <24 HRS Temp. Range: °C  
 Type of Test: 48-Hour Static Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	09/13/05	09/15/05
Time:	1300	1300

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 5%	Effluent 15%	Effluent 35%	Effluent 50%	Effluent 75%	Effluent 100%
<b>START</b>									
Temperature	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
Hardness	310	100	110						340
D.O.	8.51	8.74	8.77	8.50	8.45	8.40	8.36	8.34	8.32
pH	7.25	7.08	7.13	7.23	7.20	7.17	7.15	7.10	7.09
Alkalinity	193	63	65						
Sp. Conduct.	443	314	319	474	582	753	913	1082	1238
<b>24 HOUR</b>									
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.	8.44	8.70	8.75	8.46	8.37	8.35	8.31	8.27	8.30
pH	7.21	7.12	7.19	7.26	7.19	7.19	7.21	7.14	7.13
Sp. Conduct.	447	317	326	487	594	762	923	1077	1254
<b>48 HOUR</b>									
No. Surviving	20	20	20	20	20	20	20	20	20
Temperature	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
D.O.	8.40	8.67	8.70	8.41	8.40	8.38	8.32	8.31	8.26
pH	7.30	7.15	7.18	7.28	7.24	7.26	7.26	7.19	7.17
Sp. Conduct.	440	322	330	493	580	771	928	1095	1250

# Acute Biototoxicity Bench Sheet

Client: QC  
 Project: Reference Toxicant Lab. No.: \_\_\_\_\_

Sample Date: \_\_\_\_\_ Time: \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Source: NaCl Date Analyzed: \_\_\_\_\_

Source of dilution water: Moderately Hard Synthetic Water Analyst: KH

Test Species: Daphnia pulex Age: \_\_\_\_\_ Temp. Range: \_\_\_\_\_ °C

Type of Test: 48 Hour Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	02/13/05	02/15/05
Time:	1500	1500

Concentration	Control	625	1250	2500	5,000	10,000
<b>START</b>						
Temperature	20.7	20.7	20.7	20.7	20.7	20.7
Hardness	100					110
D.O.	8.8	8.8	8.8	8.8	8.8	8.8
pH	7.0	7.1	7.2	7.2	7.2	7.2
Alkalinity	64					75
Sp. Conduct.	317	1920	2810	5640	9730	13290
<b>24 HOUR</b>						
Temperature	20.1	20.1	20.1	20.1	20.1	20.1
No. Surviving	20	20	20	16	4	0
<b>48 HOUR</b>						
Temperature	20.4	20.4	20.4	20.4	20.4	20.4
No. Surviving	20	20	14	7	0	0

Note: All results expressed in mg/L unless otherwise designated. < = less than  
 Note: Number in parenthesis equals number not adversely effected (EC<sub>50</sub>). This number is used in calculating EC<sub>50</sub> 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 Organisms.*, Fifth Edition. EPA-821-R-02-012 U.S.EPA, Washington, DC

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: 9/13/05  
 CHEMICAL: NaCl

TEST NUMBER: -

DURATION: 48 HOURS  
 SPECIES: PULEX

RAW DATA:

CONCENTRATION (MG/L)	625.00	1250.00	2500.00	5000.00	*****
NUMBER EXPOSED:	20	20	20	20	20
MORTALITIES:	0	1	13	20	20
SPEARMAN-KARBER TRIM:	0.00%				

SPEARMAN-KARBER ESTIMATES:	LC50:	2176.38
	95% LOWER CONFIDENCE:	1849.85
	95% UPPER CONFIDENCE:	2560.54

---

**Appendix IV**  
**U.S. EPA Region I Toxicity Test Summary**

# Toxicity Test Summary Sheet

Facility Name: General Electric Co. Test Start Date: September 13, 2005  
NPDES Permit Number: MA 000 3891 Pipe Number: 001, 005-64T, 005-64G,  
09A, 09B

Test Type	Test Species	Sample Type	Sample Method
<input checked="" type="checkbox"/> Acute	<input type="checkbox"/> Fathead minnow	<input type="checkbox"/> Prechlorinated	<input type="checkbox"/> Grab
<input type="checkbox"/> Chronic	<input type="checkbox"/> Ceriodaphnia	<input type="checkbox"/> Dechlorinated	<input checked="" type="checkbox"/> Composite
<input type="checkbox"/> Modified*	<input checked="" type="checkbox"/> Daphnia pulex	<input type="checkbox"/> Chlorine	<input type="checkbox"/> Flow thru
<input type="checkbox"/> 24-hour Screening	<input type="checkbox"/> Mysid Shrimp	<input type="checkbox"/> Spiked at lab	<input type="checkbox"/> Other
	<input type="checkbox"/> Menidia	<input checked="" type="checkbox"/> Chlorinated on-site	
	<input type="checkbox"/> Sea Urchin	<input type="checkbox"/> Unchlorinated	
	<input type="checkbox"/> Champia		
	<input type="checkbox"/> Selenastrum		
	<input type="checkbox"/> Other		

\*Modified (Chronic reporting acute values)

### Dilution Water

- 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): September 11, 2005 to September 12, 2005

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: September 13, 2005 to September 15, 2005

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	<u>N/A</u>	48-hr LC50	<u>&gt;100%</u>
		Upper Value	<u>N/A</u>
		Lower Value	<u>N/A</u>
		Data Analysis	
		Method used:	<u>N/A</u>
A-NOEC	<u>N/A</u>	A-NOEC	<u>100%</u>
C-NOEC	<u>N/A</u>	C-NOEC	<u>N/A</u>
		LOEC	<u>N/A</u>
IC25	<u>N/A</u>	IC25	<u>N/A</u>
IC50	<u>N/A</u>	IC50	<u>N/A</u>

N/A = not applicable

***Attachment D***

---

***Chronic Effects of the Process Wastewaters  
Discharged From the General Electric  
Plant; Pittsfield, Massachusetts  
[Samples Collected in September 2005]***

**Chronic Effects of the Process Wastewaters  
Discharged from the  
General Electric Plant  
Pittsfield, Massachusetts**

Samples collected in September 2005

Submitted to:

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

SGS Sample ID: TA5-I0-P242

Study Director: Ken Holliday

28 September 2005

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

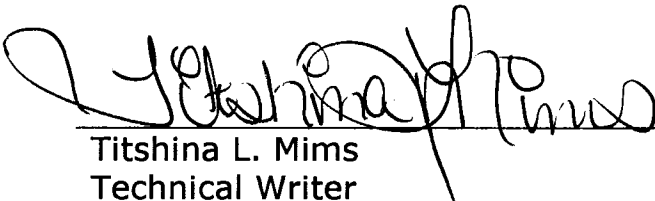
## Signatures and Approval

**Submitted by:** SGS Environmental Services  
1258 Greenbrier Street  
Charleston, West Virginia 25311-1002

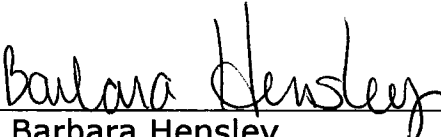
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Ken Holliday  
Study Director  
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28 September 2005  
Date

  
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Titshina L. Mims  
Technical Writer

28 September 2005  
Date

  
\_\_\_\_\_  
Barbara Hensley  
Project Manager  
Barbara.hensley@sgs.com

28 September 2005  
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: 28 September 2005  
Date

  
Authorized signature

Jeannie Milholland  
Name

QA/QC Manager  
Title

SGS Environmental Services  
Laboratory  
Jeannie.milholland@sgs.com

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## 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 September 11, 2005 to September 16, 2005. 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 <sub>50</sub> % effluent	NOAEL % effluent
<i>Ceriodaphnia dubia</i>	48 hours	>100%	100%

### Chronic Toxicity Evaluation

Species	Endpoint	Exposure Period	NOCEL % Effluent	LOCEL % Effluent	MAWC % Effluent
<i>Ceriodaphnia dubia</i>	Survival	7 days	100%	>100%	≥100%
<i>Ceriodaphnia dubia</i>	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 5.0

Study Number: TA5-I0-P242

Test Material: Composite effluent from the General Electric Company located in Pittsfield, Massachusetts

GE Sample ID: A6726C, A6728C and A6730C

Dilution Water: Water from the Housatonic River

Dilution Water ID: A6725R, A6727R and A6729R

Dates Collected:	Effluent	Dilution Water
	09/11/05 to 09/12/05 (A6726C)	09/12/05 (A6725R)
	09/13/05 to 09/14/05 (A6728C)	09/14/05 (A6727R)
	09/15/05 to 09/16/05 (A6730C)	09/16/05 (A6729R)

Dates Received: 09/13/05, 09/15/05, 09/17/05

Test Dates: 09/13/05 to 09/20/05

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 ( $\pm$  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<sub>50</sub> The 48-hour LC<sub>50</sub> 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  $\geq$ 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

September 13, 2005 to September 20, 2005 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 5.0. 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
<i>Daphnia</i> , 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 (A6726C) was collected by GE personnel from September 11, 2005 to September 12, 2005, 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 September 13, 2005, the sample temperature was 3.8°C. The effluent sample was characterized as having

#### Sample #1 – collected from 09/11/05 to 09/12/05

Parameter	Result
Total Hardness	380
Alkalinity (as CaCO <sub>3</sub> )	340
pH	7.41

**Sample #1 – collected from 09/11/05 to  
09/12/05**

<b>Parameter</b>	<b>Result</b>
Specific Conductance	1255
Dissolved Oxygen Concentration*	8.12
Appearance	Clear

The second effluent sample (A6728C) was collected by GE personnel from September 13, 2005 to September 14, 2005, and was used for renewal of test solutions on Day 3 and Day 4. Upon receipt at SGS on September 15, 2005, the sample temperature was 3.8°C. The effluent sample was characterized as having

**Sample #2 – collected from 09/13/05 to  
09/14/05**

<b>Parameter</b>	<b>Result</b>
Total Hardness	390
Alkalinity (as CaCO <sub>3</sub> )	304
pH	7.53
Specific Conductance	1214
Dissolved Oxygen Concentration*	8.08
Appearance	Clear

The third effluent sample (A6730C) was collected by GE personnel from September 15, 2005 to September 16, 2005, and was used for renewal of test solutions on Days 5, 6 and 7. Upon receipt at SGS on September 17, 2005, the sample temperature was 3.9°C. The effluent sample was characterized as having

**Sample #3 – collected from 09/15/05 to  
09/16/05**

<b>Parameter</b>	<b>Result</b>
Total Hardness	430
Alkalinity (as CaCO <sub>3</sub> )	331
pH	7.52
Specific Conductance	1234
Dissolved Oxygen Concentration*	8.09
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 (A6725R) was collected by General Electric personnel on September 12, 2005, and was used with the Day 1 and Day 2 test. Upon receipt at SGS, the sample temperature was 3.8°C. The dilution water sample was characterized as having

<b>Dilution Water #1</b>	<b>Collected 09/12/05</b>
<b>Parameter</b>	<b>Result</b>
Total Hardness	230
Alkalinity (as CaCO <sub>3</sub> )	163
pH	7.38
Specific Conductance	448
Dissolved Oxygen Concentration*	8.39
Appearance:	Slight yellow color

The second dilution water sample (A6727R) was collected by General Electric personnel on September 14, 2005, and was used with the Day 3 and Day 4 tests. Upon receipt at SGS, the sample temperature was 3.8°C. The dilution water sample was characterized as having

<b>Dilution Water #2</b>	<b>Collected 09/14/05</b>
<b>Parameter</b>	<b>Result</b>
Total Hardness	220
Alkalinity (as CaCO <sub>3</sub> )	177
pH	6.77
Specific Conductance	442
Dissolved Oxygen Concentration*	8.27
Appearance:	Slight yellow color

The third dilution water sample (A6729R) was collected by General Electric personnel on September 16, 2005, and was used with the Day 5, 6 and 7 tests. Upon receipt at SGS, the sample temperature was 3.9°C. The dilution water sample was characterized as having

**Dilution Water #3 Collected 09/16/05**

Parameter	Result
Total Hardness	270
Alkalinity (as CaCO <sub>3</sub> )	140
pH	6.96
Specific Conductance	376
Dissolved Oxygen Concentration*	8.27
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:

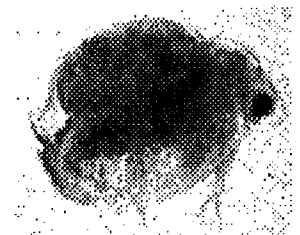
Parameter	Result
Total Hardness	100 - 110
Alkalinity (as CaCO <sub>3</sub> )	64 - 67
pH	7.03 - 7.10
Specific Conductance	308 - 320

**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:

<b>Parameter</b>	<b>Result</b>
Total Hardness	Within range of 80-110 mg/L
Alkalinity (as CaCO <sub>3</sub> )	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  $4.0 \times 10^7$  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 ( $\pm$  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 chlorine 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 September 12, 2005 to September 19, 2005. 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.

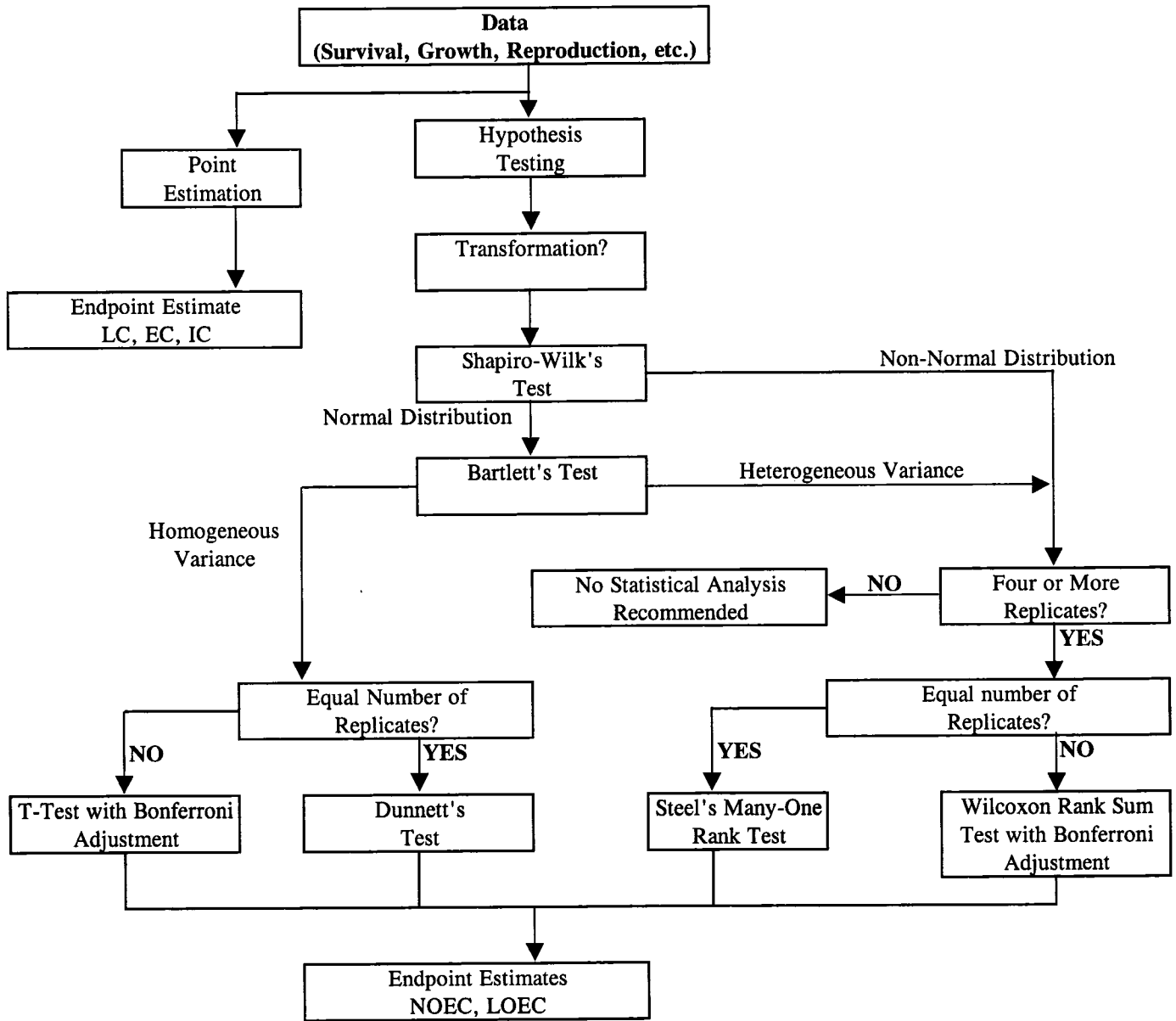
If partial mortalities were observed in at least two concentrations, the probit analysis, which yields  $LC_{50}$  values and 95 percent confidence levels, was used. When fewer than two partial mortalities were observed, the moving average method, binomial method, or non-linear interpolation, was used 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<sub>50</sub> 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 →	27.4	28.9	28.7	29.7	28.2	30.3	27.2	27.5	26.9

(Secondary reference control = sodium thiosulfate)



Statistical analyses of *C. dubia* reproduction using Dunnett's did not establish 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 September 06, 2005 to September 08, 2005, and the resulting 48-hour LC<sub>50</sub> was estimated by Spearman-Kärber Trim to be 1534 mg of NaCl/L (95% confidence intervals of 1290 to 1823 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*. 17<sup>th</sup> 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-821-R-02-013. 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).**

<b>Parameters</b>	<b>Method</b>	<b>Detection Limits</b>
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	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 09/11/05 to 09/12/05  
 Dilution water collected on 09/12/05  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

<b>Parameter</b>	<b>Effluent (A6726C)</b>	<b>Housatonic River (A6725R)</b>
Temperature	24.7°C	24.7°C
pH	7.41	7.38
Alkalinity (as CaCO <sub>3</sub> )	340 mg/L	163 mg/L
Hardness (as CaCO <sub>3</sub> )	380 mg/L	230 mg/L
Dissolved Oxygen	8.12 mg/L	8.39 mg/L
Specific Conductivity	1255 µmhos/cm	448 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	ND	ND
Chloride	160 mg/L	26 mg/L
Total Suspended Solids	ND	ND
Total Solids	630 mg/L	250 mg/L
Total Organic Carbon	ND	1.6 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 09/13/05 to 09/14/05  
 Dilution water collected on 09/14/05  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

<b>Parameter</b>	<b>Effluent (A6728C)</b>	<b>Housatonic River (A6727R)</b>
Temperature	25.2°C	25.2°C
pH	7.53	6.77
Alkalinity (as CaCO <sub>3</sub> )	304	177
Hardness (as CaCO <sub>3</sub> )	390	220
Dissolved Oxygen	8.08	8.27
Specific Conductivity	1214	442
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	0.024 mg/L	ND
Chloride	160 mg/L	24 mg/L
Total Suspended Solids	ND	ND
Total Solids	640 mg/L	250 mg/L
Total Organic Carbon	1.1 mg/L	1.6 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 09/15/05 to 09/16/05  
 Dilution water collected on 09/16/05  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

<b>Parameter</b>	<b>Effluent (A6730C)</b>	<b>Housatonic River (A6729R)</b>
Temperature	25.4°C	25.4°C
pH	7.52	6.96
Alkalinity (as CaCO <sub>3</sub> )	331	140
Hardness (as CaCO <sub>3</sub> )	430	270
Dissolved Oxygen	8.09	8.27
Specific Conductivity	1234	376
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	ND	ND
Chloride	160 mg/L	22 mg/L
Total Suspended Solids	5.0 mg/L	5.0 mg/L
Total Solids	640 mg/L	180 mg/L
Total Organic Carbon	3.3 mg/L	3.8 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	6.72-7.44	8.27-8.39	24.5-25.8	350-448
Reference Control	7.04-7.11	8.72-8.84	24.5-25.8	314-324
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	7.09-7.14	8.74-8.86	24.5-25.8	320-329
6.25% effluent	6.79-7.42	8.24-8.34	24.5-25.8	429-553
12.5% effluent	6.88-7.41	8.24-8.30	24.5-25.8	513-680
25% effluent	7.09-7.44	8.20-8.26	24.5-25.8	689-773
50% effluent	7.21-7.49	8.15-8.25	24.5-25.8	814-982
75% effluent	7.37-7.53	8.13-8.24	24.5-25.8	1016-1162
100% effluent	7.37-7.59	8.08-8.19	24.5-25.8	1187-1255

Dilution Water Control = receiving water collected from the Housatonic River  
 Reference Control = moderately hard synthetic water  
 Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 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							Mean
	1	2	3	4	5	6	7	
Reference Control	100%	100%	100%	100%	100%	100%	100%	
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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	47	34	84	110	27.5
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	0	0	0	47	48	80	94	26.9
Control	0	0	0	48	23	108	93	27.2
6.25	0	0	0	46	45	75	108	27.4
12.5	0	0	0	50	62	63	114	28.9
25	0	0	0	52	46	68	121	28.7
50	0	0	0	50	39	90	118	29.7
75	0	0	0	51	41	101	89	28.2
100	0	0	0	51	65	65	122	30.3

Actual number of mortalities (if any) is presented in parentheses.

Reference Control = moderately hard synthetic water  
 Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> Control = moderately hard synthetic water and sodium thiosulfate (0.1 N)  
 Dilution Water Control = receiving water collected from the Housatonic River

## **Appendix I**

## **References**



# SGS Environmental Services Inc.

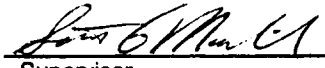
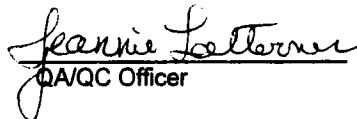
## Standard Operating Procedure

**Document Title:** Procedure for Chronic Aquatic Toxicity Testing  
**Method Reference:** SGS/USEPA  
**Document File Name:** 7003-05.DOC  
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**Effective Date:** May 17, 2005  
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Document Control Number: 7003.05

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Approved by:  5-17-05  
 Supervisor Date  
 Approved by:  5-17-05  
 QA/QC Officer Date

### 1.0 INTRODUCTION

- 1.1 This method estimates the chronic toxicity of whole effluents and receiving water to *Pimephales promelas*, fathead minnow, and *Ceriodaphnia dubia* in a seven-day, static-renewal test. Growth, survival, and reproduction are used as endpoints to measure toxicity.
- 1.2 The sample is brought up to test temperature in a room temperature water bath. 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).
- 1.3 24 hour composite samples are used in chronic testing. Some tests use three samples collected over the seven day period in which the test is set up and daily renewals are made. Other tests require a fresh sample daily for seven days.
- 1.3.1 The first sample is used for test initiation on day 1 and test solution renewal on day 2. The second sample is used for renewals on days 3 and 4, and the third sample is used for renewals on days 5, 6. Samples held over night are kept at 4° C until needed.
- 1.3.2 A fresh sample is collected and used for solution renewal each day.

### 2.0 PIMEPHALES PROMELAS LARVAL SURVIVAL AND GROWTH TEST

#### 2.1 Test Duration

7 Days

#### 2.2 Static Renewal

#### 2.3 Endpoints

Survival and Growth

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**Document Title:** Procedure for Chronic Aquatic Toxicity Testing  
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### 2.4 Test Preparation

- 2.4.1 The screening test consists of a control and a 100%. The definitive test consists of a control and a dilution series consisting of 100%, 50%, 25%, 12.5% and 6.25% of the effluent(unless otherwise requested). Samples taken at points downstream may be included if a permit requires it.
- 2.4.2 The sample is brought up to test temperature(25°C) in a waterbath. Chemical parameters (alkalinity, hardness, pH, D.O., and conductivity) 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).
- 2.4.3 The dilutions are prepared in graduated cylinders using moderately hard synthetic water (unless other dilution water is specified by the permit).
- 2.4.4 250 ml of each dilution are poured into four(4) beakers. Containers are disposable 800 ml HDPE plastic beakers.

### 2.5 Loading

- 2.5.1 Ten organisms, less than 24 hours old, are placed in each beaker. Fish are loaded by first transferring them to a shallow dish from which they are easily transferred with a large bore pipette.
- 2.5.2 The test chambers are positioned randomly at the beginning of the test. This randomization is maintained throughout the test.

### 2.6 Test Temperature

The test is conducted in a constant temperature incubator at 25°C ± 1°

### 2.7 Renewal Procedure

- 2.7.1 At 24 hours, the water quality parameters and temperatures are checked and recorded. At this time mortalities are also recorded and removed.
- 2.7.2 New concentrations are prepared (as in day 1) and the renewal water qualities and temperatures are recorded.
- 2.7.3 The test vessels are gently emptied. Extreme care is taken not to lose any fish. At this time uneaten *artemia* and other debris are removed from the

# SGS Environmental Services Inc.

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bottom of the test chambers using a disposable pipet. New dilutions are slowly added.

2.7.4 Accidental removal of fish is noted on the bench sheet.

### 2.8 Feeding

2.8.1 The fish in each chamber are fed 0.15 ml of an *artemia* suspension two (2) times daily. Accuracy and consistency is assured by dispensing *artemia* suspension with an automatic pipette. The *artemia* suspension consists of concentrated newly hatched brine shrimp. This feeding will supply each chamber with sufficient food to ensure a small excess.

2.8.2 Fish are not fed during the final 12 hours of the test.

### 2.9 Termination of the Test

2.9.1 Seven days after test initiation the test is terminated. At this time final water qualities are measured and recorded along with mortalities.

2.9.2 Surviving larvae from each test chamber are rinsed with D.I. water and are placed on pre-weighed tin trays. The fish are euthanised before drying. The fish are dried at 100° C for a minimum of 2 hours and are then placed in a desiccator until the time of weighing. Weights are measured to the nearest 0.01 mg.

### 2.10 Acceptability of Test Results

Survival in the controls must be at least 80%. The average dry weight of control larvae must be greater than or equal to 0.250 mg.

## 3.0 CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

### 3.1 Test Duration

Until 60% of the control has three broods.

### 3.2 Static Renewal

### 3.3 Test Endpoints

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Survival and Reproduction

### **3.4 Test Preparation**

3.4.1 A screening test consists of a control and a 100%.

3.4.2 A definitive test consists of a control and a dilution series consisting of 100%, 50%, 25%, 12.5% and 6.25% of the effluent (unless otherwise requested) and River Sample Points, if provided.

### **3.5 Feeding**

0.1 ml each of YCT and concentrated algae is placed in the test vessel prior to loading or transferring of the organisms. This is done to prevent undue stress to the organisms.

### **3.6 Loading**

3.6.1 Neonates are obtained from adults that have eight or more young in their third or subsequent broods.

3.6.2 Neonates used in the test are all within 8 hours of each other in age. At the time of test initiation the neonates are  $\leq 24$  hours.

3.6.3 One neonate is placed in each test vessel. Test vessels are 30 ml disposable medicine cups. SGS uses a fibrotic illuminator during loading and renewals.

### **3.7 Test Temperature**

25°C  $\pm$  1° C

### **3.8 Renewal**

3.8.1 New test solutions are prepared and placed in new test vessels daily. Renewal water quality is measured prior to transfer. The test organisms are transferred to the new test solutions using a small bore pipette.

3.8.2 Neonates are counted at the time of transfer, but are not transferred. This number, along with any adult mortalities, is recorded.

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### 3.9 Termination of the Test

3.9.1 The test is terminated when sixty percent (60%) of the control has had three broods.

3.9.2 At this time neonates are counted and recorded.

### 3.10 Acceptability of Test Results

3.10.1 Survival of the control adults must be at least 80%.

3.10.2 80% or greater survival and an average of 15 or more young/surviving female in the control solutions.

## 4.0 TEST DATA

4.1 Mortalities are recorded daily.

4.2 Water quality parameters are recorded before test initiation, at 24 hour intervals, (renewal of dilutions) and at the time of test termination.

4.3 Final dry weight of the *Pimephales promelas* are recorded.

4.4 Neonates are counted and recorded daily in the *Ceriodaphnia dubia* test.

4.5 Any unusual observations or complications noted during the test.

## 5.0 DATA ANALYSIS

5.1 Introduction

The data collected is first tabulated and summarized. A hypothesis test approach is used to calculate LOEC (Lowest Observed Effect Concentration) and NOEC (No Observed Effect Concentration) values for survival, growth and reproduction.

5.2 Methods for estimating the NOEC and LOEC of Survival Data

*Note: Concentrations at which there is no survival in any of the test chambers are excluded from statistical analysis.*

5.2.1 **Fisher's Exact Test** - used for *Ceriodaphnia dubia* survival data.

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- 5.2.2 **Shapiro-Wilk's Test and Bartlett's Test** - tests for normality and homogeneity of variance respectively, are performed first using no transformation.
- 5.2.3 **Dunnett's Procedure** - parametric procedure; used if data meets both the normality and homogeneity assumptions.
- 5.2.4 **Steel's Many-One Rank Test** - non-parametric procedure; used if either the normality or homogeneity test fail.
- 5.2.5 **Bonferroni T-test** - parametric analysis; used when unequal number of replicates occur.
- 5.2.6 **Wilcoxon Rank Sum Test with the Bonferroni adjustments** - non-parametric analysis; used when unequal number of replicates occur.
- 5.2.7 **t-Test** - used to compare Control with River Sample Points. Used for screening tests.

## 6.0 REPORT PREPARATION

- 6.1 SGS chronic toxicity test reports contain the following information:
  - 6.1.1 **Summary Page** - Includes client, NPDES permit number, date collected, type and date of test, dilution water used, summary of test procedure and results.
  - 6.1.2 **Logistical Information** - When the sample was collected and by whom, when the sample arrived at the laboratory, start time of test, any other pertinent information.
  - 6.1.3 **Results** - Values obtained from test, statistical methods utilized to calculate the results.
  - 6.1.4 **Initial Characteristics of Effluent** - Includes dissolved oxygen, pH, specific conductivity, hardness, alkalinity, temperature and total residual chlorine when indicated.
  - 6.1.5 **Data Summary** - Summarizes percent survival per concentration, mean dry weight per concentration, mean young produced per concentration.
  - 6.1.6 **Statistical Data Print Outs.**

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### 6.1.7 Chain of Custody

### 7.0 References

- 7.1 Weber, Cornelius I., et al., *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.*, Fourth Edition. EPA-821-R-02-013. U.S.EPA, Cincinnati, Ohio.
- 7.2 *Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency*, October, 1991.

# SGS Environmental Services Inc.

## Standard Operating Procedure

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Document Title: Culture Waters for Aquatic Toxicity Testing  
Method Reference: SGS/USEPA  
Document File Name: 7005-04.DOC  
Revision Number: 4.0  
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Document Control Number: 7005.04

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Approved by: *Scott McMill* 5-17-05  
Supervisor Date  
Approved by: *Jeanine Latture* 5-17-05  
QA/QC Officer Date

### 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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### 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<sub>4</sub> Stock Solution

- 4.2.1 Place 120 g of reagent water, anhydrous MgSO<sub>4</sub> 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<sub>3</sub> Stock Solution

- 4.3.1 Place 96 g of reagent grade NaHCO<sub>3</sub> 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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### 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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Document Title: Culture of *Daphnia*  
Method Reference: SGS/USEPA  
Document File Name: 7006-05.DOC  
Revision Number: 5.0  
Effective Date: March 12, 2001  
Review Date: May 17, 2005

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COPYDocument Control Number: 7006

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Approved by: [Signature]  
Supervisor5-17-05  
DateApproved by: [Signature]  
QA/QC Officer5-17-05  
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  $20 \pm 1^\circ$  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 (*Selenastrum capricornium*) 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.

# SGS Environmental Services Inc.

## Standard Operating Procedure

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Document File Name: 7006-05.DOC  
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Effective Date: March 12, 2001  
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### 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.

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### 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.

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Document Title: Reference Toxicant Testing  
Method Reference: SGS/USEPA  
Document File Name: 7008-05.DOC  
Revision Number: 5.0  
Effective Date: July 31, 2001  
Review Date: May 17, 2005

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Document Control Number: 7008

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Approved by: [Signature] Supervisor 5-17-05 Date  
Approved by: [Signature] QA/QC Manager 5-17-05 Date

### 1.0 Summary

To insure that healthy organisms are used in testing, SGS performs monthly QA/QC tests on all in-house cultured organisms. SGS uses sodium chloride as a reference toxicant.

### 2.0 Apparatus

- 2.1 Disposable plastic beakers
- 2.2 Disposable plastic medicine cups
- 2.3 Pipettes
- 2.4 pH meter
- 2.5 Dissolved oxygen (DO) meter

### 3.0 Reagents

- 3.1 Moderately hard synthetic water (refer to document control number 7005, *Culture Waters for Aquatic Toxicity Testing*)
- 3.2 Sodium Chloride (NaCl), reagent grade, Baker

### 4.0 Method

#### 4.1 *Pimephales promelas* (fathead minnows)

- 4.1.1 48-hour static acute toxicity tests are run at 20°C ( $\pm 1^\circ\text{C}$ ) using fish that are from 1 to 14 days old.
- 4.1.2 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.

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- 4.1.3 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.
- 4.1.4 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.
- 4.1.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

#### **4.2 Daphnids (*Ceriodaphnia dubia*, *Daphnia magna*, *Daphnia pulex*)**

- 4.2.1 48-hour static acute tests are performed at 25°C ( $\pm 1^\circ\text{C}$ ) using organisms less than 24 hours old.
- 4.2.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.
- 4.2.2.1 *Ceriodaphnia dubia*, *Daphnia pulex*:  
dilutions of 3.0 g/L, 2.5 g/L, 2.0 g/L, 1.5 g/L, 1.0 g/L
- 4.2.2.2 *Daphnia magna*:  
dilutions of 5.0 g/L, 4.0 g/L, 3.0 g/L, 2.0 g/L, 1.0 g/L
- 4.2.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.
- 4.2.4 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.
- 4.2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

#### **5.0 Data Analysis**

- 5.1 Toxicity tests are conducted on a monthly basis.

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- 5.2 The median lethal concentration ( $LC_{50}$ ) is calculated according to EPA protocols.
- 5.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

### 6.0 Definitions

- 6.1 Median lethal concentrations ( $LC_{50}$ ) -- the concentration that is calculated to be lethal to 50 percent of the organisms within the test period.



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## Standard Operating Procedure

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Document Title: Sample Handling for Aquatic Toxicity Testing  
Method Reference: SGS/USEPA  
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Approved by: [Signature] 5-17-05  
Supervisor Date

Approved by: [Signature] 5-17-05  
QA/QC Officer Date

### 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

SGS'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 SGS 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.

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## Standard Operating Procedure

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### 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  $20 \pm 1^\circ \text{C}$  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. SGS 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.

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### 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**



TAS-IO-P242-3/4

Chain of Custody Record  
 General Electric Co.  
 100 Woodlawn Ave. Pittsfield, MA 01201

Chain of Custody #: 086091405

Sept 2005 Chronic Toxicity - Comp. # 2

Project #	Analytical Lab:	Date	Time	Containers	Sampled By:	Preservative	Remarks
NPDES PERMIT	CT&E Environmental Services Inc.				(Print) <u>Merk Wasnewsky</u>		
Sample #					Parameters to be Analyzed		
3	A6728C	9/13 to 9/14/05	11:00 AM	1 Gallon plastic	Definitive Test( NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
3	A6728C	9/13 to 9/14/05	11:00 AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
3	A6728C	9/13 to 9/14/05	11:00 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
4	A6727R	9/14/05	8:15 AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
4	A6727R	9/14/05	8:15 AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
4	A6727R	9/14/05	8:15 AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
Relinquished By: <u>Merk Wasnewsky</u>		Date/Time: 9/14/05	Received By: <u>Jim Get</u>		Date/Time: 9/14/05		
Relinquished By:		Date/Time:	Received By: <u>Robin Dambrock</u>		Date/Time: 9-15-05	11:55	
<p>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:</p> <p>001- 7:49 AM 004- 005-64T- 7:09 AM 005-64G- 7:00 AM 007- 09A- / VPS 09B- /</p> <p>The time of compositing the final flow-proportioned sample was 11:00 A.M. 3.8<sup>°c</sup></p>							

Chain of Custody Record  
 General Electric Co.  
 100 Woodlawn Ave. Pittsfield, MA 01201

Chain of Custody #: 1A5 10-1242-016  
 Chain of Custody #: OBG091605

Sept 2005 Chronic Toxicity - Comp. # 3

Project #	Sample #	Date	Analytical Lab:	Time	Containers	Sampled By:	Preservative	Remarks
			CT&E Environmental Services Inc.			(Print) <u>Mark Wasniewsky</u>		
5	A6730C	9/15 to 9/16/05		11:00 AM	1 Gallon plastic	Parameters to be Analyzed	Chilled	(See below)
5	A6730C	9/15 to 9/16/05		11:00 AM	1000 ml. plastic	Definitive Test (MOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphna	Chilled	
5	A6730C	9/15 to 9/16/05		11:00 AM	500 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
						Total Phosphorus, TOC, NH3	H2SO4	
6	A6729R	9/16/05		8:15 AM	1 Gallon plastic	Nonstatic River water	Chilled	
6	A6729R	9/16/05		8:15 AM	1000 ml. plastic	dilution water for chronic test	Chilled	
6	A6729R	9/16/05		8:15 AM	500 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
						Total Phosphorus, TOC, NH3	H2SO4	
Relinquished By:		Date/Time		Received By:		Date/Time		
<u>Mark Wasniewsky</u>		9-16-05		<u>AM Gray</u>		SEP 16 2005		
Relinquished By:		Date/Time		Received By:		Date/Time		
<u>Mark Wasniewsky</u>		9-16-05		<u>Robert Dambuch</u>		9-16-05 both 10:15		
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 004-005-64T-700 AM 005-64G-700 AM 007-09A-09A-09B-39°C The time of compositing the final flow-proportioned sample was 11:00 A.M.								

## **Appendix III**

### **Bench Data**



# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: \_\_\_\_\_  
 Lab. No.: 7A5-10-P242-001/002  
 Date Received: 09/13/05  
 Date Analyzed: 09/13/05  
 Sample Date: 09/11/05 Time: 11:00  
 Source: Effluent composite  
 Analyst(s): KH  
 Source of dilution water: Housatonic River  
 Age: < 24 hrs Temp. Range: °C  
 Test Species: Ceriodaphnia dubia  
 Type of Test: 7-day chronic

Total Chlorine: n/d

Date:	09/13/05	Beginning	Ending
Time:	1300		09/14/05

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
<b>Initial</b>									
Temperature	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
Hardness	230	100	110						380
D.O.	8.39	8.01	8.84	8.31	8.27	8.20	8.17	8.15	8.12
pH	7.30	7.04	7.10	7.39	7.40	7.40	7.41	7.43	7.41
Alkalinity	143	63	66						340
Sp. Conduct.	448	317	320	513	680	741	934	1084	1255

	10	10	10	10	10	10	10	10	10
<b>End</b>									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	25.3	25.5	25.3	25.3	25.3	25.3	25.3	25.3	25.3
D.O.	8.28	8.90	8.75	8.25	8.24	8.16	8.10	8.11	8.08
pH	7.42	7.09	7.17	7.43	7.45	7.46	7.40	7.49	7.46
Sp. Conduct.	406	324	333	522	691	749	938	1081	1250

**DAY** \_\_\_\_\_

Method Reference: *Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition. EPA-821-R-02-013 U.S.EPA, Washington, DC

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: \_\_\_\_\_  
 Lab. No.: 145-10-P242-001/002  
 Date Received: 09/15/05  
 Sample Date: 09/11-12/05 Time: 11:00 Date Analyzed: 09/14/05  
 Source: Effluent composite Analyst(s): KH  
 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

Date:	<u>09/14/05</u>	Beginning	Ending
Time:	<u>1500</u>		<u>09/15/05</u>

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
<b>Initial</b>									
Temperature	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Hardness	210	100	100						390
D.O.	8.30	8.84	8.80	8.27	8.27	8.25	8.25	8.24	8.18
pH	7.44	7.08	7.13	7.42	7.41	7.42	7.38	7.37	7.37
Alkalinity	108	67	69						520
Sp. Conduct.	430	322	326	553	644	773	982	1016	1222

	10	10	10	10	10	10	10	10	10
<b>End</b>									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.6	24.0	24.6	24.6	24.6	24.6	24.6	24.6	24.6
D.O.	8.21	8.68	8.67	8.14	8.21	8.21	8.20	8.21	8.13
pH	7.47	7.13	7.19	7.47	7.48	7.45	7.41	7.37	7.42
Sp. Conduct.	440	331	341	566	640	791	944	1037	1237

**DAY** 7





# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: Lab. No.: TAS-10-P242-005/006  
 Date Received: 02/18/05  
 Date Analyzed: 02/17/05  
 Source: Effluent composite  
 Analyst(s): KH  
 Source of dilution water: Housatonic River  
 Age: < 24 hrs Temp. Range: °C  
 Test Species: Ceriodaphnia dubia  
 Type of Test: 7-day chronic

Date:	02/17/05	Beginning	Ending
Time:	1300		1300

Total Chlorine: n/a

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
<b>Initial</b>									
Temperature	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
Hardness	270	100	100						430
D.O.	8.27	8.72	8.75	8.25	8.24	8.21	8.15	8.14	8.09
pH	6.96	7.07	7.09	7.10	7.19	7.29	7.36	7.45	7.52
Alkalinity	140	67	66						331
Sp. Conduct.	376	314	321	458	551	734	921	1162	1234

Concentration →	10	10	10	10	10	10	10	10	10
<b>End</b>									
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.	8.21	8.61	8.65	8.21	8.21	8.16	8.12	8.10	8.13
pH	7.03	7.11	7.15	7.15	7.23	7.32	7.42	7.50	7.58
Sp. Conduct.	387	319	329	471	563	741	938	1152	1246

**DAY 5**

Method Reference: Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms., Fourth Edition. EPA-821-R-02-013 U.S.EPA, Washington, DC

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: \_\_\_\_\_  
 Lab. No.: TAS-10-P242-005/006  
 Date Received: 09/17/05  
 Sample Date: 09/15-16/05 Time: 1100  
 Date Analyzed: 09/18/05  
 Source: Effluent composite  
 Analyst(s): KH  
 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

Date:	<u>09/18/05</u>	Beginning	Ending
Time:	<u>1300</u>		

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
Initial									
Temperature	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
Hardness	250	110	110						440
D.O.	8.34	8.84	8.82	8.32	8.27	8.25	8.25	8.24	8.19
pH	7.04	7.04	7.09	7.11	7.28	7.39	7.46	7.52	7.59
Alkalinity	137	65	67						
Sp. Conduct.	360	322	328	441	580	786	840	1022	1216

End	10	10	10	10	10	10	10	10	10
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
D.O.	8.27	8.71	8.75	8.28	8.24	8.20	8.21	8.19	8.22
pH	7.09	7.09	7.12	7.15	7.33	7.45	7.51	7.59	7.63
Sp. Conduct.	371	326	337	449	593	797	854	1029	1224

DAY 4

Method Reference: Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. EPA-821-R-02-013 U.S.EPA, Washington, DC

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: JAS-10-P242-005/006  
 Lab. No.: JAS-10-P242-005/006  
 Date Received: 02/17/05  
 Date Analyzed: 04/19/05  
 Sample Date: 02/15-16/05 Time: 1100  
 Source: Effluent composite Analyst(s): KH  
 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:	02/19/05	02/20/05
Time:	1300	1300

Concentration →	Housatonic River Control	MHSW Control	MHSW Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	Effluent 6.25%	Effluent 12.5%	Effluent 25%	Effluent 50%	Effluent 75%	Effluent 100%
<b>Initial</b>									
Temperature	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
Hardness	250	100	100						420
D.O.	8.36	8.84	8.86	8.34	8.30	8.26	8.24	8.23	8.16
pH	7.07	7.11	7.14	7.19	7.18	7.44	7.49	7.53	7.58
Alkalinity	132	67	69						326
Sp. Conduct.	350	324	329	429	513	689	814	1029	1187

End	10	10	10	10	10	10	10	10	10
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.	8.31	8.72	8.71	8.30	8.26	8.20	8.21	8.20	8.19
pH	7.11	7.14	7.19	7.22	7.35	7.49	7.53	7.61	7.63
Sp. Conduct.	366	333	334	440	529	697	821	1039	1194

**DAY** 7

Method Reference: *Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.*, Fourth Edition. EPA-821-R-02-013 U.S.EPA, Washington, DC

# Biotoxicity Bench Sheet

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Page 1 of 3

Lab. No. TAS-10-P242 Test Organism CD Start Date: 09/13/05 Time: 1300  
 Client: GE Lot No. \_\_\_\_\_ End Date: 02/20/05 End Time 1300  
 Effluent/Sample EFFLUENT Age: <24 hrs Investigators KH

Conc.	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
Control	1															
	2															
	3															
	4	5	4	5	4	4	5	6	5	5	5					
	5	0	11	0	0	0	0	0	0	12	0					
	6	12	0	13	11	10	17	12	13	0	14					
	7	14	13	14	13	0	4	0	9	14	12					
	8			22												
	total	31	28	31	28	20	26	18	27	31	31	272	10	27.2		

Conc.	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
2°Control	1															
	2															
	3															
	4	4	5	4	5	6	4	5	5	4	5					
	5	11	0	0	0	0	0	12	11	0	0					
	6	0	13	12	12	15	9	0	0	11	12					
	7	10	8	15	14	0	13	14	17	13	0					
	8															
	total	31	26	31	31	21	26	31	33	28	17	275	10	27.5		

Conc.	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
2°Control+	1															
	2															
	3															
	4	5	4	5	4	5	5	5	5	4	5					
	5	0	0	11	0	12	0	0	14	11	0					
	6	16	11	0	12	0	12	14	0	0	15					
	7	0	13	7	14	12	13	16	6	13	0					
	8															
	total	21	28	23	30	29	30	35	25	28	20	269	10	26.9		



# Biotoxicity Bench Sheet

Lab. No. TAS-10-P242 Test Organism CD Start Date: 09/13/05 Time: 1300  
 Client: GE Lot No. \_\_\_\_\_ End Date: 09/20/05 End Time: 1300  
 Effluent/Sample EFFLUENT Age: <24 hrs Investigators KH

Conc. 6.25%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	4	4	4	5	5	6	4	5	4				
	5	0	0	12	0	13	0	0	9	0	11				
	6	11	15	0	13	0	11	14	0	11	0				
	7	8	6	15	18	15	8	0	11	13	14				
	8				35										
	total	24	25	31	<del>32</del>	33	24	20	24	29	29	274	10	27.4	

Conc. 12.5%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	5	4	5	4	5	6	5	5	6				
	5	0	0	14	0	13	0	10	12	13	0				
	6	10	14	0	11	0	14	0	0	0	14				
	7	12	18	12	13	13	0	17	1	15	13				
	8														
	total	27	37	30	29	30	19	33	18	33	33	289	<del>28</del> <sup>10</sup>	28.9	

Conc. 25%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	6	5	6	6	5	5	4	5	5				
	5	11	0	0	0	0	14	0	13	0	8				
	6	0	10	10	9	9	0	15	0	15	0				
	7	13	15	15	19	5	13	9	14	13	5				
	8														
	total	29	31	30	34	20	32	29	31	33	18	287	10	28.7	

# Biototoxicity Bench Sheet

Page 3 of 3

Lab. No. TAS-10-0242 Test Organism CD Start Date: 02/13/05 Time: 1300  
 Client: GE Lot No. \_\_\_\_\_ End Date: 02/29/05 End Time: 1300  
 Effluent/Sample EFFLUENT Age: < 24 hrs Investigators KH

Conc. 50%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	6	5	4	5	5	5	5	4	6				
	5	15	0	0	0	12	0	12	0	0	0				
	6	0	13	9	11	0	13	0	16	14	14				
	7	19	0	11	8	13	8	9	19	15	16				
	8														
	total	39	19	25	23	30	26	26	40	33	36	297	10	29.7	

Conc. 75%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	6	6	6	5	5	5	4	5	4				
	5	14	0	0	0	0	0	15	0	12	0				
	6	0	14	15	15	14	16	0	12	0	15				
	7	11	0	19	0	7	20	5	5	7	15				
	8														
	total	30	20	40	21	26	41	25	21	24	34	282	10	28.2	

Conc. 100%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	4	5	5	5	6	6	5	5	6	4				
	5	12	0	0	0	13	14	0	0	15	11				
	6	0	12	13	14	0	0	13	13	0	0				
	7	12	13	6	9	17	10	13	14	15	13				
	8														
	total	28	30	24	28	36	30	31	<del>31</del> 32	36	28	303	10	30.3	30.2

## **Appendix IV**

### **Statistical Sheets**

Title: GE SEPTEMBER 2005  
File: GECDREP .905

Transform:

NO TRANSFORMATION

Kolmogorov Test for Normality

---

D = 0.0850 (p-value > 0.100)  
D\* = 0.8129

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 SEPTEMBER 2005

File: GECDREP .905

Transform:

NO TRANSFORMATION

Bartlett's Test for Homogeneity of Variance

---

Calculated B1 statistic = 8.2343 (p-value = 0.4109)

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 SEPTEMBER 2005

File: GECDREP .905

Transform:

NO TRANSFORMATION

## ANOVA Table

SOURCE	DF	SS	MS	F
Between	8	115.6222	14.4528	0.4669
Within (Error)	81	2507.5000	30.9568	
Total	89	2623.1222		

(p-value = 0.8760)

Critical F = 2.7390 (alpha = 0.01, df = 8,81)

= 2.0549 (alpha = 0.05, df = 8,81)

Since  $F < \text{Critical F}$  FAIL TO REJECT  $H_0$ : All equal (alpha = 0.05)

Title: GE SEPTEMBER 2005  
File: GECDREP .905

Transform:

NO TRANSFORMATION

Dunnett's Test - TABLE 1 OF 2

Ho:Control&lt;Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	CONTROL	27.1000	27.1000		
2	CONTROL+	26.9000	26.9000	0.0804	
3	2' CONTROL	27.5000	27.5000	-0.1608	
4	6.25%	27.1000	27.1000	0.0000	
5	12.5%	28.9000	28.9000	-0.7234	
6	25%	28.7000	28.7000	-0.6430	
7	50%	29.7000	29.7000	-1.0449	
8	75%	28.2000	28.2000	-0.4421	
9	100%	30.2000	30.2000	-1.2459	

Dunnett critical value = 2.4400 (1 Tailed, alpha = 0.05, df [used] = 8,60)  
(Actual df = 8,81)

Title: GE SEPTEMBER 2005  
File: GECDREP .905

Transform:

NO TRANSFORMATION

Dunnett's Test - TABLE 2 OF 2

Ho:Control&lt;Treatment

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	CONTROL	10			
2	CONTROL+	10	6.0713	22.4	0.2000
3	2' CONTROL	10	6.0713	22.4	-0.4000
4	6.25%	10	6.0713	22.4	0.0000
5	12.5%	10	6.0713	22.4	-1.8000
6	25%	10	6.0713	22.4	-1.6000
7	50%	10	6.0713	22.4	-2.6000
8	75%	10	6.0713	22.4	-1.1000
9	100%	10	6.0713	22.4	-3.1000

Title: GE SEPTEMBER 2005

File: GECDREP .905

Transform:

NO TRANSFORMATION

GRP	IDENTIFICATION	MEAN	SMOOTHED MEAN	CONCENTRATION
1	CONTROL	27.1000	28.2556	0.0000
2	CONTROL+	26.9000	28.2556	0.0000
3	2' CONTROL	27.5000	28.2556	2.0000
4	6.25%	27.1000	28.2556	6.2500
5	12.5%	28.9000	28.2556	12.5000
6	25%	28.7000	28.2556	25.0000
7	50%	29.7000	28.2556	50.0000
8	75%	28.2000	28.2556	75.0000
9	100%	30.2000	28.2556	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: September 13, 2005  
NPDES Permit Number: MA 000 3891 Pipe Number: 001, 005-64T, 005-64G,  
09A, 09B

Test Type	Test Species	Sample Type	Sample Method
<input type="checkbox"/> Acute	<input type="checkbox"/> Fathead minnow	<input type="checkbox"/> Prechlorinated	<input type="checkbox"/> Grab
<input checked="" type="checkbox"/> Chronic	<input type="checkbox"/> Ceriodaphnia	<input type="checkbox"/> Dechlorinated	<input checked="" type="checkbox"/> Composite
<input type="checkbox"/> Modified*	<input checked="" type="checkbox"/> Ceriodaphnia dubia	<input type="checkbox"/> Chlorine	<input type="checkbox"/> Flow thru
<input type="checkbox"/> 24-hour Screening	<input type="checkbox"/> Mysid Shrimp	<input type="checkbox"/> Spiked at lab	<input type="checkbox"/> Other
	<input type="checkbox"/> Menidia	<input checked="" type="checkbox"/> Chlorinated on-site	
	<input type="checkbox"/> Sea Urchin	<input type="checkbox"/> Unchlorinated	
	<input type="checkbox"/> Champia		
	<input type="checkbox"/> Selenastrum		
	<input type="checkbox"/> Other		

\*Modified (Chronic reporting acute values)

#### Dilution Water

- 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): September 11, 2005 to September 16, 2005

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: September 12, 2005 to September 19, 2005

## 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 <sub>50</sub>	N/A	48-hr LC <sub>50</sub>	>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%
IC <sub>25</sub>	N/A	IC <sub>25</sub>	N/A
IC <sub>50</sub>	N/A	IC <sub>50</sub>	N/A

N/A = not applicable

**Appendix VI**  
**7-Day Chronic Reference**  
**Toxicity Test Data**

# Biotoxicity Bench Sheet

Lab. No. - Test Organism CD Start Date: 09/14/05 Time: 1500  
 Client: QC Lot No. - End Date: 09/19/05 End Time: 1500  
 Effluent/Sample NACI Age: 224 hrs Investigators KH

Conc. Control	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	4	3	5	4	5	4	5	4	3				
	5	0	1	0	10	0	0	0	1	0	9				
	6	11	10	13	0	8	7	8	10	0	0				
	7	13	12	0	10	13	13	14	0	11	14				
	8														
	total	29	27	16	25	25	25	20	16	23	26	238	10	23.8	

Conc. 250 mg/L 6.25%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	4	3	2	3	4	3	5	4	5	4				
	5	10	9	4	0	0	8	0	0	0	0				
	6	0	0	0	11	11	0	7	11	13	8				
	7	5	14	12	14	13	14	14	14	14	15				
	8														
	total	19	26	18	28	28	25	26	29	31	27	257	10	25.7	

Conc. 500 mg/L 12.5%	Day	Replicate										No. of Young	No. of Adults	Young per Adult	
		1	2	3	4	5	6	7	8	9	10				
	1														
	2														
	3														
	4	5	4	5	4	5	4	5	4	5	3				
	5	0	0	14	0	13	0	0	0	2	8				
	6	11	10	0	11	0	14	X-12	10	14	0				
	7	12	13	9	0	12	14	↓	13	0	15				
	8														
	total	28	27	28	15	30	32	X-17	27	21	26	251	9	25.1	

# Biotoxicity Bench Sheet

Lab. No. \_\_\_\_\_ Test Organism CD Start Date: 09/12/05 Time: 1500  
 Client: QC Lot No. \_\_\_\_\_ End Date: 09/12/05 End Time: 1500  
 Effluent/Sample NaCl Age: <24 hrs Investigators KH

Conc. <u>1000 mg/L</u> <u>-25%</u>	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
	1															
	2															
	3															
	4	3		3	3	4	2	0	3	2	3					
	5	0	2	0	0	0	0	X-0	0	0	0					
	6	3	0	5	6	0	X-0		2	X-1	2					
	7	0	X-0	0	1	2			0		0					
	8		↓				↓	↓		↓						
	total	6	X-2	8	10	6	X-2	X-0	5	X-3	5	47	6	4.7		

Conc. <u>2000 mg/L</u> <u>50%</u>	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
	1															
	2															
	3															
	4	0	0	0	0	0	0	0	0	1	0					
	5	0	2	1	3	X-0	2	X-2	0	0	2					
	6	X-0	0	0	X-0		0		2	X-0	0					
	7		0	0	↓	↓	X-0	↓	0		0					
	8	↓			↓	↓	↓	↓		↓						
	total	X-0	2	1	X-3	X-0	X-2	X-2	2	X-1	2	15	6	1.5		

Conc. <u>4000 mg/L</u> <u>100%</u>	Day	Replicate										No. of Young	No. of Adults	Young per Adult		
		1	2	3	4	5	6	7	8	9	10					
	1															
	2															
	3	X	X	X	X	X	X	X	X	X	X					
	4															
	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	total															

Title: CD REFTOX SEPT 2005  
File: QCCDREP .905

Transform:

NO TRANSFORMATION

Kolmogorov Test for Normality

---

D = 0.1916 (p-value = 0.0001)  
D\* = 1.3760

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.

Title: CD REFTOX SEPT 2005

File: QCCDREP .905

Transform:

NO TRANSFORMATION

Steel's Many-One Rank Test

Ho: Control &lt; Treatment

GROUP	IDENTIFICATION	MEAN IN ORIGINAL UNITS	RANK SUM	CRIT. VALUE	DF	SIG 0.05
1	CONTROL	23.8000				
2	250 MG/L	25.7000	123.50	76.00	10.00	
3	500 MG/L	25.1000	121.00	76.00	10.00	
4	1000 MG/L	4.7000	55.00	76.00	10.00	*
5	2000 MG/L	1.5000	55.00	76.00	10.00	*

Critical values are 1 tailed ( k = 4 )



Title: CD REFTOX SEPT 2005

File: QCCDREP .905

Transform:

NO TRANSFORMATION

GRP	IDENTIFICATION	MEAN	SMOOTHED MEAN	CONCENTRATION
1	CONTROL	23.8000	24.8667	0.0000
2	250 MG/L	25.7000	24.8667	250.0000
3	500 MG/L	25.1000	24.8667	500.0000
4	1000 MG/L	4.7000	4.7000	1000.0000
5	2000 MG/L	1.5000	1.5000	2000.0000

ICp estimate with p = 25 is 654.1322

Bootstrap results using 480 iterations:

Mean = 642.9863      Standard Deviation = 20.5419  
95% Confidence Interval: ( 586.9413 , 666.3136)

# Acute Biototoxicity Bench Sheet

80

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 Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	09/06/05	09/08/05
Time:	1600	1600

Concentration	Control	500	1000	2000	3000	4000
<b>START</b>						
Temperature	25.8	25.8	25.8	25.8	25.8	25.8
Hardness	100					120
D.O.	8.7	8.7	8.7	8.7	8.7	8.7
pH	7.1	7.2	7.2	7.2	7.2	7.2
Alkalinity	63					66
Sp. Conduct.	314	2280	4010	5460	6030	7390
<b>24 HOUR</b>						
Temperature	24.7	24.7	24.7	24.7	24.7	24.7
No. Surviving	20	20	20	13	9	0
<b>48 HOUR</b>						
Temperature	25.4	25.4	25.4	25.4	25.4	25.4
No. Surviving	20	20	16	8	0	0

Note: All results expressed in mg/L unless otherwise designated. < = less than  
 Note: Number in parenthesis equals number not adversely effected (EC<sub>50</sub>). This number is used in calculating EC<sub>50</sub> 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 Organisms.*, Fifth Edition. EPA-821-R-02-012 U.S.EPA, Washington, DC

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: 09/06/05  
CHEMICAL: NaCl

TEST NUMBER: -

DURATION: 48 HOURS  
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	4	12	20	20
SPEARMAN-KARBER TRIM:	0.00%				

SPEARMAN-KARBER ESTIMATES: LC50: 1533.67  
95% LOWER CONFIDENCE: 1290.30  
95% UPPER CONFIDENCE: 1822.96

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