



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

*Transmitted via Overnight Courier*

August 9, 2004

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

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

**Re: GE-Pittsfield/Housatonic River Site  
Monthly Status Report Pursuant to Consent Decree for July 2004 (GECDD900)**

Dear Mr. Tagliaferro and Ms. Steenstrup:

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

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

The enclosed monthly report includes, where applicable, tables that list the samples collected during the subject month, summarize the analytical results received during that month from sampling or other testing activities, and summarize other groundwater monitoring and oil recovery information obtained during that month. Also, enclosed for each of you (and for Weston) is a CD-ROM that contains these same tables of the analytical data and monitoring information in electronic form. In addition, sampling results from miscellaneous soil sampling activities conducted pursuant to GE's Excavation Protocols are included in a *Final Notification of On-Plant Excavations* letter report that was submitted to EPA and MDEP during July 2004 and is attached to this monthly report.

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

Sincerely,

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

**Enclosures**

C:\Documents\GE\2004\monthly.july.cover ltr.doc

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

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

***JULY 2004***

**MONTHLY STATUS REPORT  
PURSUANT TO CONSENT DECREE  
FOR  
GE-PITTSFIELD/HOUSATONIC RIVER  
SITE**

**GENERAL ELECTRIC COMPANY**



**PITTSFIELD, MASSACHUSETTS**

## **Background**

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

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

### **General Activities (GECD900)**

#### **GE Plant Area (non-groundwater)**

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

#### **Former Oxbow Areas (non-groundwater)**

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

#### **Housatonic River**

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

#### **Housatonic River Floodplain**

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

#### **Other Areas**

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

**Groundwater Management Areas (GMAs)**

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

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

**a. Activities Undertaken/Completed**

- Attended technical meeting with EPA and MDEP (July 21, 2004).\*
- Continued GE-EPA electronic data exchanges for the Housatonic River Watershed and Areas Outside the River.\*

**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 June 1 through June 30, 2004, are provided in Attachment B to this report.
- A report titled *Toxicity Evaluation of Wastewaters Discharged from the General Electric Plant; Pittsfield, Massachusetts (Samples Collected in July 2004)* was prepared for GE by SGS Environmental Services, Inc. (SGS) - formerly CT&E Environmental Services, Inc. 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 July 2004)* was prepared for GE by SGS. A copy of that report is provided in Attachment D.

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

GE submitted a letter report titled *Final Notification of On-Plant Excavations* for six excavation projects to EPA and MDEP (July 12, 2004). A copy of this report is provided in Attachment E. This report is also referenced under the various areas involved.

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

- Attend public, Pittsfield Citizens Coordinating Council (CCC), and Pittsfield Economic Development Authority (PEDA) meetings as appropriate.
- Continue NPDES sampling and monitoring activities.
- Attend workgroup meetings to discuss draft revised NPDES permit.

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

Issues relating to draft revised NPDES permit are under discussion.

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

None

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

**a. Activities Undertaken/Completed**

- Continued discussions with EPA, MDEP, and PEDDA regarding land transfer issues for the 20s and 30s Complexes.\*
- Continued discussions with holders of encumbrances at 20s and 30s Complexes regarding subordination agreements for Grants of Environmental Restrictions and Easements (EREs).\*
- Continued pre-demolition activities at Buildings 42, 43/43-A, and 44.
- Continued oil monitoring in Building 43 elevator shaft; no recoverable quantities were encountered (see Items 21.a).
- Completed pre-demolition activities at Building 28B.

**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 discussions with EPA, MDEP, and PEDDA regarding land transfer issues for the 20s and 30s Complexes.\*
- Continue discussions with encumbrance holders at 20s and 30s Complexes regarding subordination agreements for EREs.\*
- Develop Data Compilation Report for 30s Complex.\*
- Continue pre-demolition activities (including asbestos abatement) at Buildings 42, 43/43-A, and 44.
- Complete demolition activities at Building 28B.
- Submit proposal to conduct additional building material characterization for Buildings 42, 43/43-A, and 44.

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

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 JULY 2004**

**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>
Former Building 25 Sampling	25-FMR-SOIL-1	6/29/04	Soil	CT&E	PCB	7/6/04
Former Building 25 Sampling	25-FMR-SOIL-2	6/29/04	Soil	CT&E	PCB	7/6/04
Former Building 25 Sampling	25-FMR-SOIL-3	6/29/04	Soil	CT&E	PCB	7/6/04
Former Building 25 Sampling	25-FMR-SOIL-4	6/29/04	Soil	CT&E	PCB	7/6/04

**TABLE 1-2  
PCB DATA RECEIVED DURING JULY 2004**

**FORMER BUILDING 25 SAMPLING  
20s, 30s, 40s COMPLEX  
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>
25-FMR-SOIL-1	6/29/2004	ND(0.042)	ND(0.042)	1.2	1.2
25-FMR-SOIL-2	6/29/2004	ND(0.042)	ND(0.042)	1.8	1.8
25-FMR-SOIL-3	6/29/2004	ND(0.21)	ND(0.21)	4.8	4.8
25-FMR-SOIL-4	6/29/2004	ND(0.22)	ND(0.22)	2.7	2.7

**Notes:**

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

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

**a. Activities Undertaken/Completed**

- Performed liquid-phase carbon absorption (LPCA) monitoring at Building 64G and sludge sampling at Building 64T.
- Tankered and transported 20,000 gallons of water from Building 61 to Building 64G for treatment.
- Continued discussions regarding ERE and subordination agreements for City Recreational Area (CRA).\*
- Initiated survey activities associated with finalizing ERE for CRA.\*
- Continued pre-demolition activities (including oils sampling) at the 60s Complex.
- Provided verbal notification to EPA and MDEP that GE received laboratory analytical results from the 60s Complex – Equipment Removal Project, indicating two oil samples with PCB results exceeding 50 ppm.

**b. Sampling/Test Results Received**

See attached tables.

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

- Submitted final notification/completion report covering excavations at Standard Grid S-8 in response to a fire main break near the southeast corner of Building 66 and at Standard Grid R-9 in response to a water main break on East Street near Gate 13. A copy of that report is provided as Attachment E.
- Submitted notice of ambient air monitoring station locations for 60s Complex demolition and restoration program (July 12, 2004).

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

- Continue to conduct routine process sampling at Buildings 64G and 64T.
- Complete remaining field construction activities (punch list items) at CRA.
- Continue discussions regarding ERE and subordination agreements for CRA.\*

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

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

- Continue pre-demolition activities at the 60s Complex.
- Continue development of interim report on additional data needs at East Street Area 2-South (due on or before October 26, 2004).\*

**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 JULY 2004**

**EAST STREET AREA 2 - SOUTH  
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>
60's Complex Oil Sampling	61-1-1-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-10-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-11-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-12-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-13-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-14-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-15-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-16-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-17-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-19-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-2-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-20-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-29-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	61-1-30-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	61-1-31-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	61-1-5-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-6-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-7-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-8-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61-1-9-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-1-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-2-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-3-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-4-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-5-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-6-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61J-1-7-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-1-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-10-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-11-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-12-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	61R-1-13-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	61R-1-2-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-3-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-4-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-5-OIL-1	6/30/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-6-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-7-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-8-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61R-1-9-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61S-1-1-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04

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

**EAST STREET AREA 2 - SOUTH  
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>
60's Complex Oil Sampling	61S-1-2-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	61S-1-3-OIL-1	6/23/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-1-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-2-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-3-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-4-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-5-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-6-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-7-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-8-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	62-1-9-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	66-1-1-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-10-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-100-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-101-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-102-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-103-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-104-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-105-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-106-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-107-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-108-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-109-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-11-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-110-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-111-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-112-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-113-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-114-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-115-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-116-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-117-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-118-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-119-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-12-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-120-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-121-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-122-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-123-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-124-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-125-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04

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

**EAST STREET AREA 2 - SOUTH  
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>
60's Complex Oil Sampling	66-1-126-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-127-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-128-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-129-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-13-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-130-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-131-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-132-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-133-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-134-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-135-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-14-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-16-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-17-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-18-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-19-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-2-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-20-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-21-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-22-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-23-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-24-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-25-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-26-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-27-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-28-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-29-OIL-1	7/8/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-3-OIL-1	7/2/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-30-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-31-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-32-OIL-1	7/6/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-33-OIL-1	7/8/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-34-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-35-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-36-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-37-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-38-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-39-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-4-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-40-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-41-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04

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

**EAST STREET AREA 2 - SOUTH  
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>
60's Complex Oil Sampling	66-1-42-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-43-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-44-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-45-OIL-1	7/14/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-46-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-47-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-48-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-49-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-5-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-50-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-51-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-52-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-53-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-54-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-55-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-56-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-57-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-58-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-59-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-6-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-60-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-61-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-62-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-63-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-64-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-65-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-66-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-67-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-68-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-69-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-7-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-70-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-71-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-72-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-73-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-74-OIL-1	7/12/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	66-1-75-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-76-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-77-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-78-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-79-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04



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

**EAST STREET AREA 2 - SOUTH  
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>
60's Complex Oil Sampling	66-1-80-OIL-1	7/13/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-81-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-82-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-83-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-84-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-85-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-86-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-87-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-88-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-89-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-90-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-91-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-92-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-93-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-94-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-95-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-96-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	66-1-97-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-98-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	66-1-99-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling	67-1-1-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	67-1-2-OIL-1	6/24/04	Oil	CT&E	PCB	7/13/04
60's Complex Oil Sampling	67-1-3-OIL-1	7/8/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling	67-1-4-OIL-1	7/20/04	Oil	CT&E	PCB	7/28/04
60's Complex Oil Sampling	67-1-5-OIL-1	7/22/04	Oil	CT&E	PCB	
60's Complex Oil Sampling Drum# C0323	66-1-8-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0325	66-1-15-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0326	66-1-9-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0892	61-1-27-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0893	61-1-24-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0893	61-1-25-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0893	61-1-26-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0893	61-1-28-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0894	61-1-21-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0896	61-1-22-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0896	61-1-23-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
60's Complex Oil Sampling Drum# C0897	61-1-18-OIL-1	7/1/04	Oil	CT&E	PCB	7/23/04
Building 62 Debris & Orange Dye Sampling	F1199-62-Soil-1	7/29/04	Soil	CT&E	TCLP	
Building 64G LPCA Monitoring	G4-64G-01	7/6/04	Water	CT&E	VOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-02	7/6/04	Water	CT&E	SVOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-03	7/6/04	Water	CT&E	PCB	7/15/04

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

**EAST STREET AREA 2 - SOUTH  
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 64G LPCA Monitoring	G4-64G-04	7/6/04	Water	CT&E	Oil & Grease	7/15/04
Building 64G LPCA Monitoring	G4-64G-05	7/6/04	Water	CT&E	VOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-06	7/6/04	Water	CT&E	SVOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-07	7/6/04	Water	CT&E	PCB	7/15/04
Building 64G LPCA Monitoring	G4-64G-08	7/6/04	Water	CT&E	Oil & Grease	7/15/04
Building 64G LPCA Monitoring	G4-64G-09	7/6/04	Water	CT&E	VOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-10	7/6/04	Water	CT&E	SVOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-11	7/6/04	Water	CT&E	PCB	7/15/04
Building 64G LPCA Monitoring	G4-64G-12	7/6/04	Water	CT&E	Oil & Grease	7/15/04
Building 64G LPCA Monitoring	G4-64G-13	7/6/04	Water	CT&E	VOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-14	7/6/04	Water	CT&E	SVOC	7/15/04
Building 64G LPCA Monitoring	G4-64G-15	7/6/04	Water	CT&E	PCB	7/15/04
Building 64G LPCA Monitoring	G4-64G-16	7/6/04	Water	CT&E	Oil & Grease	7/15/04
Building 64T Sludge Sampling	G4-64T-01	7/3/04	Sludge	CT&E	PCB	7/15/04

**TABLE 2-2  
PCB DATA RECEIVED DURING JUNE 2004**

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

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1248	Aroclor-1242	Aroclor-1254	Aroclor-1260	Total PCBs
61-1-1-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-2-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-5-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-6-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	2.4	2.4
61-1-7-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-8-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-9-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-10-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-11-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-12-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	18	27	45
61-1-13-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-14-OIL-1	6/23/2004	ND(15)	ND(15)	ND(15)	180	180
61-1-15-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	25	25
61-1-16-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-17-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	25	25
61-1-18-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-19-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-20-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-21-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-22-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	8.2	8.2
61-1-23-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-24-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-25-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-26-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-27-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-28-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61-1-29-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	2.6	2.7	5.3
61-1-30-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
61-1-31-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
61J-1-1-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-2-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-3-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-4-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-5-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-6-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61J-1-7-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	0.88 J	0.88 J
61R-1-1-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-2-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-3-OIL-1	6/30/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-4-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-5-OIL-1	6/30/2004	ND(1.0)	2.7	1.6	ND(1.0)	4.3
61R-1-6-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-7-OIL-1	6/23/2004	ND(3.9)	ND(3.9)	84	ND(3.9)	84
61R-1-8-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-9-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-10-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-11-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61R-1-12-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
61R-1-13-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	9.6	ND(1.5)	9.6
61S-1-1-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61S-1-2-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
61S-1-3-OIL-1	6/23/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-1-OIL-1	6/24/2004	ND(1.0)	9.6	11	ND(1.0)	20.6

**TABLE 2-2  
PCB DATA RECEIVED DURING JUNE 2004**

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

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1248	Aroclor-1242	Aroclor-1254	Aroclor-1260	Total PCBs
62-1-2-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-3-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-4-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-5-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-6-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-7-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-8-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
62-1-9-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-1-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-2-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-3-OIL-1	7/2/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-4-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	5.1	ND(1.0)	5.1
66-1-5-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-6-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-7-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-8-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-9-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-10-OIL-1	7/2/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-11-OIL-1	7/2/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-12-OIL-1	7/2/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-13-OIL-1	7/2/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-14-OIL-1	7/2/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-15-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
66-1-16-OIL-1	7/2/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-17-OIL-1	7/2/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-18-OIL-1	7/2/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-19-OIL-1	7/1/2004	ND(1.0)	ND(1.0)	ND(1.0)	2.4	2.4
66-1-20-OIL-1	7/6/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-21-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-22-OIL-1	7/6/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-23-OIL-1	7/6/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-24-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-25-OIL-1	7/6/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-26-OIL-1	7/6/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-27-OIL-1	7/6/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-28-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-29-OIL-1	7/8/2004	ND(1.6)	ND(1.6)	1.6 J	ND(1.6)	1.6 J
66-1-30-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-31-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-32-OIL-1	7/6/2004	ND(1.5)	ND(1.5)	2.6	0.98 J	3.58
66-1-33-OIL-1	7/8/2004	ND(1.5)	ND(1.5)	8.5	3.2	11.7
66-1-34-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-35-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	9.5	9.5
66-1-36-OIL-1	7/12/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-37-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-38-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-39-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-40-OIL-1	7/12/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-41-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-42-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-43-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-44-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-45-OIL-1	7/14/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)

**TABLE 2-2  
PCB DATA RECEIVED DURING JUNE 2004**

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

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1248	Aroclor-1242	Aroclor-1254	Aroclor-1260	Total PCBs
66-1-46-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-47-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-48-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-49-OIL-1	7/12/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-50-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-51-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-52-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-53-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-54-OIL-1	7/13/2004	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)	ND(1.4)
66-1-55-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-56-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-57-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-58-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-59-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-60-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-61-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-62-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-63-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-64-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-65-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-66-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-67-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-68-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-69-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-70-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-71-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-72-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-73-OIL-1	7/12/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-74-OIL-1	7/12/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-75-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-76-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-77-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-78-OIL-1	7/13/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-79-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-80-OIL-1	7/13/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-81-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-82-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-83-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-85-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-86-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-88-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-90-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-97-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-98-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	1.3 J	1.3 J
66-1-100-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-105-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-109-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-111-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-121-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-122-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-123-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-125-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
66-1-127-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)

**TABLE 2-2  
PCB DATA RECEIVED DURING JUNE 2004**

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

<b>Sample ID</b>	<b>Date Collected</b>	<b>Aroclor-1016, -1221, -1232, -1248</b>	<b>Aroclor-1242</b>	<b>Aroclor-1254</b>	<b>Aroclor-1260</b>	<b>Total PCBs</b>
66-1-128-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
66-1-129-OIL-1	7/20/2004	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)	ND(1.5)
67-1-1-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	15	ND(1.0)	15
67-1-2-OIL-1	6/24/2004	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
67-1-3-OIL-1	7/8/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)
67-1-4-OIL-1	7/20/2004	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)	ND(1.6)

Notes:

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

**TABLE 2-3  
PCB DATA RECEIVED DURING JULY 2004**

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

<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>
G4-64T-01	7/3/2004	ND(12)	130	94	224

Notes:

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

**TABLE 2-4  
DATA RECEIVED DURING JULY 2004**

**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:	G4-64G-01 07/06/04	G4-64G-02 07/06/04	G4-64G-03 07/06/04	G4-64G-04 07/06/04	G4-64G-05 07/06/04	G4-64G-06 07/06/04	G4-64G-07 07/06/04	G4-64G-08 07/06/04
<b>Volatile Organics</b>									
Chlorobenzene		0.21	NA	NA	NA	ND(0.0050)	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1254		NA	NA	0.00017	NA	NA	NA	0.000038 J	NA
Aroclor-1260		NA	NA	0.000064 J	NA	NA	NA	ND(0.000065)	NA
Total PCBs		NA	NA	0.000234	NA	NA	NA	0.000038 J	NA
<b>Semivolatile Organics</b>									
1,4-Dichlorobenzene		NA	0.0064 J	NA	NA	NA	ND(0.010)	NA	NA
2,4-Dinitrophenol		NA	ND(0.050)	NA	NA	NA	0.041 J	NA	NA
Acenaphthene		NA	0.020	NA	NA	NA	ND(0.010)	NA	NA
bis(2-Ethylhexyl)phthalate		NA	ND(0.0081)	NA	NA	NA	ND(0.0081)	NA	NA
Di-n-Butylphthalate		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
Fluorene		NA	0.0025 J	NA	NA	NA	ND(0.010)	NA	NA
Naphthalene		NA	0.0042 J	NA	NA	NA	ND(0.010)	NA	NA
<b>Conventionals</b>									
Oil & Grease		NA	NA	NA	2.5 B	NA	NA	NA	ND(5.0)



**TABLE 2-4  
DATA RECEIVED DURING JULY 2004**

**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:	G4-64G-09 07/06/04	G4-64G-10 07/06/04	G4-64G-11 07/06/04	G4-64G-12 07/06/04	G4-64G-13 07/06/04	G4-64G-14 07/06/04	G4-64G-15 07/06/04	G4-64G-16 07/06/04
<b>Volatile Organics</b>									
Chlorobenzene		ND(0.0050)	NA	NA	NA	ND(0.0050)	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1254		NA	NA	ND(0.000065)	NA	NA	NA	ND(0.000065)	NA
Aroclor-1260		NA	NA	ND(0.000065)	NA	NA	NA	ND(0.000065)	NA
Total PCBs		NA	NA	ND(0.000065)	NA	NA	NA	ND(0.000065)	NA
<b>Semivolatile Organics</b>									
1,4-Dichlorobenzene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
2,4-Dinitrophenol		NA	ND(0.050)	NA	NA	NA	ND(0.050)	NA	NA
Acenaphthene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
bis(2-Ethylhexyl)phthalate		NA	ND(0.0082)	NA	NA	NA	0.0086	NA	NA
Di-n-Butylphthalate		NA	ND(0.010)	NA	NA	NA	0.0034 J	NA	NA
Fluorene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
Naphthalene		NA	ND(0.010)	NA	NA	NA	ND(0.010)	NA	NA
<b>Conventionals</b>									
Oil & Grease		NA	NA	NA	ND(5.0)	NA	NA	NA	3.2 B

Notes:

1. Samples were collected by General Electric Company, and were submitted to CT&E 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. With the exception of conventional parameters only those constituents detected in one or more samples are summarized.

Data Qualifiers:

Organics

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

Inorganics and Conventional Parameters

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

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

**a. Activities Undertaken/Completed**

- Tankered and transported 8,000 gallons of water from Building 9 and 200 gallons of water from Building 100 electrical manhole to Building 64G for treatment.
- Conducted miscellaneous sampling as identified in Table 3-1.

**b. Sampling/Test Results Received**

See attached table.

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

Submitted final notification/completion report covering excavations at Standard Grid M-10 in response to a water line break near the west side of Building 16 and at Standard Grid M-9 for drilling of vent holes for a gas leak in front of Building 11. A copy of that report is provided as Attachment E.

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

None

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

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

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

None

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

**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 12 Carwash Sludge Sampling	A2188-Carwash-Sludge-1	7/30/04	Solid	CT&E	TCLP	
Building 12 Decon Water Drum Sampling	12X-B0673-WATER-1	7/12/04	Water	CT&E	PCB	7/19/04
Building 78 Decon Water Sampling	B0680-Decon-Water-1	7/30/04	Water	CT&E	PCB	

**TABLE 3-2  
PCB DATA RECEIVED DURING JULY 2004**

**BUILDING 12 DECON WATER DRUM SAMPLING  
EAST STREET AREA 2 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in 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>
12X-B0673-WATER-1	7/12/2004	ND(0.0010)	0.011	ND(0.0010)	0.011

Notes:

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

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

**a. Activities Undertaken/Completed**

- Continued discussions regarding ERE and subordination agreements for GE-owned properties at this area.\*
- Initiated survey activities associated with finalizing ERE for GE-owned properties.\*

**b. Sampling/Test Results Received**

None

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

None

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

- Continue discussions with holders of encumbrances on GE properties regarding subordination agreements.\*
- Submit executed ERE and subordination agreements for GE properties.\*
- Send notices to holders of encumbrances on Parcel K11-1-15 that a Conditional Solution was implemented at the portion of that property within East Street Area 1-North.\*
- Conduct pre-certification inspection of this RAA with EPA and MDEP.\*

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

No issues

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

None

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

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

**a. Activities Undertaken/Completed**

- Transferred soil and sediment from 1½ Mile Reach of the Housatonic River to the On-Plant Consolidation Areas (OPCAs).
- Continued transfer of leachate from Building 71 OPCA to Building 64G for treatment. The total amount transferred in July 2004 was 171,000 gallons (see Table 5-1).

**b. Sampling/Test Results Received**

None

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

None

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

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

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

No issues

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

None

**TABLE 5-1**  
**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**  
**July 2004**

Month / Year	Total Volume of Leachate Transferred (Gallons)
July 2003	53,000
August 2003	122,500
September 2003	94,000
October 2003	84,000
November 2003	86,500
December 2003	102,500
January 2004	35,000
February 2004	30,000
March 2004	98,000
April 2004	107,000
May 2004	164,500
June 2004	147,500
July 2004	171,000

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

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

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

**a. Activities Undertaken/Completed**

Initiated preparation of Addendum to Pre-Design Work Plan to address conditions in EPA's July 22, 2004 conditional approval letter.

**b. Sampling/Test Results Received**

None

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

Submitted final notification/completion report covering excavations at Standard Grid Q-32 for installation of a flagpole at the Pittsfield Generating facility and at Standard Grid N-28 for installation of a new security gate by Building 78. A copy of that report is provided as Attachment E.

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

- Submit Addendum to Pre-Design Investigation Work Plan (due on or before August 21, 2004).
- Following EPA approval of Addendum to Pre-Design Investigation Work Plan, initiate pre-design soil sampling.

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

None

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

Received conditional approval letter for Pre-Design Investigation Work Plan on July 22, 2004.



**ITEM 7  
PLANT AREA  
UNKAMET BROOK AREA  
(GECD170)  
JULY 2004**

**a. Activities Undertaken/Completed**

- Continued pre-design investigation soil sampling.\*
- Received signed owner access agreement for Parcel L12-1-2 (July 20, 2004).\*
- Notified EPA and MDEP of Potential Imminent Hazard (PIH) within Parcel L11-4-11 at soil sample location RAA10-E-KK15 (July 21, 2004).\*
- Conducted other miscellaneous sampling as identified in Table 7-1.

**b. Sampling/Test Results Received**

See attached tables.

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

None

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

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

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

No issues

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

Received EPA conditional approval of GE's excavation plan to support upgrade project at General Dynamics facilities (July 23, 2004).

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**UNKAMET BROOK AREA  
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>
Beaver Dam Roll-Off Debris Sampling	ROLLOFF#3054-BD-1	7/1/04	NA	Solid	CT&E	PCB	7/6/04
Beaver Dam Roll-Off Debris Sampling	ROLLOFF#3054-BD-2	7/1/04	NA	Solid	CT&E	PCB	7/6/04
Beaver Dam Roll-Off Debris Sampling	ROLLOFF#3054-BD-3	7/1/04	NA	Solid	CT&E	PCB	7/6/04
GE Plastics Concrete/Brick Pile	PLASTICS-C/B-1	7/12/04	NA	Concrete/Brick	CT&E	PCB	7/30/04
GE Plastics Concrete/Brick Pile	PLASTICS-C/B-2	7/12/04	NA	Concrete/Brick	CT&E	PCB	7/30/04
GE Plastics Concrete/Brick Pile	PLASTICS-C/B-3	7/12/04	NA	Concrete/Brick	CT&E	PCB	7/30/04
GE Plastics Concrete/Brick Pile	PLASTICS-C/B-DUP-1 (PLASTICS-C/B-	7/12/04	NA	Concrete/Brick	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-DUP-1 (PLASTICS-SAND-2)	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-DUP-2 (PLASTICS-SAND-	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-1	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-10	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-11	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-12	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-13	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-14	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-15	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-16	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-17	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-18	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-19	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-2	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-20	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-21	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-3	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-4	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-5	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-6	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-7	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-8	7/12/04	NA	Sand	CT&E	PCB	7/30/04
GE Plastics Sand Sweeping Pile	PLASTICS-SAND-9	7/12/04	NA	Sand	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-81 (RAA10-E-Z20)	6/21/04	0-1	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-82 (RAA10-E-Z20)	6/21/04	0-1	Soil	CT&E	VOC	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-84 (RAA10-E-GG14)	6/30/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-85 (RAA10-E-II14)	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-86 (RAA10-E-KK26)	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-87 (RAA10-E-MM20)	7/12/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	Cancelled
Pre-Design Soil Investigation Sampling	RAA10-DUP-88 (RAA10-E-OO27)	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-DUP-89 (RAA10-E-VV25)	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-DUP-90 (RAA10-E-WW28)	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-DUP-91 (RAA10-E-AAA30)	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-DUP-92 (RAA10-E-X15)	7/27/04	6-15	Soil	CT&E	Pest, Herb	
Pre-Design Soil Investigation Sampling	RAA10-DUP-93 (RAA10-E-R16)	7/27/04	6-15	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-DUP-94 (RAA10-E-F22)	7/28/04	3-6	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-AAA27	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-AAA28	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-AAA29	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-AAA30	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**UNKAMET BROOK AREA  
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>
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	0-1	Soil	CT&E	PCB	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	3-6	Soil	CT&E	PCB, SVOC, Inorganics	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	4-6	Soil	CT&E	VOC	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB16	6/22/04	8-10	Soil	CT&E	VOC	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB18	6/22/04	1-3	Soil	CT&E	PCB	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB18	6/22/04	3-6	Soil	CT&E	PCB	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB18	6/22/04	6-15	Soil	CT&E	PCB	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB18	6/22/04	0-1	Soil	CT&E	VOC, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB20	6/21/04	0-1	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB20	6/21/04	1-3	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB20	6/21/04	3-6	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB20	6/21/04	6-15	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB22	6/21/04	0-1	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB22	6/21/04	1-3	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB22	6/21/04	3-6	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-BB22	6/21/04	6-15	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	3-6	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-E-DD16	7/27/04	8-10	Soil	CT&E	VOC	
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	1-3	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	3-6	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	6-15	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-DD18	7/27/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	0-1	Soil	CT&E	PCB	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	3-6	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	4-6	Soil	CT&E	VOC	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-DD20	6/22/04	8-10	Soil	CT&E	VOC	7/9/04
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	1-3	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	3-6	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-F22	7/28/04	6-15	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-GG14	6/30/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG15	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG16	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG17	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG18	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG19	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG20	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG21	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG22	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG23	6/30/04	0-1	Soil	CT&E	PCB	7/15/04

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**UNKAMET BROOK AREA  
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>
Pre-Design Soil Investigation Sampling	RAA10-E-GG24	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-GG25	6/30/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	1-3	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	3-6	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	6-15	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-H20	7/28/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Pre-Design Soil Investigation Sampling	RAA10-E-HH13	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH15	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH17	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH19	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH21	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH23	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-HH25	6/30/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II14	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II15	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II16	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II17	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II18	7/1/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II19	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II20	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II21	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II23	7/1/04	0-1	Soil	CT&E	PCB, SVOC	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II24	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II25	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II26	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-II27	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-JJ15	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-JJ17	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-JJ19	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-JJ23	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-JJ25	7/1/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-K27	7/28/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-KK15	7/8/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK16	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK17	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK18	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK19	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK20	7/7/04	0-1	Soil	CT&E	VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK21	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK22	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK23	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK24	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK25	7/7/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-KK26	7/7/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL17	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL21	7/12/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL23	7/8/04	0-1	Soil	CT&E	PCB	7/15/04

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**UNKAMET BROOK AREA  
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>
Pre-Design Soil Investigation Sampling	RAA10-E-LL25	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-LL27	7/8/04	0-1	Soil	CT&E	PCB	7/15/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM18	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-MM19	7/12/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM20	7/12/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM21	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM22	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM23	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM24	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM25	7/12/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM26	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-MM27	7/12/04	0-1	Soil	CT&E	PCB	7/29/04
Pre-Design Soil Investigation Sampling	RAA10-E-NN21	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-NN23	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-NN25	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-NN27	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-OO22	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-OO23	7/13/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-E-OO24	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-OO25	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-OO26	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-OO27	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-P16	6/18/04	1-3	Soil	CT&E	PCB	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-P16	6/18/04	3-6	Soil	CT&E	PCB	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-P16	6/18/04	6-15	Soil	CT&E	PCB	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-P16	6/18/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-PP23	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-PP25	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-QQ24	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	6-15	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	3-6	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF	
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF	
Pre-Design Soil Investigation Sampling	RAA10-E-R16	7/27/04	4-6	Soil	CT&E	VOC	
Pre-Design Soil Investigation Sampling	RAA10-E-RR25	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-RR25	7/14/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-RR27	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-SS24	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-SS25	7/13/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-SS26	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-SS27	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-T16	6/18/04	3-6	Soil	CT&E	PCB, SVOC, Inorganics	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-T16	6/18/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-T16	6/18/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-T16	6/18/04	3-4	Soil	CT&E	VOC	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-T16	6/18/04	6-8	Soil	CT&E	VOC	7/6/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT25	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-TT27	7/14/04	0-1	Soil	CT&E	PCB	7/30/04

**TABLE 7-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**UNKAMET BROOK AREA  
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>
Pre-Design Soil Investigation Sampling	RAA10-E-UU24	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-UU25	7/14/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, Pest, Herb	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-UU26	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-UU27	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-VV25	7/14/04	0-1	Soil	CT&E	PCB	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-VV27	7/14/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/30/04
Pre-Design Soil Investigation Sampling	RAA10-E-WW25	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-WW26	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-WW27	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-WW28	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	6-15	Soil	CT&E	SVOC, Inorganics, PCDD/PCDF, Pest, Herb	
Pre-Design Soil Investigation Sampling	RAA10-E-X15	7/27/04	6-8	Soil	CT&E	VOC	
Pre-Design Soil Investigation Sampling	RAA10-E-XX23	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-XX25	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-XX27	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-YY24	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-E-YY25	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-YY26	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	
Pre-Design Soil Investigation Sampling	RAA10-E-YY27	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-YY28	7/15/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	
Pre-Design Soil Investigation Sampling	RAA10-E-Z16	6/21/04	1-3	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z16	6/21/04	3-6	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z16	6/21/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z16	6/21/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z16	6/21/04	8-10	Soil	CT&E	VOC	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z18	6/21/04	1-3	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z18	6/21/04	3-6	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z18	6/21/04	6-15	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z18	6/21/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	3-6	Soil	CT&E	PCB, SVOC, Inorganics	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	6-15	Soil	CT&E	PCB, SVOC, Inorganics, PCDD/PCDF, Pest, Herb	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	1-3	Soil	CT&E	PCB, VOC, SVOC, Inorganics	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	0-1	Soil	CT&E	PCB, VOC, SVOC, Inorganics, PCDD/PCDF, Pest,	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	4-6	Soil	CT&E	VOC	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z20	6/21/04	8-10	Soil	CT&E	VOC	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z22	6/21/04	0-1	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z22	6/21/04	1-3	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z22	6/21/04	3-6	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-Z22	6/21/04	6-15	Soil	CT&E	PCB	7/12/04
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ25	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ27	7/15/04	0-1	Soil	CT&E	PCB	
Pre-Design Soil Investigation Sampling	RAA10-E-ZZ29	7/15/04	0-1	Soil	CT&E	PCB	

**Note:**

1. Field duplicate sample locations are presented in parenthesis.

**TABLE 7-2  
PCB DATA RECEIVED DURING JULY 2004**

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

Sample ID	Depth(Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA10-E-BB16	0-1	6/22/2004	ND(0.046)	0.052	0.14	0.192
	1-3	6/22/2004	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
	3-6	6/22/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	6-15	6/22/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA10-E-BB18	1-3	6/22/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/22/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
	6-15	6/22/2004	ND(0.052)	ND(0.052)	ND(0.052)	ND(0.052)
RAA10-E-BB20	0-1	6/21/2004	ND(0.058)	0.30	0.18	0.48
	1-3	6/21/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
	3-6	6/21/2004	ND(0.057)	ND(0.057)	ND(0.057)	ND(0.057)
	6-15	6/21/2004	ND(0.062)	ND(0.062)	ND(0.062)	ND(0.062)
RAA10-E-BB22	0-1	6/21/2004	ND(0.048)	ND(0.048)	0.068	0.068
	1-3	6/21/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/21/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
	6-15	6/21/2004	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
RAA10-E-DD20	0-1	6/22/2004	ND(0.050)	0.049 J	0.18	0.229
	1-3	6/22/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/22/2004	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
	6-15	6/22/2004	ND(0.068)	ND(0.068)	ND(0.068)	ND(0.068)
RAA10-E-GG14	0-1	6/30/2004	ND(0.055) [ND(0.054)]	0.096 [ND(0.054)]	0.28 [0.28]	0.376 [0.28]
RAA10-E-GG15	0-1	6/30/2004	ND(0.056)	0.11	0.33	0.44
RAA10-E-GG16	0-1	6/30/2004	ND(0.048)	ND(0.048)	0.23	0.23
RAA10-E-GG17	0-1	6/30/2004	ND(0.049)	ND(0.049)	0.17	0.17
RAA10-E-GG18	0-1	6/30/2004	ND(0.048)	ND(0.048)	0.14	0.14
RAA10-E-GG19	0-1	6/30/2004	ND(0.047)	ND(0.047)	0.11	0.11
RAA10-E-GG20	0-1	6/30/2004	ND(0.050)	ND(0.050)	0.056	0.056
RAA10-E-GG21	0-1	6/30/2004	ND(0.046)	ND(0.046)	0.068	0.068
RAA10-E-GG22	0-1	6/30/2004	ND(0.048)	ND(0.048)	0.076	0.076
RAA10-E-GG23	0-1	6/30/2004	ND(0.045)	ND(0.045)	0.045 J	0.045 J
RAA10-E-GG24	0-1	6/30/2004	ND(0.050)	ND(0.050)	0.034 J	0.034 J
RAA10-E-GG25	0-1	6/30/2004	ND(0.051)	ND(0.051)	0.064	0.064
RAA10-E-HH13	0-1	7/1/2004	ND(0.054)	0.23	0.22	0.45
RAA10-E-HH15	0-1	6/30/2004	ND(0.052)	ND(0.052)	0.21	0.21
RAA10-E-HH17	0-1	6/30/2004	ND(0.050)	ND(0.050)	0.18	0.18
RAA10-E-HH19	0-1	6/30/2004	ND(0.046)	ND(0.046)	0.095	0.095
RAA10-E-HH21	0-1	6/30/2004	ND(0.052)	ND(0.052)	0.047 J	0.047 J
RAA10-E-HH23	0-1	6/30/2004	ND(0.053)	ND(0.053)	0.061	0.061
RAA10-E-HH25	0-1	6/30/2004	ND(0.050)	ND(0.050)	0.050	0.050
RAA10-E-II14	0-1	7/1/2004	ND(0.072) [ND(0.066)]	0.46 [0.59]	0.57 [0.80]	1.03 [1.39]
RAA10-E-II15	0-1	7/1/2004	ND(0.056)	0.23	0.26	0.49
RAA10-E-II16	0-1	7/1/2004	ND(0.050)	0.026 J	0.10	0.126
RAA10-E-II17	0-1	7/1/2004	ND(0.054)	0.057	0.14	0.197
RAA10-E-II18	0-1	7/1/2004	ND(0.042)	0.025 J	0.078	0.103
RAA10-E-II19	0-1	7/1/2004	ND(0.047)	0.014 J	0.042 J	0.056 J
RAA10-E-II20	0-1	7/1/2004	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)
RAA10-E-II21	0-1	7/1/2004	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
RAA10-E-II23	0-1	7/1/2004	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
RAA10-E-II24	0-1	7/1/2004	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
RAA10-E-II25	0-1	7/1/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-II26	0-1	7/1/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-II27	0-1	7/1/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-JJ15	0-1	7/8/2004	ND(0.052)	0.079	0.14	0.219
RAA10-E-JJ17	0-1	7/8/2004	ND(0.049)	0.026 J	0.063	0.089
RAA10-E-JJ19	0-1	7/1/2004	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
RAA10-E-JJ23	0-1	7/1/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
RAA10-E-JJ25	0-1	7/1/2004	ND(0.047)	0.019 J	0.055	0.074

**TABLE 7-2  
PCB DATA RECEIVED DURING JULY 2004**

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

Sample ID	Depth(Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA10-E-KK15	0-1	7/8/2004	ND(0.62)	15	18	33
RAA10-E-KK16	0-1	7/8/2004	ND(0.045)	0.30	0.66	0.96
RAA10-E-KK17	0-1	7/8/2004	ND(0.054)	0.23	0.40	0.63
RAA10-E-KK18	0-1	7/7/2004	ND(0.045)	ND(0.045)	0.050	0.050
RAA10-E-KK19	0-1	7/7/2004	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
RAA10-E-KK21	0-1	7/7/2004	ND(0.052)	ND(0.052)	0.038 J	0.038 J
RAA10-E-KK22	0-1	7/7/2004	ND(0.050)	ND(0.050)	0.036 J	0.036 J
RAA10-E-KK23	0-1	7/7/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
RAA10-E-KK24	0-1	7/7/2004	ND(0.050)	ND(0.050)	0.018 J	0.018 J
RAA10-E-KK25	0-1	7/7/2004	ND(0.048)	ND(0.048)	0.027 J	0.027 J
RAA10-E-KK26	0-1	7/7/2004	ND(0.048) [ND(0.047)]	ND(0.048) [ND(0.047)]	ND(0.048) [ND(0.047)]	ND(0.048) [ND(0.047)]
RAA10-E-LL17	0-1	7/12/2004	ND(0.080)	1.0	1.6	2.6
RAA10-E-LL21	0-1	7/12/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
RAA10-E-LL23	0-1	7/8/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-LL25	0-1	7/8/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
RAA10-E-LL27	0-1	7/8/2004	ND(0.046)	ND(0.046)	0.022 J	0.022 J
RAA10-E-MM19	0-1	7/12/2004	ND(0.083)	0.15	0.30	0.45
RAA10-E-MM20	0-1	7/12/2004	ND(0.085)	0.13	0.21	0.34
RAA10-E-MM21	0-1	7/12/2004	ND(0.049)	ND(0.049)	ND(0.049)	ND(0.049)
RAA10-E-MM22	0-1	7/12/2004	ND(0.065)	0.12	0.22	0.34
RAA10-E-MM23	0-1	7/12/2004	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
RAA10-E-MM24	0-1	7/12/2004	ND(0.062)	ND(0.062)	0.086	0.086
RAA10-E-MM25	0-1	7/12/2004	ND(0.062)	0.025 J	0.069	0.094
RAA10-E-MM26	0-1	7/12/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-MM27	0-1	7/12/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-P16	0-1	6/18/2004	ND(0.036)	0.10	0.072	0.172
	1-3	6/18/2004	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
	3-6	6/18/2004	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	6-15	6/18/2004	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
RAA10-E-RR25	0-1	7/14/2004	ND(0.051)	0.076	0.28	0.356
RAA10-E-SS26	0-1	7/14/2004	ND(0.049)	ND(0.049)	0.052	0.052
RAA10-E-SS27	0-1	7/14/2004	ND(0.046)	ND(0.046)	0.041 J	0.041 J
RAA10-E-T16	1-3	6/18/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/18/2004	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
	6-15	6/18/2004	ND(0.074)	ND(0.074)	ND(0.074)	ND(0.074)
RAA10-E-TT25	0-1	7/14/2004	ND(0.049)	0.067	0.10	0.167
RAA10-E-TT27	0-1	7/14/2004	ND(0.046)	0.034 J	0.052	0.086
RAA10-E-UU24	0-1	7/14/2004	ND(0.32)	2.2	2.2	4.4
RAA10-E-UU25	0-1	7/14/2004	ND(0.049)	ND(0.049)	0.059	0.059
RAA10-E-UU26	0-1	7/14/2004	ND(0.050)	0.060	0.11	0.17
RAA10-E-UU27	0-1	7/14/2004	ND(0.042)	0.026 J	0.068	0.094
RAA10-E-VV25	0-1	7/14/2004	ND(0.052) [ND(0.052)]	0.089 [0.13]	0.12 [0.23]	0.209 [0.36]
RAA10-E-VV27	0-1	7/14/2004	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
RAA10-E-Z16	0-1	6/21/2004	ND(0.053)	ND(0.053)	0.030 J	0.030 J
	1-3	6/21/2004	ND(0.056)	ND(0.056)	ND(0.056)	ND(0.056)
	3-6	6/21/2004	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	6-15	6/21/2004	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
RAA10-E-Z18	0-1	6/21/2004	ND(0.056)	0.12	0.11	0.23
	1-3	6/21/2004	ND(0.052)	ND(0.052)	ND(0.052)	ND(0.052)
	3-6	6/21/2004	ND(0.065)	ND(0.065)	ND(0.065)	ND(0.065)
	6-15	6/21/2004	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
RAA10-E-Z20	0-1	6/21/2004	ND(0.045) [ND(0.043)]	ND(0.045) [ND(0.043)]	ND(0.045) [ND(0.043)]	ND(0.045) [ND(0.043)]
	1-3	6/21/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/21/2004	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
	6-15	6/21/2004	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)



**TABLE 7-2  
PCB DATA RECEIVED DURING JULY 2004**

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

<b>Sample ID</b>	<b>Depth(Feet)</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>
RAA10-E-Z22	0-1	6/21/2004	ND(0.050)	ND(0.050)	0.060	0.060
	1-3	6/21/2004	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	3-6	6/21/2004	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
	6-15	6/21/2004	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)

Notes:

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

Data Qualifiers:

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

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-BB16 1-3 06/22/04	RAA10-E-BB16 3-6 06/22/04	RAA10-E-BB16 4-6 06/22/04	RAA10-E-BB16 6-15 06/22/04	RAA10-E-BB16 8-10 06/22/04
<b>Volatile Organics</b>						
1,2-Dibromo-3-chloropropane		ND(0.0065)	NA	ND(0.0058)	NA	ND(0.0061)
2-Butanone		ND(0.013)	NA	ND(0.012)	NA	ND(0.012)
Acetone		ND(0.026)	NA	ND(0.023)	NA	ND(0.024)
<b>Semivolatile Organics</b>						
1,4-Dichlorobenzene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
2,4-Dinitrophenol		ND(2.2)	ND(2.0)	NA	ND(2.0)	NA
2,4-Dinitrotoluene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
2,6-Dinitrotoluene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
2-Nitroaniline		ND(2.2)	ND(2.0)	NA	ND(2.0)	NA
Acenaphthylene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Aniline		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Anthracene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Benzidine		ND(0.87)	ND(0.79)	NA	ND(0.79)	NA
Benzo(a)anthracene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Benzo(a)pyrene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Benzo(b)fluoranthene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Benzo(g,h,i)perylene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Benzo(k)fluoranthene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
bis(2-Ethylhexyl)phthalate		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Chrysene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Dimethylphthalate		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Fluoranthene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Indeno(1,2,3-cd)pyrene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Phenanthrene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
Pyrene		ND(0.43)	ND(0.39)	NA	ND(0.39)	NA
<b>Organochlorine Pesticides</b>						
None Detected		NA	NA	NA	NA	NA
<b>Organophosphate Pesticides</b>						
None Detected		NA	NA	NA	NA	NA
<b>Herbicides</b>						
None Detected		NA	NA	NA	NA	NA
<b>Furans</b>						
2,3,7,8-TCDF		NA	NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA	NA
OCDF		NA	NA	NA	NA	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-BB16 1-3 06/22/04	RAA10-E-BB16 3-6 06/22/04	RAA10-E-BB16 4-6 06/22/04	RAA10-E-BB16 6-15 06/22/04	RAA10-E-BB16 8-10 06/22/04
<b>Dioxins</b>						
2,3,7,8-TCDD		NA	NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA	NA
OCDD		NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA	NA
<b>Inorganics</b>						
Antimony		ND(6.00)	ND(6.00)	NA	ND(6.00)	NA
Arsenic		2.70	1.10	NA	1.60	NA
Barium		57.0	20.0	NA	8.50 B	NA
Beryllium		0.700	0.280 B	NA	0.170 B	NA
Cadmium		0.350 B	0.170 B	NA	0.250 B	NA
Chromium		15.0	6.40	NA	4.10	NA
Cobalt		10.0	4.40 B	NA	4.80 B	NA
Copper		12.0	6.90	NA	12.0	NA
Cyanide		0.0260 B	0.0390 B	NA	ND(0.120)	NA
Lead		7.40	4.20	NA	3.50	NA
Mercury		0.0120 B	ND(0.120)	NA	ND(0.120)	NA
Nickel		17.0	8.40	NA	8.60	NA
Selenium		ND(1.00)	ND(1.00)	NA	ND(1.00)	NA
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00)	NA
Sulfide		ND(6.50)	ND(5.90)	NA	28.0	NA
Thallium		ND(1.30)	ND(1.20)	NA	ND(1.20)	NA
Tin		4.40 B	3.00 B	NA	3.40 B	NA
Vanadium		15.0	5.80	NA	3.50 B	NA
Zinc		76.0	32.0	NA	29.0	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-BB18 0-1 06/22/04	RAA10-E-DD20 1-3 06/22/04	RAA10-E-DD20 3-6 06/22/04	RAA10-E-DD20 4-6 06/22/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane		0.0049 J	ND(0.0066)	NA	ND(0.0064)
2-Butanone		ND(0.014)	ND(0.013)	NA	ND(0.013)
Acetone		ND(0.028)	ND(0.026)	NA	ND(0.026)
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene		ND(0.50)	ND(0.44)	ND(0.52)	NA
2,4-Dinitrophenol		ND(2.5)	ND(2.2)	ND(2.6)	NA
2,4-Dinitrotoluene		ND(0.50)	ND(0.44)	ND(0.52)	NA
2,6-Dinitrotoluene		ND(0.50)	ND(0.44)	ND(0.52)	NA
2-Nitroaniline		ND(2.5)	ND(2.2)	ND(2.6)	NA
Acenaphthylene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Aniline		ND(0.50)	ND(0.44)	ND(0.52)	NA
Anthracene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Benzidine		ND(1.0)	ND(0.88)	ND(1.0)	NA
Benzo(a)anthracene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Benzo(a)pyrene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Benzo(b)fluoranthene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Benzo(g,h,i)perylene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Benzo(k)fluoranthene		ND(0.50)	ND(0.44)	ND(0.52)	NA
bis(2-Ethylhexyl)phthalate		ND(0.46)	ND(0.44)	ND(0.46)	NA
Chrysene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Dimethylphthalate		ND(0.50)	ND(0.44)	ND(0.52)	NA
Fluoranthene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Indeno(1,2,3-cd)pyrene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Phenanthrene		ND(0.50)	ND(0.44)	ND(0.52)	NA
Pyrene		ND(0.50)	ND(0.44)	ND(0.52)	NA
<b>Organochlorine Pesticides</b>					
None Detected		--	--	--	NA
<b>Organophosphate Pesticides</b>					
None Detected		--	--	--	NA
<b>Herbicides</b>					
None Detected		--	--	--	NA
<b>Furans</b>					
2,3,7,8-TCDF		ND(0.000014) X	0.0000061 J	0.0000028 J	NA
TCDFs (total)		0.0000075	0.0000016 J	0.0000028 J	NA
1,2,3,7,8-PeCDF		0.0000011 J	ND(0.0000063)	ND(0.0000063)	NA
2,3,4,7,8-PeCDF		0.0000015 J	ND(0.0000063)	ND(0.0000063)	NA
PeCDFs (total)		0.0000026	0.0000069 J	ND(0.0000063)	NA
1,2,3,4,7,8-HxCDF		0.0000065 J	ND(0.0000063)	ND(0.0000063)	NA
1,2,3,6,7,8-HxCDF		0.0000024 J	ND(0.0000063)	ND(0.0000063)	NA
1,2,3,7,8,9-HxCDF		ND(0.0000066)	ND(0.0000063)	ND(0.0000063)	NA
2,3,4,6,7,8-HxCDF		0.0000094 J	ND(0.0000063)	ND(0.0000063)	NA
HxCDFs (total)		0.000030	0.0000014 J	ND(0.0000063)	NA
1,2,3,4,6,7,8-HpCDF		0.000022	0.0000032 J	ND(0.0000063)	NA
1,2,3,4,7,8,9-HpCDF		0.0000018 J	ND(0.0000063)	ND(0.0000063)	NA
HpCDFs (total)		0.000037	0.0000049 J	ND(0.0000063)	NA
OCDF		0.000027	0.0000016 J	ND(0.0000012)	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-BB18 0-1 06/22/04	RAA10-E-DD20 1-3 06/22/04	RAA10-E-DD20 3-6 06/22/04	RAA10-E-DD20 4-6 06/22/04
<b>Dioxins</b>					
2,3,7,8-TCDD		ND(0.00000075) X	ND(0.00000025)	ND(0.00000025)	NA
TCDDs (total)		ND(0.00000072)	ND(0.00000068)	ND(0.00000079)	NA
1,2,3,7,8-PeCDD		ND(0.00000066)	ND(0.00000063)	ND(0.00000063)	NA
PeCDDs (total)		ND(0.00000066)	ND(0.0000011)	ND(0.00000063)	NA
1,2,3,4,7,8-HxCDD		ND(0.00000066)	ND(0.00000063)	ND(0.00000063)	NA
1,2,3,6,7,8-HxCDD		ND(0.00000066)	ND(0.00000063)	ND(0.00000063)	NA
1,2,3,7,8,9-HxCDD		ND(0.00000066)	ND(0.00000063)	ND(0.00000063)	NA
HxCDDs (total)		ND(0.00000066)	ND(0.00000063)	ND(0.0000010)	NA
1,2,3,4,6,7,8-HpCDD		0.0000049 J	0.0000011 J	ND(0.00000063)	NA
HpCDDs (total)		0.0000081	0.0000011 J	ND(0.00000063)	NA
OCDD		0.000036	0.0000077 J	0.0000035 J	NA
Total TEQs (WHO TEFs)		0.0000030	0.00000094	0.00000087	NA
<b>Inorganics</b>					
Antimony		ND(6.00)	ND(6.00)	ND(6.00)	NA
Arsenic		2.80	3.80	3.30	NA
Barium		70.0	62.0	60.0	NA
Beryllium		0.710	0.740	0.580	NA
Cadmium		0.420 B	0.510	0.480 B	NA
Chromium		16.0	14.0	13.0	NA
Cobalt		8.10	11.0	9.10	NA
Copper		15.0	15.0	12.0	NA
Cyanide		0.0590 B	0.0440 B	ND(0.140)	NA
Lead		14.0	7.20	5.90	NA
Mercury		0.0820 B	0.0140 B	ND(0.140)	NA
Nickel		16.0	18.0	14.0	NA
Selenium		0.720 B	ND(1.00)	0.700 B	NA
Silver		ND(1.00)	ND(1.00)	ND(1.00)	NA
Sulfide		8.80	6.30 B	9.00	NA
Thallium		1.50	1.30 B	ND(1.40)	NA
Tin		4.80 B	3.90 B	4.30 B	NA
Vanadium		15.0	16.0	15.0	NA
Zinc		75.0	73.0	63.0	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-DD20 6-15 06/22/04	RAA10-E-DD20 8-10 06/22/04	RAA10-E-GG14 0-1 06/30/04	RAA10-E-GG25 0-1 06/30/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane		NA	ND(0.017)	ND(0.0082) [ND(0.0082)]	ND(0.0076)
2-Butanone		NA	0.077	ND(0.016) [ND(0.016)]	ND(0.015)
Acetone		NA	0.38	ND(0.033) [ND(0.033)]	ND(0.030)
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
2,4-Dinitrophenol		ND(8.2)	NA	ND(2.8) [ND(2.8)]	ND(2.6)
2,4-Dinitrotoluene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
2,6-Dinitrotoluene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
2-Nitroaniline		ND(8.2)	NA	ND(2.8) [ND(2.8)]	ND(2.6)
Acenaphthylene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Aniline		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Anthracene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Benzidine		ND(3.3)	NA	ND(1.1) [ND(1.1)]	ND(1.0)
Benzo(a)anthracene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Benzo(a)pyrene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Benzo(b)fluoranthene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Benzo(g,h,i)perylene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Benzo(k)fluoranthene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
bis(2-Ethylhexyl)phthalate		ND(0.82)	NA	ND(0.54) [ND(0.54)]	ND(0.50)
Chrysene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Dimethylphthalate		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Fluoranthene		ND(1.6)	NA	0.14 J [0.21 J]	ND(0.51)
Indeno(1,2,3-cd)pyrene		ND(1.6)	NA	ND(0.55) [ND(0.54)]	ND(0.51)
Phenanthrene		ND(1.6)	NA	ND(0.55) [0.12 J]	ND(0.51)
Pyrene		ND(1.6)	NA	0.14 J [0.15 J]	ND(0.51)
<b>Organochlorine Pesticides</b>					
None Detected		NA	NA	NA	NA
<b>Organophosphate Pesticides</b>					
None Detected		NA	NA	NA	NA
<b>Herbicides</b>					
None Detected		NA	NA	NA	NA
<b>Furans</b>					
2,3,7,8-TCDF		NA	NA	NA	NA
TCDFs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDF		NA	NA	NA	NA
2,3,4,7,8-PeCDF		NA	NA	NA	NA
PeCDFs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	NA
HxCDFs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	NA
HpCDFs (total)		NA	NA	NA	NA
OCDF		NA	NA	NA	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-DD20 6-15 06/22/04	RAA10-E-DD20 8-10 06/22/04	RAA10-E-GG14 0-1 06/30/04	RAA10-E-GG25 0-1 06/30/04
<b>Dioxins</b>					
2,3,7,8-TCDD		NA	NA	NA	NA
TCDDs (total)		NA	NA	NA	NA
1,2,3,7,8-PeCDD		NA	NA	NA	NA
PeCDDs (total)		NA	NA	NA	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	NA
HxCDDs (total)		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	NA
HpCDDs (total)		NA	NA	NA	NA
OCDD		NA	NA	NA	NA
Total TEQs (WHO TEFs)		NA	NA	NA	NA
<b>Inorganics</b>					
Antimony		ND(6.00)	NA	1.30 B [1.60 B]	1.20 B
Arsenic		3.80	NA	5.20 [6.50]	5.50
Barium		86.0	NA	90.0 [89.0]	71.0
Beryllium		0.860	NA	0.620 [0.590]	0.560
Cadmium		1.50	NA	0.660 [0.710]	0.730
Chromium		18.0	NA	19.0 [20.0]	29.0
Cobalt		11.0	NA	8.80 [8.60]	10.0
Copper		33.0	NA	17.0 [19.0]	22.0
Cyanide		0.0660 B	NA	0.180 [0.230]	0.140 B
Lead		9.20	NA	23.0 [29.0]	26.0
Mercury		ND(0.200)	NA	0.250 [0.190]	0.140 B
Nickel		22.0	NA	16.0 [17.0]	18.0
Selenium		1.20 B	NA	ND(1.20) [ND(1.20)]	ND(1.10)
Silver		ND(1.50)	NA	ND(1.20) [0.350 B]	0.190 B
Sulfide		46.0	NA	10.0 [13.0]	ND(7.60)
Thallium		ND(2.00)	NA	ND(1.60) [ND(1.60)]	ND(1.50)
Tin		6.90 B	NA	6.30 B [6.80 B]	6.50 B
Vanadium		20.0	NA	19.0 [20.0]	17.0
Zinc		93.0	NA	84.0 [88.0]	86.0

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-II18 0-1 07/01/04	RAA10-E-II23 0-1 07/01/04	RAA10-E-KK15 0-1 07/08/04	RAA10-E-KK20 0-1 07/07/04	RAA10-E-KK25 0-1 07/07/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane	ND(0.0063)	NA	ND(0.0093)	ND(0.0072)	ND(0.0071)
2-Butanone	ND(0.012)	NA	ND(0.019)	ND(0.014)	ND(0.014)
Acetone	ND(0.025)	NA	ND(0.037)	ND(0.029)	ND(0.028)
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene	ND(0.42)	ND(0.50)	0.54 J	ND(0.48)	ND(0.48)
2,4-Dinitrophenol	ND(2.1)	0.90 J	ND(7.8)	ND(2.4)	ND(2.4)
2,4-Dinitrotoluene	ND(0.42)	0.98	ND(1.6)	ND(0.48)	ND(0.48)
2,6-Dinitrotoluene	ND(0.42)	1.1	ND(1.6)	ND(0.48)	ND(0.48)
2-Nitroaniline	0.086 J	ND(2.5)	ND(7.8)	ND(2.4)	ND(2.4)
Acenaphthylene	ND(0.42)	ND(0.50)	0.56 J	ND(0.48)	ND(0.48)
Aniline	ND(0.42)	ND(0.50)	0.99 J	ND(0.48)	ND(0.48)
Anthracene	ND(0.42)	ND(0.50)	0.59 J	ND(0.48)	ND(0.48)
Benzdine	ND(0.84)	0.43 J	ND(3.1)	ND(0.97)	ND(0.96)
Benzo(a)anthracene	ND(0.42)	ND(0.50)	1.3 J	ND(0.48)	ND(0.48)
Benzo(a)pyrene	ND(0.42)	ND(0.50)	1.2 J	ND(0.48)	ND(0.48)
Benzo(b)fluoranthene	ND(0.42)	ND(0.50)	0.84 J	ND(0.48)	ND(0.48)
Benzo(g,h,i)perylene	ND(0.42)	ND(0.50)	1.0 J	ND(0.48)	ND(0.48)
Benzo(k)fluoranthene	ND(0.42)	ND(0.50)	1.6	ND(0.48)	ND(0.48)
bis(2-Ethylhexyl)phthalate	ND(0.42)	ND(0.49)	0.46 J	ND(0.48)	ND(0.47)
Chrysene	ND(0.42)	ND(0.50)	2.3	ND(0.48)	ND(0.48)
Dimethylphthalate	ND(0.42)	0.31 J	ND(1.6)	ND(0.48)	ND(0.48)
Fluoranthene	ND(0.42)	ND(0.50)	4.6	ND(0.48)	ND(0.48)
Indeno(1,2,3-cd)pyrene	ND(0.42)	ND(0.50)	0.74 J	ND(0.48)	ND(0.48)
Phenanthrene	ND(0.42)	ND(0.50)	2.4	ND(0.48)	ND(0.48)
Pyrene	ND(0.42)	ND(0.50)	3.6	ND(0.48)	ND(0.48)
<b>Organochlorine Pesticides</b>					
None Detected	NA	NA	NA	NA	NA
<b>Organophosphate Pesticides</b>					
None Detected	NA	NA	NA	NA	NA
<b>Herbicides</b>					
None Detected	NA	NA	NA	NA	NA
<b>Furans</b>					
2,3,7,8-TCDF	NA	NA	NA	NA	NA
TCDFs (total)	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	NA	NA	NA	NA	NA
PeCDFs (total)	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	NA	NA	NA	NA	NA
HxCDFs (total)	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	NA	NA
HpCDFs (total)	NA	NA	NA	NA	NA
OCDF	NA	NA	NA	NA	NA



**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-II18 0-1 07/01/04	RAA10-E-II23 0-1 07/01/04	RAA10-E-KK15 0-1 07/08/04	RAA10-E-KK20 0-1 07/07/04	RAA10-E-KK25 0-1 07/07/04
<b>Dioxins</b>					
2,3,7,8-TCDD	NA	NA	NA	NA	NA
TCDDs (total)	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	NA	NA	NA	NA	NA
PeCDDs (total)	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	NA	NA	NA	NA	NA
HxCDDs (total)	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	NA	NA	NA	NA	NA
HpCDDs (total)	NA	NA	NA	NA	NA
OCDD	NA	NA	NA	NA	NA
Total TEQs (WHO TEFs)	NA	NA	NA	NA	NA
<b>Inorganics</b>					
Antimony	ND(6.00)	NA	3.70 B	ND(6.00)	ND(6.00)
Arsenic	5.70	NA	6.70	3.40	4.90
Barium	88.0	NA	78.0	56.0	72.0
Beryllium	0.890	NA	0.530	0.590	0.610
Cadmium	0.750	NA	1.80	0.390 B	0.600
Chromium	16.0	NA	100	14.0	15.0
Cobalt	11.0	NA	8.10	8.60	11.0
Copper	14.0	NA	100	13.0	17.0
Cyanide	0.130	NA	0.250	0.0810 B	0.140 B
Lead	26.0	NA	150	13.0	16.0
Mercury	0.110 B	NA	1.20	0.0180 B	0.0670 B
Nickel	15.0	NA	22.0	14.0	17.0
Selenium	1.10	NA	ND(1.40)	0.850 B	1.10
Silver	0.560 B	NA	12.0	0.170 B	0.150 B
Sulfide	ND(6.30)	NA	39.0	ND(7.20)	ND(7.10)
Thallium	ND(1.20)	NA	ND(1.90)	ND(1.40)	ND(1.40)
Tin	4.30 B	NA	15.0	4.90 B	5.30 B
Vanadium	19.0	NA	27.0	14.0	16.0
Zinc	74.0	NA	240	59.0	73.0

**TABLE 7-3**  
**APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-LL21 0-1 07/12/04	RAA10-E-MM19 0-1 07/12/04	RAA10-E-MM20 0-1 07/12/04	RAA10-E-MM25 0-1 07/12/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane		ND(0.0072)	ND(0.012)	ND(0.013)	ND(0.0093)
2-Butanone		ND(0.014)	ND(0.025)	0.019 J	ND(0.018)
Acetone		ND(0.029)	0.051	0.048 J	ND(0.037)
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
2,4-Dinitrophenol		ND(2.5)	ND(4.2)	ND(4.3)	ND(3.2)
2,4-Dinitrotoluene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
2,6-Dinitrotoluene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
2-Nitroaniline		ND(2.5)	ND(4.2)	ND(4.3)	ND(3.2)
Acenaphthylene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Aniline		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Anthracene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Benzidine		ND(0.97)	ND(1.7)	ND(1.7)	ND(1.2)
Benzo(a)anthracene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Benzo(a)pyrene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Benzo(b)fluoranthene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Benzo(g,h,i)perylene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Benzo(k)fluoranthene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
bis(2-Ethylhexyl)phthalate		ND(0.48)	ND(0.82)	ND(0.84)	ND(0.61)
Chrysene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Dimethylphthalate		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Fluoranthene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Indeno(1,2,3-cd)pyrene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Phenanthrene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
Pyrene		ND(0.48)	ND(0.83)	ND(0.85)	ND(0.62)
<b>Organochlorine Pesticides</b>					
None Detected		NA	NA	--	NA
<b>Organophosphate Pesticides</b>					
None Detected		NA	NA	--	NA
<b>Herbicides</b>					
None Detected		NA	NA	--	NA
<b>Furans</b>					
2,3,7,8-TCDF		NA	NA	0.000097 Y	NA
TCDFs (total)		NA	NA	0.00012	NA
1,2,3,7,8-PeCDF		NA	NA	ND(0.000054)	NA
2,3,4,7,8-PeCDF		NA	NA	0.000013	NA
PeCDFs (total)		NA	NA	0.00017 QI	NA
1,2,3,4,7,8-HxCDF		NA	NA	0.000022	NA
1,2,3,6,7,8-HxCDF		NA	NA	0.000072	NA
1,2,3,7,8,9-HxCDF		NA	NA	0.000029 J	NA
2,3,4,6,7,8-HxCDF		NA	NA	0.000011	NA
HxCDFs (total)		NA	NA	0.00029	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	0.00027	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	0.000040 J	NA
HpCDFs (total)		NA	NA	0.00048	NA
OCDF		NA	NA	0.00015	NA

**TABLE 7-3**  
**APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-LL21 0-1 07/12/04	RAA10-E-MM19 0-1 07/12/04	RAA10-E-MM20 0-1 07/12/04	RAA10-E-MM25 0-1 07/12/04
<b>Dioxins</b>					
2,3,7,8-TCDD		NA	NA	ND(0.0000014)	NA
TCDDs (total)		NA	NA	0.0000017 J	NA
1,2,3,7,8-PeCDD		NA	NA	ND(0.0000012)	NA
PeCDDs (total)		NA	NA	0.0000066	NA
1,2,3,4,7,8-HxCDD		NA	NA	ND(0.0000028)	NA
1,2,3,6,7,8-HxCDD		NA	NA	0.0000044 J	NA
1,2,3,7,8,9-HxCDD		NA	NA	ND(0.0000024) X	NA
HxCDDs (total)		NA	NA	0.000033	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	0.000077	NA
HpCDDs (total)		NA	NA	0.00014	NA
OCDD		NA	NA	0.00072	NA
Total TEQs (WHO TEFs)		NA	NA	0.000018	NA
<b>Inorganics</b>					
Antimony		ND(6.00)	ND(6.00)	ND(6.00)	ND(6.00)
Arsenic		ND(1.10)	5.20	13.0	5.30
Barium		74.0	96.0	120	84.0
Beryllium		0.590	0.560	0.760	0.630
Cadmium		0.240 B	0.980	1.60	1.10
Chromium		17.0	21.0	42.0	24.0
Cobalt		12.0	8.20	14.0	11.0
Copper		13.0	23.0	46.0	27.0
Cyanide		0.0500 B	0.310	0.200 B	0.130 B
Lead		10.0	23.0	61.0	30.0
Mercury		0.0410 B	0.280	0.460	0.270
Nickel		17.0	14.0	22.0	19.0
Selenium		ND(1.10)	ND(1.80)	1.70 B	ND(1.40)
Silver		ND(1.10)	0.820 B	0.610 B	ND(1.40)
Sulfide		7.00 B	24.0	ND(13.0)	ND(9.30)
Thallium		ND(1.40)	ND(2.50)	ND(2.50)	ND(1.80)
Tin		2.10 B	8.70 B	12.0 B	7.50 B
Vanadium		15.0	16.0	21.0	20.0
Zinc		82.0	91.0	130	100

**TABLE 7-3**  
**APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-P16 0-1 06/18/04	RAA10-E-RR25 0-1 07/14/04	RAA10-E-T16 1-3 06/18/04	RAA10-E-T16 3-4 06/18/04	RAA10-E-T16 3-6 06/18/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane	ND(0.0054)	ND(0.0077)	ND(0.0066)	ND(0.0062)	NA
2-Butanone	ND(0.011)	ND(0.015)	ND(0.013)	ND(0.012)	NA
Acetone	ND(0.022)	ND(0.031)	ND(0.026)	ND(0.025)	NA
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
2,4-Dinitrophenol	ND(2.5)	ND(2.6)	ND(2.9)	NA	ND(2.7)
2,4-Dinitrotoluene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
2,6-Dinitrotoluene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
2-Nitroaniline	ND(2.5)	ND(2.6)	ND(2.9)	NA	ND(2.7)
Acenaphthylene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Aniline	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Anthracene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Benzidine	ND(1.0)	ND(1.0)	ND(1.1)	NA	ND(1.1)
Benzo(a)anthracene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Benzo(a)pyrene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Benzo(b)fluoranthene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Benzo(g,h,i)perylene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Benzo(k)fluoranthene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
bis(2-Ethylhexyl)phthalate	ND(0.36)	ND(0.51)	ND(0.44)	NA	ND(0.49)
Chrysene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Dimethylphthalate	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Fluoranthene	0.31 J	0.13 J	ND(0.57)	NA	ND(0.55)
Indeno(1,2,3-cd)pyrene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Phenanthrene	ND(0.50)	ND(0.51)	ND(0.57)	NA	ND(0.55)
Pyrene	0.29 J	0.12 J	ND(0.57)	NA	ND(0.55)
<b>Organochlorine Pesticides</b>					
None Detected	NA	--	NA	NA	NA
<b>Organophosphate Pesticides</b>					
None Detected	NA	--	NA	NA	NA
<b>Herbicides</b>					
None Detected	NA	--	NA	NA	NA
<b>Furans</b>					
2,3,7,8-TCDF	0.0000041 Y	0.000014 Y	NA	NA	NA
TCDFs (total)	0.000086 Q	0.00053 QI	NA	NA	NA
1,2,3,7,8-PeCDF	0.0000022 J	0.0000048	NA	NA	NA
2,3,4,7,8-PeCDF	0.0000048 J	0.000080	NA	NA	NA
PeCDFs (total)	0.00011 Q	0.0014 Q	NA	NA	NA
1,2,3,4,7,8-HxCDF	0.0000056	0.000016	NA	NA	NA
1,2,3,6,7,8-HxCDF	0.0000038 J	0.000042	NA	NA	NA
1,2,3,7,8,9-HxCDF	0.0000060 JQ	0.000094	NA	NA	NA
2,3,4,6,7,8-HxCDF	0.0000023 J	0.00014	NA	NA	NA
HxCDFs (total)	0.000046	0.0022 I	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	0.000010	0.00044	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	0.0000013 J	0.000012	NA	NA	NA
HpCDFs (total)	0.000021	0.00090	NA	NA	NA
OCDF	0.000016	0.00017	NA	NA	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-P16 0-1 06/18/04	RAA10-E-RR25 0-1 07/14/04	RAA10-E-T16 1-3 06/18/04	RAA10-E-T16 3-4 06/18/04	RAA10-E-T16 3-6 06/18/04
<b>Dioxins</b>					
2,3,7,8-TCDD	ND(0.0000025) X	0.0000060 J	NA	NA	NA
TCDDs (total)	ND(0.0000060)	0.000053 Q	NA	NA	NA
1,2,3,7,8-PeCDD	ND(0.0000054)	0.000032 J	NA	NA	NA
PeCDDs (total)	0.000015 JQ	0.000028 Q	NA	NA	NA
1,2,3,4,7,8-HxCDD	ND(0.0000054)	0.000032 J	NA	NA	NA
1,2,3,6,7,8-HxCDD	0.000011 J	0.000091	NA	NA	NA
1,2,3,7,8,9-HxCDD	0.000011 J	0.000062	NA	NA	NA
HxCDDs (total)	0.000080	0.000083	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	0.000018	0.00010	NA	NA	NA
HpCDDs (total)	0.000032	0.00019	NA	NA	NA
OCDD	0.00015	0.00079	NA	NA	NA
Total TEQs (WHO TEFs)	0.000051	0.000074	NA	NA	NA
<b>Inorganics</b>					
Antimony	ND(6.00)	1.10 B	ND(6.00)	NA	ND(6.00)
Arsenic	4.50	7.40	1.10	NA	1.80
Barium	19.0 B	75.0	58.0	NA	53.0
Beryllium	0.230 B	0.320 B	0.610	NA	0.530
Cadmium	0.310 B	1.20	0.440 B	NA	0.400 B
Chromium	5.50	27.0	13.0	NA	12.0
Cobalt	6.30	11.0	10.0	NA	10.0
Copper	9.00	34.0	11.0	NA	14.0
Cyanide	0.0320 B	0.390	ND(0.130)	NA	0.0380 B
Lead	9.10	40.0	6.70	NA	6.00
Mercury	ND(0.110)	0.390	ND(0.130)	NA	ND(0.150)
Nickel	10.0	18.0	15.0	NA	17.0
Selenium	0.540 B	ND(1.20)	1.10	NA	1.50
Silver	ND(1.00)	0.380 B	ND(1.00)	NA	ND(1.10)
Sulfide	6.90	9.80	ND(6.60)	NA	34.0
Thallium	ND(1.10)	ND(1.50)	ND(1.30)	NA	ND(1.50)
Tin	3.60 B	6.40 B	3.90 B	NA	4.70 B
Vanadium	6.40	18.0	16.0	NA	14.0
Zinc	37.0	84.0	62.0	NA	61.0

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-T16 6-8 06/18/04	RAA10-E-T16 6-15 06/18/04	RAA10-E-UU25 0-1 07/14/04	RAA10-E-VV27 0-1 07/14/04	RAA10-E-Z16 0-1 06/21/04
<b>Volatile Organics</b>						
1,2-Dibromo-3-chloropropane		ND(0.0088)	NA	ND(0.0074)	ND(0.0065)	ND(0.0079)
2-Butanone		ND(0.018)	NA	ND(0.015)	ND(0.013)	ND(0.016)
Acetone		0.033 J	NA	ND(0.030)	ND(0.026)	ND(0.032)
<b>Semivolatile Organics</b>						
1,4-Dichlorobenzene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
2,4-Dinitrophenol		NA	ND(4.8)	ND(2.7)	ND(2.2)	ND(4.5)
2,4-Dinitrotoluene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
2,6-Dinitrotoluene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
2-Nitroaniline		NA	ND(4.8)	ND(2.7)	ND(2.2)	ND(4.5)
Acenaphthylene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Aniline		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Anthracene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Benzidine		NA	ND(1.9)	ND(1.1)	ND(0.87)	ND(1.8)
Benzo(a)anthracene		NA	ND(0.96)	ND(0.54)	0.10 J	ND(0.90)
Benzo(a)pyrene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Benzo(b)fluoranthene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Benzo(g,h,i)perylene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Benzo(k)fluoranthene		NA	ND(0.96)	ND(0.54)	0.087 J	ND(0.90)
bis(2-Ethylhexyl)phthalate		NA	ND(0.73)	ND(0.49)	ND(0.43)	ND(0.52)
Chrysene		NA	ND(0.96)	ND(0.54)	0.15 J	ND(0.90)
Dimethylphthalate		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Fluoranthene		NA	ND(0.96)	0.13 J	0.30 J	ND(0.90)
Indeno(1,2,3-cd)pyrene		NA	ND(0.96)	ND(0.54)	ND(0.43)	ND(0.90)
Phenanthrene		NA	ND(0.96)	ND(0.54)	0.17 J	ND(0.90)
Pyrene		NA	ND(0.96)	0.12 J	0.23 J	ND(0.90)
<b>Organochlorine Pesticides</b>						
None Detected		NA	--	--	--	--
<b>Organophosphate Pesticides</b>						
None Detected		NA	--	--	--	--
<b>Herbicides</b>						
None Detected		NA	--	--	--	--
<b>Furans</b>						
2,3,7,8-TCDF		NA	ND(0.0000042)	NA	0.000012 Y	0.0000021 J
TCDFs (total)		NA	ND(0.0000042)	NA	0.000037 Q	0.000063
1,2,3,7,8-PeCDF		NA	ND(0.0000010)	NA	0.0000048	ND(0.0000080)
2,3,4,7,8-PeCDF		NA	ND(0.0000010)	NA	0.0000044	0.000012
PeCDFs (total)		NA	ND(0.0000010)	NA	0.000026 Q	0.00011
1,2,3,4,7,8-HxCDF		NA	ND(0.0000010)	NA	0.0000056	0.0000018 J
1,2,3,6,7,8-HxCDF		NA	ND(0.0000010)	NA	0.0000016 J	0.0000026 J
1,2,3,7,8,9-HxCDF		NA	ND(0.0000010)	NA	ND(0.0000014) X	0.0000010 J
2,3,4,6,7,8-HxCDF		NA	ND(0.0000010)	NA	0.0000012 J	0.0000051 J
HxCDFs (total)		NA	ND(0.0000010)	NA	0.000040	0.000067
1,2,3,4,6,7,8-HpCDF		NA	ND(0.0000010)	NA	0.000063	0.000014
1,2,3,4,7,8,9-HpCDF		NA	ND(0.0000010)	NA	0.0000094 J	ND(0.0000080)
HpCDFs (total)		NA	ND(0.0000010)	NA	0.00011	0.000023
OCDF		NA	ND(0.0000021)	NA	0.000032	0.0000072 J

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-T16 6-8 06/18/04	RAA10-E-T16 6-15 06/18/04	RAA10-E-UU25 0-1 07/14/04	RAA10-E-VV27 0-1 07/14/04	RAA10-E-Z16 0-1 06/21/04
<b>Dioxins</b>					
2,3,7,8-TCDD	NA	ND(0.00000046)	NA	ND(0.00000014)	ND(0.00000032)
TCDDs (total)	NA	ND(0.0000011)	NA	ND(0.00000040)	ND(0.00000099)
1,2,3,7,8-PeCDD	NA	ND(0.0000010)	NA	ND(0.00000029)	ND(0.00000080)
PeCDDs (total)	NA	ND(0.0000017)	NA	0.0000012 J	0.0000044 J
1,2,3,4,7,8-HxCDD	NA	ND(0.0000010)	NA	ND(0.00000039)	ND(0.00000080)
1,2,3,6,7,8-HxCDD	NA	ND(0.0000010)	NA	ND(0.00000086) X	0.0000018 J
1,2,3,7,8,9-HxCDD	NA	ND(0.0000010)	NA	0.00000040 J	0.0000012 J
HxCDDs (total)	NA	ND(0.0000010)	NA	0.0000053	0.000014
1,2,3,4,6,7,8-HpCDD	NA	ND(0.0000010)	NA	0.000014	0.0000080
HpCDDs (total)	NA	ND(0.0000010)	NA	0.000025	0.000013
OCDD	NA	0.0000040 J	NA	0.00016	0.000043
Total TEQs (WHO TEFs)	NA	0.0000014	NA	0.0000057	0.0000084
<b>Inorganics</b>					
Antimony	NA	ND(6.00)	ND(6.00)	ND(6.00)	ND(6.00)
Arsenic	NA	1.90	5.30	7.20	3.20
Barium	NA	45.0	84.0	52.0	78.0
Beryllium	NA	0.400 B	0.450 B	0.220 B	0.890
Cadmium	NA	0.490 B	1.20	0.850	0.620
Chromium	NA	9.20	19.0	33.0	90.0
Cobalt	NA	8.60	13.0	8.60	9.70
Copper	NA	14.0	22.0	35.0	22.0
Cyanide	NA	0.0740 B	0.200	0.140	0.140 B
Lead	NA	4.40	21.0	60.0	17.0
Mercury	NA	ND(0.220)	0.240	0.420	0.0730 B
Nickel	NA	14.0	20.0	15.0	20.0
Selenium	NA	1.60 B	1.00 B	ND(1.00)	2.00
Silver	NA	ND(1.70)	0.360 B	0.370 B	0.400 B
Sulfide	NA	53.0	7.10 B	590	ND(7.90)
Thallium	NA	ND(2.20)	ND(1.50)	ND(1.30)	1.30 B
Tin	NA	6.30 B	4.10 B	8.70 B	6.00 B
Vanadium	NA	9.70	18.0	12.0	18.0
Zinc	NA	73.0	80.0	86.0	92.0

**TABLE 7-3**  
**APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-Z16 6-15 06/21/04	RAA10-E-Z16 8-10 06/21/04	RAA10-E-Z18 0-1 06/21/04	RAA10-E-Z20 0-1 06/21/04
<b>Volatile Organics</b>					
1,2-Dibromo-3-chloropropane		NA	ND(0.0062)	ND(0.0084)	ND(0.0067) [ND(0.0068)]
2-Butanone		NA	ND(0.012)	ND(0.017)	ND(0.013) [ND(0.014)]
Acetone		NA	ND(0.025)	ND(0.034)	ND(0.027) [ND(0.027)]
<b>Semivolatile Organics</b>					
1,4-Dichlorobenzene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
2,4-Dinitrophenol		ND(2.1)	NA	ND(4.8)	ND(2.3) [ND(3.2)]
2,4-Dinitrotoluene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
2,6-Dinitrotoluene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
2-Nitroaniline		ND(2.1)	NA	ND(4.8)	ND(2.3) [ND(3.2)]
Acenaphthylene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Aniline		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Anthracene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Benzidine		ND(0.84)	NA	ND(1.9)	ND(0.90) [ND(1.3)]
Benzo(a)anthracene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Benzo(a)pyrene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Benzo(b)fluoranthene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Benzo(g,h,i)perylene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Benzo(k)fluoranthene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
bis(2-Ethylhexyl)phthalate		ND(0.41)	NA	ND(0.55)	ND(0.44) [ND(0.43)]
Chrysene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Dimethylphthalate		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Fluoranthene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Indeno(1,2,3-cd)pyrene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Phenanthrene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
Pyrene		ND(0.42)	NA	ND(0.95)	ND(0.45) [ND(0.65)]
<b>Organochlorine Pesticides</b>					
None Detected		--	NA	NA	--
<b>Organophosphate Pesticides</b>					
None Detected		--	NA	NA	--
<b>Herbicides</b>					
None Detected		--	NA	NA	--
<b>Furans</b>					
2,3,7,8-TCDF		ND(0.0000023)	NA	NA	0.000014 J [0.000020 J]
TCDFs (total)		ND(0.0000023)	NA	NA	0.000076 [0.000015]
1,2,3,7,8-PeCDF		ND(0.0000058)	NA	NA	ND(0.0000062) [0.0000070 J]
2,3,4,7,8-PeCDF		ND(0.0000058)	NA	NA	0.0000071 J [0.000013 J]
PeCDFs (total)		ND(0.0000058)	NA	NA	0.000062 J [0.000022]
1,2,3,4,7,8-HxCDF		ND(0.0000058)	NA	NA	ND(0.0000070) X [0.000048 J]
1,2,3,6,7,8-HxCDF		ND(0.0000058)	NA	NA	ND(0.0000062) [0.0000075 J]
1,2,3,7,8,9-HxCDF		ND(0.0000058)	NA	NA	ND(0.0000062) [ND(0.0000064)]
2,3,4,6,7,8-HxCDF		ND(0.0000058)	NA	NA	ND(0.0000062) [0.0000081 J]
HxCDFs (total)		ND(0.0000058)	NA	NA	0.000014 [0.000027]
1,2,3,4,6,7,8-HpCDF		ND(0.0000058)	NA	NA	0.000022 [0.000030]
1,2,3,4,7,8,9-HpCDF		ND(0.0000058)	NA	NA	ND(0.0000062) [ND(0.0000064)]
HpCDFs (total)		ND(0.0000058)	NA	NA	0.000037 [0.000052]
OCDF		ND(0.000012)	NA	NA	0.000092 J [0.000014]



**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-Z16 6-15 06/21/04	RAA10-E-Z16 8-10 06/21/04	RAA10-E-Z18 0-1 06/21/04	RAA10-E-Z20 0-1 06/21/04
<b>Dioxins</b>					
2,3,7,8-TCDD		ND(0.0000023)	NA	NA	ND(0.0000025) [ND(0.0000026)]
TCDDs (total)		ND(0.0000072)	NA	NA	ND(0.0000072) [ND(0.0000076)]
1,2,3,7,8-PeCDD		ND(0.0000058)	NA	NA	ND(0.0000062) [ND(0.0000064)]
PeCDDs (total)		ND(0.0000099)	NA	NA	ND(0.0000062) [ND(0.0000064)]
1,2,3,4,7,8-HxCDD		ND(0.0000058)	NA	NA	ND(0.0000062) [ND(0.0000064)]
1,2,3,6,7,8-HxCDD		ND(0.0000058)	NA	NA	ND(0.0000062) [0.0000067 J]
1,2,3,7,8,9-HxCDD		ND(0.0000058)	NA	NA	ND(0.0000062) [ND(0.0000064)]
HxCDDs (total)		ND(0.000011)	NA	NA	0.000015 J [0.000014 J]
1,2,3,4,6,7,8-HpCDD		ND(0.0000058)	NA	NA	0.000038 J [0.000071]
HpCDDs (total)		ND(0.0000058)	NA	NA	0.000066 [0.00012]
OCDD		0.000014 J	NA	NA	0.000034 [0.000061]
Total TEQs (WHO TEFs)		0.0000079	NA	NA	0.000014 [0.000025]
<b>Inorganics</b>					
Antimony		ND(6.00)	NA	1.40 B	ND(6.00) [ND(6.00)]
Arsenic		1.40	NA	4.30	5.20 [4.70]
Barium		11.0 B	NA	66.0	84.0 [80.0]
Beryllium		0.290 B	NA	0.820	0.880 [0.890]
Cadmium		0.240 B	NA	0.690	0.760 [0.660]
Chromium		4.40	NA	170	19.0 [17.0]
Cobalt		4.80 B	NA	8.80	13.0 [12.0]
Copper		8.60	NA	38.0	18.0 [16.0]
Cyanide		ND(0.250)	NA	0.160 B	0.0790 B [0.0740 B]
Lead		3.70	NA	29.0	11.0 [11.0]
Mercury		ND(0.120)	NA	0.180	0.0640 B [0.0600 B]
Nickel		8.80	NA	20.0	22.0 [19.0]
Selenium		0.620 B	NA	1.50	1.30 [1.50]
Silver		0.420 B	NA	0.660 B	ND(1.00) [0.420 B]
Sulfide		18.0	NA	21.0	ND(6.70) [8.30]
Thallium		ND(1.20)	NA	ND(1.70)	1.80 [1.80]
Tin		3.80 B	NA	7.80 B	5.30 B [4.70 B]
Vanadium		4.40 B	NA	20.0	21.0 [18.0]
Zinc		28.0	NA	91.0	92.0 [83.0]

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-Z20 1-3 06/21/04	RAA10-E-Z20 3-6 06/21/04	RAA10-E-Z20 4-6 06/21/04	RAA10-E-Z20 6-15 06/21/04	RAA10-E-Z20 8-10 06/21/04
<b>Volatile Organics</b>						
1,2-Dibromo-3-chloropropane		ND(0.0066)	NA	ND(0.0058)	NA	ND(0.0061)
2-Butanone		ND(0.013)	NA	ND(0.012)	NA	ND(0.012)
Acetone		ND(0.026)	NA	ND(0.023)	NA	ND(0.024)
<b>Semivolatile Organics</b>						
1,4-Dichlorobenzene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
2,4-Dinitrophenol		ND(2.2)	ND(2.1)	NA	ND(2.1)	NA
2,4-Dinitrotoluene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
2,6-Dinitrotoluene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
2-Nitroaniline		ND(2.2)	ND(2.1)	NA	ND(2.1)	NA
Acenaphthylene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Aniline		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Anthracene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Benzidine		ND(0.89)	ND(0.83)	NA	ND(0.81)	NA
Benzo(a)anthracene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Benzo(a)pyrene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Benzo(b)fluoranthene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Benzo(g,h,i)perylene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Benzo(k)fluoranthene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
bis(2-Ethylhexyl)phthalate		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Chrysene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Dimethylphthalate		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Fluoranthene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Indeno(1,2,3-cd)pyrene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Phenanthrene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
Pyrene		ND(0.44)	ND(0.41)	NA	ND(0.40)	NA
<b>Organochlorine Pesticides</b>						
None Detected		NA	NA	NA	--	NA
<b>Organophosphate Pesticides</b>						
None Detected		NA	NA	NA	--	NA
<b>Herbicides</b>						
None Detected		NA	NA	NA	--	NA
<b>Furans</b>						
2,3,7,8-TCDF		NA	NA	NA	ND(0.00000020)	NA
TCDFs (total)		NA	NA	NA	ND(0.00000020)	NA
1,2,3,7,8-PeCDF		NA	NA	NA	ND(0.00000051)	NA
2,3,4,7,8-PeCDF		NA	NA	NA	ND(0.00000051)	NA
PeCDFs (total)		NA	NA	NA	ND(0.00000051)	NA
1,2,3,4,7,8-HxCDF		NA	NA	NA	ND(0.00000051)	NA
1,2,3,6,7,8-HxCDF		NA	NA	NA	ND(0.00000051)	NA
1,2,3,7,8,9-HxCDF		NA	NA	NA	ND(0.00000051)	NA
2,3,4,6,7,8-HxCDF		NA	NA	NA	ND(0.00000051)	NA
HxCDFs (total)		NA	NA	NA	ND(0.00000051)	NA
1,2,3,4,6,7,8-HpCDF		NA	NA	NA	ND(0.00000051)	NA
1,2,3,4,7,8,9-HpCDF		NA	NA	NA	ND(0.00000051)	NA
HpCDFs (total)		NA	NA	NA	ND(0.00000051)	NA
OCDF		NA	NA	NA	ND(0.0000010)	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA10-E-Z20 1-3 06/21/04	RAA10-E-Z20 3-6 06/21/04	RAA10-E-Z20 4-6 06/21/04	RAA10-E-Z20 6-15 06/21/04	RAA10-E-Z20 8-10 06/21/04
<b>Dioxins</b>						
2,3,7,8-TCDD		NA	NA	NA	ND(0.00000020)	NA
TCDDs (total)		NA	NA	NA	ND(0.00000063)	NA
1,2,3,7,8-PeCDD		NA	NA	NA	ND(0.00000051)	NA
PeCDDs (total)		NA	NA	NA	ND(0.00000076)	NA
1,2,3,4,7,8-HxCDD		NA	NA	NA	ND(0.00000051)	NA
1,2,3,6,7,8-HxCDD		NA	NA	NA	ND(0.00000051)	NA
1,2,3,7,8,9-HxCDD		NA	NA	NA	ND(0.00000051)	NA
HxCDDs (total)		NA	NA	NA	ND(0.00000085)	NA
1,2,3,4,6,7,8-HpCDD		NA	NA	NA	ND(0.00000051)	NA
HpCDDs (total)		NA	NA	NA	ND(0.00000051)	NA
OCDD		NA	NA	NA	0.0000018 J	NA
Total TEQs (WHO TEFs)		NA	NA	NA	0.00000069	NA
<b>Inorganics</b>						
Antimony		ND(6.00)	ND(6.00)	NA	ND(6.00)	NA
Arsenic		6.60	3.00	NA	2.50	NA
Barium		63.0	110	NA	14.0 B	NA
Beryllium		1.00	0.670	NA	0.380 B	NA
Cadmium		0.820	0.400 B	NA	0.310 B	NA
Chromium		17.0	12.0	NA	5.10	NA
Cobalt		13.0	7.80	NA	6.20	NA
Copper		20.0	14.0	NA	7.90	NA
Cyanide		0.0460 B	0.0300 B	NA	ND(0.120)	NA
Lead		8.50	7.20	NA	4.20	NA
Mercury		0.0390 B	0.0120 B	NA	ND(0.120)	NA
Nickel		21.0	15.0	NA	9.70	NA
Selenium		1.70	0.700 B	NA	ND(1.00)	NA
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00)	NA
Sulfide		ND(6.60)	ND(6.20)	NA	60.0	NA
Thallium		1.60	ND(1.20)	NA	ND(1.20)	NA
Tin		4.90 B	4.30 B	NA	4.40 B	NA
Vanadium		21.0	13.0	NA	6.30	NA
Zinc		78.0	59.0	NA	28.0	NA

**TABLE 7-3  
APPENDIX IX+3 DATA RECEIVED DURING JULY 2004**

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

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs and Appendix IX+3 constituents.
2. NA - Not Analyzed.
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
5. With the exception of dioxin/furans, only those constituents detected in one or more samples are summarized.
6. -- Indicates that all constituents for the parameter group were not detected.
7. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics

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

Inorganics

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

**TABLE 7-4  
DATA RECEIVED DURING JULY 2004**

**BEAVER DAM ROLL-OFF DEBRIS SAMPLING  
UNKAMET BROOK AREA  
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>
ROLLOFF#3054-BD-1	7/1/2004	ND(2.0)	35	15	50
ROLLOFF#3054-BD-2	7/1/2004	ND(1.0)	13	7.6	20.6
ROLLOFF#3054-BD-3	7/1/2004	ND(1.0)	13	6.7	19.7

Notes:

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

**TABLE 7-5  
DATA RECEIVED DURING JULY 2004**

**GE PLASTICS CONCRETE/BRICK AND SAND SWEEPING PILE SAMPLING  
UNKAMET BROOK AREA  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Date Collected	Aroclor-1016, -1221, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
PLASTICS-C/B-1	7/12/2004	ND(0.033)	ND(0.033)	0.011 J	0.011 J
PLASTICS-C/B-2	7/12/2004	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]
PLASTICS-C/B-3	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-1	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-2	7/12/2004	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]
PLASTICS-SAND-3	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-4	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-5	7/12/2004	ND(0.033)	0.16	0.23	0.39
PLASTICS-SAND-6	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-7	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-8	7/12/2004	ND(0.033)	ND(0.033)	0.025 J	0.025 J
PLASTICS-SAND-9	7/12/2004	ND(0.033)	ND(0.033)	0.040	0.040
PLASTICS-SAND-10	7/12/2004	ND(0.033)	ND(0.033)	0.023 J	0.023 J
PLASTICS-SAND-11	7/12/2004	ND(0.033) [ND(0.033)]	ND(0.033) [ND(0.033)]	0.029 J [0.031 J]	0.029 J [0.031 J]
PLASTICS-SAND-12	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-13	7/12/2004	ND(0.033)	ND(0.033)	0.040	0.040
PLASTICS-SAND-14	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-15	7/12/2004	ND(0.033)	ND(0.033)	0.051	0.051
PLASTICS-SAND-16	7/12/2004	ND(0.033)	0.071	0.092	0.163
PLASTICS-SAND-17	7/12/2004	ND(0.033)	0.070	0.039	0.109
PLASTICS-SAND-18	7/12/2004	ND(0.033)	0.026 J	0.024 J	0.050 J
PLASTICS-SAND-19	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-20	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)
PLASTICS-SAND-21	7/12/2004	ND(0.033)	ND(0.033)	ND(0.033)	ND(0.033)

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

**Data Qualifiers:**

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

**ITEM 8  
FORMER OXBOW AREAS A & C  
(GEC410)  
JULY 2004**

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

**a. Activities Undertaken/Completed**

- Initiated additional supplemental sampling as proposed in Supplemental Pre-Design Investigation Report and Additional Sampling Proposal submitted on May 19, 2004 and conditionally approved by EPA on July 1, 2004 (see Table 8-1).
- Sent request for ERE decision to owner of Parcel I8-23-5 (July 8, 2004).
- Sent request for extension of access agreement to owner of Parcels I8-23-6, I8-23-7, I9-5-1, and I9-5-2 (July 12, 2004).
- Received extension of access agreement for Parcels I8-23-6, I8-23-7, I9-5-1, and I9-5-2 (July 16, 2004).

**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**

No issues

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

Received EPA's conditional approval of GE's May 19, 2004 Supplemental Pre-Design Investigation Report and Additional Sampling Proposal (July 1, 2004).

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

**FORMER OXBOW AREAS A AND C  
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 Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17	7/28/04	1-3	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17E	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-C17SW	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-1 (RAA11-G27A)	7/28/04	10-15	Soil	CT&E	PCDD/PCDF	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-2 (RAA11-H27)	7/28/04	1-3	Soil	CT&E	Inorganics	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-3 (RAA11-G28)	7/28/04	0-1	Soil	CT&E	VOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-DUP-4 (RAA11-C17)	7/28/04	1-3	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15E	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15N	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15S	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G15W	7/28/04	0-1	Soil	CT&E	SVOC	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G27A	7/28/04	10-15	Soil	CT&E	PCDD/PCDF	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-G28	7/28/04	0-1	Soil	CT&E	VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H26A	7/28/04	0-1	Soil	CT&E	VOC, SVOC, Inorganics, PCDD/PCDF	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H27	7/28/04	3-6	Soil	CT&E	PCDD/PCDF	
Additional Supplemental Pre-Design Soil Investigation Sampling	RAA11-H27	7/28/04	1-3	Soil	CT&E	VOC, SVOC, Inorganics, PCDD/PCDF	

Note:

1. Field duplicate sample locations are presented in parenthesis.



**ITEM 9  
LYMAN STREET AREA  
(GEC430)  
JULY 2004**

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

a. **Activities Undertaken/Completed**

None

b. **Sampling/Test Results Received**

None

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

None

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

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

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

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

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

None

**ITEM 10  
NEWELL STREET AREA I  
(GEC440)  
JULY 2004**

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

**a. Activities Undertaken/Completed**

- Completed restoration activities at Parcels J9-23-16, J9-23-17, and J9-23-18.
- Continued final restoration activities at Parcels J9-23-22, J9-23-23, and J9-23-24.

**b. Sampling/Test Results Received**

See attached Table 10-1 (re-reporting analytical results for topsoil and gravel sampling for use as backfill materials; these data were received in June and inadvertently reported under Items 16 & 17 in the June CD Monthly Status Report).

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

Submitted letter to EPA and MDEP describing GE's efforts to obtain access to Parcel J9-23-13 to perform the required remediation and GE's inability to obtain such access permission, and requesting the Agencies' assistance (July 26, 2004).

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

- Complete final restoration activities at Parcels J9-23-22, J9-23-23, and J9-23-24.
- Submit final executed ERE and associated documentation for Parcel J9-23-24.
- Continue discussions regarding access to Parcel J9-23-13 and Parcels J9-23-19, -20, and -21 for remediation.
- Discuss draft EREs for GE-owned properties with EPA and MDEP and work on obtaining subordination agreements for easements at those properties.

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

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

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

None

**TABLE 10-1  
DATA RECEIVED DURING JUNE 2004**

**TOPSOIL AND GRAVEL SAMPLING  
NEWELL STREET AREA I  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Date Collected:	GRAVEL-052504-1 05/25/04	TOPSOIL-052504-1 05/25/04
<b>Volatile Organics</b>			
None Detected		--	--
<b>PCBs</b>			
None Detected		--	--
<b>Semivolatile Organics</b>			
None Detected		--	--
<b>Inorganics</b>			
Arsenic		2.70	5.20
Barium		59.0	33.0
Beryllium		0.160 B	0.320 B
Cadmium		0.120 B	0.260 B
Chromium		5.70	8.60
Cobalt		5.50	6.80
Copper		10.0	12.0
Lead		5.00	13.0
Mercury		ND(0.110)	0.0380 B
Nickel		6.90	10.0
Tin		3.60 B	4.70 B
Vanadium		6.00	8.20
Zinc		22.0	53.0

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and submitted to CT&E Environmental Services, Inc. for analysis of PCBs, volatiles, semivolatiles and metals.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. Only detected constituents are summarized.
4. -- Indicates that all constituents for the parameter group were not detected.
5. This data was inadvertently reported in item 16&17 in the June 2004 CD Monthly Status Report.

Data Qualifiers:

Inorganics

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

**ITEM 11  
NEWELL STREET AREA II  
(GEC450)  
JULY 2004**

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

**a. Activities Undertaken/Completed**

Completed preparation of Conceptual RD/RA Work Plan.

**b. Sampling/Test Results Received**

None

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

Submitted Conceptual RD/RA Work Plan (July 16, 2004).

**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 12  
FORMER OXBOW AREAS J & K  
(GEC420)  
JULY 2004**

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

a. **Activities Undertaken/Completed**

None

b. **Sampling/Test Results Received**

None

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

None

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

Initiate additional supplemental sampling upon EPA approval of Supplemental Pre-Design Investigation Report and Additional Sampling Proposal submitted on June 28, 2004.

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  
(GECD800)  
JULY 2004**

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

a. **Activities Undertaken/Completed**

None

b. **Sampling/Test Results Received**

See attached tables.

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

None

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

Conduct seepage meter monitoring when water levels allow.

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

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

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

None

**TABLE 13-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**HOUSATONIC RIVER - UPPER 1/2 MILE REACH  
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/1/2 Mile Low Flow	Location-2	6/24/04	Water	NEA	PCB, PCB (f), TSS, POC	7/13/04
Monthly Water Column Sampling/1/2 Mile Low Flow	Location-4	6/24/04	Water	NEA	PCB, PCB (f), TSS, POC	7/13/04

Note:

1. (f) - Indicates filtered analysis requested.

**TABLE 13-2  
SAMPLE DATA RECEIVED DURING JULY 2004**

**MONTHLY WATER COLUMN SAMPLING / 1/2 MILE LOW FLOW SAMPLING  
HOUSATONIC RIVER - UPPER 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
LOCATION 2	Newell Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.490	1.90
LOCATION 2 (FILTERED)	Newell Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	NA	NA
LOCATION 4	Lyman Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.370	1.60
LOCATION 4 (FILTERED)	Lyman Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	NA	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical, Inc. for analysis of PCBs (filtered and unfiltered), total suspended solids (TSS) and particulate organic carbon (POC).
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. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. POC and TSS in addition to Housatonic River - 1 1/2 Mile Reach low flow sampling parameters have been analyzed as part of the Housatonic River Monthly Water Column Monitoring Program.



**ITEM 14  
HOUSATONIC RIVER AREA  
1½-MILE REACH  
(GEC820)  
JULY 2004**

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

**a. Activities Undertaken/Completed**

On July 29, 2004, BBL (on GE's behalf) performed a round of water column monitoring at nine locations along the Housatonic River between Coltsville, MA and Great Barrington, MA. Two of these locations are situated in the 1½-Mile Reach: Lyman Street Bridge (Location 4) and Pomeroy Avenue Bridge (Location 6A). A composite grab sample was collected at each location and submitted to Northeast Analytical for analysis of PCBs (total), TSS, POC, and chlorophyll-a (see Table 14-1). (The other seven locations are discussed under Item 15 below.)

**b. Sampling/Test Results Received**

See attached tables.

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

None

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

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

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

No issues

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

None

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

**HOUSATONIC RIVER - 1 1/2 MILE REACH  
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	Location-4	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling/1/2 Mile Low Flow	Location-4	6/24/04	Water	NEA	PCB, PCB (f), TSS, POC	7/13/04
Monthly Water Column Sampling	Location-6A	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-6A	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04

Note:

1. (f) - Indicates filtered analysis requested.

**TABLE 14-2  
SAMPLE DATA RECEIVED DURING JULY 2004**

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

<b>Sample ID</b>	<b>Location</b>	<b>Date Collected</b>	<b>Aroclor-1016, -1221, -1232, -1242</b>	<b>Aroclor 1248</b>	<b>Aroclor 1254</b>	<b>Aroclor 1260</b>	<b>Total PCBs</b>	<b>POC</b>	<b>TSS</b>
LOCATION-4	Lyman Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.371	1.60
LOCATION-4 (FILTERED) <sup>5</sup>	Lyman Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	NA	NA
LOCATION-6A	Pomeroy Ave. Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.427	2.50

**Notes:**

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical, Inc. and/or Aquatec Biological Sciences, for analysis of unfiltered PCBs, total suspended solids (TSS) and particulate organic carbon (POC).
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. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Filtered PCBs in addition to Monthly Water Column monitoring parameters have been analyzed as part of the Housatonic River 1/2 Mile Reach low flow event at Location 4.

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

**a. Activities Undertaken/Completed**

- On July 29, 2004, BBL (on GE's behalf) performed a round of water column monitoring at nine locations along the Housatonic River between Coltsville and Great Barrington, MA. Two locations are situated in the 1½-Mile Reach of the Housatonic River and were discussed in Item 14. Of the remaining seven locations, two are located upstream of the 1½-Mile Reach: Hubbard Avenue Bridge (Location 1) and Newell Street Bridge (Location 2). The five remaining locations are situated in the Rest of the River: Holmes Road Bridge (Location 7); New Lenox Road Bridge (Location 9); Woods Pond Headwaters (Location 10); Schweitzer Bridge (Location 12); and Division Street Bridge (Location 13). Sampling activities were performed at all these locations on July 29, 2004 from downstream to upstream. Composite grab samples were collected at each location sampled and submitted to Northeast Analytical for analysis of PCBs (total), TSS, POC, and chlorophyll-a (see Table 15-1).
- GE met with EPA on July 7, 2004, to discuss EPA's Human Health and Ecological Risk Assessments and received response from EPA on July 20, 2004.\*

**b. Sampling/Test Results**

See attached table.

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

None

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

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

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

Ongoing issues relating to EPA's risk assessments.\*

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

None

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

**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)	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	HR-D1 (Location-12)	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-1	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-1	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-10	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-10	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-12	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-12	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-13	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-13	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-2	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-7	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-7	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling	Location-9	7/29/04	Water	NEA	PCB, TSS, POC, Chlorophyl-A	
Monthly Water Column Sampling	Location-9	6/24/04	Water	NEA	PCB, TSS, POC	7/13/04
Monthly Water Column Sampling/1/2 Mile Low Flow	Location-2	6/24/04	Water	NEA	PCB, PCB (f), TSS, POC	7/13/04

**Notes:**

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

**TABLE 15-2  
SAMPLE DATA RECEIVED DURING JULY 2004**

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

Sample ID	Location	Date Collected	Aroclor-1016, -1221, -1232, -1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs	POC	TSS
LOCATION-1	Hubbard Ave. Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.454	1.00
LOCATION-2	Newell Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.494	1.90
LOCATION-2 (FILTERED) <sup>9</sup>	Newell Street Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	NA	NA
LOCATION-7	Holmes Rd. Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.250	1.80
LOCATION-9	New Lenox Rd. Bridge	6/24/2004	ND(0.0000220)	0.0000270 PE	0.0000230 AF	0.0000310 AG	0.0000810	0.434	1.60
LOCATION-10	Headwaters of Woods Pond	6/24/2004	ND(0.0000220)	0.0000310 PE	0.0000330 AF	0.0000470 AG	0.000111	0.550	2.40
LOCATION-12	Schweitzer Bridge	6/24/2004	ND(0.0000220)	0.0000230 PE	ND(0.0000220)	0.0000300 AG	0.0000530	2.99	1.60
		6/24/2004	[ND(0.0000220)]	[0.0000340 PE]	[0.0000310 AF]	[0.0000410 AG]	[0.000106]	[0.673]	[2.90]
LOCATION-13	Division St. Bridge	6/24/2004	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	ND(0.0000220)	0.388	3.10

**Notes:**

1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Northeast Analytical, Inc. for analysis of PCBs (filtered and unfiltered), total suspended solids (TSS) and particulate organic carbon (POC).
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. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
6. AG - Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
7. 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
8. Field duplicate sample results are presented in brackets.
9. Filtered PCBs in addition to Monthly Water Column monitoring parameters have been analyzed as part of the Housatonic River 1/2 Mile Reach low flow event at Location 2.

**ITEMS 16 & 17**  
**HOUSATONIC RIVER FLOODPLAIN**  
**RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES**  
**ADJACENT TO 1½-MILE REACH**  
**(GEC710 AND GEC720)**  
**JULY 2004**

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

**a. Activities Undertaken/Completed**

Given GE's inability to obtain access permission from owner of Parcel I7-2-46 (Phase 3 property) for sampling, EPA agreed that the proposed samples from this property do not need to be collected and that future evaluations will be performed using data previously collected from within or adjacent to this property.

**b. Sampling/Test Results Received**

None

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

Submitted Pre-Design Investigation Work Plan Addendum for Phase 4, Group 4A properties (July 14, 2004).

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

- Submit Proposal for Supplemental PCB Pre-Design Investigations for Phase 3 Properties (first week of August, 2004).
- Submit Interim Pre-Design Investigation Report for Phase 3 Properties (due on or before August 16, 2004).

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

- GE will discuss with EPA schedule for pre-certification inspection and submittal of Final Completion Report for Phase 1 and Phase 2 properties, and ERE for City-owned property in Phase 2.
- EPA has requested that GE submit a Pre-Design Investigation Work Plan Addendum for Phase 4, Groups 4B and 4C properties. GE and EPA will discuss the timing for that submittal.

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

None

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

a. **Activities Undertaken/Completed**

None

b. **Sampling/Test Results Received**

None

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

None

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

None

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

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

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

None



**ITEM 20  
OTHER AREAS  
SILVER LAKE AREA  
(GECD600)  
JULY 2004**

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

**a. Activities Undertaken/Completed**

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

**b. Sampling/Test Results Received**

None

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

None

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

- Continue water-level monitoring at well pairs surrounding the lake.
- Work on Interim Pre-Design Investigation Report for Soils at properties adjacent to Silver Lake (due by September 30, 2004).
- If required by EPA, submit follow-up report to GE's Pre-Design Investigation Report for Silver Lake Sediments (submitted in February 2004).

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

GE is engaged in discussions with EPA regarding GE's Pre-Design Investigation Report for Silver Lake Sediments. It is anticipated that GE will conduct bench-scale and pilot studies for capping of Silver Lake sediments.

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

None

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

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

**a. Activities Undertaken/Completed**

**General:**

- Initiated preparation of NAPL Monitoring Report for Spring 2004.

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

- Continued automated groundwater and NAPL pumping at North Side and South Side Caissons. A total of approximately 8.8 gallons of LNAPL were removed from the North Side and South Side Caissons in July.
- Continued routine well monitoring and manual NAPL removal activities. Approximately 0.064 liter (0.017 gallon) of LNAPL was removed from wells in this area during July.

**East Street Area 2-South:**

- Continued automated groundwater and LNAPL removal activities. A total of approximately 4,449,979 gallons of groundwater was recovered from pumping systems 64R, 64S, 64V, 64X, RW-1(S), RW-1(X), and RW-2(X). In addition, approximately 1,538 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 57 gallons of DNAPL from pumping system RW-3(X).
- Continued routine well monitoring and manual NAPL removal activities. Approximately 4.08 liters (1.08 gallons) of LNAPL were recovered from the wells monitored during July.
- Treated/discharged 4,902,175 gallons of water through 64G Groundwater Treatment Facility.

**East Street Area 2-North:**

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

**ITEM 21**  
**(cont'd)**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 1 (GMA 1)**  
**(GEC310)**  
**JULY 2004**

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

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

- Continued routine well monitoring and manual NAPL removal activities. Recoverable quantities of NAPL were not encountered in any of the wells monitored in July.
- Continued to monitor LNAPL within the hydraulic piston cylinder of Building 43 elevator shaft; no recoverable quantities were encountered.

**Lyman Street Area:**

- Continued automated groundwater and NAPL removal activities. Recoverable quantities of NAPL were not encountered in any of the wells monitored in July.
- Continued routine well monitoring and manual NAPL removal activities and conducted semi-annual bailing round at all wells that contained NAPL in 2003. Approximately 15.16 liters (4.0 gallons) of LNAPL and approximately 10.1 liters (2.65 gallons) of DNAPL were removed from wells located in this area.

**Newell Street Area II:**

- Continued automated DNAPL recovery, with the collection of approximately 30.5 gallons of DNAPL from the automated collection systems.
- Continued routine well monitoring and manual NAPL removal activities. Approximately 0.74 liter (0.2 gallon) of LNAPL and approximately 1.8 liters (0.47 gallon) of DNAPL were removed from wells in this area.

**Silver Lake:**

- Continued routine monitoring of wells around lake.

**b. Sampling/Test Results Received**

None

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

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

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

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

- Continue routine monitoring.
- Install two monitoring wells (139R and GMA1-18) to replace wells that could not be sampled in spring 2004.
- Decommission well 139.
- Possibly install two soil borings downgradient of wells GMA1-15 and GMA1-16 upon EPA approval (see Item 21.f below).
- Submit NAPL Monitoring Report for Spring 2004 (due on or before August 31, 2004).
- Submit a proposal for abandonment of Building 43 elevator shaft.

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

None

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

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

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

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

<b>Caisson</b>	<b>Month</b>	<b>Vol. LNAPL Collected (gallon)</b>	<b>Vol. Water Recovered (gallon)</b>	<b>Percent Downtime</b>
Northside	July 2003	0.0	23,100	
	August 2003	0.0	13,800	
	September 2003	5.0	26,800	0.074 - Power Outage
	October 2003	0.0	22,700	
	November 2003	0.0	37,300	
	December 2003	0.0	47,300	
	January 2004	2.5	23,700	0.40
	February 2004	0.0	16,300	
	March 2004	0.0	22,500	0.27 - Power Outage
	April 2004	1.0	29,100	
	May 2004	0.0	22,300	
	June 2004	4.3	28,500	
July 2004	4.4	16,700		
Southside	July 2003	2.0	101,000	
	August 2003	0.0	65,900	1.19
	September 2003	0.0	77,600	0.074 - Power Outage
	October 2003	0.0	94,000	
	November 2003	0.0	85,100	
	December 2003	0.0	106,600	
	January 2004	2.5	72,500	0.40
	February 2004	0.0	5,400	
	March 2004	0.0	68,200	0.27 - Power Outage
	April 2004	1.0	74,600	
	May 2004	0.0	71,500	
	June 2004	0.0	75,300	
July 2004	4.4	67,100		

**TABLE 21-2**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**EAST STREET AREA 1 - NORTH & SOUTH**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

<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>July 2004 Removal (liters)</b>
34	7/29/2004	6.20	6.14	0.06	0.037	0.037
72	7/29/2004	6.88	6.84	0.04	0.025	0.025
131	7/29/2004	4.70	4.69	0.01	0.002	0.002

**Total Manual LNAPL Removal for July 2004: 0.064 liters**

**0.017 gallons**

**NOTE:**

1. ft BMP - feet Below Measuring Point.

**TABLE 21-3**  
**ROUTINE WELL MONITORING**  
**EAST STREET AREA 1 - NORTH & SOUTH**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
<b>GMA 1 - East Street Area 1 - North</b>									
52	999.26	#####	5.28	---	0.00	---	15.36	0.00	993.98
131	1,001.18	#####	4.70	4.69	0.01	---	6.41	0.00	996.49
140	1,000.30	#####	8.07	---	0.00	---	15.25	0.00	992.23
ES1-08	1,000.85	#####	5.59	---	0.00	---	13.55	0.00	995.26
North Caisson	997.84	7/7/2004	18.19	18.18	0.01	---	19.80	0.00	979.66
North Caisson	997.84	#####	18.30	18.29	0.01	---	19.80	0.00	979.55
North Caisson	997.84	#####	18.26	18.25	0.01	---	19.80	0.00	979.59
North Caisson	997.84	#####	18.23	18.13	0.10	---	19.80	0.00	979.70
<b>GMA 1 - East Street Area 1 - South</b>									
31R	1,000.23	#####	9.48	---	0.00	---	15.06	0.00	990.75
33	999.50	#####	6.69	---	0.00	---	21.40	0.00	992.81
34	999.90	#####	6.20	6.14	0.06	---	21.01	0.00	993.76
72	1,000.62	#####	6.88	6.84	0.04	---	21.99	0.00	993.78
72R	1,000.92	#####	6.71	---	0.00	---	13.34	0.00	994.21
South Caisson	1,001.11	7/7/2004	11.86	11.85	0.01	---	15.00	0.00	989.26
South Caisson	1,001.11	#####	12.46	12.27	0.19	---	15.00	0.00	988.83
South Caisson	1,001.11	#####	14.27	14.23	0.04	---	15.00	0.00	986.88
South Caisson	1,001.11	#####	13.93	13.92	0.01	---	15.00	0.00	987.19

**Notes:**

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

**TABLE 21-4**  
**AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS**  
**EAST STREET AREA 2 - SOUTH**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**  
**July 2004**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
40R	July 2003	0		
	August 2003	0		
	September 2003	0		
	October 2003	0		
	November 2003	0		
	December 2003	0		
	January 2004	0		
	February 2004	0		0.3
	March 2004	0		0.27 - Power Outage
	April 2004	0		
	May 2004	0		
	June 2004	0		
	July 2004	0		
64R	July 2003	750	525,200	
	August 2003	300	580,600	
	September 2003	1,150	639,200	
	October 2003	975	717,300	
	November 2003	200	563,400	
	December 2003	625	290,500	
	January 2004	50	233,000	
	February 2004	250	1,015,000	0.3
	March 2004	325	897,300	0.94 - Power Outage
	April 2004	975	705,000	
	May 2004	125	629,500	
	June 2004	736	923,500	
	July 2004	380	693,900	
64S System	July 2003	750	48,725	
	August 2003	38	302,161	
	September 2003	0	443,631	
	October 2003	150	983,801	
	November 2003	1,198	1,041,476	
	December 2003	925	1,529,896	1.6 - Low Voltage
	January 2004	1,054	1,237,777	
	February 2004	224	651,804	3.88
	March 2004	1,271	802,349	1.88 - Power Outage
	April 2004	1,374	947,810	
	May 2004	1,045	1,062,518	
	June 2004	772	968,659	
	July 2004	154	349,705	
64V	July 2003	408	1,184,900	
	August 2003	391	1,026,400	
	September 2003	867	1,020,100	
	October 2003	1,071	1,482,600	
	November 2003	1,377	1,309,800	
	December 2003	2,261	1,719,700	6.7 - Replaced Pump
	January 2004	1,768	1,366,300	
	February 2004	408	1,091,800	0.3
	March 2004	1,173	1,370,200	0.27 - Power Outage
	April 2004	1,598	1,212,000	
	May 2004	933	1,313,100	
	June 2004	879	1,444,400	
	July 2004	798	940,100	



**TABLE 21-4**  
**AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS**  
**EAST STREET AREA 2 - SOUTH**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**  
**July 2004**

Recovery System Location	Month	Oil Collected (gallon)	Water Recovered (gallon)	Percent Downtime
64X	July 2003	20	500,300	3.2 - Cleaned Flow Meter  0.3 0.27 - Power Outage
	August 2003	30	403,200	
	September 2003	15	403,200	
	October 2003	10	460,800	
	November 2003	10	403,200	
	December 2003	5	504,000	
	January 2004	10	676,800	
	February 2004	2	403,200	
	March 2004	4	504,000	
	April 2004	0	388,800	
	May 2004	10	403,200	
	June 2004	5	518,400	
	July 2004	10	403,200	
RW-2(X)	July 2003	0	504,000	0.3 0.27 - Power Outage
	August 2003	0	481,800	
	September 2003	0	403,800	
	October 2003	0	498,300	
	November 2003	0	461,400	
	December 2003	0	917,800	
	January 2004	0	403,200	
	February 2004	0	580,000	
	March 2004	0	644,300	
	April 2004	0	518,200	
	May 2004	0	427,200	
	June 2004	0	458,500	
	July 2004	0	1,029,700	
RW-1(S) <sup>1</sup>	July 2003	0	821,262	0.3 0.27 - Power Outage
	August 2003	12	776,403	
	September 2003	50	811,790	
	October 2003	25	1,303,720	
	November 2003	52	1,155,983	
	December 2003	0	1,677,094	
	January 2004	96	1,196,628	
	February 2004	51	832,544	
	March 2004	31	1,114,375	
	April 2004	76	1,012,477	
	May 2004	36	1,056,169	
	June 2004	419	1,108,600	
	July 2004	196	669,474	
RW-1(X)	July 2003	0	541,200	3.2 - Cleaned Flow Meter  0.3 0.27 - Power Outage
	August 2003	0	499,300	
	September 2003	10	486,700	
	October 2003	0	690,100	
	November 2003	0	488,500	
	December 2003	0	575,100	
	January 2004	0	426,600	
	February 2004	0	382,600	
	March 2004	1	502,100	
	April 2004	0	387,100	
	May 2004	0	397,200	
	June 2004	5	453,900	
	July 2004	0	363,900	

**TABLE 21-4**  
**AUTOMATED LNAPL/DNAPL & GROUNDWATER RECOVERY SYSTEMS**  
**EAST STREET AREA 2 - SOUTH**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD MASSACHUSETTS**  
**July 2004**

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

Summary of Total Automated Removal	
LNAPL:	1,538 Gallons
DNAPL:	57 Gallons
Water:	4,449,979 Gallons

**Note:**

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

**TABLE 21-5**  
**WELL MONITORING AND RECOVERY OF LNAPL**  
**EAST STREET AREA 2 - NORTH & SOUTH / 20s, 30s, & 40s COMPLEXES**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	July 2004 Removal (liters)
50	7/22/2004	12.03	10.37	1.66	1.024	1.024
55	7/24/2004	17.60	16.71	0.89	0.549	0.549
GMA1-15	7/23/2004	15.81	15.05	0.76	0.469	0.469
GMA1-16	7/23/2004	13.80	13.11	0.69	0.426	0.426
GMA1-17W	7/23/2004	17.80	15.18	2.62	1.616	1.616

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

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

**Total LNAPL Removal East Street Area 2 - South for July 2004: 4.084 liters**  
**1.078 gallons**

**Total LNAPL Removal for July 2004: 4.084 liters**  
**1.078 gallons**

**Note:**

1. ft BMP - feet Below Measuring Point.

**TABLE 21-6**  
**64G TREATMENT PLANT DISCHARGE DATA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

<b>Date</b>	<b>Housatonic River Discharge (gallons)</b>	<b>Recharge Pond Discharge (gallons)</b>	<b>Total Discharge (gallons)</b>
July 2003	2,785,280	429,342	3,214,622
August 2003	3,810,650	339,323	4,149,973
September 2003	4,336,220	294,016	4,630,236
October 2003	5,428,939	251,753	5,680,692
November 2003	5,599,600	108,107	5,707,707
December 2003	6,406,420	60,343	6,466,763
January 2004	6,158,960	132,862	6,291,822
February 2004	4,883,690	186,281	5,069,971
March 2004	5,462,280	112,985	5,575,265
April 2004	5,406,760	169,598	5,576,358
May 2004	5,678,620	236,862	5,915,482
June 2004	4,709,390	350,668	5,060,058
July 2004	4,585,370	316,805	4,902,175

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

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

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
<b>30's Complex</b>									
95-15	986.38	7/28/2004	Well was submerged in a large puddle of water				NM	NM	NA
GMA1-2	1,006.75	7/28/2004	16.14	---	0.00	---	16.18	0.00	990.61
GMA1-10	984.86	7/28/2004	7.40	---	0.00	---	19.81	0.00	977.46
GMA1-12	992.26	7/28/2004	15.85	---	0.00	---	22.15	0.00	976.41
RF-02	982.43	7/28/2004	5.60	---	0.00	---	18.28	0.00	976.83
RF-03	985.40	7/28/2004	9.18	---	0.00	---	18.44	0.00	976.22
RF-03D	985.31	7/28/2004	7.37	---	0.00	---	36.00	0.00	977.94
RF-16	987.91	7/28/2004	9.02	---	0.00	---	20.70	0.00	978.89
<b>40s Complex</b>									
Bldg. 43 Elev.	NA	7/6/2004	27.77	27.76	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	7/12/2004	28.13	28.12	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	7/19/2004	27.94	27.93	0.01	---	61.69	0.00	NA
Bldg. 43 Elev.	NA	7/26/2004	28.04	28.03	0.01	---	61.69	0.00	NA
95-17	1,007.67	7/28/2004	24.17	---	0.00	---	28.71	0.00	983.50
RF-4	1,011.99	7/28/2004	14.38	---	0.00	---	23.96	0.00	997.61
<b>East Street Area 2 - South</b>									
13	990.88	7/23/2004	10.30	---	0.00	---	22.60	0.00	980.58
14	991.61	7/23/2004	17.50	---	0.00	---	25.75	0.00	974.11
15R	989.23	7/23/2004	15.41	---	0.00	---	19.64	0.00	973.82
26RR	1,000.58	7/22/2004	21.4	---	0.00	---	28.61	0.00	979.18
40R	991.60	7/7/2004	16.77	---	0.00	---	NA	NA	974.83
40R	991.60	7/13/2004	15.58	---	0.00	---	NA	NA	976.02
40R	991.60	7/21/2004	15.89	---	0.00	---	NA	NA	975.71
40R	991.60	7/28/2004	17.60	---	0.00	---	NA	NA	974.00
49R	988.71	7/22/2004	15.64	---	0.00	---	24.91	0.00	973.07
49RR	989.80	7/22/2004	16.71	---	0.00	---	23.10	0.00	973.09
50	985.79	7/22/2004	12.03	10.37	1.66	---	23.48	0.00	975.30
53	986.90	7/23/2004	14.32	---	0.00	---	25.88	0.00	972.58
55	989.45	7/24/2004	17.60	16.71	0.89	---	30.05	0.00	972.68
64R	993.37	7/7/2004	17.80	17.45	0.35	---	19.00	0.00	975.90
64R	993.37	7/13/2004	17.72	17.40	0.32	---	19.00	0.00	975.95
64R	993.37	7/21/2004	16.81	16.80	0.01	---	19.00	0.00	976.57
64R	993.37	7/28/2004	17.01	16.63	0.38	---	19.00	0.00	976.71
64S	984.48	7/7/2004	13.86	---	0.00	---	28.70	0.00	970.62
64S	984.48	7/13/2004	13.84	---	0.00	---	28.70	0.00	970.64
64S	984.48	7/21/2004	13.88	---	0.00	---	28.70	0.00	970.60
64S	984.48	7/28/2004	13.46	---	0.00	---	28.70	0.00	971.02
64S-Caisson	NA	7/7/2004	9.73	9.48	0.25	---	14.55	0.00	NA
64S-Caisson	NA	7/13/2004	9.65	9.53	0.12	---	14.55	0.00	NA
64S-Caisson	NA	7/21/2004	9.68	9.51	0.17	---	14.55	0.00	NA
64S-Caisson	NA	7/28/2004	9.64	9.55	0.09	---	14.55	0.00	NA
64V	987.29	7/7/2004	22.05	21.48	0.57	28.00	29.60	1.60	965.77
64V	987.29	7/13/2004	22.35	21.50	0.85	28.90	29.60	0.70	965.73
64V	987.29	7/21/2004	22.10	21.60	0.50	28.80	29.60	0.80	965.66

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

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
64V	987.29	7/28/2004	22.35	21.45	0.90	P	29.60	< 0.01	965.78
64X(N)	984.83	7/7/2004	10.10	9.82	0.28	---	15.85	0.00	974.99
64X(N)	984.83	7/13/2004	12.52	12.35	0.17	---	15.85	0.00	972.47
64X(N)	984.83	7/21/2004	12.70	12.54	0.16	---	15.85	0.00	972.28
64X(N)	984.83	7/28/2004	11.40	11.29	0.11	---	15.85	0.00	973.53
64X(S)	981.56	7/7/2004	12.70	P	< 0.01	---	23.82	0.00	968.86
64X(S)	981.56	7/13/2004	15.31	15.30	0.01	---	23.82	0.00	966.26
64X(S)	981.56	7/21/2004	15.50	15.43	0.07	---	23.82	0.00	966.13
64X(S)	981.56	7/28/2004	14.98	P	< 0.01	---	23.82	0.00	966.58
64X(W)	984.87	7/7/2004	15.86	15.84	0.02	---	24.35	0.00	969.03
64X(W)	984.87	7/13/2004	18.51	P	< 0.01	---	24.35	0.00	966.36
64X(W)	984.87	7/21/2004	18.66	18.55	0.11	---	24.35	0.00	966.31
64X(W)	984.87	7/28/2004	17.21	17.19	0.02	---	24.35	0.00	967.68
3-6C-EB-22	986.94	7/23/2004	13.80	---	0.00	---	20.04	0.00	973.14
95-01	983.77	7/23/2004	10.07	---	0.00	---	17.21	0.00	973.70
E2SC-23	992.07	7/22/2004	17.10	---	0.00	---	21.18	0.00	974.97
E2SC-24	987.90	7/22/2004	16.72	---	0.00	---	21.63	0.00	971.18
GMA1-14	997.43	7/23/2004	18.90	P	< 0.01	---	23.87	0.00	978.53
GMA1-15	988.59	7/23/2004	15.81	15.05	0.76	---	17.83	0.00	973.49
GMA1-16	986.82	7/23/2004	13.80	13.11	0.69	---	20.01	0.00	973.66
GMA1-17E	993.03	7/23/2004	15.44	---	0.00	---	17.31	0.00	977.59
GMA1-17W	992.63	7/23/2004	17.80	15.18	2.62	---	23.38	0.00	977.27
HR-G1-MW-1	982.42	7/22/2004	10.20	---	0.00	---	20.31	0.00	972.22
HR-G1-MW-2	980.23	7/22/2004	7.89	---	0.00	---	28.45	0.00	972.34
HR-G1-MW-3	980.21	7/22/2004	8.16	---	0.00	---	17.89	0.00	972.05
HR-G2-MW-1	982.60	7/22/2004	10.59	---	0.00	---	18.25	0.00	972.01
HR-G2-MW-2	981.39	7/22/2004	8.60	---	0.00	---	17.69	0.00	972.79
HR-G2-MW-3	987.14	7/22/2004	14.55	---	0.00	---	22.03	0.00	972.59
HR-G2-RW-1	976.88	7/22/2004	6.05	---	0.00	---	18.57	0.00	972.36
HR-G3-MW-1	982.45	7/22/2004	14.72	---	0.00	---	17.72	0.00	967.73
HR-G3-MW-2	987.88	7/22/2004	15.26	---	0.00	---	17.75	0.00	972.62
HR-G3-RW-1	977.78	7/23/2004	5.03	---	0.00	---	8.60	0.00	972.75
HR-J1-MW-1	985.95	7/22/2004	13.43	---	0.00	---	25.98	0.00	972.52
HR-J1-MW-2	983.56	7/23/2004	10.70	---	0.00	---	17.81	0.00	972.86
HR-J1-MW-3	987.68	7/22/2004	15.13	---	0.00	---	26.44	0.00	972.55
HR-J1-RW-1	975.05	7/23/2004	3.13	---	0.00	---	14.91	0.00	971.92
RW-1(S)	987.23	7/7/2004	17.05	17.04	0.01	P	28.60	< 0.01	970.19
RW-1(S)	987.23	7/13/2004	17.05	16.80	0.25	---	28.60	0.00	970.41
RW-1(S)	987.23	7/21/2004	16.90	16.60	0.30	---	28.60	0.00	970.61
RW-1(S)	987.23	7/28/2004	19.86	18.31	1.55	---	28.60	0.00	968.81
RW-1(X)	982.68	7/7/2004	12.61	P	< 0.01	---	20.80	0.00	970.07
RW-1(X)	982.68	7/13/2004	14.90	14.86	0.04	---	20.80	0.00	967.82
RW-1(X)	982.68	7/21/2004	15.40	15.31	0.09	---	20.80	0.00	967.36
RW-1(X)	982.68	7/28/2004	13.96	13.94	0.02	---	20.80	0.00	968.74
RW-2(X)	985.96	7/7/2004	11.11	---	0.00	---	15.30	0.00	974.85

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

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

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
RW-2(X)	985.96	7/13/2004	15.13	---	0.00	---	15.30	0.00	970.83
RW-2(X)	985.96	7/21/2004	14.50	---	0.00	---	15.30	0.00	971.46
RW-2(X)	985.96	7/28/2004	13.29	---	0.00	---	15.30	0.00	972.67
RW-3(X)	980.28	7/7/2004	7.70	---	0.00	42.00	44.40	2.40	972.58
RW-3(X)	980.28	7/13/2004	8.80	---	0.00	42.18	44.40	2.22	971.48
RW-3(X)	980.28	7/21/2004	9.09	---	0.00	41.98	44.40	2.42	971.19
RW-3(X)	980.28	7/28/2004	7.85	---	0.00	41.70	44.40	2.70	972.43
TMP-1	992.74	7/22/2004	19.81	---	0.00	---	21.95	0.00	972.93
<b>Housatonic River</b>									
SG-HR-1	990.73	7/1/2004	19.50	---	---	---	---	---	971.23
SG-HR-1	990.73	7/8/2004	19.05	---	---	---	---	---	971.68
SG-HR-1	990.73	7/15/2004	19.37	---	---	---	---	---	971.36
SG-HR-1	990.73	7/23/2004	19.34	---	---	---	---	---	971.39
SG-HR-1	990.73	7/28/2004	16.49	---	---	---	---	---	974.24
Housatonic River (Temporary Monitoring Pt.)	NA	7/28/2004	See Note 8	---	---	---	---	---	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. 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.
8. A data logger has been placed at this location. Data is collected and subsequently presented in the GMA 1 Groundwater Monitoring Reports. The depth to water measurement is used to confirm the data logger

**TABLE 21-8**  
**ACTIVE RECOVERY SYSTEMS MONTHLY SUMMARY**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Month / Year	Volume Water Pumped (gallon)	RW-1R LNAPL Recovered (gallon)	RW-1 DNAPL Recovered (gallon)	RW-3 LNAPL Recovered (gallon)
July 2002	219,781	13	---	5
August 2002	127,581	---	---	15
September 2002	165,634	4	---	10
October 2002	271,056	---	---	15
November 2002	264,950	---	---	5
December 2002	316,482	2	---	23
January 2003	272,679	---	---	20
February 2003	228,093	---	---	20
March 2003	287,152	---	---	20
April 2003	518,782	---	---	10
May 2003	281,349	---	---	10
June 2003	266,987	---	---	10
July 2003	244,776	---	---	10
August 2003	290,984	---	---	10
September 2003	309,162	---	---	20
October 2003	485,653	---	---	20
November 2003	363,979	---	---	10
December 2003	490,517	---	---	---
January 2004	299,584	---	---	---
February 2004	305,485	---	---	---
March 2004	409,514	---	---	---
April 2004	344,707	---	---	1
May 2004	307,361	---	---	---
June 2004	410,230	---	---	---
July 2004	328,363	---	---	---

**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 no downtime during the month of July 2004.



**TABLE 21-9**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	July 2004 Removal (liters)
RW-3	7/28/2004	16.85	16.75	0.10	15.160	15.160

**Total Manual LNAPL Removal for July 2004: 15.160 liters**

**Note:**

**4.000 gallons**

1. ft BMP - feet Below Measuring Point.

**TABLE 21-10**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Date	Depth to Water (ft BMP)	Depth to DNAPL (ft BMP)	DNAPL Thickness (feet)	DNAPL Removed (liters)	July 2004 Removal (liters)
LS-34	7/23/2004	12.98	27.60	0.94	0.395	1.226
LSSC-07	7/1/2004	10.04	24.88	0.20	0.123	0.789
	7/8/2004	9.41	24.9	0.18	0.111	
	7/15/2004	9.40	24.81	0.27	0.166	
	7/22/2004	10.00	24.78	0.30	0.185	
	7/29/2004	9.54	24.75	0.33	0.204	
LSSC-08I	7/1/2004	11.53	23.37	0.03	0.012	0.042
	7/15/2004	11.34	23.36	0.03	0.018	
	7/22/2004	11.34	23.37	0.02	0.012	
LSSC-34I	7/23/2004	12.45	27.28	1.22	0.432	0.432
RW-1	7/28/2004	11.69	P	< 0.01	7.580	7.580

**Total Manual DNAPL Removal for July 2004: 10.069 liters**

**2.657 gallons**

**Notes:**

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

**TABLE 21-11**  
**ROUTINE WELL MONITORING**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
E-07	982.87	7/22/2004	7.25	---	0.00	---	19.80	0.00	975.62
EPA-1	NA	7/22/2004	11.24	---	0.00	---	22.66	0.00	NA
LS-24	986.58	7/22/2004	13.75	---	0.00	---	15.28	0.00	972.83
LS-30	986.44	7/23/2004	13.50	13.48	0.02	22.01	22.22	0.21	972.96
LS-31	987.09	7/23/2004	13.36	---	0.00	23.20	23.32	0.12	973.73
LS-34	985.79	7/23/2004	12.98	---	0.00	27.60	28.54	0.94	972.81
LS-38	986.95	7/23/2004	14.81	---	0.00	---	25.05	0.00	972.14
LS-43	981.17	7/22/2004	1.55	---	0.00	---	9.24	0.00	979.62
LS-44	980.78	7/22/2004	8.55	---	0.00	---	24.78	0.00	972.23
LSSC-07	982.48	7/1/2004	10.04	---	0.00	24.88	25.08	0.20	972.44
LSSC-07	982.48	7/8/2004	9.41	---	0.00	24.9	25.08	0.18	973.07
LSSC-07	982.48	7/15/2004	9.40	---	0.00	24.81	25.08	0.27	973.08
LSSC-07	982.48	7/22/2004	10.00	---	0.00	24.78	25.08	0.30	972.48
LSSC-07	982.48	7/29/2004	9.54	---	0.00	24.75	25.08	0.33	972.94
LSSC-08I	983.13	7/1/2004	11.53	---	0.00	23.37	23.40	0.03	971.60
LSSC-08I	983.13	7/8/2004	10.90	---	0.00	---	23.38	0.00	972.23
LSSC-08I	983.13	7/15/2004	11.34	---	0.00	23.36	23.39	0.03	971.79
LSSC-08I	983.13	7/22/2004	11.34	---	0.00	23.37	23.39	0.02	971.79
LSSC-08I	983.13	7/29/2004	10.98	---	0.00	---	23.39	0.00	972.15
LSSC-08S	983.11	7/22/2004	11.45	---	0.00	---	14.68	0.00	971.66
LSSC-16I	980.88	7/22/2004	8.35	---	0.00	28.5	28.54	0.04	972.53
LSSC-18	987.32	7/22/2004	14.55	---	0.00	---	18.59	0.00	972.77
LSSC-32	980.68	7/22/2004	8.42	---	0.00	---	35.24	0.00	972.26
LSSC-33	980.49	7/22/2004	8.25	---	0.00	---	29.76	0.00	972.24
LSSC-34I	984.74	7/23/2004	12.45	---	0.00	27.28	28.50	1.22	972.29
MW-4R	980.82	7/22/2004	Well could not be located						NA
MW-6R	985.14	7/22/2004	10.91	---	0.00	---	13.64	0.00	974.23
RW-1	984.88	7/7/2004	11.15	---	0.00	20.79	21.00	0.21	973.73
RW-1	984.88	7/13/2004	12.08	P	< 0.01	---	21.00	0.00	972.80
RW-1	984.88	7/21/2004	12.06	---	0.00	20.80	21.00	0.20	972.82
RW-1	984.88	7/28/2004	11.69	---	0.00	P	21.00	< 0.01	973.19
RW-1 (R)	985.07	7/7/2004	15.27	---	0.00	P	20.42	< 0.01	969.80
RW-1 (R)	985.07	7/13/2004	15.88	P	< 0.01	---	20.42	0.00	969.19
RW-1 (R)	985.07	7/21/2004	12.36	P	< 0.01	---	20.42	0.00	972.71
RW-1 (R)	985.07	7/28/2004	15.60	---	0.00	P	20.42	< 0.01	969.47
RW-2	987.82	7/7/2004	13.04	---	0.00	---	21.75	0.00	974.78
RW-2	987.82	7/13/2004	15.61	---	0.00	---	21.75	0.00	972.21
RW-2	987.82	7/21/2004	14.10	---	0.00	---	21.75	0.00	973.72
RW-2	987.82	7/28/2004	14.44	---	0.00	---	21.75	0.00	973.38
RW-3	984.08	7/7/2004	16.65	16.57	0.08	---	21.57	0.00	967.50
RW-3	984.08	7/13/2004	16.38	P	< 0.01	---	21.57	0.00	967.70
RW-3	984.08	7/21/2004	16.68	16.57	0.11	---	21.57	0.00	967.50
RW-3	984.08	7/28/2004	16.85	16.75	0.10	---	21.57	0.00	967.32

**TABLE 21-11**  
**ROUTINE WELL MONITORING**  
**LYMAN STREET AREA**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
<b>Housatonic River (Lyman Street Bridge)</b>									
BM-2A	986.32	7/1/2004	15.15	---	---	---	---	---	971.17
BM-2A	986.32	7/8/2004	14.66	---	---	---	---	---	971.66
BM-2A	986.32	7/15/2004	14.90	---	---	---	---	---	971.42
BM-2A	986.32	7/22/2004	14.90	---	---	---	---	---	971.42
BM-2A	986.32	7/29/2004	11.88	---	---	---	---	---	974.44

**Notes:**

1. ft BMP - feet Below Measuring Point.
2. --- indicates LNAPL or DNAPL was not present in a measurable quantity.
3. NA indicates information not available.
4. P indicates that LNAPL or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.
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 21-12**  
**ACTIVE DNAPL RECOVERY SYSTEMS MONTHLY SUMMARY**  
**NEWELL STREET AREA II**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Recovery System	Date	Total Gallons Recovered
<b>System 1</b>	July 2003	28.0
	August 2003	53.0
	September 2003	26.0
	October 2003	56.0
	November 2003	27.0
	December 2003	47.0
	January 2004	24.0
	February 2004	25.5
	March 2004	25.3
	April 2004	26.4
	May 2004	16.0
	June 2004	16.5
	July 2004	14.3
<b>System 2</b>	July 2003	130.0
	August 2003	115.0
	September 2003	390.0
	October 2003	227.0
	November 2003	146.0
	December 2003	182.0
	January 2004	128.0
	February 2004	139.0
	March 2004	112.0
	April 2004	320.0
	May 2004	138.8
	June 2004	97.2
	July 2004	16.2
<b>Total Automated DNAPL Removal for July 2004:</b>		<b>30.5 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. There was no downtime during the month of July 2004.

**TABLE 21-13**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GROUNDWATER MANAGEMENT AREA 1 - NEWELL STREET AREA II**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**July 2004**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	July 2004 Removal (liters)
NS-10	7/22/2004	10.55	10.25	0.30	0.741	0.741

**Total LNAPL Removal for July 2004: 0.741 liters**  
**0.196 gallons**

**Note:**

1. ft BMP - feet Below Measuring Point.

**TABLE 21-14**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GROUNDWATER MANAGEMENT AREA 1 - NEWELL STREET AREA II**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE DNAPL**  
**July 2004**

<b>Well Name</b>	<b>Date</b>	<b>Depth to Water (ft BMP)</b>	<b>Depth to DNAPL (ft BMP)</b>	<b>DNAPL Thickness (feet)</b>	<b>DNAPL Removed (liters)</b>	<b>July 2004 Removal (liters)</b>
MW-1S	7/22/2004	13.65	24.70	0.57	0.352	0.352
N2SC-07	7/24/2004	12.48	38.10	0.06	0.037	0.037
N2SC-08	7/22/2004	12.58	40.30	2.27	1.400	1.400

**Total DNAPL Removal for July 2004: 1.789 liters**  
**0.472 gallons**

**Note:**

1. ft BMP - feet Below Measuring Point.

**TABLE 21-15**  
**ROUTINE WELL MONITORING**  
**NEWELL STREET AREA II**  
**GROUNDWATER MANAGEMENT AREA 1**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
MW-1D	987.20	7/22/2004	14.20	---	0.00	39.30	39.53	0.23	973.00
MW-1S	986.60	7/22/2004	13.65	---	0.00	24.70	25.27	0.57	972.95
N2SC-02I	985.56	7/22/2004	13.06	---	0.00	---	40.43	0.00	972.50
N2SC-07	984.61	7/24/2004	12.48	---	0.00	38.10	38.16	0.06	972.13
N2SC-08	986.07	7/22/2004	12.58	---	0.00	40.30	42.57	2.27	973.49
NS-10	984.59	7/22/2004	10.55	10.25	0.30	---	19.21	0.00	974.32

**Notes:**

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



TABLE 21-16  
ROUTINE WELL MONITORING  
SILVER LAKE AREA  
GROUNDWATER MANAGEMENT AREA 1  
CONSENT DECREE MONTHLY STATUS REPORT  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
July 2004

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
<b>Monitoring Wells Adjacent to Silver Lake</b>									
SLGW-01S	982.94	7/28/2004	6.64	---	0.00	---	16.25	0.00	976.30
SLGW-01D	983.13	7/28/2004	4.48	---	0.00	---	36.98	0.00	978.65
SLGW-02S	985.39	7/28/2004	8.16	---	0.00	---	16.79	0.00	977.23
SLGW-02D	985.10	7/28/2004	7.43	---	0.00	---	36.90	0.00	977.67
SLGW-03S	980.21	7/28/2004	3.69	---	0.00	---	14.65	0.00	976.52
SLGW-03D	979.14	7/28/2004	1.32	---	0.00	---	32.06	0.00	977.82
SLGW-04S	984.02	7/28/2004	7.48	---	0.00	---	16.66	0.00	976.54
SLGW-04D	983.51	7/28/2004	6.25	---	0.00	---	37.16	0.00	977.26
SLGW-05S	979.12	7/28/2004	2.88	---	0.00	---	11.68	0.00	976.24
SLGW-05D	979.3	7/28/2004	3.16	---	0.00	---	34.91	0.00	976.14
SLGW-06S	981.66	7/28/2004	6.47	---	0.00	---	13.75	0.00	975.19
SLGW-06D	981.63	7/28/2004	5.65	---	0.00	---	34.98	0.00	975.98
<b>Staff Gauge within Silver Lake</b>									
Silver Lake Gauge	NA	7/1/2004	0.42	---	---	---	---	---	NA
Silver Lake Gauge	NA	7/8/2004	0.72	---	---	---	---	---	NA
Silver Lake Gauge	NA	7/15/2004	0.52	---	---	---	---	---	NA
Silver Lake Gauge	NA	7/23/2004	0.58	---	---	---	---	---	NA
Silver Lake Gauge	NA	7/28/2004	0.98	---	---	---	---	---	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)**  
**JULY 2004**

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

a. **Activities Undertaken/Completed**

Continued preparation of Groundwater Quality Interim Report for Spring 2004.

b. **Sampling/Test Results Received**

None

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

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

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 23**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 2 (GMA 3)**  
**(GECD330)**  
**JULY 2004**

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

**a. Activities Undertaken/Completed**

- Conducted monthly monitoring and NAPL removal in the vicinity of Buildings 51 and 59. Approximately 20.47 liters (5.40 gallons) of LNAPL were removed by the automatic skimmer located in well 51-21 and an additional 14.08 liters (3.72 gallons) of LNAPL were manually removed from the wells in this area.
- Conducted summer 2004 groundwater elevation monitoring event.
- Sampled development water from well 16C (abandoned in May 2004) and replacement well 16C-R (installed in May 2004) for waste characteristics for disposal purposes.

**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.
- Decommission wells 6B, 16E, 54B, 82B, 89D, 95B, 95C, 111A, and 114C.
- Install replacement monitoring wells 6B-R, 54B-R, 82B-R, 89D-R, 95B-R, and 111A-R.
- Submit Baseline Groundwater Quality Interim Report for Spring 2004 (due on or before August 31, 2004).

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

None

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

None

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

**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>
Water Generated During Installation of Wells 16C & 16C-R	B1783-B1787-Water-1	7/30/04	Water	CT&E	PCB, VOC, SVOC, RCRA	

**TABLE 23-2**  
**MEASUREMENT AND REMOVAL OF RECOVERABLE LNAPL**  
**GROUNDWATER MANAGEMENT AREA 3**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	LNAPL Removed (liters)	July 2004 Removal (liters)
51-08	7/15/2004	11.35	10.79	0.56	0.345	2.155
	7/23/2004	12.10	10.91	1.19	0.934	
	7/29/2004	12.30	10.88	1.42	0.876	
51-16R	7/15/2004	10.24	10.12	0.12	0.074	0.074
51-17	7/15/2004	11.15	9.86	1.29	0.796	0.796
51-19	7/15/2004	11.20	10.22	0.98	0.494	0.494
51-21	7/7/2004	15.21	P	< 0.01	4.548	20.466
	7/13/2004	15.30	15.29	0.01	4.548	
	7/21/2004	15.36	P	< 0.01	5.685	
	7/28/2004	15.40	P	< 0.01	5.685	
59-03R	7/15/2004	12.20	11.01	1.19	0.598	0.598
GMA3-10	7/1/2004	11.55	10.87	0.68	0.420	2.135
	7/8/2004	11.60	10.91	0.69	0.426	
	7/15/2004	11.68	11.02	0.66	0.407	
	7/23/2004	11.88	11.16	0.72	0.444	
	7/29/2004	11.95	11.24	0.71	0.438	
GMA3-12	7/1/2004	11.70	11.27	0.43	1.681	7.647
	7/8/2004	11.90	11.21	0.69	1.705	
	7/15/2004	12.05	11.38	0.67	1.655	
	7/23/2004	12.25	11.55	0.70	1.730	
	7/29/2004	12.09	11.61	0.48	0.876	
UB-PZ-3	7/15/2004	12.10	11.80	0.30	0.185	0.185

**Total Automated LNAPL Removal at well 51-21 for July 2004: 20.466 liters**  
**5.40 Gallons**

**Total Manual LNAPL Removal at all other wells for July 2004: 14.084 liters**  
**3.72 Gallons**

**Total LNAPL Removed for July 2004: 34.550 liters**  
**9.12 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 23-3**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 3**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
002A	994.16	7/16/2004	8.38	---	0.00	---	55.40	0.00	985.78
006B	993.01	7/16/2004	6.53	---	0.00	---	9.51	0.00	986.48
016A	991.77	7/16/2004	7.48	---	0.00	---	50.99	0.00	984.29
016B-R	994.87	7/16/2004	9.64	---	0.00	---	16.38	0.00	985.23
016C-R	991.47	7/16/2004	8.54	---	0.00	---	NM	0.00	982.93
016E	992.14	7/16/2004	6.88	---	0.00	---	49.30	0.00	985.26
039B-R	991.97	7/16/2004	6.45	---	0.00	---	13.85	0.00	985.52
039D	992.16	7/16/2004	6.41	---	0.00	---	66.08	0.00	985.75
039E	992.21	7/16/2004	5.85	---	0.00	---	242.00	0.00	986.36
043A	993.79	7/15/2004	5.75	---	0.00	---	51.52	0.00	988.04
043B	993.61	7/15/2004	5.89	---	0.00	---	21.43	0.00	987.72
050B	991.76	7/16/2004	3.44	---	0.00	---	15.03	0.00	988.32
054B	987.96	7/16/2004	3.70	---	0.00	---	13.06	0.00	984.26
078B-R	988.83	7/15/2004	1.54	---	0.00	---	11.75	0.00	987.29
082B	990.08	7/16/2004	6.20	---	0.00	---	10.09	0.00	983.88
089A	985.76	7/16/2004	2.80	---	0.00	---	47.50	0.00	982.96
089B	986.03	7/16/2004	3.15	---	0.00	---	8.88	0.00	982.88
089D	985.42	7/16/2004	2.41	---	0.00	---	67.20	0.00	983.01
095A	987.18	7/16/2004	6.75	---	0.00	---	51.05	0.00	980.43
095B	988.72	7/16/2004	6.40	---	0.00	---	10.63	0.00	982.32
095C	988.16	7/16/2004	4.40	---	0.00	---	95.98	0.00	983.76
111A	997.57	7/16/2004	14.45	---	0.00	---	16.50	0.00	983.12
111B	996.75	7/16/2004	Bee nest inside PVC casing, could not gauge well				NM	0.00	NA
114A	986.16	7/15/2004	6.27	---	0.00	---	52.31	0.00	979.89
114B	984.98	7/15/2004	5.93	---	0.00	---	10.91	0.00	979.05
114C	986.68	7/15/2004	5.18	---	0.00	---	90.70	0.00	981.50
51-05	996.44	7/15/2004	9.85	9.84	0.01	---	12.48	0.00	986.60
51-06	997.36	7/15/2004	10.71	---	0.00	---	14.62	0.00	986.65
51-07	997.08	7/15/2004	10.56	---	0.00	---	11.23	0.00	986.52
51-08	997.08	7/1/2004	10.76	10.74	0.02	---	14.65	0.00	986.34
51-08	997.08	7/8/2004	10.80	10.71	0.09	---	14.65	0.00	986.36
51-08	997.08	7/15/2004	11.35	10.79	0.56	---	14.65	0.00	986.25
51-08	997.08	7/23/2004	12.10	10.91	1.19	---	14.65	0.00	986.09
51-08	997.08	7/29/2004	12.30	10.88	1.42	---	14.65	0.00	986.10
51-09	997.70	7/15/2004	10.58	---	0.00	---	11.99	0.00	987.12
51-11	994.37	7/15/2004	8.46	---	0.00	---	13.53	0.00	985.91
51-12	996.55	7/15/2004	7.47	---	0.00	---	10.98	0.00	989.08
51-13	997.42	7/15/2004	Dry	---	0.00	---	10.04	0.00	< 987.38
51-14	996.77	7/15/2004	10.68	---	0.00	---	15.00	0.00	986.09
51-15	996.43	7/15/2004	10.18	10.15	0.03	---	14.46	0.00	986.28
51-16R	996.39	7/15/2004	10.24	10.12	0.12	---	14.55	0.00	986.26
51-17	996.43	7/15/2004	11.15	9.86	1.29	---	14.48	0.00	986.48
51-18	997.12	7/15/2004	10.89	---	0.00	---	12.56	0.00	986.23
51-19	996.43	7/15/2004	11.20	10.22	0.98	---	14.05	0.00	986.14
51-21	1,001.49	7/7/2004	15.21	P	< 0.01	---	NM	0.00	986.28
51-21	1,001.49	7/13/2004	15.30	15.29	0.01	---	NM	0.00	986.20
51-21	1,001.49	7/21/2004	15.36	P	< 0.01	---	NM	0.00	986.13
51-21	1,001.49	7/28/2004	15.40	P	< 0.01	---	NM	0.00	986.09

**TABLE 23-3**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 3**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
59-01	997.52	7/15/2004	11.16	---	0.00	---	11.35	0.00	986.36
59-03R	997.64	7/15/2004	12.20	11.01	1.19	---	17.04	0.00	986.55
59-07	997.96	7/15/2004	11.55	---	0.00	---	23.56	0.00	986.41
GMA3-2	991.94	7/15/2004	7.80	---	0.00	---	14.93	0.00	984.14
GMA3-3	990.45	7/15/2004	2.07	---	0.00	---	12.21	0.00	988.38
GMA3-4	994.60	7/15/2004	7.02	---	0.00	---	13.70	0.00	987.58
GMA3-5	993.67	7/16/2004	9.26	---	0.00	---	15.43	0.00	984.41
GMA3-6	997.49	7/15/2004	10.84	---	0.00	---	17.94	0.00	986.65
GMA3-7	1000.17	7/16/2004	13.71	---	0.00	---	19.90	0.00	986.46
GMA3-8	996.24	7/16/2004	10.70	---	0.00	---	15.66	0.00	985.54
GMA3-9	992.39	7/15/2004	4.80	---	0.00	---	12.66	0.00	987.59
GMA3-10	997.54	7/1/2004	11.55	10.87	0.68	---	18.03	0.00	986.62
GMA3-10	997.54	7/8/2004	11.60	10.91	0.69	---	18.03	0.00	986.58
GMA3-10	997.54	7/15/2004	11.68	11.02	0.66	---	18.02	0.00	986.47
GMA3-10	997.54	7/23/2004	11.88	11.16	0.72	---	18.03	0.00	986.33
GMA3-10	997.54	7/29/2004	11.95	11.24	0.71	---	18.02	0.00	986.25
GMA3-11	997.25	7/15/2004	10.48	---	0.00	---	18.53	0.00	986.77
GMA3-12	997.84	7/1/2004	11.70	11.27	0.43	---	21.25	0.00	986.54
GMA3-12	997.84	7/8/2004	11.90	11.21	0.69	---	21.25	0.00	986.58
GMA3-12	997.84	7/15/2004	12.05	11.38	0.67	---	21.25	0.00	986.41
GMA3-12	997.84	7/23/2004	12.25	11.55	0.70	---	21.25	0.00	986.24
GMA3-12	997.84	7/29/2004	12.09	11.61	0.48	---	21.25	0.00	986.20
OBG-2	992.20	7/16/2004	5.65	---	0.00	---	14.80	0.00	986.55
UB-MW-10	995.99	7/15/2004	9.60	---	0.00	---	15.71	0.00	986.39
UB-PZ-1	999.70	7/15/2004	13.76	---	0.00	---	13.79	0.00	985.94
UB-PZ-2	994.77	7/16/2004	Well damaged, unable to measure			NM	NM	NM	NA
UB-PZ-3	998.15	7/15/2004	12.10	11.80	0.30	---	13.36	0.00	986.33
<b>Unkamet Brook Staff Gauge</b>									
GMA3-SG-1	983.44	7/15/2004	2.90	---	---	---	---	---	986.34
GMA3-SG-2	NA	7/16/2004	0.26	---	---	---	---	---	NA
GMA3-SG-3	985.53	7/15/2004	1.98	---	---	---	---	---	987.51

**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 or DNAPL is present at a thickness that is < 0.01 feet. The corresponding thickness is recorded as such.
6. For the Unkamet Brook Staff Gauges, a reading of 0.00 feet corresponds to the listed measuring point elevation. The "Depth to Water" values shown above refer to feet above the datum, rather than feet below the measuring point.

**ITEM 24**  
**GROUNDWATER MANAGEMENT AREAS**  
**PLANT SITE 3 (GMA 4)**  
**(GEC340)**  
**JULY 2004**

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

**a. Activities Undertaken/Completed**

- Initiated preparation of Groundwater Quality Interim Report for Spring 2004.
- Conducted groundwater elevation monitoring and sampling at well GMA4-5 (under Commercial Street ACO Program).

**b. Sampling/Test Results Received**

See attached tables.

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

None

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

Submit Groundwater Quality Interim Report for Spring 2004 (due on or before August 31, 2004).

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

No issues

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

None



**TABLE 24-1  
DATA RECEIVED AND/OR SAMPLES COLLECTED DURING JULY 2004**

**GROUNDWATER MANAGEMENT AREA 4  
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>
Semi-Annual Groundwater Sampling	Comm-DUP-1 (GMA4-	7/13/04	Water	CT&E	PCB, PCB (f), VOC, SVOC, EPH	7/29/04
Semi-Annual Groundwater Sampling	GMA4-5	7/13/04	Water	CT&E	PCB, PCB (f), VOC, SVOC, EPH	7/29/04

Note:

1. Field duplicate sample locations are presented in parenthesis.

**TABLE 24-2  
DATA RECEIVED DURING JULY 2004**

**SEMI-ANNUAL GROUNDWATER SAMPLING  
GROUNDWATER MANAGEMENT AREA 4  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in parts per million, ppm)**

Parameter	Sample ID: Date Collected:	GMA4-5 07/13/04
<b>Volatile Organics</b>		
None Detected		--
<b>PCBs-Unfiltered</b>		
Aroclor-1254		0.000020 J [0.000019 J]
Total PCBs		0.000020 J [0.000019 J]
<b>PCBs-Filtered</b>		
Aroclor-1254		0.000023 J [0.000059 J]
Total PCBs		0.000023 J [0.000059 J]
<b>Semivolatile Organics</b>		
None Detected		--
<b>Extractable Petroleum Hydrocarbons</b>		
None Detected		--

Notes:

1. Sample was collected by Blasland Bouck & Lee, Inc., and submitted to CT&E Environmental Services, Inc. for analysis of volatiles, PCBs (filtered and unfiltered), semivolatiles and EPH.
2. Only detected constituents are summarized.
3. Field duplicate sample results are presented in brackets.
4. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, EPH)

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

**TABLE 24-3**  
**ROUTINE WELL MONITORING**  
**GROUNDWATER MANAGEMENT AREA 4**  
**CONSENT DECREE MONTHLY STATUS REPORT**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**July 2004**

Well Name	Measuring Point Elev. (feet)	Date	Depth to Water (ft BMP)	Depth to LNAPL (ft BMP)	LNAPL Thickness (feet)	Depth to DNAPL (ft BMP)	Total Depth (ft BMP)	DNAPL Thickness (feet)	Corrected Water Elev. (feet)
GMA4-5	993.34	7/28/2004	11.84	---	0.00	---	18.13	0.00	981.50

**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)**  
**(GECD350)**  
**JULY 2004**

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

a. **Activities Undertaken/Completed**

Continued preparation of Groundwater Quality Interim Report for Spring 2004.

b. **Sampling/Test Results Received**

None

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

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

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

# ***Attachment A***

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## ***NPDES Sampling Records and Results July 2004***

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

**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-A5773	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	001-A5775	7/5/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	001-A5790	7/6/04	Water	CT&E	TSS	7/30/04
NPDES Sampling	004-A5780	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	004-A5782	7/5/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	005-A5752/A5753	6/29/04	Water	CT&E	PCB	7/6/04
NPDES Sampling	005-A5793/A5794	7/6/04	Water	CT&E	PCB, BOD	7/30/04
NPDES Sampling	005-A5793/A5794	7/6/04	Water	CT&E	TSS	7/30/04
NPDES Sampling	005-A5808/A5807	7/13/04	Water	CT&E	PCB	7/22/04
NPDES Sampling	005-A5814/A5818	7/19/04	Water	CT&E	PCB	7/28/04
NPDES Sampling	005-A5842/A5844	7/27/04	Water	CT&E	PCB	
NPDES Sampling	006-A5767	7/2/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	006-A5769	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	007-A5756	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	01A-A5785	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	01A-A5787	7/5/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	05A-A5761	7/2/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	05A-A5763	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	05B-A5764	7/2/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	05B-A5766	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	06A-A5770	7/2/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	06A-A5772	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	09A-A5754	6/29/04	Water	CT&E	BOD	7/6/04
NPDES Sampling	09A-A5795	7/6/04	Water	CT&E	BOD	7/30/04
NPDES Sampling	09A-A5795	7/6/04	Water	CT&E	TSS	7/30/04
NPDES Sampling	09A-A5843	7/27/04	Water	CT&E	TSS, BOD	
NPDES Sampling	09B-A5743	6/27/04	Water	CT&E	TSS	7/6/04
NPDES Sampling	09B-A5755	6/29/04	Water	CT&E	BOD	7/6/04
NPDES Sampling	09B-A5796	7/6/04	Water	CT&E	BOD	7/30/04
NPDES Sampling	09B-A5796	7/6/04	Water	CT&E	TSS	7/30/04
NPDES Sampling	09B-A5822	7/19/04	Water	CT&E	TSS, BOD	7/28/04
NPDES Sampling	09C-A5748	6/29/04	Water	CT&E	Oil & Grease	7/6/04
NPDES Sampling	09C-A5760	7/2/04	Water	CT&E	PCB	7/30/04
NPDES Sampling	09C-A5783	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	09C-A5823	7/19/04	Water	CT&E	Oil & Grease	7/28/04

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

**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	09C-A5845	7/27/04	Water	CT&E	Oil & Grease	
NPDES Sampling	64G-A5746	6/28/04	Water	CT&E	Oil & Grease	7/6/04
NPDES Sampling	64G-A5778	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	64G-A5788	7/6/04	Water	CT&E	VOC	7/30/04
NPDES Sampling	64G-A5789	7/6/04	Water	CT&E	SVOC	7/30/04
NPDES Sampling	64G-A5805	7/12/04	Water	CT&E	Oil & Grease	7/22/04
NPDES Sampling	64G-A5817	7/19/04	Water	CT&E	Oil & Grease	7/28/04
NPDES Sampling	64G-A5839	7/26/04	Water	CT&E	Oil & Grease	
NPDES Sampling	64T-A5744	6/28/04	Water	CT&E	Oil & Grease	7/6/04
NPDES Sampling	64T-A5776	7/5/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	64T-A5803	7/12/04	Water	CT&E	Oil & Grease	7/22/04
NPDES Sampling	64T-A5813	7/19/04	Water	CT&E	Oil & Grease	7/28/04
NPDES Sampling	64T-A5837	7/26/04	Water	CT&E	Oil & Grease	
NPDES Sampling	A5797R	7/19/04	Water	CT&E	Acute Toxicity Test	8/2/04
NPDES Sampling	A5797R	7/19/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5797RCN	7/19/04	Water	CT&E	CN	7/28/04
NPDES Sampling	A5797RTM	7/19/04	Water	CT&E	Metals (10)	7/28/04
NPDES Sampling	A5798C	7/19/04	Water	CT&E	Acute Toxicity Test	8/2/04
NPDES Sampling	A5798C	7/19/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5798CCN	7/19/04	Water	CT&E	CN	7/28/04
NPDES Sampling	A5798CDM	7/19/04	Water	CT&E	Filtered Metals (8)	7/28/04
NPDES Sampling	A5798CTM	7/19/04	Water	CT&E	Metals (10)	7/28/04
NPDES Sampling	A5799R	7/21/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5799RCN	7/21/04	Water	CT&E	CN	7/28/04
NPDES Sampling	A5799RTM	7/21/04	Water	CT&E	Metals (10)	7/28/04
NPDES Sampling	A5800C	7/21/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5800CCN	7/21/04	Water	CT&E	CN	7/28/04
NPDES Sampling	A5800CDM	7/21/04	Water	CT&E	Filtered Metals (8)	7/28/04
NPDES Sampling	A5800CTM	7/21/04	Water	CT&E	Metals (10)	7/28/04
NPDES Sampling	A5801R	7/23/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5801RCN	7/23/04	Water	CT&E	CN	7/29/04
NPDES Sampling	A5801RTM	7/23/04	Water	CT&E	Metals (10)	7/29/04
NPDES Sampling	A5802C	7/23/04	Water	CT&E	Chronic Toxicity Test	8/3/04
NPDES Sampling	A5802CCN	7/23/04	Water	CT&E	CN	7/29/04
NPDES Sampling	A5802CDM	7/23/04	Water	CT&E	Filtered Metals (8)	7/29/04

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

**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	A5802CTM	7/23/04	Water	CT&E	Metals (10)	7/29/04
NPDES Sampling	JUL04WK1	6/29/04	Water	CT&E	Cu, Pb, Zn	7/6/04
NPDES Sampling	JUL04WK2	7/6/04	Water	CT&E	Cu, Pb, Zn	7/30/04
NPDES Sampling	JUL04WK3	7/13/04	Water	CT&E	Cu, Pb, Zn	7/22/04
NPDES Sampling	JUL04WK5	7/27/04	Water	CT&E	Cu, Pb, Zn	
NPDES Sampling	SR068-A5757	7/2/04	Water	CT&E	Oil & Grease	7/30/04
NPDES Sampling	SR068-A5759	7/2/04	Water	CT&E	PCB	7/30/04
Stormwater Monitoring	001-A5831	7/23/04	Water	CT&E	Zinc	
Stormwater Monitoring	007-A5832	7/23/04	Water	CT&E	Zinc	
Stormwater Monitoring	YD12-A5835	7/23/04	Water	CT&E	Zinc	
Stormwater Monitoring	YD13-A5836	7/23/04	Water	CT&E	Zinc	
Stormwater Monitoring	YD5-A5833	7/23/04	Water	CT&E	Zinc	
Stormwater Monitoring	YD9-A5834	7/23/04	Water	CT&E	Zinc	



**TABLE A-2**  
**DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Date Collected:	001-A5773 07/05/04	001-A5775 07/05/04	001-A5790 07/06/04	01A-A5785 07/05/04	01A-A5787 07/05/04	004-A5780 07/05/04	004-A5782 07/05/04	005-A5752/A5753 06/29/04
<b>Volatile Organics</b>									
None Detected		NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1254		NA	0.00018	NA	NA	0.00085	NA	0.0016	ND(0.000065)
Aroclor-1260		NA	0.000086	NA	NA	0.00092	NA	0.0011	ND(0.000065)
Total PCBs		NA	0.000266	NA	NA	0.00177	NA	0.0027	ND(0.000065)
<b>Semivolatile Organics</b>									
None Detected		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	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		ND(5.0)	NA	NA	ND(5.0)	NA	2.2 B	NA	NA
Total Suspended Solids		NA	NA	5.00	NA	NA	NA	NA	NA

TABLE A-2  
DATA RECEIVED DURING JULY 2004

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

Parameter	Sample ID: Date Collected:	005-A5793/A5794 07/06/04	005-A5808/A5807 07/13/04	005-A5814/A5818 07/19/04	05A-A5761 07/02/04	05A-A5763 07/02/04	05B-A5764 07/02/04	05B-A5766 07/02/04	006-A5767 07/02/04
<b>Volatile Organics</b>									
None Detected		NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1254		0.000093	ND(0.000065)	0.000031 J	NA	0.0046	NA	0.0050	NA
Aroclor-1260		0.000055 J	ND(0.000065)	ND(0.000065)	NA	0.0050	NA	0.0048	NA
Total PCBs		0.000148	ND(0.000065)	0.000031 J	NA	0.0096	NA	0.0098	NA
<b>Semivolatile Organics</b>									
None Detected		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)		ND(2.0)	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		NA	NA	NA	ND(5.0)	NA	ND(5.0)	NA	ND(5.0)
Total Suspended Solids		ND(5.00)	NA	NA	NA	NA	NA	NA	NA

**TABLE A-2  
DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Date Collected:	006-A5769 07/02/04	06A-A5770 07/02/04	06A-A5772 07/02/04	007-A5756 07/02/04	09A-A5754 06/29/04	09A-A5795 07/06/04	09B-A5743 06/27/04	09B-A5755 06/29/04	09B-A5796 07/06/04
<b>Volatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>										
Aroclor-1254		0.000089	NA	0.00095	0.00071	NA	NA	NA	NA	NA
Aroclor-1260		0.00010	NA	0.0018	0.0011	NA	NA	NA	NA	NA
Total PCBs		0.000189	NA	0.00275	0.00181	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Filtered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Conventionals</b>										
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	6.0	2.6	NA	ND(2.0)	ND(2.0)
Oil & Grease		NA	ND(5.0)	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids		NA	NA	NA	NA	NA	11.0	8.00	NA	ND(5.00)

TABLE A-2  
DATA RECEIVED DURING JULY 2004

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

Parameter	Sample ID: Date Collected:	09B-A5822 07/19/04	09C-A5748 06/29/04	09C-A5760 07/02/04	09C-A5783 07/05/04	09C-A5823 07/19/04	64G-A5746 06/28/04	64G-A5778 07/05/04	64G-A5788 07/06/04	64G-A5789 07/06/04
<b>Volatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	--	NA
<b>PCBs-Unfiltered</b>										
Aroclor-1254		NA	NA	0.00075	NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	0.0013	NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	0.00205	NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	--
<b>Inorganics-Unfiltered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide		NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Filtered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Conventionals</b>										
Biological Oxygen Demand (5-day)		ND(2.0)	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		NA	ND(5.0)	NA	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	NA
Total Suspended Solids		5.00	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE A-2**  
**DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Date Collected:	64G-A5805 07/12/04	64G-A5817 07/19/04	64T-A5744 06/28/04	64T-A5776 07/05/04	64T-A5803 07/12/04	64T-A5813 07/19/04	A5797RCN 07/19/04	A5797RTM 07/19/04	A5798CCN 07/19/04
<b>Volatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>										
Aroclor-1254		NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	0.0730 B	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	ND(0.00100)	NA
Calcium		NA	NA	NA	NA	NA	NA	NA	29.0	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	ND(0.00500)	NA
Copper		NA	NA	NA	NA	NA	NA	NA	ND(0.00500)	NA
Cyanide		NA	NA	NA	NA	NA	NA	ND(0.0200)	NA	0.0350
Lead		NA	NA	NA	NA	NA	NA	NA	ND(0.00500)	NA
Magnesium		NA	NA	NA	NA	NA	NA	NA	9.20	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	ND(0.00500)	NA
Silver		NA	NA	NA	NA	NA	NA	NA	ND(0.00500)	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	0.00810 B	NA
<b>Inorganics-Filtered</b>										
Aluminum		NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium		NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Conventionals</b>										
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	2.3 B	ND(5.0)	NA	NA	NA
Total Suspended Solids		NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A-2  
DATA RECEIVED DURING JULY 2004

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

Parameter	Sample ID: Date Collected:	A5798CDM 07/19/04	A5798CTM 07/19/04	A5799RCN 07/21/04	A5799RTM 07/21/04	A5800CCN 07/21/04	A5800CDM 07/21/04	A5800CTM 07/21/04	A5801RCN 07/23/04	A5801RTM 07/23/04
<b>Volatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>										
Aroclor-1254		NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics</b>										
None Detected		NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>										
Aluminum		NA	0.0750 B	NA	ND(0.100)	NA	NA	ND(0.100)	NA	ND(0.100)
Cadmium		NA	ND(0.00100)	NA	ND(0.00100)	NA	NA	ND(0.00100)	NA	ND(0.00100)
Calcium		NA	66.0	NA	27.0	NA	NA	64.0	NA	26.0
Chromium		NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Copper		NA	0.00960	NA	ND(0.00500)	NA	NA	0.00620	NA	0.00140 B
Cyanide		NA	NA	ND(0.0200)	NA	0.0500	NA	NA	0.00250 B	NA
Lead		NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Magnesium		NA	26.0	NA	8.90	NA	NA	26.0	NA	8.40
Nickel		NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Silver		NA	ND(0.00500)	NA	ND(0.00500)	NA	NA	ND(0.00500)	NA	ND(0.00500)
Zinc		NA	0.0180 B	NA	0.00650 B	NA	NA	0.00840 B	NA	0.00670 B
<b>Inorganics-Filtered</b>										
Aluminum		0.0700 B	NA	NA	NA	NA	ND(0.100)	NA	NA	NA
Cadmium		ND(0.00100)	NA	NA	NA	NA	ND(0.00100)	NA	NA	NA
Chromium		0.00140 B	NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Copper		0.00510	NA	NA	NA	NA	0.00480 B	NA	NA	NA
Lead		ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Nickel		0.00270 B	NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Silver		ND(0.00500)	NA	NA	NA	NA	ND(0.00500)	NA	NA	NA
Zinc		0.0200 B	NA	NA	NA	NA	0.0130 B	NA	NA	NA
<b>Conventionals</b>										
Biological Oxygen Demand (5-day)		NA	NA	NA	NA	NA	NA	NA	NA	NA
Oil & Grease		NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids		NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE A-2  
DATA RECEIVED DURING JULY 2004**

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

Parameter	Sample ID: Date Collected:	A5802CCN 07/23/04	A5802CDM 07/23/04	A5802CTM 07/23/04	JUL04WK1 06/29/04	JUL04WK2 07/06/04	JUL04WK3 07/13/04	SR068-A5757 07/02/04	SR068-A5759 07/02/04
<b>Volatile Organics</b>									
None Detected		NA	NA	NA	NA	NA	NA	NA	NA
<b>PCBs-Unfiltered</b>									
Aroclor-1254		NA	NA	NA	NA	NA	NA	NA	0.0078
Aroclor-1260		NA	NA	NA	NA	NA	NA	NA	0.0077
Total PCBs		NA	NA	NA	NA	NA	NA	NA	0.0155
<b>Semivolatile Organics</b>									
None Detected		NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics-Unfiltered</b>									
Aluminum		NA	NA	ND(0.100)	NA	NA	NA	NA	NA
Cadmium		NA	NA	ND(0.00100)	NA	NA	NA	NA	NA
Calcium		NA	NA	71.0	NA	NA	NA	NA	NA
Chromium		NA	NA	ND(0.00500)	NA	NA	NA	NA	NA
Copper		NA	NA	0.00500 B	0.0130	0.0160	0.00400 B	NA	NA
Cyanide		0.0480	NA	NA	NA	NA	NA	NA	NA
Lead		NA	NA	0.00450 B	ND(0.00500)	0.0110	ND(0.00500)	NA	NA
Magnesium		NA	NA	30.0	NA	NA	NA	NA	NA
Nickel		NA	NA	ND(0.00500)	NA	NA	NA	NA	NA
Silver		NA	NA	ND(0.00500)	NA	NA	NA	NA	NA
Zinc		NA	NA	0.00850 B	0.0250	0.0400	0.00880 B	NA	NA
<b>Inorganics-Filtered</b>									
Aluminum		NA	ND(0.100)	NA	NA	NA	NA	NA	NA
Cadmium		NA	ND(0.00100)	NA	NA	NA	NA	NA	NA
Chromium		NA	ND(0.00500)	NA	NA	NA	NA	NA	NA
Copper		NA	0.00320 B	NA	NA	NA	NA	NA	NA
Lead		NA	ND(0.00500)	NA	NA	NA	NA	NA	NA
Nickel		NA	ND(0.00500)	NA	NA	NA	NA	NA	NA
Silver		NA	ND(0.00500)	NA	NA	NA	NA	NA	NA
Zinc		NA	0.0110 B	NA	NA	NA	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	ND(5.0)	NA
Total Suspended Solids		NA	NA	NA	NA	NA	NA	NA	NA

**Notes:**

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

**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 practical quantitation limit (PQL).

# ***Attachment B***

---

## ***NPDES Discharge Monitoring Reports June 2004***



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

001 1  
 DISCHARGE NUMBER

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

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	06	01		04	06	30

\*\*\* 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			
PH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.4	( 12 ) SU	0	01/07	GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-C
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0	0	( 26 ) LBS/DY	*****	*****	*****		0	01/30	CP
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	138 MO AVG	628 DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/ MONTH	COMPOS
OIL & GREASE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	0	( 19 ) MG/L	0	01/30	GR
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	319 DAILY MX	LBS/DY	*****	*****	15 DAILY MX	MG/L		ONCE/ MONTH	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	0.0001	( 26 ) LBS/DY	*****	*****	*****		0	01/30	GR
39516 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/ MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.102	0.434	( 03 ) MGD	*****	*****	*****		0	99/99	RC
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	1.10 MO AVG	2.55 DAILY MX	MGD	*****	*****	*****	****		CONTIN UOUS	CORDR
	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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

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

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

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

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER

004 1  
 DISCHARGE NUMBER

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

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	06	01		04	06	30

\*\*\* 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			
PH	SAMPLE MEASUREMENT	*****	*****		6.6	*****	8.1	( 12 ) SU	0	01/DW	GR
00400 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-C
OIL & GREASE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	0	( 19 ) MG/L	0	01/30	GR
00556 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	261 DAILY MX	LBS/DY	*****	*****	15 DAILY MX	MG/L		ONCE/ MONTH	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	0.00023	( 26 ) LBS/DY	*****	*****	*****		0	01/90	GR
39516 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.002	0.019	( 03 ) MGD	*****	*****	*****		0	99/99	RC
50050 P O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	0.38 MO AVG	2.09 DAILY MX	MGD	*****	*****	*****	****		ONCE/ MONTH	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 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		
413 494-3500		2004	7	22
AREA CODE	NUMBER	YEAR	MO	DAY

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

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

MAJOR

(SUBR W )

F - FINAL

WATERS TO HOUSATONIC RIVER

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	06	01		04	06	30

\*\*\* 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 T O O SEE COMMENTS BELOW	0	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP	
	PERMIT REQUIREMENT	90 MO AVG	135 DAILY MX	LBS/DY	*****	*****	*****	****	ONCE/MONTH	COMPOS	
SOLIDS, TOTAL SUSPENDED 00530 T O O SEE COMMENTS BELOW	8.5	8.5	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP	
	PERMIT REQUIREMENT	188 MO AVG	270 DAILY MX	LBS/DY	*****	*****	*****	****	ONCE/MONTH	COMPOS	
OIL & GREASE 00556 T O O SEE COMMENTS BELOW	*****	0	( 26 ) LBS/DY	*****	*****	0	( 19 ) MG/L	0	01/07	GR	
	PERMIT REQUIREMENT	*****	135 DAILY MX	LBS/DY	*****	*****	15 DAILY MX MG/L	****	WEEKLY GRAB		
POLYCHLORINATED BIPHENYLS (PCBS) 39516 T O O SEE COMMENTS BELOW	0.0002	0.0004	( 26 ) LBS/DY	*****	*****	*****	*****	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 O O SEE COMMENTS BELOW	0.223	0.492	( 03 ) MGD	*****	*****	*****	*****	0	99/99	RC	
	PERMIT REQUIREMENT	2.09 MO AVG	2.09 DAILY MX	MGD	*****	*****	*****	****	CONTINUOUS	RECORDED	
	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

413 494-3500

AREA CODE

NUMBER

DATE

2004 7 22

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

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)

MA0003871  
PERMIT NUMBER

064 T  
DISCHARGE NUMBER

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

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	06	01		04	06	30

\*\*\* 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			
PH 00400 T O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		6.9	*****	7.9	( 12 ) SU	0	99/99	RCDR
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-C
DIBENZOFURAN B1302 T O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	NODI [6]	NODI [6]	( 22 )			
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	PPT		ONCE/ MONTH	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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 413 494-3500  
DATE 2004 7 22  
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.

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

064 G  
DISCHARGE NUMBER

MAJOR (SUBR W)  
F - FINAL

GROUNDWATER TREATMENT (005)

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	05	01		04	05	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			
PH	SAMPLE MEASUREMENT	*****	*****		7.3	*****	7.4	( 12 ) SU	0	99/99	RCDR
00400 T O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-C
BASE NEUTRALS & ACID (METHOD 625), TOTAL	SAMPLE MEASUREMENT	*****	*****		*****	0	0	( 19 ) MG/L	0	01/90	GR
76030 T O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	GRAB
VOLATILE COMPOUNDS, (GC/MS)	SAMPLE MEASUREMENT	*****	*****		*****	0	0	( 19 ) MG/L	0	01/90	GR
78732 T O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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

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

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

TELEPHONE DATE  
413 494-3500 2004 7 22  
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)

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

Form Approved.  
 OMB No. 2040-0004

MA0003891 PERMIT NUMBER  
 007 1 DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	05	01		04	05	30

\*\*\* NO DISCHARGE 1 1 \*\*\*

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	*****	*****		*****	54	54	( 15) DEG.F	0	01/30	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	70 MO AVG	75 DAILY MX	DEG.F		ONCE/ MONTH	GRAB
PH 00400 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		6.6		7.4	( 12) SU	0	01/07	GR
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEKLY	RANG-C
POLYCHLORINATED BIPHENYLS (PCBS) 39516 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	0.2	0.2	( 21) PPB	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	REPORT MO AVG	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 W O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.034	0.054	( 03) MGD	*****	*****	*****		0	22/30	CA
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		ONCE/ MONTH	CALCTE
	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  <i>M. T. Carroll</i>	TELEPHONE		DATE		
			AREA CODE	NUMBER	YEAR	MO	DAY
			413	494-3500	2004	7	22

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)

MAJOR

(SUBR W)

F - FINAL

PROCESSES TO UNKAMET BROOK

Form Approved.  
OMB No. 2040-0004

MA0003891  
PERMIT NUMBER

009 1  
DISCHARGE NUMBER

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
04	06	01	04	06	30

FROM

TO

\*\*\* 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			
BOD, 5-DAY (20 DEG. C)	SAMPLE MEASUREMENT	0.02	0.04	( 26 ) LBS/DY	*****	*****	*****		0	01/07	CP
00310 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	106 MO AVG	438 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
PH	SAMPLE MEASUREMENT	*****	*****		6.6	*****	7.6	( 12 ) SU	0	01/07	GR
00400 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	**** MINIMUM	6.0	*****	9.0	SU MAXIMUM		WEEKLY	RANG-O
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0.1	0.3	( 26 ) LBS/DY	*****	*****	*****		0	01/07	CP
00530 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	213 MO AVG	376 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
OIL & GREASE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	0	( 19 ) MG/L	0	01/07	GR
00556 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	438 DAILY MX	LBS/DY	*****	*****	15	DAILY MX MG/L		WEEKLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	*****		*****	0.0003	0.0003	( 19 ) MG/L	0	01/90	GR
39516 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	**** REPORT MO AVG	*****	REPORT	REPORT	DAILY MX MG/L		DIRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.003	0.036	( 03 ) MGD	*****	*****	*****		0	99/99	RC
50050 V O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		CONTIN	CORDR
	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  
413 494-3500  
DATE  
2004 7 22  
AREA CODE NUMBER YEAR MO DAY

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

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

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

MA0003891 PERMIT NUMBER  
 009 A DISCHARGE NUMBER

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

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	06	01		04	06	30

\*\*\* 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 O O SEE COMMENTS BELOW	106	0.004	438	( 26 ) LBS/DY	*****	*****	*****	****	0	01/DW	CP
	PERMIT REQUIREMENT	MD AVG	DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
SOLIDS, TOTAL SUSPENDED 00530 V O O SEE COMMENTS BELOW	213	0.02	876	( 26 ) LBS/DY	*****	*****	*****	****	0	01/DW	CP
	PERMIT REQUIREMENT	MD AVG	DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V O O SEE COMMENTS BELOW		0.0003	0.004	( 03 ) MGD	*****	*****	*****	****	0	99/99	RC
	PERMIT REQUIREMENT	REPORT MD AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		CONTINRCORDR UOUS	
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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

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

TELEPHONE 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

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



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 B  
 DISCHARGE NUMBER

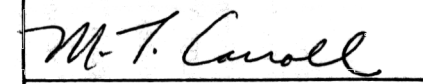
MAJOR  
 (SUBR W )  
 F - FINAL  
 09B SAMPLE POINT PRIOR TO 009

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	06	01		04	06	30

\*\*\* 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			
BOD, 5-DAY (20 DEG. C) 00310 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.02	0.04	( 26 ) LBS/DY	*****	*****	*****		0	01/DW	CP
	PERMIT REQUIREMENT	106 MD AVG	438 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
SOLIDS, TOTAL SUSPENDED 00530 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.1	0.2	( 26 ) LBS/DY	*****	*****	*****		0	01/DW	CP
	PERMIT REQUIREMENT	213 MD AVG	876 DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 V O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	0.003	0.036	( 03 ) MGD	*****	*****	*****		0	99/99	RC
	PERMIT REQUIREMENT	REPORT MD AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		CONT INRCORDR UOUS	
	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.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE			
			413 494-3500	2004	7	22	
			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 W)  
 F - FINAL  
 METALS: 001, 004, 005, 007, 009, 011

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	08	01		04	08	30

\*\*\* 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			
PHOSPHORUS, TOTAL (AS P) 00665 1 0 0	00665 1 0 0	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/MONTH	COMPOSITE
NICKEL TOTAL RECOVERABLE 01074 1 0 0	01074 1 0 0	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/MONTH	COMPOSITE
SILVER TOTAL RECOVERABLE 01079 1 0 0	01079 1 0 0	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/MONTH	COMPOSITE
ZINC TOTAL RECOVERABLE 01094 1 0 0	01094 1 0 0	*****	0.2	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/07	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOSITE
ALUMINUM, TOTAL (AS AL) 01105 1 0 0	01105 1 0 0	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/MONTH	COMPOSITE
CADMIUM TOTAL RECOVERABLE 01113 1 0 0	01113 1 0 0	*****	0	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/30	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE/MONTH	COMPOSITE
LEAD TOTAL RECOVERABLE 01114 1 0 0	01114 1 0 0	*****	0.09	( 26 ) LBS/DY	*****	*****	*****	*****	0	01/07	CP
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOSITE

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  <i>M. T. Carroll</i>	TELEPHONE		DATE		
			AREA CODE	NUMBER	YEAR	MO	DAY
			413	494-3500	2004	7	22

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

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

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

Form Approved.  
 OMB No. 2040-0004

MA0003891  
 PERMIT NUMBER

SUM A  
 DISCHARGE NUMBER

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

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
04	06	01	04	06	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			
CHROMIUM TOTAL RECOVERABLE 01118 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0	( 26 ) LBS/DY	*****	*****	*****		0	01/30	CP
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		ONCE / MONTH	COMPOSE
COPPER TOTAL RECOVERABLE 01119 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.17	( 26 ) LBS/DY	*****	*****	*****		0	01/07	CP
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	LBS/DY	*****	*****	*****	****		WEEKLY	COMPOSE
CYANIDE, TOTAL RECOVERABLE 78248 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.11	( 26 ) LBS/DY	*****	*****	*****		0	01/30	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  
 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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

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

PERMITTEE NAME/ADDRESS (Include Facility Name/Location (if different))

NAME GENERAL ELECTRIC CORPORATION

ADDRESS ATTN: JEFFREY G. RUEBESAM

100 WOODLAWN AVENUE

PITTSFIELD MA 01201

FACILITY GENERAL ELECTRIC COMPANY

LOCATION PITTSFIELD MA 01201

ATTN: MICHAEL T CARROLL, EHS&F

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

MA0003891  
PERMIT NUMBER

SUM B  
DISCHARGE NUMBER

MAJOR (SUBR W)  
F - FINAL

TOXICS: 001, 004, 005, 007, 009, 011

Form Approved.  
OMB No. 2040-0004

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	06	01		04	06	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			
NDAEL STATE 4BHR AC	SAMPLE MEASUREMENT	*****	*****		100	*****	*****	( 23 )	0	01/30	CP
U D. PULEX	PERMIT REQUIREMENT	*****	*****	****	35	*****	*****	% PER-CENT		ONCE/MONTH	COMPOS
TDM3D 1 0 0	SAMPLE MEASUREMENT										
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll  
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

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*M. T. Carroll*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

413 494-3500

AREA CODE

NUMBER

DATE

2004 7 22

YEAR MO DAY

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

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

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

NAME GENERAL ELECTRIC CORPORATION

ADDRESS ATTN: JEFFREY G. RUEBESAM

100 WOODLAWN AVENUE

PITTSFIELD

MA 01201

FACILITY GENERAL ELECTRIC COMPANY

LOCATION PITTSFIELD

MA 01201

ATTN: MICHAEL T CARROLL, EHS&F

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

MA0003891

PERMIT NUMBER

001 A

DISCHARGE NUMBER

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	04	01		04	06	30

MAJOR (SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

\*\*\* NO DISCHARGE 1 1 \*\*\*

NOTE: Read instructions before completing this form.

Form Approved. OMB No. 2040-0004

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	*****	*****		7.7	*****	7.7	( 12 ) SU	0	01/90	GR
00400 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	2.4	( 20 ) PPM	0	01/90	GR
00556 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	*****		*****	*****	0.7	( 21 ) PPB	0	01/90	GR
39516 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	0.864	( 03 ) MGD	*****	*****	*****		0	01/90	ES
50050 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll  
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

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*M. T. Carroll*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

413 494-3500

AREA CODE NUMBER

DATE

2004 7 22

YEAR MO DAY

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

QUARTERLY SAMPLE AT POINT OF DISCHARGE.

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)

MAJOR (SUBR W)  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

Form Approved.  
 OMB No. 2040-0004

MA0003891 PERMIT NUMBER  
 005 A DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	30

\*\*\* 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			
PH	00400 S O O SEE COMMENTS BELOW	*****	*****	****	7.1	*****	7.1	( 12) SU	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU			QTRLY RANG-C
PH	00400 U O O SEE COMMENTS BELOW	*****	*****	****	NODI C	*****	NODI C	( 12) SU			QTRLY RANG-C
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU			QTRLY RANG-C
OIL & GREASE	00556 S O O SEE COMMENTS BELOW	*****	*****	****	*****	*****	0	( 20) PPM	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM			QTRLY GRAB
OIL & GREASE	00556 U O O SEE COMMENTS BELOW	*****	*****	****	*****	*****	NODI C	( 20) PPM			QTRLY GRAB
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM			QTRLY GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	39516 S O O SEE COMMENTS BELOW	*****	*****	****	*****	*****	1.0	( 21) PPB	0	01/90	GR
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB			QTRLY GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	39516 U O O SEE COMMENTS BELOW	*****	*****	****	*****	*****	NODI C REPORT	( 21) PPB			QTRLY GRAB
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	DAILY MX	PPB			QTRLY GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	50050 S O O SEE COMMENTS BELOW	*****	0.03	( 03) MGD	*****	*****	*****	*****	0	01/90	ES
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	*****			QTRLY ESTIMA

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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 QUARTERLY. SAMPLE AT POINT OF DISCHARGE. SEE PAGES 16-17 FOR WET WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'S'. SEE PAGE 18 FOR DRY WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'U'. IF NO DISCHARGE USE '9'

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 A  
DISCHARGE NUMBER

MAJOR  
(SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

Form Approved.  
OMB No. 2040-0004

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	30

\*\*\* 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			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 U O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI [C]	( 03 )	*****	*****	*****				
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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

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

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

TELEPHONE  
413 494-3500  
AREA CODE NUMBER  
DATE  
2004 7 22  
YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
QUARTERLY. SAMPLE AT POINT OF DISCHARGE. SEE PAGES 16-17 FOR WET WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'S'. SEE PAGE 18 FOR DRY WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'U'. IF NO DISCHARGE USE '9'.

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)

MA0003871

PERMIT NUMBER

005 B

DISCHARGE NUMBER

MAJOR

(SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	04	01		04	06	30

\*\*\* 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			
PH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	7.9	( 12 )	0	01/90	GR
00400 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU SU		QTRLY	RANG-C
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	4.8	( 20 )	0	01/90	GR
00556 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	*****		*****	*****	2.9	( 21 )	0	01/90	GR
39516 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	0.007	( 03 )	*****	*****	*****		0	01/90	ES
50050 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD MGD	*****	*****	*****	**** ****		QTRLY	ESTIMA
	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

413 494-3500

AREA CODE NUMBER

DATE

2004 7 22

YEAR MO DAY

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

QUARTERLY. SAMPLE AT POINT OF DISCHARGE.



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

006 1  
 DISCHARGE NUMBER

MAJOR (SUBR W)  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	08	30

\*\*\* 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			
PH		*****	*****		7.1	*****	7.1	( 12)	0	01/90	GR
00400 S O O SEE COMMENTS BELOW		*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
PH		*****	*****		NODI [C]	*****	NODI [C]	( 12)			
00400 U O O SEE COMMENTS BELOW		*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
OIL & GREASE		*****	*****		*****	*****	4.9	( 20)	0	01/90	GR
00556 S O O SEE COMMENTS BELOW		*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
OIL & GREASE		*****	*****		*****	*****	NODI [C]	( 20)			
00556 U O O SEE COMMENTS BELOW		*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)		*****	*****		*****	*****	0.33	( 21)	0	01/90	GR
39516 S O O SEE COMMENTS BELOW		*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)		*****	*****		*****	*****	NODI [C]	( 21)			
39516 U O O SEE COMMENTS BELOW		*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT		*****	0.014	( 03)	*****	*****	*****		0	01/90	ES
50050 S O O SEE COMMENTS BELOW		*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA

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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 QUARTERLY. SAMPLE AT POINT OF DISCHARGE. SEE PAGES 16-17 FOR WET WEATHER REQUIREMENTS. FOR LIMITS WITH MONITORING LOCATION OF 'S'. SEE PAGE 18 FOR DRY WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'U'. IF NO DISCHARGE USE '9'

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

006 1  
 DISCHARGE NUMBER

MAJOR (SUBR W)  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	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			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 U O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODIC	( 03 )	*****	*****	*****				
	PERMIT REQUIREMENT	*****	REPORT	DAILY MX MGD	*****	*****	*****	****		QTRLY	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME OF 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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  


TELEPHONE: 413 494-3500  
 DATE: 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 QUARTERLY. SAMPLE AT POINT OF DISCHARGE. SEE PAGES 16-17 FOR WET WEATHER REQUIREMENTS. FOR LIMITS WITH MONITORING LOCATION OF 'S'. SEE PAGE 18 FOR DRY WEATHER REQUIREMENTS FOR LIMITS WITH MONITORING LOCATION OF 'U' IF NO DISCHARGE USE '9'

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)

MAJOR (SUBR W )  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

Form Approved.  
 OMB No. 2040-0004

MA0003891 PERMIT NUMBER  
 006 A DISCHARGE NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	30

\*\*\* 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			
PH	SAMPLE MEASUREMENT	*****	*****		7.0	*****	7.0	( 12 ) SU	0	01/90	GR
00400 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
OIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	0	( 20 ) PPM	0	01/90	GR
00556 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	*****		*****	*****	1.1	( 21 ) PPB	0	01/90	GR
39516 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	0.043	( 03 ) MGD	*****	*****	*****		0	01/90	ES
50050 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA
	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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):  
 QUARTERLY. SAMPLE AT POINT OF DISCHARGE

PERMITTEE NAME/ADDRESS (Include Facility Name/Location (D/F/errant))  
 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 D DISCHARGE NUMBER

MAJOR (SUBR W)  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	30

\*\*\* NO DISCHARGE 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			
PH 00400 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		NODI [E]	*****	NODI [E]	( 12)			
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
OIL & GREASE 00556 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 20)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 21)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI [E]	( 03)	*****	*****	*****				
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA
	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	TELEPHONE		DATE		
			413 494-3500		2004	7	22
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 QUARTERLY. SAMPLE AT POINT OF DISCHARGE.

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

SR0 1

DISCHARGE NUMBER

MAJOR

(SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	04	01		04	06	30

\*\*\* NO DISCHARGE 1-1 \*\*\*

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			
PH	SAMPLE MEASUREMENT	*****	*****		NODI [E]	*****	NODI [E]	( 12)			
00400 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	MINIMUM	*****	MAXIMUM	SU		QTRLY	RANG-C
DIL & GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 20)			
00556 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15	DAILY MX	PPM	QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS)	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 21)			
39516 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT	DAILY MX	PPB	QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	NODI [E]	( 03)	*****	*****	*****				
50050 S O O SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	REPORT	DAILY MX	MGD	*****	*****	*****	****	QTRLY	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll  
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

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*M. T. Carroll*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

413 494-3500

AREA CODE NUMBER

DATE

2004 7 22

YEAR MO DAY

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

SAMPLE AT POINT OF DISCHARGE.

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

SRO 2  
 DISCHARGE NUMBER

MAJOR (SUBR W )  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	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			
PH 00400 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		NODI [E]	*****	NODI [E]	( 12)			
	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
DIL & GREASE 00556 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 20)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 21)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI [E]	( 03)	*****	*****	*****				
	PERMIT REQUIREMENT	*****	REPORT DAILY MX	MGD	*****	*****	*****	****		QTRLY	ESTIMA
	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		
413 494-3500		2004	7	2a
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 SAMPLE AT POINT OF DISCHARGE.

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

SRO 3

DISCHARGE NUMBER

MAJOR

(SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

Form Approved.  
OMB No. 2040-0004

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	04	01		04	06	30

\*\*\* NO DISCHARGE 1 1 \*\*\*

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			
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	PERMIT REQUIREMENT	*****	*****	****	MINIMUM	*****	MAXIMUM	SU			QTRLY RANG-C
OIL & GREASE 00556 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	NODI [E]	( 20 )			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM			QTRLY GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	NODI [E]	( 21 )			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB			QTRLY GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI [E]	( 03 )	*****	*****	*****	*****			
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	PERMIT REQUIREMENT										

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

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

TELEPHONE: 413 494-3500  
DATE: 2004 7 22  
AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
SAMPLE AT POINT OF DISCHARGE

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)

MA0003871

PERMIT NUMBER

SRO 4

DISCHARGE NUMBER

MAJOR

(SUBR W)

F - FINAL

NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	04	04	01		04	06	30

\*\*\* 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			
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	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM			GRAB
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	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB			GRAB
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	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Michael T. Carroll  
Mgr. Pittsfield Remediation Prog.

TYPED OR PRINTED

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*M. T. Carroll*

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

413 494-3500

AREA CODE NUMBER

DATE

2004 7 22

YEAR MO DAY

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

SAMPLE AT POINT OF DISCHARGE



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

SRD 5  
 DISCHARGE NUMBER

MAJOR (SUBR W )  
 F - FINAL  
 NON PROCESS/STORMWATER BYPASS

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
04	04	01		04	06	30

\*\*\* 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			
PH 00400 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		NODI [E]	*****	NODI [E]	( 12)			
	PERMIT REQUIREMENT	*****	*****	****	5.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	RANG-C
OIL & GREASE 00556 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 20)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	15 DAILY MX	PPM		QTRLY	GRAB
POLYCHLORINATED BIPHENYLS (PCBS) 39516 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	*****		*****	*****	NODI [E]	( 21)			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	REPORT DAILY MX	PPB		QTRLY	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 S O O SEE COMMENTS BELOW	SAMPLE MEASUREMENT	*****	NODI [E]	( 03)	*****	*****	*****	*****			
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	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  
 Michael T. Carroll  
 Mgr. Pittsfield Remediation Prog.  
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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 413 494-3500  
 DATE 2004 7 22  
 AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)  
 SAMPLE AT POINT OF DISCHARGE

## ***Attachment C***

---

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

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

Samples collected in July 2004

Submitted to:

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

SGS Sample ID: TA4-G0-P410

Study Director: Ken Holliday

03 August 2004

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

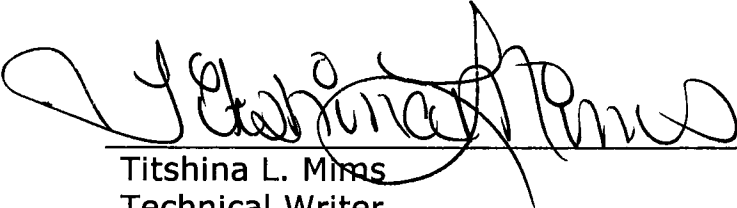
## Signatures and Approval

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

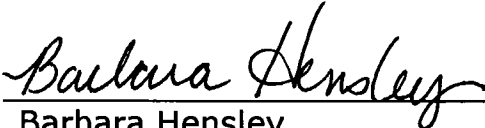
Tel: 304.346.0725  
Fax: 304.346.0761

  
\_\_\_\_\_  
Ken Holliday  
Study Director  
ken\_holliday@sgs.com

August 03, 2004  
*Date*

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

August 03, 2004  
*Date*

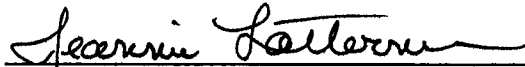
  
\_\_\_\_\_  
Barbara Hensley  
Project Manager  
barbara\_hensley@sgs.com

August 03, 2004  
*Date*

## Whole Effluent Toxicity Test Report Certification

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

Executed on: August 03, 2004  
Date



Authorized signature

Jeannie Latterner

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 4.0

SGS Study Number: TA4-G0-P410

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

GE Sample ID: A5798C

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

GE Sample ID: A5797R

Dates Collected: July 18, 2004 to July 19, 2004

Date Received: July 20, 2004

Test Dates: July 20, 2004 to July 22, 2004

Test Concentrations: 100% effluent  
75% effluent  
50% effluent  
35% effluent  
15% effluent  
5% effluent  
dilution water control  
reference control  
secondary reference control (sodium thiosulfate)

Results: The 48-hour LC50 value was determined to be >100% effluent. The No-Observed-Acute-Effect-Level (NOAEL) was observed to be 100% effluent.



## **1.0 Introduction**

### **1.1 Background**

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

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

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

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

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

## **1.3 Objective of the General Electric Study**

The objective of this study was to measure the acute toxicity of the composite wastewater discharged by the General Electric facility located in Pittsfield, Massachusetts, using *Daphnia pulex* under static conditions. Whereas *D. pulex* are not considered locally important, they are routinely used by regulatory agencies and contract laboratories nationwide for toxicity testing. A toxicity test was conducted from July 20, 2004 to July 22, 2004 at SGS Environmental Services, Charleston, West Virginia. All original raw data and the final report produced for this study are stored in SGS's archives at the above location.

## 2.0 Materials and Methods

### 2.1 Protocol

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

Title	Document Number	Version
Culture Waters for Aquatic Toxicity Testing	7005	4.0
Culture of <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 (A5798C) was collected by GE personnel July 18, 2004 to July 19, 2004. Upon receipt at SGS on July 20, 2004, the sample temperature was 4.6° C. The effluent sample was characterized as having

Parameter	Result
Total Hardness	340
Alkalinity (as CaCO <sub>3</sub> )	283
pH	7.42
Specific Conductance	1051
Dissolved Oxygen Concentration*	8.16

\*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 (A5797R) was collected by General Electric personnel on July 19, 2004. Upon receipt at SGS on July 20, 2004, the sample temperature was 4.6°C. The dilution water was characterized as having

<b>Parameter</b>	<b>Result</b>
Total Hardness	160
Alkalinity (as CaCO <sub>3</sub> )	110
pH	7.02
Specific Conductance	328
Dissolved Oxygen Concentration*	8.28

\*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	110
Alkalinity (as CaCO <sub>3</sub> )	69
pH	7.14
Specific Conductance	338
Dissolved Oxygen	8.88

## 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 (*Selenastrum capricorium*), approximately 4.0 x 10<sup>7</sup> 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°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 July 20, 2004 to July 22, 2004. The reference test was conducted to establish the health of the test organisms. The reference toxicity test included five NaCl concentrations and a dilution water control (moderately hard reconstituted water). The nominal NaCl concentrations for the test with *Daphnia pulex* ranged from 625 to 10,000 mg of NaCl/L. Test methods were the same as those described above for the effluent test.

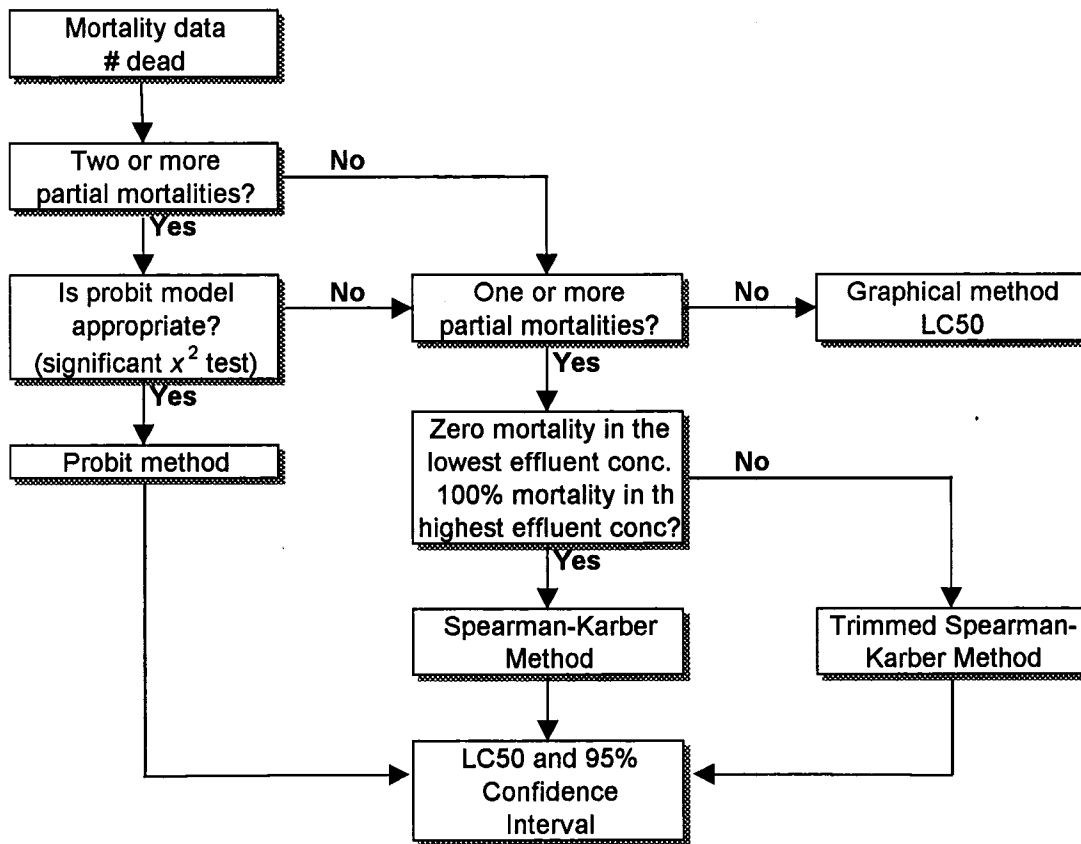
### **3.0 Statistics**

The concentration-response relationships observed were characterized by the median lethal concentrations (LC50), which is the concentration that is calculated to be lethal to 50 percent of the organisms within the test period. If no concentration caused mortality of 50%, then the LC50 value was determined to be greater than the highest concentration tested and no statistical analysis were performed. If at least one concentration caused mortality of greater than 50% of the test population, then a computer program (TOXSTAT 3.5) was used to calculate the LC50 value. Three statistical methods were available in the computer program: probit analysis, the Trimmed Spearman-Kärber, and the Spearman-Kärber 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 July 20, 2004 to July 22, 2004, and the resulting 48-hour LC<sub>50</sub> was estimated by Trimmed Spearman-Kärber Method to be 1830 mg NaCl/L (95% confidence intervals of 1490 to 2246 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. 1993. for *Measuring the Acute Toxicity of Effluents and Receiving Methods Waters to Freshwater and Marine Organisms*. EPA/600/4-90/027F.

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

<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	0.02 mg/L
Total Residual Chlorine	Standard Methods 4500-Cl G	0.01 mg/L
Total Suspended Solids	EPA 160.2	5.0 mg/L

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

<b>Parameter</b>	<b>Effluent (A5798C)</b>	<b>Housatonic River (A5797R)</b>
Temperature	20.2°C	20.2°C
pH	7.42	7.02
Alkalinity (as CaCO <sub>3</sub> )	283 mg/L	110 mg/L
Hardness (as CaCO <sub>3</sub> )	340 mg/L	160 mg/L
Dissolved Oxygen	8.16 mg/L	8.28 mg/L
Specific Conductivity	1051 µmhos/cm	328 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	0.025 mg/L	ND
Chloride	120 mg/L	21 mg/L
Total Suspended Solids	6.0 mg/L	9.0 mg/L
Total Solids	600 mg/L	210 mg/L
Total Organic Carbon	4.7 mg/L	5.8 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	7.11	7.18	8.84	8.71	8.72	20.2	19.7
Secondary Ref Control	7.14	7.20	7.23	8.88	8.67	8.60	20.2	19.7	20.4
Dilution Water Control	7.02	7.08	7.11	8.28	8.34	8.40	20.2	19.7	20.4
5% Effluent	7.08	7.12	7.17	8.24	8.34	8.37	20.2	19.7	20.4
15% Effluent	7.14	7.18	7.20	8.25	8.38	8.38	20.2	19.7	20.4
35% Effluent	7.28	7.32	7.37	8.21	8.28	8.34	20.2	19.7	20.4
50% Effluent	7.35	7.41	7.44	8.20	8.33	8.39	20.2	19.7	20.4
75% Effluent	7.39	7.45	7.49	8.19	8.24	8.29	20.2	19.7	20.4
100% Effluent	7.42	7.51	7.53	8.16	8.27	8.32	20.2	19.7	20.4

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**



# CT&E Environmental Services Inc.

## Standard Operating Procedure

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 Method Reference: CT&E/USEPA  
 Document File Name: 7002-04.DOC  
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Approved by: *Ken Holladay* 10/21/98  
 Supervisor Date  
 Approved by: *Myra M. Wark* 10/20/98  
 QA/QC Officer Date

### 1.0 SUMMARY

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

### 2.0 REFERENCES

- 2.1 Weber, Cornelius I., *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition. EPA-600/4-90/027. U.S.EPA, Cincinnati, Ohio.
- 2.2 *Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency*, October, 1991.
- 2.3 *Toxics Management Program's Guidance for Conduction and Reporting the Results of Toxicity Tests in Fulfillment of VPDES Permit Requirements*, Revised July 1992.

### 3.0 SCREENING

#### 3.1 Test Duration

24 Hours, 48 Hours or 96 Hours.

#### 3.2 Test Preparation

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

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

- 3.2.2 Twenty organisms per concentration are used in acute screening tests.
- 3.2.3 This is a static, non-renewal test, using *Ceriodaphnia dubia*, *Daphnia pulex*, *Daphnia magna*, or *Pimephales promelas* (Fathead minnow).
- 3.2.4 Water quality (D.O., pH, conductivity, hardness, alkalinity and TRC), is measured at the time of test initiation. At test termination, temperature, D.O. conductivity and pH are measured. The final mortality and percent effected counts are recorded. Temperature is maintained at  $25^{\circ} \pm 1^{\circ}\text{C}$  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

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

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

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

#### 4.1.4 Loading

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

#### 4.1.5 Test Temperature

20° C (± 1)

#### 4.1.6 Daily Procedures

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

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

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

#### 4.1.7 Feeding

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

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

#### 4.2.1 Test Duration

48-Hours

#### 4.2.2 Static Non-renewal

#### 4.2.3 Test Preparation

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

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

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

#### 4.2.4 Loading

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

#### 4.2.5 Test Temperature

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

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### 4.2.6 Daily Procedure

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

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

### 4.2.7 Photoperiod

16 hours light, 8 hours dark.

### 4.2.8 Feeding

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

## 5.0 TEST DATA

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

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

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

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

5.1.4 Any atypical behavior or complications are recorded.

## 6.0 DATA ANALYSIS

### 6.1 Introduction

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

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

### 6.2 Methods for Estimating the LC50 & EC50

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

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

## 7.0 REPORT PREPARATION

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

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

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

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

7.1.4 Reference Toxicity Data

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Approved by: Ken Holliday  
Supervisor

10/21/98  
Date

Approved by: Lydia M. Wark  
QA/QC Officer

10/20/98  
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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Approved by: Ken Halliday 3/23/2001  
 Supervisor Date

Approved by: Lynda M. Work 3/23/2001  
 QA/QC Officer 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 (*Selanastrum capricorium*) on Monday, Wednesday and Friday. Feeding, as well as culture rotation, temperature and all other relevant data is recorded by species in a log book.
- 2.5 Stock cultures are also fed algae and YCT. These feedings are recorded in the log book.

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

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

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

**4.0 Obtaining Neonates for Testing**

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

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

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

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

**5.0 DAPHNIA Food**

**5.1 Digested Flake Food**

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

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

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

5.1.4 Filter through fine mesh.

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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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Supervisor

3/23/2001  
Date

Approved by: [Signature]  
QA/QC Officer

3/23/2001  
Date

### 1.0 Summary

To insure that healthy organisms are used in testing, CT&E performs monthly QA/QC tests on all in-house cultured organisms. CT&E uses Sodium Chloride as a reference toxicant.

### 2.0 *Pimephales promelas*

- 2.1 48 hour static acute toxicity tests are run at 20°C ( $\pm 1^\circ\text{C}$ ) using fish 1 to 14 days old.
- 2.2 This test consists of a control and a dilution series of 10g/L, 9g/L, 8g/L, 7g/L, and 6g/L, of sodium chloride. Other dilution series may be used.
- 2.3 The dilutions are prepared in 800 ml disposable plastic beakers using moderately hard synthetic water. 500 mls of test solution is placed in each of two replications. Water quality values are measured and recorded at this time.
- 2.4 Ten organisms are placed in each replicate. Fish are loaded by first siphoning them into a shallow pan from which they are transferred to the beakers with a large bore pipette.
- 2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

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

- 3.1 48 hour static acute tests are performed at 25°C ( $\pm 1^\circ\text{C}$ ) using organisms less than 24 hours old.
- 3.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.
  - 3.2.1 *Ceriodaphnia dubia*, *Daphnia pulex*: 10, 5, 2.5, 1.25, 0.625 grams/L

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**Standard Operating Procedure**

036

Document Title: Reference Toxicant Testing  
Method Reference: CT&E/USEPA  
Document File Name: 7008-05.DOC  
Revision Number: 5.0  
Effective Date: March 12, 2001

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Document Control Number: 7008

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3.2.2 *Daphnia magna*: 10, 5, 2.5, 1.25, 0.625 grams/L

- 3.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.
- 3.4 Four organisms are placed in each test vessel. The *Daphnids* are loaded with a disposable plastic pipette. Organisms are gently released below the surface of the water to minimize risk of injury.
- 3.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

**4.0 Data Analysis**

- 4.1 Toxicity tests are conducted on a monthly basis.
- 4.2 The LC<sub>50</sub> is calculated according to EPA protocols.
- 4.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

037

Document Title: Sample Handling for Aquatic Toxicity Testing  
Method Reference: CT&E/USEPA  
Document File Name: 7009-04.DOC  
Revision Number: 4.0  
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Document Control Number: 7009

Page 1 of 3

Approved by: *Ken Holliday*  
Supervisor

10/21/98  
Date

Approved by: *Judith M. U. Davis*  
QA/QC Officer

10/20/98  
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

CT&E's sampling personnel are trained and experienced in the techniques for collecting samples according to NPDES permit requirements. This includes the use of automatic sampling equipment and the measurement of various field parameters.

#### 2.2 Sample Containers

Sample containers used by CT&E are disposable plastic cubitainers®.

#### 2.3 Sample Collection Points

For NPDES permit required tests, the sample will be collected at the point specified in the discharge permit unless otherwise directed by the regulatory agency.

#### 2.4 Sample Shipment

Samples are placed on ice (sufficient to maintain 0-4°C) in a cooler and are transported as quickly as possible to the laboratory.

#### 2.5 Laboratory Handling of Samples

Upon delivery to the laboratory, the effluent samples are inspected, given a sample control number and stored at 4° C until used for testing.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

058

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Method Reference: CT&E/USEPA  
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Document Control Number: 7009.

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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. CT&E has access to municipally supplied water, well water and reagent water from which synthetic water is prepared. Waters used for culturing and testing are analyzed semiannually for priority pollutants and other contaminants. A detailed report is available.

### 3.4 Lighting

Ambient laboratory lighting is regulated with a 16 hour day/8 hour night photoperiod controlled by an electronic timing system in the culturing and testing areas.

## 4.0 LABORATORY EQUIPMENT

### 4.1 General

Instruments used for the measurement of physical and chemical parameters are calibrated prior to use in testing. Any instrument that exceeds the calibration limits is taken out of service and corrective action is taken.



# CT&E Environmental Services Inc.

## Standard Operating Procedure

039

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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**

### **Chain of Custody**

Chain of Custody Record

General Electric Co.

100 Woodlawn Ave. Pittsfield, MA 01201

410  
TAC-GO-P44-72

Chain of Custody #: DBG071904-1

Split Sample

Wet Weather Acute Aquatic Toxicity for July 2004 / Chronic TOX #1 July 2004

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) <u>Mark Wasniewsky</u>		
Sample #	Date	Time	Containers	Parameters to be Analyzed	Preservative	Remarks
<u>A5798C</u>	<u>7/18 to 7/19/04</u>	<u>11<sup>00</sup> AM</u>	<u>1 Gallon plastic</u>	<u>Definitive Test(LC50 and NOAEL), Static acute toxicity, 48 hr w/ Daphnia pulex</u>	<u>Chilled</u>	<u>(See below)</u>
	<u>to</u>		<u>1000 ml. plastic</u>	<u>Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2</u>	<u>Chilled</u>	
	<u>to</u>		<u>500 ml. plastic</u>	<u>Total Phosphorus, TOC, NH3</u>	<u>H2SO4</u>	
<u>A5797R</u>	<u>7-19-04</u>	<u>9<sup>00</sup> AM</u>	<u>1 Gallon plastic</u>	<u>Housatonic River water dilution water for definitive test</u>	<u>Chilled</u>	
			<u>1000 ml. plastic</u>	<u>Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2</u>	<u>Chilled</u>	
			<u>500 ml. plastic</u>	<u>Total Phosphorus, TOC, NH3</u>	<u>H2SO4</u>	
Relinquished By: <u>Mark Wasniewsky</u>		Date/Time <u>7-19-04</u>	Received By: <u>[Signature]</u>		Date/Time <u>7-19-04 1400</u>	
Relinquished By:		Date/Time	Received By: <u>[Signature]</u>		Date/Time <u>7/20/04 0945</u>	
<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- <u>8<sup>05</sup> AM</u>   004- <u>8<sup>00</sup> AM</u>   005-64T- <u>7<sup>00</sup> AM</u>   005-64G- <u>7<sup>00</sup> AM</u>   007- <u>7<sup>40</sup> AM</u>   09A- <input checked="" type="checkbox"/>   09B- <u>7<sup>50</sup> AM</u></p> <p>The time of compositing the final flow-proportioned sample was <u>11<sup>00</sup> A.M.</u></p>						

## **Appendix III**

### **Bench Data**

# General Electric - 48-hour Acute Biotoxicity Bench Sheet

Client: General Electric

Project: \_\_\_\_\_

Lab. No.: TA4-GO-P44-051/002 <sup>410 KH</sup>

Date Received: 7/20/04

Sample Date: 7/18-19/04 Time: 11:00

Date Analyzed: 7/20/04

Source: EFFLUENT COMPOSITE

Analyst(s): KH

Source of dilution water: Housatonic River Water

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

Type of Test: 48-Hour Static Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	<u>7/20/04</u>	<u>7/22/04</u>
Time:	<u>1100</u>	<u>1100</u>

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	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>	<u>20.2</u>
Hardness	<u>160</u>	<u>110</u>	<u>110</u>						<u>340</u>
D.O.	<u>8.28</u>	<u>8.84</u>	<u>8.88</u>	<u>8.24</u>	<u>8.25</u>	<u>8.21</u>	<u>8.20</u>	<u>8.19</u>	<u>8.16</u>
pH	<u>7.02</u>	<u>7.08</u>	<u>7.14</u>	<u>7.08</u>	<u>7.14</u>	<u>7.28</u>	<u>7.35</u>	<u>7.39</u>	<u>7.42</u>
Alkalinity	<u>110</u>	<u>67</u>	<u>69</u>						<u>283</u>
Sp. Conduct.	<u>328</u>	<u>331</u>	<u>338</u>	<u>360</u>	<u>382</u>	<u>642</u>	<u>708</u>	<u>913</u>	<u>1051</u>
<b>24 HOUR</b>									
No. Surviving	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
Temperature	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>	<u>19.7</u>
D.O.	<u>8.34</u>	<u>8.71</u>	<u>8.67</u>	<u>8.34</u>	<u>8.38</u>	<u>8.28</u>	<u>8.33</u>	<u>8.24</u>	<u>8.27</u>
pH	<u>7.08</u>	<u>7.11</u>	<u>7.20</u>	<u>7.12</u>	<u>7.18</u>	<u>7.32</u>	<u>7.41</u>	<u>7.45</u>	<u>7.51</u>
Sp. Conduct.	<u>337</u>	<u>338</u>	<u>341</u>	<u>368</u>	<u>393</u>	<u>658</u>	<u>714</u>	<u>920</u>	<u>1063</u>
<b>48 HOUR</b>									
No. Surviving	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
Temperature	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>	<u>20.4</u>
D.O.	<u>8.40</u>	<u>8.72</u>	<u>8.60</u>	<u>8.37</u>	<u>8.38</u>	<u>8.34</u>	<u>8.39</u>	<u>8.29</u>	<u>8.32</u>
pH	<u>7.11</u>	<u>7.18</u>	<u>7.23</u>	<u>7.17</u>	<u>7.20</u>	<u>7.37</u>	<u>7.44</u>	<u>7.49</u>	<u>7.53</u>
Sp. Conduct.	<u>341</u>	<u>345</u>	<u>349</u>	<u>374</u>	<u>404</u>	<u>671</u>	<u>722</u>	<u>931</u>	<u>1077</u>

Method Reference: *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition. EPA-600/4-90/027F. U.S.EPA, Cincinnati, Ohio.

## Acute Biotoxicity Bench Sheet

Client: QC  
 Project: Reference Toxicant Lab. No.: —  
 Date Received: \_\_\_\_\_  
 Sample Date: \_\_\_\_\_ Time: \_\_\_\_\_ Date Analyzed: \_\_\_\_\_  
 Source: NaCl Analyst: KH  
 Source of dilution water: Moderately Hard Synthetic Water  
 Test Species: Daphnia pulex Age: <24 hours Temp. Range: \_\_\_\_\_ °C  
 Type of Test: \_\_\_\_\_

Total Chlorine: \_\_\_\_\_

	Beginning	Ending
Date:	7/20/04	7/22/04
Time:	1500	1500

Concentration	Control		625	1250	2500	5000	10,000
<b>START</b>							
Temperature	20.7		20.7	20.7	20.7	20.7	20.7
Hardness	110						120
D.O.	8.9		8.9	8.9	8.9	8.9	8.9
pH	7.0		7.0	7.1	7.2	7.2	7.2
Alkalinity	69						75
Sp. Conduct.	329		1113	2240	3780	6980	10720
<b>24 HOUR</b>							
Temperature	20.4		20.4	20.4	20.4	20.4	20.4
No. Surviving	20		20	15	15	6	0
<b>48 HOUR</b>							
Temperature	20.1		20.1	20.1	20.1	20.1	20.1
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*

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: 07/20/04  
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	6	13	20	20
SPEARMAN-KARBER TRIM:	0.00%				

SPEARMAN-KARBER ESTIMATES: LC50: 1830.11  
95% LOWER CONFIDENCE: 1490.84  
95% UPPER CONFIDENCE: 2246.58

---

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



## Toxicity Test Summary Sheet

Facility Name: General Electric Co. Test Start Date: July 20, 2004  
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): July 18, 2004 to July 19, 2004

Effluent concentrations tested (in %): 100 75 50 35 15 5  
\*(Permit limit concentration): N/A

Was effluent salinity adjusted? No  
If yes, to what value? N/A ppt  
With sea salts? N/A Hypersaline brine solution? N/A

Actual effluent concentrations tested after salinity adjustment  
(in %): N/A N/A N/A N/A N/A N/A

Reference Toxicant Test Date: July 20, 2004 to July 22, 2004

N/A= not applicable

## Permit Limits & Test Results

### Test Acceptability Criteria

MEAN CONTROL SURVIVAL: 100%      MEAN CONTROL REPRODUCTION: N/A

MEAN CONTROL WEIGHT: N/A      MEAN CONTROL CELL COUNT: N/A

Limits		Results	
LC50	<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 July 2004]***



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

Samples collected in July 2004

Submitted to:

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

SGS Sample ID: TA4-G0-P411

Study Director: Ken Holliday


05 August 2004

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

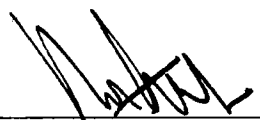
## Signatures and Approval

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

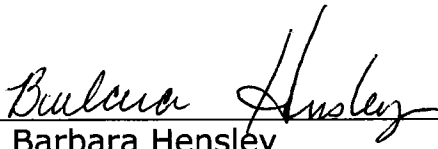
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\_\_\_\_\_  
Ken Holliday  
Study Director  
ken.holliday@sgs.com

5 August 2004  
\_\_\_\_\_  
*Date*

  
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5 August 2004  
\_\_\_\_\_  
*Date*

  
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Barbara Hensley  
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barbara.hensley@sgs.com

5 August 2004  
\_\_\_\_\_  
*Date*

## Whole Effluent Toxicity Test Report Certification

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

Executed on: 5 August 2004  
Date

  
Authorized signature

Jeannie Latterner  
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 July 18, 2004 to July 23, 2004. The freshwater species, *Ceriodaphnia dubia*, was exposed to the effluent under static-renewal conditions. Acute endpoints were derived 48-hours into the chronic studies.

### Acute Toxicity Evaluation

Species	Exposure Period	LC <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 4.0

Study Number: TA4-G0-P411

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

GE Sample ID: A5798C, A5800C and A5802C

Dilution Water: Water from the Housatonic River

Dilution Water ID: A5797R, A5799R and A5801R

Dates Collected:	<u>Effluent</u>	<u>Dilution Water</u>
	7/18/04 to 7/19/04 (A5798C)	7/19/04 (A5797R)
	7/20/04 to 7/21/04 (A5800C)	7/21/04 (A5799R)
	7/22/04 to 7/23/04 (A5802C)	7/23/04 (A5801R)

Dates Received: 7/20/04, 7/22/04, 7/24/04

Test Dates: 7/20/04 to 7/27/04

Test Concentrations: 100% effluent  
 75% effluent  
 50% effluent  
 25% effluent  
 12.5 effluent  
 6.25% effluent  
 dilution water control (Housatonic River)  
 reference control (moderately hard reconstituted water)  
 secondary reference control (sodium thiosulfate)

Test Type: Chronic static renewal

Temperature: 25°C (± 1°C)

Light Intensity: 90 to 100 foot-candles

Photoperiod: 16 hours light, 8 hours dark

Size of Test Chamber: 30 ml medicine cups

Test Solution Volume: 20 ml per medicine cup

Renewal of solutions: Test solutions were renewed daily using the most recently collected effluent sample.

Age of Organisms: The test organisms were less than 24-hours old and were all hatched within an 8-hour period of each other.

Number of Neonates per test chamber: 1 daphnid per test chamber (replicate)

Number of Replicate Test Chambers per treatment: 10 test chambers (replicates) per concentration

Feeding regime: Daphnid cultures were fed a combination of green algae (*Selenastrum capricorium*) and YCT (yeast, cereal leaves and trout chow).

Aeration: The effluent sample was supersaturated by aeration prior to use in the test.

Results:

- LC<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 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 waste waters 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 July 20, 2004 to July 27, 2004 at SGS Environmental Services, Charleston, West Virginia. All original raw data and the final report produced for this study are stored in SGS's archives at the above location.

## 2.0 Materials and Methods

### 2.1 Protocol

Procedures used in this chronic toxicity test followed those described in the SGS Standard Operating Procedure (SOP) entitled *Chronic Aquatic Toxicity Testing*, SGS document control number 7003, version 4.0. This SOP generally follows the standard methodology described by the U.S. Environmental Protection Agency.

Additional SOPs used in this study are outlined below:

Title	Document Number	Version
Culture Waters for Aquatic Toxicity Testing	7005	4.0
<i>Daphnia</i> , Culture of	7006	5.0
Reference Toxicant Testing	7008	5.0

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

### 2.2 Effluent Sample

The first effluent sample (A5798C) was collected by GE personnel from July 18, 2004 to July 19, 2004, and was used to initiate the short-term chronic test and renewal of the test solutions on Day 1 and Day 2. Upon receipt at SGS on July 20, 2004, the sample temperature was 4.6° C. The effluent sample was characterized as having

**Sample #1 – collected from 7/18/04 to 7/19/04**

Parameter	Result
Total Hardness	300
Alkalinity (as CaCO <sub>3</sub> )	288
pH	7.74
Specific Conductance	1033



**Sample #1 – collected from 7/18/04 to 7/19/04**

Parameter	Result
Dissolved Oxygen Concentration*	8.33
Appearance	Clear

The second effluent sample (A5800C) was collected by GE personnel from July 20, 2004 to July 21, 2004, and was used for renewal of test solutions on Day 3 and Day 4. Upon receipt at SGS on July 22, 2004, the sample temperature was 4.3° C. The effluent sample was characterized as having

**Sample #2 – collected from 7/20/04 to 7/21/04**

Parameter	Result
Total Hardness	250
Alkalinity (as CaCO <sub>3</sub> )	315
pH	7.25
Specific Conductance	1085
Dissolved Oxygen Concentration*	8.39
Appearance	Clear

The third effluent sample (A5802C) was collected by GE personnel from July 22, 2004 to July 23, 2004, and was used for renewal of test solutions on Days 5, 6 and 7. Upon receipt at SGS on July 24, 2004, the sample temperature was 4.2° C. The effluent sample was characterized as having

**Sample #3 – collected from 7/22/04 to 7/23/04**

Parameter	Result
Total Hardness	350
Alkalinity (as CaCO <sub>3</sub> )	274
pH	7.59
Specific Conductance	1122
Dissolved Oxygen Concentration*	8.23
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 (A5797R) was collected by General Electric personnel on July 19, 2004, and was used with the Day 1 and Day 2 test. Upon receipt at SGS, the sample temperature was 4.6°C. The dilution water sample was characterized as having

<b>Dilution Water #1</b>		<b>Collected 07/19/04</b>
<b>Parameter</b>		<b>Result</b>
Total Hardness		210
Alkalinity (as CaCO <sub>3</sub> )		110
pH		6.78
Specific Conductance		320
Dissolved Oxygen Concentration*		8.31
Appearance:		Slight yellow color

The second dilution water sample (A5799R) was collected by General Electric personnel on July 21, 2004, and was used with the Day 3 and Day 4 tests. Upon receipt at SGS, the sample temperature was 4.3°C. The dilution water sample was characterized as having

<b>Dilution Water #2</b>		<b>Collected 07/21/04</b>
<b>Parameter</b>		<b>Result</b>
Total Hardness		230
Alkalinity (as CaCO <sub>3</sub> )		104
pH		7.09
Specific Conductance		307
Dissolved Oxygen Concentration*		8.31
Appearance:		Slight yellow color

The third dilution water sample (A5801R) was collected by General Electric personnel on July 23, 2004, and was used with the Day 5, 6 and 7 tests. Upon receipt at SGS, the sample temperature was 4.2°C. The dilution water sample was characterized as having

<b>Dilution Water #3</b>	<b>Collected 07/23/04</b>
<b>Parameter</b>	<b>Result</b>
Total Hardness	240
Alkalinity (as CaCO <sub>3</sub> )	106
pH	7.28
Specific Conductance	297
Dissolved Oxygen Concentration*	8.07
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:

<b>Parameter</b>	<b>Result</b>
Total Hardness	100 – 110
Alkalinity (as CaCO <sub>3</sub> )	69 – 76
pH	6.9 – 7.1
Specific Conductance	338 – 360

**2.5 Secondary Reference Control**

A secondary reference control consisted of deionized (DI) water adjusted to the appropriate hardness (moderately hard reconstituted water) and sodium thiosulfate (0.1 N).

**2.6 Test Organisms**

*Ceriodaphnia dubia*→

Daphnids (*Ceriodaphnia dubia*), less than 24-hours old, were obtained from SGS laboratory cultures maintained in Charleston. The culture system consisted of twenty-four (24) 100 ml disposable plastic beakers each containing 80 ml of culture medium



and one (1) daphnid. The culture medium was deionized (DI) water for which the hardness was raised by addition of reagent grade chemicals (U.S. EPA, 1993). Prior to use, the culture water was characterized:

Parameter	Result
Total Hardness	within range of 80-110 mg/L
Alkalinity (as CaCO <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 x 10<sup>7</sup> 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 a 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 July 20, 2004 to July 27, 2004. The reference test was conducted to establish the health of the test organisms. The reference toxicity test included five NaCl concentrations and a dilution water control (moderately hard reconstituted water). The nominal NaCl concentrations for the test with *Ceriodaphnia dubia* was 500, 1000, 2000, 3000 and 4000 mg of NaCl/L. Test methods were the same as those described above for the effluent test.

### **3.0 Statistics**

All data generated during the test was tabulated, summarized and analyzed by SGS. The data generated at the end of 48 hours were analyzed and when appropriate a median lethal concentration ( $LC_{50}$ ) was calculated. This value was derived using a computerized statistical method (TOXSTAT 3.5), which was also used to calculate confidence levels were possible for each test organism.

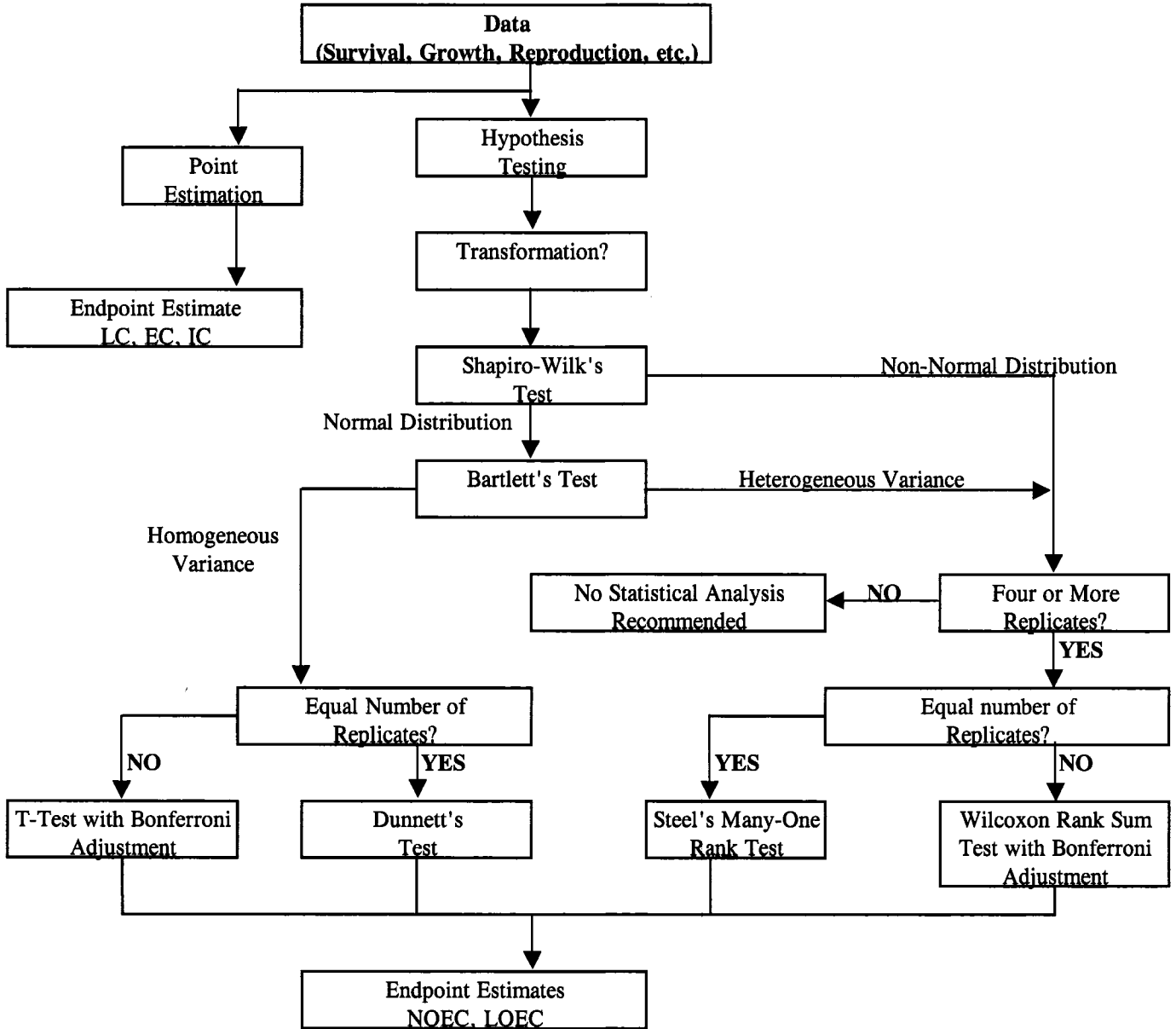
If partial mortalities were observed in at least two concentrations, the probit analysis, which yields  $LC_{50}$  values and 95 percent confidence levels, was used. When fewer than two partial mortalities were observed, the moving average method, binomial method, or non-linear interpolation, was used to generate  $LC_{50}$ s. The final report specifies the statistical methods used.

The Shapiro-Wilk's test and Bartlett's test are performed on all other chronic data to test for normality of data distribution and homogeneity of variance between treatments.

Concentrations above the NOECL for survival were excluded from the hypothesis tests for reproduction and growth. If assumptions of parametric analysis (Shapiro-Wilk's test and Bartlett's test) are met, the reproduction data will be analyzed using Dunnett's procedure or the T-test with Bonferroni Adjustment. If assumptions are not met, Steel's Many-One Rank test or Wilcoxon Rank Sum test with Bonferroni Adjustment (non-parametric analyses) are used to analyze data. Fisher's Exact is used to analyze Ceriodaphnia survival data. The final report specifies the statistical methods used.

Generally, to choose the best estimate values for a particular data set, the U.S. EPA flow chart on page 21 was followed.

**Flowchart for Statistical Analysis of Data**





## 4.0 Results

### 4.1 Effluent Toxicity Test

The methods and detection limits of chemical analyses performed on the composite effluent sample and dilution water are summarized in Table 1. Results of the characterization and analysis of the effluent and the dilution water are presented in Table 2. Water quality parameters measured during the toxicity test are presented in Table 3. Daily and continuous monitoring of the test solutions established the temperature ranged from 24°C to 26°C throughout the exposure period. The effluent concentration was tested (expressed as %) and the corresponding percent mortalities recorded during the 48-hour toxicity test are presented in Table 4.

The percent survival and number of offspring produced during the 7-day exposure to *C. dubia* are presented in Table 4. The 48-hour LC<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 →	23.2	25.1	25.2	25.7	20.7	23.5	25.0	20.5	23.0

(secondary reference control = sodium thiosulfate)

Statistical analyses of *C. dubia* reproduction using Dunnett's did not established a difference between the 100% effluent concentration and the control group. The NOCEL, based on reproduction, was therefore determined to be 100% effluent. The Lowest-Observed-Chronic-Effect-Level (LOCEL), based on reproduction, was determined to be >100% effluent. The Maximum-Acceptable-Wastewater-Concentration (MAWC) was calculated to be 100% effluent.

#### **4.2 Reference Toxicity Test**

SGS uses sodium chloride (NaCl) as a reference toxicant. The reference test was conducted from July 9, 2004 to July 11, 2004, and the resulting 48-hour LC<sub>50</sub> was estimated by Spearman-Kärber Trim to be 1318 mg of NaCl/L (95% confidence intervals of 1104 to 1574 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-600/4-91/002. U.S.EPA, Cincinnati, Ohio.

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

<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	10.0 mg/L
Total Organic Carbon	EPA 415.1	1.0 mg/L
Total Solids	EPA 160.3	10.0 mg/L
Phosphorus, Total as P	Standard Methods 4500PE	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 07/18/04 to 07/19/04  
 Dilution water collected on 07/19/04  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

Parameter	Effluent (A5798C)	Housatonic River (A5797R)
Temperature	20.2°C	20.2°C
pH	7.42	7.02
Alkalinity (as CaCO <sub>3</sub> )	283 mg/L	110 mg/L
Hardness (as CaCO <sub>3</sub> )	340 mg/L	160 mg/L
Dissolved Oxygen*	8.16 mg/L	8.28 mg/L
Specific Conductivity	1051 µmhos/cm	328 µmhos/cm
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	0.025 mg/L	ND
Chloride	120 mg/L	21 mg/L
Total Suspended Solids	6.0 mg/L	9.0 mg/L
Total Solids	600 mg/L	210 mg/L
Total Organic Carbon	4.7 mg/L	5.8 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 2b. Sample #2 – collected from 07/20/04 to 07/21/04  
 Dilution water collected on 07/21/04  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

Parameter	Effluent (A5800C)	Housatonic River (A5799R)
Temperature	25.6°C	25.6°C
pH	7.25	7.09
Alkalinity (as CaCO <sub>3</sub> )	315	104
Hardness (as CaCO <sub>3</sub> )	250	230
Dissolved Oxygen	8.39	8.31
Specific Conductivity	1085	307
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	ND	ND
Chloride	150 mg/L	20 mg/L
Total Suspended Solids	ND	5 mg/L
Total Solids	660 mg/L	310 mg/L
Total Organic Carbon	4.9 mg/L	5.6 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 07/22/04 to 07/23/04  
 Dilution water collected on 07/23/04  
 Results of the characterization and analyses of the General  
 Electric Pittsfield Plant effluent and the dilution water  
 (Housatonic River).**

<b>Parameter</b>	<b>Effluent (A5802C)</b>	<b>Housatonic River (A5801R)</b>
Temperature	24.7°C	24.7°C
pH	7.59	7.28
Alkalinity (as CaCO <sub>3</sub> )	274	106
Hardness (as CaCO <sub>3</sub> )	350	240
Dissolved Oxygen	8.23	8.07
Specific Conductivity	1122	297
Salinity	N/A	N/A
Total Residual Chlorine	ND	ND
Ammonia as N (0-Hour)	ND	ND
Total Phosphorus as P	ND	0.037 mg/L
Chloride	160 mg/L	20.0 mg/L
Total Suspended Solids	ND	8.0 mg/L
Total Solids	660 mg/L	170 mg/L
Total Organic Carbon	5.6 mg/L	8.1 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	6.78-7.34	8.07-8.31	24.7-25.6	282-328
Reference Control	7.04-7.13	8.84-8.91	24.7-25.6	326-330
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	7.09-7.17	8.89-8.94	24.7-25.6	334-339
6.25% effluent	6.82-7.39	8.11-8.33	24.7-25.6	320-369
12.5% effluent	7.02-7.44	8.15-8.34	24.7-25.6	362-408
25% effluent	7.17-7.48	8.17-8.33	24.7-25.6	528-591
50% effluent	7.19-7.52	8.17-8.35	24.7-25.6	647-791
75% effluent	7.20-7.59	8.20-8.37	24.7-25.6	804-977
100% effluent	7.21-7.74	8.23-8.39	24.7-25.6	1016-1122

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						
	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	29	7	79	135	25.0
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Control	0	0	0	36	5	76	113	23.0
Control	0	0	0	30	16	47	112	20.5
6.25	0	0	0	38	3	80	116	23.2
12.5	0	0	0	35	5	77	139	25.1
25	0	0	0	43	2	93	114	25.2
50	0	0	0	36	3	93	125	25.7
75	0	0	0	37	5	90	95	20.7
100	0	0	0	35	1	87	112	23.5

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

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



## **Appendix I**

## **References**

# CT&E Environmental Services Inc.

## Standard Operating Procedure

C31

Document Title: Procedure for Chronic Aquatic Toxicity Testing  
Method Reference: CT&E/USEPA  
Document File Name: 7003-04.DOC  
Revision Number: 4.0  
Effective Date: October 20, 1998

Document Control Number: 7003.04

Page 1 of 7

Approved by: *Ken Hollister*  
Supervisor

10/21/98  
Date

Approved by: *Joyce M. Drake*  
QA/QC Officer

10/20/98  
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

# CT&E Environmental Services Inc.

## Standard Operating Procedure

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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

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from the 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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## Standard Operating Procedure

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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. CT&E 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 CT&E 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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## Standard Operating Procedure

Document Title: Procedure for Chronic Aquatic Toxicity Testing  
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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.*, Second Edition. EPA-600/4-89/001. U.S.EPA, Cincinnati, Ohio.
- 7.2 *Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency*, October, 1991.



# CT&E Environmental Services Inc.

## Standard Operating Procedure

C38

Document Title: Culture Waters for Aquatic Toxicity Testing  
Method Reference: CT&E/USEPA  
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Document Control Number: 7005.

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Approved by: Ken Halliday  
Supervisor

10/21/98  
Date

Approved by: Lynda M. Ward  
QA/QC Officer

10/20/98  
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.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

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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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## Standard Operating Procedure

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Document Title: Culture Waters for Aquatic Toxicity Testing  
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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.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

C41

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

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Document Control Number: 7006

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Approved by: Ken Halliday 3/23/2001  
Supervisor Date  
Approved by: Michael W. Dark 3/23/2001  
QA/QC Officer 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.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

042

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

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

#### 4.0 Obtaining Neonates for Testing

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

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

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

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

#### 5.0 DAPHNIA Food

##### 5.1 Digested Flake Food

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

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

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

5.1.4 Filter through fine mesh.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

043

Document Title: Culture of *Daphnia*  
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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.

# CT&E Environmental Services Inc.

## Standard Operating Procedure

C44

Document Title: *Culturing of Pimephales Promelas* (Fathead Minnows)  
Method Reference: CT&E/USEPA  
Document File Name: 7007-04.DOC  
Revision Number: 4.0  
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Document Control Number: 7007

Page 1 of 2

Approved by: *Ken Halliday*  
Supervisor

10/21/98  
Date

Approved by: *Michael U. D...*  
QA/QC Officer

10/20/98  
Date

### 1.0 Summary

This SOP outlines the procedures for culturing of *Pimephales Promelas* (Fathead Minnows).

### 2.0 Fathead Minnow Cultures

- 2.1 Culture tanks currently being used at CT&E consist of 10 gallon glass aquaria equipped with bubble-up corner filters and heaters. Well water is used as media.
- 2.2 Spawning substrates, 4 inch clay pots cut in half lengthwise, are placed in each tank to provide a surface for eggs. Three substrate sections are kept in each aquarium.
- 2.3 To set up a new tank, rinse all clean components and fill with well water. Assemble filter, attach airline and adjust for moderately heavy air flow.
- 2.4 Heaters are adjusted to maintain water temperature of 25°C. Thermometers in all spawning tanks are checked daily to ensure that this temperature is maintained. Any adjustment made to tank temperature is documented in the log book.
- 2.5 The photoperiod to encourage spawning is 16 hours light/8 hours dark and is maintained with electronic timers.
- 2.6 Ideally, 2 males and 6 females for each 10 gallon aquaria should be maintained. By identifying banded males and removing them, remaining fish can be identified and the male/female ratio adjusted.
- 2.7 Tanks are kept clean by weekly siphoning and replacing of the water.
- 2.8 Fish are fed Wardley's Total Tropical Flake Food twice daily.
- 2.9 In the event that diseased fish are present in an aquarium, the fish must be discarded and the aquarium, filter parts and substrate soaked in a 5% chlorine

# CT&E Environmental Services Inc.

## Standard Operating Procedure

045

Document Title: Culturing of *Pimephales Promelas* (Fathead Minnows)  
Method Reference: CT&E/USEPA  
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bleach solution for 24 hours. After soaking, pour out bleach solution, rinse well with tap water and allow to air dry before setting up tank again.

- 2.10 All information pertaining to culture tank conditions, water quality and stocking must be recorded on the Fish Culture Tank Log Sheet. All observations of spawning frequency are recorded and kept.

### 3.0 Fathead Minnow Egg Incubation

- 3.1 Remove from culture tanks any substrates with eggs and place in that days hatching tank.(if fish are in the process of spawning do not remove the substrate until spawning is completed). Label fry tank with the date.
- 3.2 Maintain temperature of hatching tanks(fry tanks) at 25°. Place active air stone with a fairly high air flow in the tank.
- 3.3 Spawning substrates are moved to a new fry tank each day to ensure that all fry in a given tank are hatched within a twenty-four (24) hour period. Air flow is reduced after substrates are moved to avoid injury to fry.
- 3.4 Eggs are checked daily for fungal growth. If present, all affected eggs are removed.
- 3.5 Eggs should hatch after 4 to 6 days at 25° C. If temperature is lower it will take longer. When eggs have hatched, remove spawning shelters.

### 4.0 Routine Handling of Fry Culture Aquaria

- 4.1 Fry are held in five (5) gallon aquaria. No fewer than 14 tanks are kept at all times. Well water is the culture medium.
- 4.2 Fry tanks are maintained with active sponge filters with gentle aeration at room temperature.
- 4.3 Fry are fed live < 24 hour old *Artemia* twice daily which have been drained of salt water and rinsed with tank water. The amount of food is varied depending on the number of fry per tank and their size.
- 4.4 Information pertaining to care and feeding of fry is recorded the log book.



# CT&E Environmental Services Inc.

## Standard Operating Procedure

046

Document Title: Reference Toxicant Testing  
Method Reference: CT&E/USEPA  
Document File Name: 7008-05.DOC  
Revision Number: 5.0  
Effective Date: March 12, 2001

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Approved by: Kan Holliday  
Supervisor

3/23/2001  
Date

Approved by: [Signature]  
QA/QC Officer

3/23/2001  
Date

### 1.0 Summary

To insure that healthy organisms are used in testing, CT&E performs monthly QA/QC tests on all in-house cultured organisms. CT&E uses Sodium Chloride as a reference toxicant.

### 2.0 *Pimephales promelas*

- 2.1 48 hour static acute toxicity tests are run at 20°C ( $\pm 1^\circ\text{C}$ ) using fish 1 to 14 days old.
- 2.2 This test consists of a control and a dilution series of 10g/L, 9g/L, 8g/L, 7g/L, and 6g/L, of sodium chloride. Other dilution series may be used.
- 2.3 The dilutions are prepared in 800 ml disposable plastic beakers using moderately hard synthetic water. 500 mls of test solution is placed in each of two replications. Water quality values are measured and recorded at this time.
- 2.4 Ten organisms are placed in each replicate. Fish are loaded by first siphoning them into a shallow pan from which they are transferred to the beakers with a large bore pipette.
- 2.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

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

- 3.1 48 hour static acute tests are performed at 25°C ( $\pm 1^\circ\text{C}$ ) using organisms less than 24 hours old.
- 3.2 These tests consist of a control and a five dilution series. The concentration of the reference toxicant is varied depending on species.
  - 3.2.1 *Ceriodaphnia dubia*, *Daphnia pulex*: 10, 5, 2.5, 1.25, 0.625 grams/L

# CT&E Environmental Services Inc.

## Standard Operating Procedure

C47

Document Title: Reference Toxicant Testing  
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3.2.2 *Daphnia magna*: 10, 5, 2.5, 1.25, 0.625 grams/L

- 3.3 Dilutions are prepared using moderately hard synthetic water. 20 mls of each dilution are placed in each of 5 plastic medicine cups.
- 3.4 Four organisms are placed in each test vessel. The *Daphnids* are loaded with a disposable plastic pipette. Organisms are gently released below the surface of the water to minimize risk of injury.
- 3.5 The test is terminated at 48 hours. At this time, mortalities are recorded along with final water quality data.

#### 4.0 Data Analysis

- 4.1 Toxicity tests are conducted on a monthly basis.
- 4.2 The LC<sub>50</sub> is calculated according to EPA protocols.
- 4.3 Results from these tests are incorporated into Q-sum charts. These records are kept in monthly files.

## **Appendix II**

### **Chains of Custody**

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

411  
 TA4-GO-P410-1/2  
 Chain of Custody #: OBG071904  
 Split Sample  
 July Chronic TOX #1  
 July Wet Acute TOX

July 2004  
 Chronic Toxicity - Comp. # 1

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.	Sampled By: (Print) <u>Mark Wasniewsky</u>				
Sample #	Date	Time	Containers	Parameters to be Analyzed	Preservative	Remarks
A5798C	7/18 to 7/19/04	11 <sup>00</sup> AM	1 Gallon plastic	Definitive Test( NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
A5798C	7/18 to 7/19/04	11 <sup>00</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5798C	7/18 to 7/19/04	11 <sup>00</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
A5797R	7-19-04	9 <sup>00</sup> AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
A5797R	7-19-04	9 <sup>00</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
A5797R	7-19-04	9 <sup>00</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
Relinquished By: <u>Mark Wasniewsky</u>		Date/Time 7-19-04	Received By: <u>[Signature]</u>		Date/Time 7-19-04 1400	
Relinquished By:		Date/Time	Received By: <u>[Signature]</u>		Date/Time 7/20/04 0945	
<b>Additional Comments:</b> 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 style="margin-left: 20px;">001- 8<sup>05</sup> AM    004- 8<sup>00</sup> AM    005-64T- 7<sup>00</sup> AM    005-64G- 7<sup>00</sup> AM    007- 7<sup>40</sup> AM    09A- /    09B- 7<sup>50</sup> AM</p> <p style="margin-left: 20px;">The time of compositing the final flow-proportioned sample was <u>1100</u> A.M.</p>						

Chain of Custody Record

General Electric Co.

100 Woodlawn Ave. Pittsfield, MA 01201

Chain of Custody #: 08G072104

July 2004 Chronic Toxicity - Comp. # 2

TAY-GO-P411-3/4

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) <u>Mark Wasniewsky</u>		
Sample #	Date	Time	Containers	Parameters to be Analyzed	Preservative	Remarks
3 A5800C	7/20 to 7/21/04	10 <sup>00</sup> AM	1 Gallon plastic	Definitive Test( NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
3 A5800C	7/20 to 7/21/04	10 <sup>00</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
3 A5800C	7/20 to 7/21/04	10 <sup>00</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
4 A5799R	7/21/04	8 <sup>30</sup> AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
4 A5799R	7/21/04	8 <sup>30</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
4 A5799R	7/21/04	8 <sup>30</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
Relinquished By: <u>Mark Wasniewsky</u>		Date/Time 7-21-04		Received By: <u>[Signature]</u>		Date/Time 7-21-04 1400
Relinquished By:		Date/Time		Received By: <u>[Signature]</u>		Date/Time 7/22/04 0930
<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- 8<sup>00</sup> AM    004- /    005-64T- 7<sup>00</sup> AM    005-64G- 7<sup>00</sup> AM    007- /    09A- /    09B- /    4.3<sup>00</sup></p> <p>The time of compositing the final flow-proportioned sample was <u>10<sup>00</sup></u> A.M.</p>						

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

Chain of Custody #: OBG 072304

July 2004  
 Chronic Toxicity - Comp. # 3

TA4-GOP411-5/6

Project # NPDES PERMIT	Analytical Lab: CT&E Environmental Services Inc.			Sampled By: (Print) <u>Mark Wasnewsky</u>		
Sample #	Date	Time	Containers	Parameters to be Analyzed	Preservative	Remarks
S A5802C	7/22 to 7/23/04	10 <sup>00</sup> AM	1 Gallon plastic	Definitive Test( NOCEL), Static reproductive chronic toxicity, 7-day w/Ceriodaphnia	Chilled	(See below)
S A5802C	7/22 to 7/23/04	10 <sup>00</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
S A5802C	7/22 to 7/23/04	10 <sup>00</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
G A5801R	7/23/04	8 <sup>30</sup> AM	1 Gallon plastic	Housatonic River water dilution water for chronic test	Chilled	
G A5801R	7/23/04	8 <sup>30</sup> AM	1000 ml. plastic	Chloride, TSS, Total Solids, Alkalinity Specific Conductance, CL2	Chilled	
G A5801R	7/23/04	8 <sup>30</sup> AM	500 ml. plastic	Total Phosphorus, TOC, NH3	H2SO4	
Relinquished By: <u>Mark Wasnewsky</u>	Date/Time <u>7-23-04</u>	Received By: <u>B. Tower</u>		Date/Time <u>7-23-04 1400</u>		
Relinquished By:	Date/Time	Received By: <u>[Signature]</u>		Date/Time <u>7/24/04 0955</u>		
<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- <u>7<sup>55</sup> AM</u> 004- <u>7<sup>00</sup> AM</u> 005-64T- <u>7<sup>00</sup> AM</u> 005-64G- <u>7<sup>00</sup> AM</u> 007- <u>7<sup>00</sup> AM</u> 09A- <u>7<sup>00</sup> AM</u> 09B- <u>7<sup>00</sup> AM</u> <u>4.2°C</u></p> <p>The time of compositing the final flow-proportioned sample was <u>10<sup>00</sup> A.M.</u></p>						

## **Appendix III**

### **Bench Data**

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric 411 JML  
 Project: July 2004 Lab. No.: JAY-60-P418-001/002  
 Date Received: 7/20/04  
 Sample Date: 7/18-19/2004 Time: 11:00 Date Analyzed: 7/20/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	<u>7/20/04</u>	<u>7/21/04</u>
Time:	<u>1000</u>	<u>1000</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	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>
Hardness	<u>210</u>	<u>110</u>	<u>110</u>						<u>300</u>
D.O.	<u>8.31</u>	<u>8.87</u>	<u>8.92</u>	<u>8.31</u>	<u>8.52</u>	<u>8.31</u>	<u>8.52</u>	<u>8.32</u>	<u>8.53</u>
pH	<u>6.78</u>	<u>7.08</u>	<u>7.11</u>	<u>6.82</u>	<u>7.02</u>	<u>7.27</u>	<u>7.38</u>	<u>7.59</u>	<u>7.74</u>
Alkalinity	<u>110</u>	<u>67</u>	<u>70</u>						<u>288</u>
Sp. Conduct.	<u>320</u>	<u>327</u>	<u>337</u>	<u>358</u>	<u>395</u>	<u>538</u>	<u>722</u>	<u>918</u>	<u>1033</u>

<b>End</b>									
No. Surviving	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Temperature	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>	<u>25.4</u>
D.O.	<u>8.36</u>	<u>8.77</u>	<u>8.72</u>	<u>8.28</u>	<u>8.33</u>	<u>8.34</u>	<u>8.31</u>	<u>8.30</u>	<u>8.30</u>
pH	<u>6.84</u>	<u>7.12</u>	<u>7.17</u>	<u>6.87</u>	<u>7.07</u>	<u>7.31</u>	<u>7.42</u>	<u>7.61</u>	<u>7.73</u>
Sp. Conduct.	<u>328</u>	<u>334</u>	<u>341</u>	<u>367</u>	<u>392</u>	<u>549</u>	<u>738</u>	<u>915</u>	<u>1015</u>

DAY 1

653

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition EPA-600/4-91/002. U.S EPA, Cincinnati, Ohio



# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: July 2004 Lab. No.: TA4-60-P411  
 Date Received: 7/20/04  
 Sample Date: 7/18-19/2004 Time: 11:00 Date Analyzed: 7/21/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	7/21/04	7/22/04
Time:	1000	1000

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	25.3	25.3	25.3	25.3	25.3	25.5	25.3	25.3	25.3
Hardness	200	110	110						280
D.O.	8.27	8.87	8.89	8.21	8.28	8.53	8.55	8.37	8.38
pH	6.80	7.11	7.15	6.93	7.02	7.19	7.32	7.53	7.67
Alkalinity	170	72	75						277
Sp. Conduct.	328	330	336	369	408	551	743	930	1016

<b>End</b>									
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.	8.24	8.91	8.77	8.25	8.46	8.31	8.32	8.53	8.34
pH	6.85	7.15	7.19	6.98	7.09	7.21	7.34	7.57	7.72
Sp. Conduct.	334	335	342	373	415	562	758	950	1022

DAY 2

054

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition EPA-600/4-91/002. U.S. EPA, Cincinnati, Ohio

# General Electric - 7-Day Chronic Biototoxicity Bench Sheet

Client: General Electric  
 Project: July 2004 Lab. No.: TA4-60-F411  
 Date Received: 7/22/04  
 Sample Date: 7/20-21/04 Time: 10:00 Date Analyzed: 7/22/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	<u>7/22/04</u>	<u>7/23/04</u>
Time:	<u>1000</u>	<u>1000</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	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>	<u>25.6</u>
Hardness	<u>230</u>	<u>100</u>	<u>100</u>						<u>250</u>
D.O.	<u>8.31</u>	<u>8.86</u>	<u>8.93</u>	<u>8.33</u>	<u>8.34</u>	<u>8.32</u>	<u>8.34</u>	<u>8.36</u>	<u>8.39</u>
pH	<u>7.09</u>	<u>7.10</u>	<u>7.14</u>	<u>7.12</u>	<u>7.15</u>	<u>7.19</u>	<u>7.24</u>	<u>7.25</u>	<u>7.25</u>
Alkalinity	<u>104</u>	<u>73</u>	<u>72</u>						<u>315</u>
Sp. Conduct.	<u>307</u>	<u>329</u>	<u>338</u>	<u>352</u>	<u>398</u>	<u>591</u>	<u>657</u>	<u>804</u>	<u>1085</u>

<b>End</b>									
No. Surviving	<u>0</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Temperature	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>	<u>25.3</u>
D.O.	<u>8.26</u>	<u>8.71</u>	<u>8.74</u>	<u>8.28</u>	<u>8.26</u>	<u>8.27</u>	<u>8.25</u>	<u>8.28</u>	<u>8.29</u>
pH	<u>7.11</u>	<u>7.13</u>	<u>7.18</u>	<u>7.16</u>	<u>7.20</u>	<u>7.25</u>	<u>7.29</u>	<u>7.34</u>	<u>7.35</u>
Sp. Conduct.	<u>312</u>	<u>334</u>	<u>342</u>	<u>352</u>	<u>391</u>	<u>583</u>	<u>647</u>	<u>810</u>	<u>1062</u>

DAY Day 3

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition EPA 600/4-91/002 U.S. EPA, Cincinnati, Ohio

CES

# General Electric – 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: JULY 2004 Lab. No.: TA4-GO-P411  
 Date Received: 7/22/04  
 Sample Date: 7/20-21/04 Time: 1000 Date Analyzed: 7/23/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:        °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	7/23/04	7/24/04
Time:	1000	1000

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	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
Hardness	220	100	110						260
D.O.	8.22	8.91	8.94	8.23	8.25	8.25	8.25	8.25	8.29
pH	7.13	7.13	7.17	7.14	7.17	7.17	7.19	7.20	7.21
Alkalinity	116	65	72						324
Sp. Conduct.	304	327	339	332	367	584	647	812	1055

<b>End</b>									
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.	8.24	8.69	8.71	8.20	8.18	8.21	8.17	8.19	8.22
pH	7.14	7.18	7.22	7.17	7.18	7.18	7.20	7.16	7.17
Sp. Conduct.	316	332	337	340	366	572	651	817	1070

DAY 4

056

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition EPA-600/4-91/002. U.S.EPA, Cincinnati, Ohio.

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: July 2004 Lab. No.: JA4-60-P411  
 Date Received: 7/24/04  
 Sample Date: 7/22-23/04 Time: 1000 Date Analyzed: 7/24/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	<u>7/24/04</u>	<u>7/25/04</u>
Time:	<u>1000</u>	<u>1000</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	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>	<u>24.7</u>
Hardness	<u>240</u>	<u>110</u>	<u>100</u>						<u>350</u>
D.O.	<u>8.07</u>	<u>8.84</u>	<u>8.89</u>	<u>8.11</u>	<u>8.15</u>	<u>8.17</u>	<u>8.17</u>	<u>8.20</u>	<u>8.23</u>
pH	<u>7.28</u>	<u>7.11</u>	<u>7.16</u>	<u>7.35</u>	<u>7.38</u>	<u>7.42</u>	<u>7.49</u>	<u>7.57</u>	<u>7.59</u>
Alkalinity	<u>106</u>	<u>69</u>	<u>72</u>						<u>274</u>
Sp. Conduct.	<u>217</u>	<u>326</u>	<u>337</u>	<u>339</u>	<u>378</u>	<u>528</u>	<u>784</u>	<u>958</u>	<u>1122</u>

<b>End</b>									
No. Surviving	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
Temperature	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>	<u>25.2</u>
D.O.	<u>8.20</u>	<u>8.71</u>	<u>8.78</u>	<u>8.18</u>	<u>8.20</u>	<u>8.10</u>	<u>8.21</u>	<u>8.23</u>	<u>8.25</u>
pH	<u>7.32</u>	<u>7.16</u>	<u>7.19</u>	<u>7.39</u>	<u>7.42</u>	<u>7.42</u>	<u>7.51</u>	<u>7.54</u>	<u>7.58</u>
Sp. Conduct.	<u>308</u>	<u>331</u>	<u>342</u>	<u>343</u>	<u>383</u>	<u>534</u>	<u>791</u>	<u>770</u>	<u>1137</u>

DAY   5  

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition EPA-600/4-91/002 U.S. EPA, Cincinnati, Ohio.

057

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: July 2004 Lab. No.: TA4-GO-P411  
 Date Received: 7/24/04  
 Sample Date: 7/22-23/04 Time: 1000 Date Analyzed: 7/25/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	7/25/04	7/26/04
Time:	1000	1000

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	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
Hardness	260	100	100						340
D.O.	8.12	8.86	8.93	8.15	8.17	8.22	8.25	8.28	8.28
pH	7.30	7.04	7.09	7.33	7.38	7.45	7.52	7.53	7.54
Alkalinity	110	69	72						268
Sp. Conduct.	282	330	335	320	362	542	758	918	1104

<b>End</b>									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
D.O.	8.17	8.79	8.80	8.19	8.22	8.24	8.28	8.27	8.25
pH	7.35	7.10	7.14	7.37	7.41	7.48	7.55	7.53	7.56
Sp. Conduct.	292	338	340	328	358	551	766	927	1116

DAY 6

058

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.*, Fourth Edition EPA-600/4-91/002. U.S. EPA, Cincinnati, Ohio

# General Electric - 7-Day Chronic Biotoxicity Bench Sheet

Client: General Electric  
 Project: July 2004 Lab. No.: TA4-GO-P411  
 Date Received: 7/24/04  
 Sample Date: 7/22-23/04 Time: 1000 Date Analyzed: 7/26/04  
 Source: Effluent composite Analyst(s): KH/JH  
 Source of dilution water: Housatonic River  
 Test Species: Ceriodaphnia dubia Age: < 24 hrs Temp. Range:      °C  
 Type of Test: 7-day chronic

Total Chlorine: n/d

	Beginning	Ending
Date:	7/24/04	7/27/04
Time:	1000	1000

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	250	100	110						340
D.O.	8.22	8.84	8.90	8.24	8.25	8.24	8.26	8.27	8.27
pH	7.34	7.10	7.14	7.39	7.44	7.48	7.50	7.52	7.55
Alkalinity	111	72	74						268
Sp. Conduct.	290	329	334	358	382	539	791	977	1116

<b>End</b>									
No. Surviving	10	10	10	10	10	10	10	10	10
Temperature	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
D.O.	8.26	8.74	8.79	8.31	8.34	8.32	8.32	8.30	8.32
pH	7.38	7.14	7.11	7.42	7.48	7.49	7.53	7.56	7.62
Sp. Conduct.	299	336	338	363	397	580	781	982	1122

DAY 7

Method Reference: *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition EPA 600/4-91/002 U.S. EPA, Cincinnati, Ohio

059

# Biotoxicity Bench Sheet

Lab. No. TAY-60-P411 Test Organism CD Start Date: 7/12/04 Time: 1000  
 Client: GE Lot No. \_\_\_\_\_ End Date: 7/23/04 End Time: 1000  
 Effluent/Sample EFF Age: <24 Hours Investigators KH

C60

Conc. <u>0.25%</u> <u>Control</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	4	3	4	5	4	4	4	3	3	4				
	5	0	0	0	0	1	0	0	2	0	0				
	6	6	6	9	10	11	10	9	0	9	10				
	7	11	15	14	14	9	17	11	14	0	11				
	8														
	total	21	24	27	24	25	31	24	19	12	25	232	10	23.2	

Conc. <u>12.5%</u> <u>6.25%</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	4	4	4	2	3	3	5	5	2	3				
	5	0	0	0	0	0	4	0	1	0	0				
	6	10	8	9	7	11	0	10	9	8	5				
	7	14	11	15	12	16	13	15	13	14	16				
	8														
	total	28	23	28	21	30	20	30	23	24	24	251	10	25.1	

Conc. <u>25%</u> <u>12.5%</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	4	5	3	4	4	5	5	4	5	4				
	5	0	0	1	0	0	0	1	0	0	0				
	6	7	12	9	11	7	11	10	7	8	11				
	7	14	13	0	15	11	13	18	15	15	0				
	8														
	total	25	30	13	30	22	29	34	26	28	15	252	10	25.2	

# Biotoxicity Bench Sheet

Lab. No. T44-60-P411 Test Organism CD Start Date: 7/20/04 Time: 1000  
 Client: GE Lot No. \_\_\_\_\_ End Date: 7/27/04 End Time: 1000  
 Effluent/Sample EEF Age: <24hrs Investigators KLH

**C61**

Conc. 50% 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	4	3	4	3	4	4	5					
	5	0	0	0	0	0	0	2	0	1	0					
	6	11	8	9	9	6	9	11	10	9	11					
	7	13	14	15	13	12	11	15	15	17	0					
	8															
	total	28	25	26	26	21	24	31	29	31	16	257	10	25.7		

Conc. 75% 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	2	4	3	5	3	4	4	3	4					
	5	0	4	0	0	0	0	0	0	1	0					
	6	12	8	7	6	8	9	11	10	10	9					
	7	13	12	13	14	16	0	0	14	0	13					
	8															
	total	20	26	24	23	29	12	15	28	14	6	702	10	70.2		

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	2	4	4	3	2	4	3	5	4					
	5	0	0	1	0	0	0	0	0	0	0					
	6	9	6	8	9	12	6	12	8	10	7					
	7	13	12	14	12	9	14	10	5	12	11					
	8															
	total	26	20	27	25	24	22	26	16	27	22	235	10	23.5		



# Biotoxicity Bench Sheet

Lab. No. TAY-GO-P411 Test Organism Ⓚ Start Date: 7/20/04 Time: 1000  
 Client: GE Lot No. \_\_\_\_\_ End Date: 7/27/04 End Time: 1000  
 Effluent/Sample EFF Age: <24 hours Investigators KH

062

Conc. <del>Control</del> 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	2	3	1	3	4	4	3	2	4	3				
	5	0	0	0	0	0	0	1	6	0	0				
	6	10	9	8	9	8	8	8	0	10	9				
	7	16	9	6	14	17	15	13	11	13	17				
	8														
	total	28	21	19	26	29	27	25	19	27	21	250	10	25.0	

Conc. 20C <del>50%</del>	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	2	5	4	2	0	3	3	4	4	3				
	5	0	1	0	7	2	0	6	0	0	0				
	6	7	0	9	0	0	9	0	6	7	9				
	7	9	12	11	12	13	11	12	13	11	8				
	8														
	total	18	18	24	21	15	23	21	23	22	20	205	10	20.5	

Conc. 20C <del>100%</del>	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	4	3	4	4	3	4	3	4	3				
	5	0	0	0	0	0	0	0	5	0	0				
	6	10	7	8	9	10	8	9	0	9	6				
	7	12	11	14	15	11	9	12	11	9	9				
	8														
	total	26	22	25	28	25	20	25	19	22	18	230	10	23.0	

**Appendix IV**  
**Statistical Sheets**

Title: GE JULY 2004

File: GECDREP .704

Transform:

NO TRANSFORMATION

Kolmogorov Test for Normality

---

D = 0.0939 (p-value = 0.0483)  
D\* = 0.8985

**CS4**

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 JULY 2004

File: GECDREP .704

Transform:

NO TRANSFORMATION

Bartlett's Test for Homogeneity of Variance

---

Calculated B1 statistic = 12.2592

(p-value = 0.1400)

**035**

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 JULY 2004

File: GECDREP .704

Transform:

NO TRANSFORMATION

036

ANOVA Table

---

SOURCE	DF	SS	MS	F
Between	8	297.0222	37.1278	1.7553
Within (Error)	81	1713.3000	21.1519	
Total	89	2010.3222		

---

(p-value = 0.0982)

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 JULY 2004  
 File: GECDREP .704

Transform:

067  
 NO TRANSFORMATION

Dunnett's Test - TABLE 1 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	CONTROL	25.0000	25.0000		
2	CONTROL+	23.0000	23.0000	0.9724	
3	2' CONTROL	20.5000	20.5000	2.1879	
4	6.25%	23.2000	23.2000	0.8752	
5	12.5%	25.1000	25.1000	-0.0486	
6	25%	25.2000	25.2000	-0.0972	
7	50%	25.7000	25.7000	-0.3403	
8	75%	20.7000	20.7000	2.0906	
9	100%	23.5000	23.5000	0.7293	

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

Title: GE JULY 2004  
 File: GECDREP .704

Transform:

NO TRANSFORMATION

Dunnett's Test - TABLE 2 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	CONTROL	10			
2	CONTROL+	10	5.0186	20.1	2.0000
3	2' CONTROL	10	5.0186	20.1	4.5000
4	6.25%	10	5.0186	20.1	1.8000
5	12.5%	10	5.0186	20.1	-0.1000
6	25%	10	5.0186	20.1	-0.2000
7	50%	10	5.0186	20.1	-0.7000
8	75%	10	5.0186	20.1	4.3000
9	100%	10	5.0186	20.1	1.5000

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

# Toxicity Test Summary Sheet

059

Facility Name: General Electric Co. Test Start Date: July 20, 2004  
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): \_\_\_\_\_  
\_\_\_\_\_

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: July 9, 2004 to July 11, 2004



## Permit Limits & Test Results

070

### 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>	<u>N/A</u>	48-hr LC <sub>50</sub>	<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>100%</u>
		LOEC	<u>100%</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

071

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

072

## Acute Biototoxicity Bench Sheet

Client: SC  
 Project: Reflux Lab. No.: \_\_\_\_\_  
 Sample Date: \_\_\_\_\_ Time: \_\_\_\_\_ Date Received: \_\_\_\_\_  
 Source: NaCl Date Analyzed: \_\_\_\_\_  
 Source of dilution water: Moderately Hard Synthetic Water Analyst: KH  
 Test Species: Ceriodaphnia dubia Age: < 24 hours Temp. Range: \_\_\_\_\_ °C  
 Type of Test: 48 Hour Static Acute

Total Chlorine: n/d

	Beginning	Ending
Date:	7/9/04	7/11/04
Time:	1600	1600

Concentration	Control	500	1000	2000	3000	4000
<b>START</b>						
Temperature	25.2	25.2	25.2	25.2	25.2	25.2
Hardness	110					120
D.O.	8.8	8.8	8.8	8.9	8.9	8.9
pH	7.0	7.0	7.1	7.1	7.1	7.1
Alkalinity	72					76
Sp. Conduct.	324	2180	3220	4310	5440	7720
<b>24 HOUR</b>						
Temperature	24.8	24.8	24.8	24.8	24.8	24.8
No. Surviving	20	20	20	14	7	0
<b>48 HOUR</b>						
Temperature	25.4	25.4	25.4	25.4	25.4	25.4
No. Surviving	20	20	14	5	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*

TRIMMED SPEARMAN-KARBER METHOD. MONTANA STATE UNIV

073

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: 07/09/04  
CHEMICAL: NaCl

TEST NUMBER: -

DURATION: 48 HOURS  
SPECIES: CERIODAPHN

RAW DATA:

CONCENTRATION (MG/L)	500.00	1000.00	2000.00	3000.00	4000.00
NUMBER EXPOSED:	20	20	20	20	20
MORTALITIES:	0	6	15	20	20
SPEARMAN-KARBER TRIM:	0.00%				

SPEARMAN-KARBER ESTIMATES: LC50: 1317.79  
95% LOWER CONFIDENCE: 1103.50  
95% UPPER CONFIDENCE: 1573.69

---

# Biotoxicity Bench Sheet

Lab. No. QC Test Organism CD Start Date: 7/20/04 Time: 1000  
 Client: \_\_\_\_\_ Lot No. \_\_\_\_\_ End Date: 7/27/04 End Time: 1000  
 Effluent/Sample \_\_\_\_\_ Age: <24 HRS Investigators KLT

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	3	4	0	4	5	4	3	4	0	4					
	5	0	0	5	0	0	0	2	0	4	0					
	6	8	9	0	9	7	8	0	10	11	8					
	7	11	12	12	0	13	11	9	12	0	13					
	8															
	total	22	25	17	13	25	23	14	20	15	25	205	10	20.5		

Conc. 200 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	5	4	3	4	5	4	3	4	4	5					
	5	0	0	7	0	0	0	0	7	0	0					
	6	7	9	0	8	10	X-8	9	0	8	7					
	7	13	12	12	10	13	↓	12	11	12	13					
	8															
	total	25	25	22	22	28	X-12	24	22	24	25	229	9	22.9		

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	3	4	3	4	3	4	3	4	5	4					
	5	0	1	0	0	0	0	0	0	0	0					
	6	8	0	8	8	10	10	0	7	8	7					
	7	11	10	10	12	13	13	11	13	12	9					
	8															
	total	22	15	21	24	26	27	14	24	25	20	20	10	21.8		

# Biotoxicity Bench Sheet

Lab. No. \_\_\_\_\_ Test Organism CD Start Date: 7/20/04 Time: 1200  
 Client: OC Lot No. \_\_\_\_\_ End Date: 7/22/04 End Time: 1800  
 Effluent/Sample \_\_\_\_\_ Age: <24 hours Investigators: ETH

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	0	0	0	2	3	0	0	0	3	3					
	5	2	0	3	0	0	3	X-3	2	0	0					
	6	0	X-0	0	4	7	0		3	2	3					
	7	1	↓	2	0	0	4	↓	0	0	0					
	8		↓					↓								
	total	3	X-0	5	6	10	7	X-3	5	5	6	50	8	5.0		

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	X-0	0	2	0	X-0					
	5	0	2	0	2	X-0		X-0	0	X-0						
	6	X-0	X-0	X-0	0	↓	↓	↓	3		↓					
	7	↓	↓	↓	X-0	↓	↓	↓	X-0	↓	↓					
	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	total	X-0	X-2	X-0	X-2	X-0	X-0	X-0	X-5	X-0	X-0	7	0	0.7		

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															
	4	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0					
	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	8	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
	total	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	X-0	0	0	0		

## Fisher's Exact Test

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
250MG/L	9	1	10
TOTAL	19	1	20

Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6.0. b value is 9.  
 Since b is greater than 6.0 there is no significant difference  
 between CONTROL and TREATMENT at the 0.05 level.

## Fisher's Exact Test

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
500MG/L	10	0	10
TOTAL	20	0	20

Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6.0. b value is 10.  
 Since b is greater than 6.0 there is no significant difference  
 between CONTROL and TREATMENT at the 0.05 level.

## Fisher's Exact Test

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
1000MG/L	8	2	10

TOTAL 18 2 20

=====  
 Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6.0. b value is 8.  
 Since b is greater than 6.0 there is no significant difference  
 between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test

=====  
 NUMBER OF  
 -----

IDENTIFICATION	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
2000MG/L	0	10	10
TOTAL	10	10	20

=====

Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6.0. b value is 0.  
 Since b is less than or equal to 6.0 there is a significant difference  
 between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test

=====  
 NUMBER OF  
 -----

IDENTIFICATION	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
4000MG/L	0	10	10
TOTAL	10	10	20

=====

Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6.0. b value is 0.  
 Since b is less than or equal to 6.0 there is a significant difference  
 between CONTROL and TREATMENT at the 0.05 level.

Summary of Fisher's Exact Tests

-----  
 NUMBER NUMBER SIG



GROUP	IDENTIFICATION	EXPOSED	DEAD	0.05
	CONTROL	10	0	
1	250MG/L	10	1	
2	500MG/L	10	0	
3	1000MG/L	10	2	
4	2000MG/L	10	10	*
5	4000MG/L	10	10	*

Title: JULY 2004 CD REP REFTOX

File: QCCDREP .704

Transform:

NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

---

D = 643.0000

W = 0.9223

Critical W = 0.9190 (alpha = 0.01 , N = 40)

W = 0.9400 (alpha = 0.05 , N = 40)

---

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: JULY 2004 CD REP REFTOX

File: QCCDREP .704

Transform:

NO TRANSFORMATION

Bartlett's Test for Homogeneity of Variance

---

Calculated B1 statistic = 3.5822 (p-value = 0.3103)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

---

Critical B = 11.3449 (alpha = 0.01, df = 3)  
= 7.8147 (alpha = 0.05, df = 3)

Title: JULY 2004 CD REP REFTOX

File: QCCDREP .704

Transform:

NO TRANSFORMATION

## ANOVA Table

SOURCE	DF	SS	MS	F
Between	3	2128.9000	709.6333	39.7306
Within (Error)	36	643.0000	17.8611	
Total	39	2771.9000		

(p-value = 0.0000)

Critical F = 4.3771 (alpha = 0.01, df = 3,36)  
= 2.8663 (alpha = 0.05, df = 3,36)

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

Title: JULY 2004 CD REP REFTOX

File: QCCDREP .704

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	20.5000	20.5000		
2	250 MG/L	22.9000	22.9000	-1.2698	
3	500 MG/L	21.8000	21.8000	-0.6878	
4	1000 MG/L	5.0000	5.0000	8.2009	*

Dunnett critical value = 2.1500 (1 Tailed, alpha = 0.05, df [used] = 3,30)  
(Actual df = 3,36)

Title: JULY 2004 CD REP REFTOX

File: QCCDREP .704

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	250 MG/L	10	4.0636	19.8	-2.4000
3	500 MG/L	10	4.0636	19.8	-1.3000
4	1000 MG/L	10	4.0636	19.8	15.5000

Title: JULY 2004 CD REP REFTOX  
File: QCCDREP .704

Transform:

NO TRANSFORMATION

GRP	IDENTIFICATION	MEAN	SMOOTHED MEAN	CONCENTRATION
1	CONTROL	20.5000	21.7333	0.0000
2	250 MG/L	22.9000	21.7333	250.0000
3	500 MG/L	21.8000	21.7333	500.0000
4	1000 MG/L	5.0000	5.0000	1000.0000

ICp estimate with p = 25 is 662.3506

Bootstrap results using 480 iterations:

Mean = 649.6499      Standard Deviation = 21.5567  
95% Confidence Interval: ( 590.8273 , 677.3256)

# ***Attachment E***

---

## ***Final Notification of On-Plant Excavations***



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

July 12, 2004

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

Mr. James DiLorenzo  
U.S. Environmental Protection Agency  
EPA New England  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

**RE: GE Pittsfield – Final Notification of On Plant Excavations**

Dear Ms. Steenstrup and Mr. DiLorenzo:

In accordance with our *Protocols for the Management of Excavation Activities*, this letter serves as the final notification for several excavations by General Electric Co. at the Pittsfield site.

**Minor excavation for installation of a flagpole at Pittsfield Generating Facility: DEP Site GECD160.**

**Location:** Standard Grid Q-32, Southwest of the parking lot at the Pittsfield Generating Facility.

**Activity:** On July 14, 2003 soil was excavated at the Pittsfield Generating Facility to install a flagpole. The excavated soil was placed in drums and brought to the Building 78 LTS pending sampling and a review of the analytical results. The excavated area was back-filled with clean fill from off-site by a GE approved vendor.

**Dimension and Volume:** A hole was excavated using a rubber tire backhoe. Dimensions of the pit were approximately four feet by four feet by four feet deep. A total of approximately two yards of soil was excavated and six drums were filled with soil.

**Analytical:** See Attachment 1. PCB concentrations detected were less than or equal 0.72 ppm. PID readings indicated that no further sampling was necessary.

**Material Disposition:** Material was brought to OPCA Cell 78 for disposal on 5/14/2004.

**Emergency excavation to repair a water line break near the west side of Building 16. DEP Site GECD140.**

**Location:** Standard Grid M-10, Near the west side of Building 16.

**Activity:** On January 21, 2004 soil was excavated near the west side of Building 16 in response to a water line break. The excavated soil was placed on and covered with a polyethylene sheeting pending a review of the historic analytical results. The excavated area was back-filled with clean fill from off-site by a GE approved vendor.

**Dimensions and Volume:** The area of excavation was six feet by twelve feet and approximately six feet deep. Approximately fifteen yards of soil was excavated.

**Analytical:** See Attachment 2. PCB concentrations detected were less than or equal 2.4 ppm. PID readings indicated that no further sampling was necessary.

**Material Disposition:** Material was brought to OPCA Cell 78 for disposal on 6/12/2004.

**Drilling of vent holes for a gas leak in front of Building 11: DEP Site GECD140.**

**Location:** Standard Grid M-9, In front of Building 11.

**Activity:** On January 27, 2004 vent holes were drilled to vent a leaking gas line running into Building 11. The soil was placed in a five-gallon pail and taken to Building 78 LTS pending disposal. The area was not back-filled.

**Dimension and Volume:** A hole was drilled with a diameter of one and one half inches by three feet deep. A five-gallon poly pail of soil and asphalt was generated.

**Analytical:** No analytical was run. The soil was disposed of as PCB Material.



---

**Material Disposition:** See Attachment 3. Material was sent to CWM Chemical Services, L.L.C., Model City, NY as Line 11C of Manifest NYH0654381 on 5/10/2004.

**Emergency excavation in response to a fire main break, near the southeast corner of Building 66. DEP Site GECD150.**

**Location:** Standard Grid S-8, Near the Southeast corner of Building 66.

**Activity:** On March 8, 2004 soil was excavated near the southeast corner of Building 66 in response to a fire main break. The excavated soil was placed on and covered with a polyethylene sheeting pending a review of the historic analytical results. The excavated area was back-filled with clean fill from off-site by a GE approved vendor. See Attachment 4.

**Dimensions and Volume:** The area of excavation was twelve feet by twelve feet and approximately five feet deep. Approximately 30 yards of soil was excavated.

**Analytical:** Presented in the pre-design investigation report for East Street Area 2 South (BBL, January 2003) at soil boring location Y-21. PCB concentrations detected were less than or equal 1.1 ppm. PID readings indicated that no further sampling was necessary.

**Material Disposition:** Material was brought to OPCA Cell 78 for disposal on 6/12/2004.

**Emergency excavation in response to a water main break on East Street, near Gate 13. DEP Site GECD150.**

**Location:** Standard Grid R-9, East Street near Gate 13.

**Activity:** On April 9, 2004 soil was excavated from East Street in response to a water main break on East Street, near Gate 13. The excavated soil was placed on and covered with a polyethylene sheeting pending a review of the historic analytical results. The excavated area was back-filled with clean fill from off-site by a GE approved vendor. See Attachment 5.

**Dimensions and Volume:** The area of excavation was eight feet by eight feet and approximately eight feet deep. Approximately nineteen yards of soil was excavated.

**Analytical:** Presented in the pre-design investigation report for East Street Area 2 South (BBL, January 2003) at soil boring location Y-21. PCB concentrations detected were less than or equal 1.1 ppm. PID readings indicated that no further sampling was necessary.

**Material Disposition:** Material was brought to OPCA Cell 78 for disposal on 6/12/2004.

**Minor excavation for installation of a new security gate by Building 78. DEP Site GECD160.**

**Location:** Standard Grid N-28, the Tyler Street entrance to Building 78.

**Activity:** On April 7, 2004 soil was excavated by the Northeast corner of Building 78 to install a new security gate. The excavated soil was placed on and covered with a polyethylene sheeting pending a review of the historic analytical results. The excavated area was back-filled with clean fill from off-site by a GE approved vendor.

**Dimension and Volume:** A hole was excavated using a rubber tire backhoe. Dimensions of the excavation were approximately six feet long by two inches wide by 2 inches deep. A total of approximately 9 yards of soil was excavated.

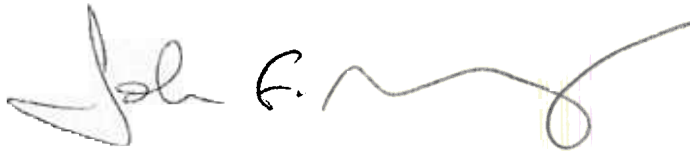
**Analytical:** See Attachment 6. PCB concentrations detected were less than or equal to 1000 ppm. PID readings indicated that no further sampling was necessary.

**Material Disposition:** Material was brought to OPCA Cell 71 for disposal on 6/18/2004.

This completes notification for these excavations. Please contact me at (413) 494-3177 if you have any concerns regarding this notification.

---

Yours truly,

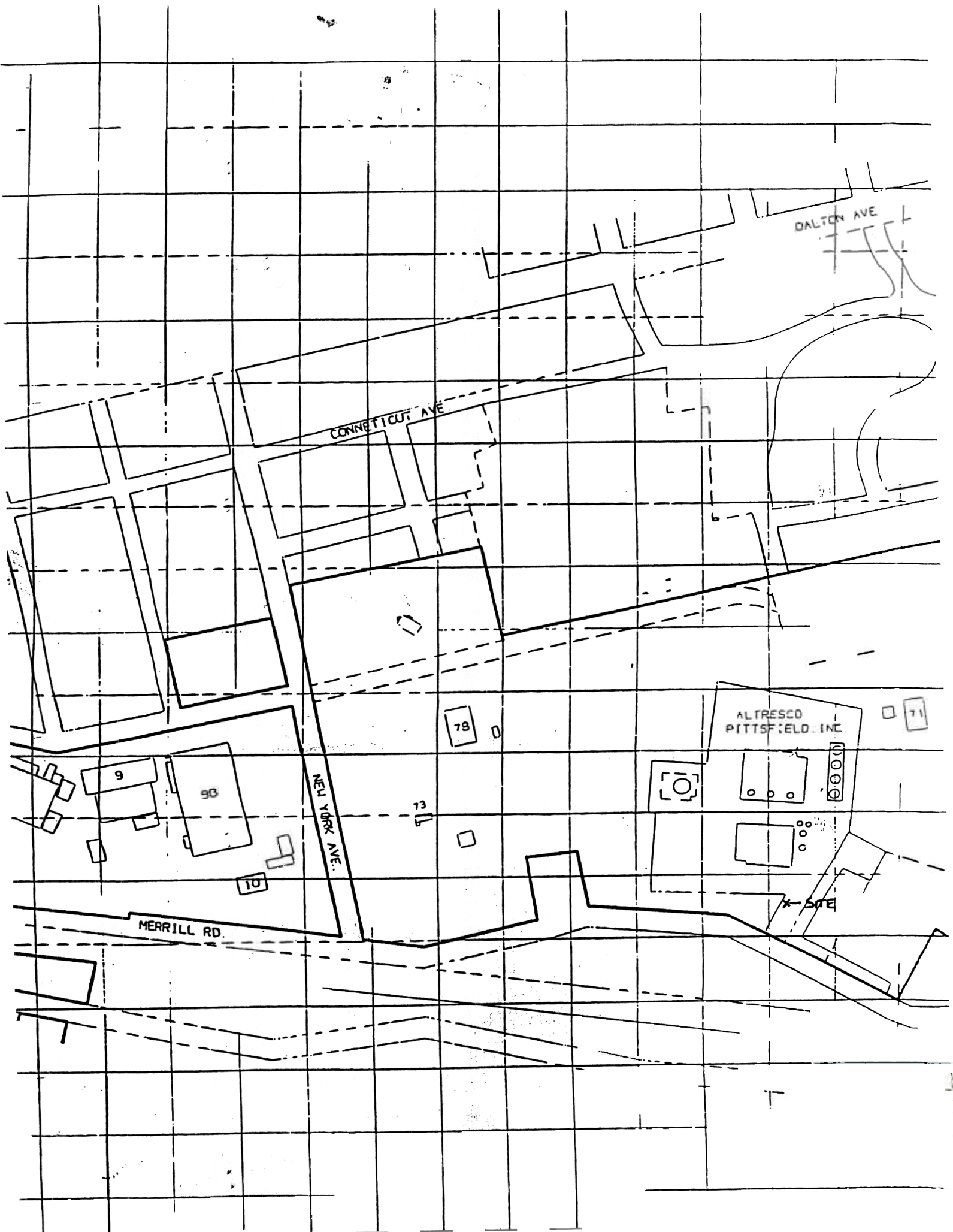
A handwritten signature in black ink, appearing to read "John F. Novotny". The signature is fluid and cursive, with a large initial "J" and a distinct "F".

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

**Enclosure/attachments**

**Cc: Dean Tagliaferro, EPA**  
**Anna Symington, DEP**  
**Robert Bell, DEP**  
**Michael Carroll, GE**  
**Rod McLaren, GE**  
**John Levesque, GE**  
**Peter Varley, Onyx**  
**Craig Bruening, BB&L**

## **Attachment 1**



DALTON AVE

CONNECTICUT AVE

NEW YORK AVE.

MERRILL RD.

ALTRESCO  
PITTSFIELD INC.

9

9B

10

78

73

71

X-SITE

11

**To:** Bruce Eulian  
**Cc:** Jason Lannie, Jeffrey Nicholson, John Levesque, John Novotny  
**From:** Pete Varley – ONYX Environmental  
**Date:** July 21, 2003  
**Subject:** **Sampling of drums of soil from Flagpole Excavation at Pittsfield Generating**

Bruce,

Currently there are six drums staged in Building 78 that require sampling to determine proper disposal requirements. The soil was generated during excavation activities to install a flagpole at the Pittsfield Generating facility

Specific numbers for these drums are as follows: A0426, A1575, A1576, A1563, A1574, and A1101. Please sample these drums in accordance with the *Protocols for the Management of Excavation Activities* as a minor excavation. At least three composite samples must be taken, analyzed for PCBs (Method 8082) and screened with a PID. The drums should be sampled as follows: one composite of drums A0426 and A1575, one composite of drums A1576 and A1563, and one composite of drums A1574 and A1101.

Please have the laboratory hold the remainder of the sample, pending the results of the PCB analysis. If the soil exceeds applicable standards, additional analysis may be necessary.

**BBL Project Number:**

**Lab & PO#: BBL Choice**

**Note: We Always need a method detection limit of 1 PPM on soils, Please advise lab on COC.**

**Turnaround: Standard Turnaround**

**Final Copy to: Peter Varley at Fax Number (413) 494-5695**

**Invoice To: Facilities**

# CHAIN OF CUSTODY RECORD



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 Laboratory Division

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 • New Jersey • West Virginia  
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JUN 01 2003 11:10:02

D&D ENVIRONMENTAL

FHX NO. 3043480/61

P. 02/04

1 CLIENT: **BLASBUD, BOOK & USE INC.**  
 CONTACT: **JOE MORAN** PHONE NO: **4134944314**  
**EUROPE EXCAVATION DRUM SITE - PITTSFIELD**  
**SAMPLING - PITTSFIELD GENERAL STRAIT**  
 REPORTS TO: **BRUCE E. EDWARDS**  
**100 WOOD LAWN AVE**  
**PITTSFIELD, MA 01201 413 4942576**  
 INVOICE TO:  
 P.O. NUMBER: **401.7001**

CT&E Reference: **TA3-GO-P644-1/3** PAGE **1** OF **1**

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
1	A0426-A1575-SOILCOMP-1	7-30-03	1400	SOIL	1	C	ICE		* Please note!
2	A1576-A1563-SOILCOMP-1	↓	1410	↓	1	C			Please hold
3	A1574-A1101-SOILCOMP-1	↓	1420	↓	1	C			The remainder of the sample
									If the soil exceeds applicable standards additional analysis may be necessary

5 Collected/Relinquished By: (1) **Joseph C. Moran** Date **7/30/03** Time **1700**  
 Relinquished By: (2) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received By: \_\_\_\_\_  
 Relinquished By: (3) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received By: \_\_\_\_\_  
 Relinquished By: (4) \_\_\_\_\_ Date **7-31-03** Time **9:00** Received For Laboratory By: **Rolind Hambrick**

4 Shipping Carrier: **FED EX** Samples Received Cold? (Circle) **YES** NO  
 Shipping Ticket No: \_\_\_\_\_ Temperature °C: **4.1**  
 Special Deliverable Requirements: Chain of Custody Seal: (Circle) **INTACT** BROKEN ABSENT  
 Requested Turnaround Time and Special Instructions:  
**\* STANDARD TURNDAROUND TIME REQUESTED**

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 3G0P644 Chain of Custody Number: 000959  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA.

Received by SGS 07/31/03 09:00

Reference: AD426-A1575-SOILCOMP-1 Description: COMPOSITE FLAGPOLE EXCAVATION DRUM SAMP.GE PITTS  
 SGS Lab Number: TA3G0P644001 Percent Solids: 89 Sample Type: F

Matrix: SOIL Sampled: 07/30/03 14:00

Prep Code: SW3541C		Prepared: 08/02/03 14:00		Preparation Batch: 083019			Analyst: des			Report Basis: Dry		
Run#: 001 Method Code: SW8082		Analyzed: 08/05/03 21:26		Analytical Batch: 083158			Dilution Factor: 1.00			Analytical Run Type: 00		
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	0.038 U	mg/Kg	0.038						12674-11-2
Analyte....	AROCLOR-1221		ND	0.038 U	mg/Kg	0.038						11104-28-2
Analyte....	AROCLOR-1232		ND	0.038 U	mg/Kg	0.038						11141-16-5
Analyte....	AROCLOR-1242		ND	0.038 U	mg/Kg	0.038						53469-21-9
Analyte....	AROCLOR-1248		ND	0.038 U	mg/Kg	0.038						12672-29-6
Analyte....	AROCLOR-1254		ND	0.038 U	mg/Kg	0.038						11097-69-1
Analyte....	AROCLOR-1260		ND	0.038 U	mg/Kg	0.038						11096-82-5
Surrogate..	DECACHLOROBIPHENYL		qc	0.023	mg/Kg		61	0.038	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	0.019	mg/Kg		52	0.038	27 to 132			877-09-8

Reference: A1576-A1563-SOILCOMP-1 Description: COMPOSITE FLAGPOLE EXCAVATION DRUM SAMP.GE PITTS  
 SGS Lab Number: TA3G0P644002 Percent Solids: 86 Sample Type: F

Matrix: SOIL Sampled: 07/30/03 14:10

Prep Code: SW3541C		Prepared: 08/02/03 14:00		Preparation Batch: 083019			Analyst: des			Report Basis: Dry		
Run#: 001 Method Code: SW8082		Analyzed: 08/05/03 21:43		Analytical Batch: 083158			Dilution Factor: 1.00			Analytical Run Type: 00		
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	0.039 U	mg/Kg	0.039						12674-11-2
Analyte....	AROCLOR-1221		ND	0.039 U	mg/Kg	0.039						11104-28-2
Analyte....	AROCLOR-1232		ND	0.039 U	mg/Kg	0.039						11141-16-5
Analyte....	AROCLOR-1242		ND	0.039 U	mg/Kg	0.039						53469-21-9
Analyte....	AROCLOR-1248		ND	0.039 U	mg/Kg	0.039						12672-29-6
Analyte....	AROCLOR-1254		ND	0.039 U	mg/Kg	0.039						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	0.72	mg/Kg	0.039						11096-82-5
Surrogate..	DECACHLOROBIPHENYL		qc	0.020	mg/Kg		51	0.039	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	0.016	mg/Kg		41	0.039	27 to 132			877-09-8

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 3G0P644 Chain of Custody Number: 000959  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 07/31/03 09:00

Reference: A1574-A1101-SOILCOMP-1 Description: COMPOSITE FLAGPOLE EXCAVATION DRUM SAMP.GE PITTS  
 SGS Lab Number: TA3G0P644003 Percent Solids: 90 Sample Type: F

Matrix: SOIL Sampled: 07/30/03 14:20

Run#	Type	Parameter Name	Prep Code	Method Code	Prepared	Analyzed	QF	Result	RF	Units	PQL	REC	Spk Amt	Spk Limits	Report Basis	Analytical Run Type	CAS Number	
001			SW3541C	SW8082	08/02/03 14:00	08/03/03 02:00									Dry	00		
					Preparation Batch: 083019						Dilution Factor: 1.00				Analytical Batch: 083051			
Analyte....		AROCLOR-1016					ND	0.037 U		mg/Kg	0.037						12674-11-2	
Analyte....		AROCLOR-1221					ND	0.037 U		mg/Kg	0.037						11104-28-2	
Analyte....		AROCLOR-1232					ND	0.037 U		mg/Kg	0.037						11141-16-5	
Analyte....		AROCLOR-1242					ND	0.037 U		mg/Kg	0.037						53469-21-9	
Analyte....		AROCLOR-1248					ND	0.037 U		mg/Kg	0.037						12672-29-6	
Analyte....		AROCLOR-1254					ND	0.037 U		mg/Kg	0.037						11097-69-1	
Analyte....		AROCLOR-1260					ND	0.037 U		mg/Kg	0.037						11096-82-5	
Surrogate..		DECACHLOROBIPHENYL					qc	0.027		mg/Kg		74	0.037	50 to 150			2051-24-3	
Surrogate..		TETRACHLORO-M-XYLENE					qc	0.025		mg/Kg		67	0.037	27 to 132			877-09-8	

RUV-UI-CUUC IUV 10-03 SCS ENVIRONMENTAL

FAX NO. 3043460161

P. 04/04





**Pittsfield Generating Co. Flag Pole  
Excavation Soil Drum Sampling  
(GE Drum #'s A0426, A1575, A1576, A1563, A1574 AND A1101)**

**(401.70.001)**

**(Table 1)**

LAB ID	SAMPLE DATE	PCBs (ppm)	SAMPLE MATERIAL	PID READINGS (ppm)	SAMPLE TYPE
A0426-A1575-SOILCOMP-1	7/30/03	ND	SOIL	0.0	FIELD-COMPOSITE
A1576-A1563-SOILCOMP-1	7/30/03	0.72	SOIL	0.0	FIELD-COMPOSITE
A1574-A1101-SOILCOMP-1	7/30/03	ND	SOIL	0.0	FIELD-COMPOSITE

## **Attachment 2**

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

### Request For Excavation Approval

Please provide the following information along with site and excavation drawings of your proposed excavation.

Requestor's Name: Warren Wood Request Date: 1/21/04

Location: B16 Westside Grid: M10 (provide map and drawings)

Purpose of excavation: REPAIR 6" WATER LINE

List dimensions of excavation: To Be Determined

Estimated amount of soil to be excavated: 15 cubic yards

Assuming there is no contamination preventing it, is it your intention to backfill if possible or will you be seeking disposal alternatives?

Current and historical use of the excavation site? (please list any former manufacturing or chemical storage facilities and any possible types of contamination)

NA

\*When is excavation scheduled to begin? 1/21/04 ASAP

\*Anticipated date of completion? 1/22/04

**\*NOTE: GE approval and DEP notification are required for all types of excavations. Time must be allotted in the planning stage for these requirements. CEP will provide sampling requirements after receipt of this form and approvals will be granted in a timely manner.**

**For non CEP projects only:**

Contact Person: \_\_\_\_\_

Telephone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

Please fax this form to (413) 494-5695

Attention: Jeff Borycki (ONYX)  
Tel.# (413) 494-5358

1

5

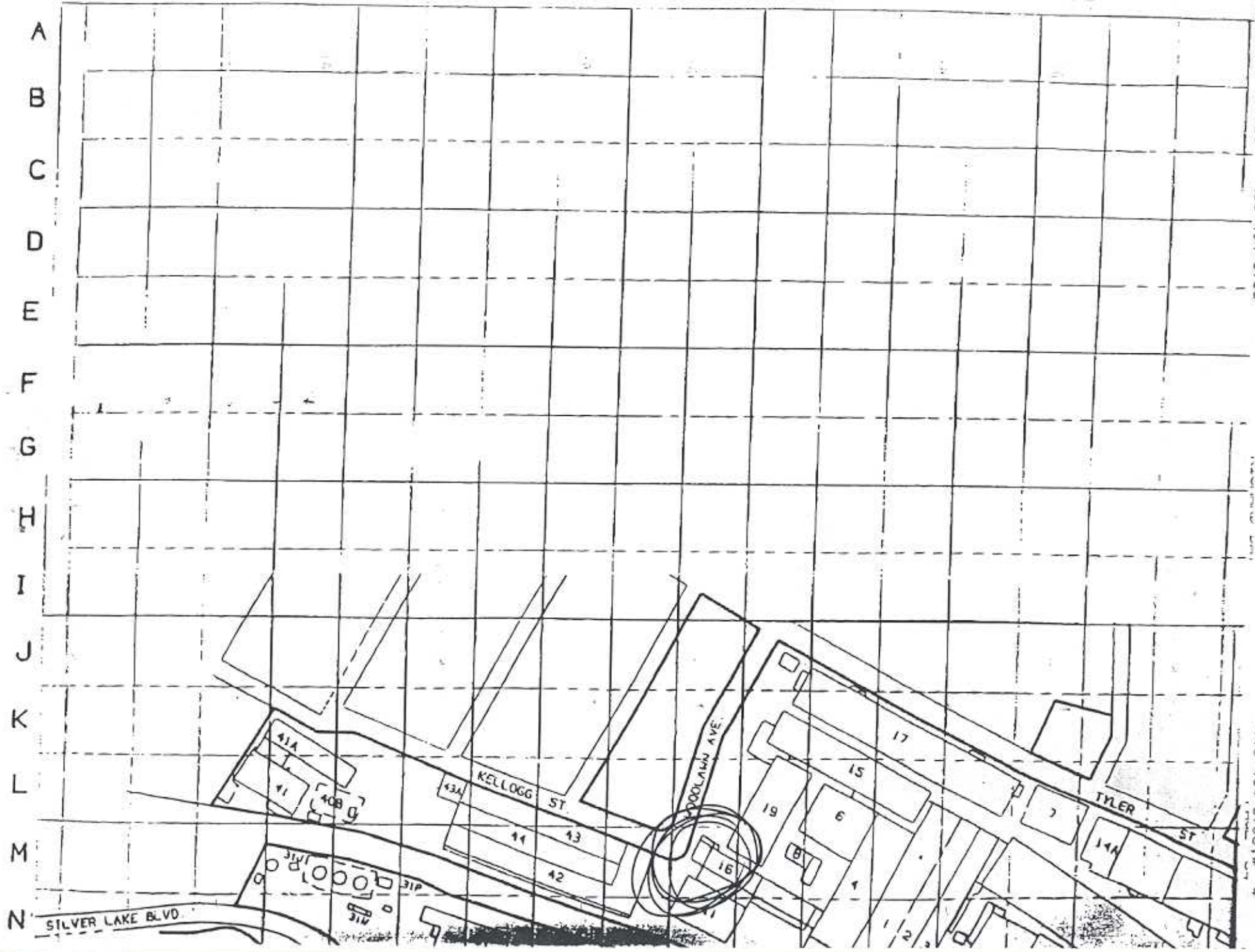
10

15

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N

1-21-04; 1:09PM

413 494 5700;# 4



**To:** Bruce Eulian  
**Cc:** Jason Lannie, John Novotny  
**From:** Pete Varley – ONYX Environmental  
**Date:** January 27, 2004  
**Subject:** **Sampling of soil stockpile from emergency excavation by Bldg 16 to repair a water main break.**

Bruce,

Currently there is one stockpile of soil (30 yards) staged in Bldg 19 on poly that requires sampling to determine proper disposal requirements. The soil was generated during emergency excavation activities by the West Side of Building 16 (Grid M-10) to repair a water main break on January 21, 2004. The soil was placed on poly in Bldg. 19 upon completion of the excavation early morning on January 22, 2004.

Please sample this excavated material in accordance with the *Protocols for the management of Excavation Activities*. Please take one sample per every 5 yards of material (six total samples), to have analyzed for PCBs (Method 8082) and screened with a PID. If the PID comes back higher than 10 units please have that sample analyzed for VOC and 1,2,4-Trichlorobenzene.

If possible, please take enough sample at each location as to allow the lab to hold some sample from each jar they receive, in order to run a composite TCLP constituents (excluding Pesticides and Herbicides) (Method 1311) test at a later date. Keep in mind that we would not want TCLP sample hold times to expire while we wait for PCB results.

**BBL Project Number:**

**Lab & PO#: BBL Choice**

**Note: We Always need a method detection limit of 1 PPM on soils, please advise lab on COC.**

**Turnaround: 3-Day Turn**

**Final Copy to: Peter Varley at Fax Number (413) 494-5695**

**Invoice To: Facilities**



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013701

NO. 275 P. 5

FEB-02-2004 MON 15:10

SGS ENVIRONMENTAL

FAX NO. 3043480761

P. 02

CLIENT: <b>BBL</b> CONTACT: <b>E. Rodriguez</b> PHONE NO: <b>518 669 3911</b> PROJECT: <b>Bldg 19 Staple of So.</b> SITE/PROJID: <b>HD1.70.10</b> REPORTS TO: <b>Bruce Eulian</b> FAX NO.: <b>(413) 474 2576</b> INVOICE TO: <b>Bruce Eulian</b> QUOTE # P.O. NUMBER					CTBE Reference: <b>TA4-A0-0504-1/9</b>		PAGE <b>1</b> OF <b>1</b>							
2 LAB NO. 1 2 3 4 5 6/8 9 Dup-1	SAMPLE IDENTIFICATION 17-012004-1 -2 -3 -4 -5 -6	DATE 1/28/04 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	TIME 1330 1345 1400 1415 1430 1445 ↓ ↓	MATRIX Soil ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	CONTAINERS 1-6 ↓ ↓ ↓ ↓ 2 ↓ ↓ ↓	Preservatives Used <b>ICE</b> <b>400</b> <b>PCBs 8082</b> <b>MS/MS.D</b>	Analysis Required <input checked="" type="checkbox"/>	REMARKS *We need a method detection limit of 1 PPM on soils. *If TCLP analysis is requested at a later date use method 1311 excluding Pest & Herbs.						
									Relinquished By: (1) <b>HA Rodriguez</b>	Date <b>1/28/04</b>	Time <b>1700</b>	Received By: <b>Wagner Perry</b>	Shipping Carrier: <b>UPS</b>	Samples Received Cold? (Circle) <b>YES</b> NO Temperature °C: <b>4.1</b>
									Relinquished By: (2) <b>Wagner Perry</b>	Date <b>1-28-04</b>	Time <b>17:30</b>	Received By: <b>Wagner Perry</b>	Special Deliverable Requirements:	Chain of Custody Seal: (Circle) <b>INTACT</b> BROKEN ABSENT
									Relinquished By: (3)	Date	Time	Received By:	Requested Turnaround Time and Special Instructions: Please collect and hold from these 6 containers 1 composite sample for TCLP analysis pending these PCB results * PCB TOT 3 Day ok	
									Relinquished By: (4)	Date <b>1/28/04</b>	Time <b>0915</b>	Received By: <b>Dotson</b>		

FEB. 3.

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4AOP504 Chain of Custody Number: D13701  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 01/29/04 09:15

Reference: 19-012804-1 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4AOP504001 Percent Solids: 92 Sample Type: F

Matrix: SOIL Sampled: 01/28/04 13:30

Run#	Method Code	Prep Code	Prepared	Preparation Batch	Analyst	Report Basis					
001	SW8082	SW3541C	01/29/04 16:00	091260	des	Dry					
Type	Parameter Name	QF	Result	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
Analyte	AROCLOR-1016	ND	1.0 U	mg/Kg	1.0						
Analyte	AROCLOR-1221	ND	1.0 U	mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1232	ND	1.0 U	mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1242	ND	1.0 U	mg/Kg	1.0						11241-16-5
Analyte	AROCLOR-1248	ND	1.0 U	mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1254	ND	2.0 U	mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1260	ND	1.0 U	mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBI-PHENYL	qc	0.026	mg/Kg		73	0.036	50 to 150			2051-24-3
Surrogate	TETRACHLORO-M-XYLENE	qc	0.018	mg/Kg		51	0.036	27 to 132			877-09-8

Reference: 19-012804-2 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4AOP504002 Percent Solids: 94 Sample Type: F

Matrix: SOIL Sampled: 01/28/04 13:45

Run#	Method Code	Prep Code	Prepared	Preparation Batch	Analyst	Report Basis					
001	SW8082	SW3541C	01/29/04 16:00	091260	des	Dry					
Type	Parameter Name	QF	Result	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
Analyte	AROCLOR-1016	ND	1.0 U	mg/Kg	1.0						
Analyte	AROCLOR-1221	ND	1.0 U	mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1232	ND	1.0 U	mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1242	ND	1.0 U	mg/Kg	1.0						11241-16-5
Analyte	AROCLOR-1248	ND	1.0 U	mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1254	<Hit>	0.078 J	mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1260	<Hit>	0.063 J	mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBI-PHENYL	qc	0.026	mg/Kg		73	0.035	50 to 150			2051-24-3
Surrogate	TETRACHLORO-M-XYLENE	qc	0.025	mg/Kg		70	0.035	27 to 132			877-09-8

FEB-02-2004 MON 15:11

SGS ENVIRONMENTAL

FAX NO. 3043460761

P. 03

**SGS - Environmental Services**  
**1258 Greenbrier Street Charleston WV 25311**

Sample Delivery Group: 4ADP504 Chain of Custody Number: 013701  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 01/29/04 09:15

Reference: 19-012804-3 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4AOP504003 Percent Solids: 91 Sample Type: f

Matrix: SOIL Sampled: 01/28/04 14:00

Run#	Method Code	Prep Code	Prepared	Analyzed	Preparation Batch	Analyst	Dilution Factor	Report Basis				
001	SN9082	SN3541C	01/29/04 16:00	01/30/04 16:12	091260	des	1.00	Dry				
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDSi	CAS Number
Analyte	AROCLOR-1016	ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1221	ND	1.0 U		mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1232	ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte	AROCLOR-1242	ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1248	ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1254	<Kit>	1.0		mg/Kg	1.0						11097-69-1
Analyte	AROCLOR-1260	<Kit>	1.4		mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBI-PHENYL	qc	0.042		mg/Kg		116	0.036	50 to 150			2051-24-3
Surrogate	TETRACHLORO-N-XYLENE	qc	0.032		mg/Kg		89	0.036	27 to 132			877-09-8

Reference: 19-012804-4 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4AOP504004 Percent Solids: 92 Sample Type: F

Matrix: SOIL Sampled: 01/28/04 14:15

Run#	Method Code	Prep Code	Prepared	Analyzed	Preparation Batch	Analyst	Dilution Factor	Report Basis				
001	SN9082	SN3541C	01/29/04 16:00	01/30/04 16:28	091260	des	1.00	Dry				
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	2DHI	CAS Number
Analyte	AROCLOR-1016	ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1221	ND	1.0 U		mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1232	ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte	AROCLOR-1242	ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1248	ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1254	<Kit>	0.13 J		mg/Kg	1.0						11097-69-1
Analyte	AROCLOR-1260	<Kit>	0.12 J		mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBI-PHENYL	qc	0.026		mg/Kg		77	0.036	50 to 150			2051-24-3
Surrogate	TETRACHLORO-N-XYLENE	qc	0.024		mg/Kg		62	0.036	27 to 132			877-09-8

JUN 1  
 SGS ENVIRONMENTAL  
 FAX NO. 3043460761

P. 04



**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4A0P504 Chain of Custody Number: 013701  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 01/29/04 09:15

Reference: 19-012804-5 Description: GRAB BLDG 19 STOCKPILE OF SOIL Matrix: SOIL Sampled: 01/28/04 14:30  
 SGS Lab Number: TA4A0P504005 Percent Solids: 95 Sample Type: F

Run#	Prep Code	Method Code	Prepared	Preparation Batch	Analyst	Report Basis						
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
001	SW3541C	SW8082	01/29/04 16:00	091260	des	Dry						
			01/30/04 16:45	091273		00						
						1.00						
Analyte	AROCLOR-1016	ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1221	ND	1.0 U		mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1232	ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte	AROCLOR-1242	ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1248	ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1254	ND	1.0 U		mg/Kg	1.0						11097-69-3
Analyte	AROCLOR-1260	<Hit>	0.016 U		mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBIPHENYL	qc	0.026		mg/Kg		74	0.035	50 to 150			2051-24-3
Surrogate	TETRACHLORO-M-XYLENE	qc	0.022		mg/Kg		62	0.035	27 to 132			877-09-8

Reference: 19-012804-6 Description: GRAB BLDG 19 STOCKPILE OF SOIL Matrix: SOIL Sampled: 01/28/04 14:45  
 SGS Lab Number: TA4A0P504006 Percent Solids: 92 Sample Type: F

Run#	Prep Code	Method Code	Prepared	Preparation Batch	Analyst	Report Basis						
Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
001	SW3541C	SW8082	01/29/04 16:00	091260	bcl	Dry						
			01/31/04 20:18	091298		00						
						1.00						
Analyte	AROCLOR-1016	ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1221	ND	1.0 U		mg/Kg	1.0						11104-28-2
Analyte	AROCLOR-1232	ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte	AROCLOR-1242	ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1248	ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1254	ND	1.0 U		mg/Kg	1.0						11097-69-3
Analyte	AROCLOR-1260	ND	1.0 U		mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBIPHENYL	qc	0.038		mg/Kg		106	0.036	50 to 150			2051-24-3
Surrogate	TETRACHLORO-M-XYLENE	qc	0.034		mg/Kg		92	0.036	27 to 132			877-09-8

2004 JUN 10 11

SGS ENVIRONMENTAL

FAX NO. 3043460761

P. 05

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4A0P504 Chain of Custody Number: 013701  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 01/29/04 09:15

Reference: 19-012804-6 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4A0P504007 Percent Solids: 92 Sample Type: MS

Matrix: SOIL Sampled: 01/28/04 14:45

Run#	Method Code	Prep Code	Prepared	Time	Preparation Batch	Analyst	Dilution Factor	Report Basis					
001	SW8082	SW3511C	01/29/04	16:00	091260	bcl	1.00	Dry					
Type..... Parameter Name			QF	Result	RP	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
Analyte....	AROCLOR-1016		ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte....	AROCLOR-1221		ND	1.0 U		mg/Kg	1.0						11108-28-2
Analyte....	AROCLOR-1232		ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte....	AROCLOR-1242		ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte....	AROCLOR-1248		ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte....	AROCLOR-1254		Spiked	0.18		mg/Kg	1.0	99	0.18	50 to 130			11097-69-1
Analyte....	AROCLOR-1260		ND	1.0 U		mg/Kg	1.0						11096-82-5
Surrogate..	DECACHLOROBIIPHENYL		qc	0.040		mg/Kg		112	0.036	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	0.036		mg/Kg		98	0.036	27 to 132			877-09-8

Reference: 19-012804-6 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TA4A0P504008 Percent Solids: 92 Sample Type: MSD

Matrix: SOIL Sampled: 01/28/04 14:45

Run#	Method Code	Prep Code	Prepared	Time	Preparation Batch	Analyst	Dilution Factor	Report Basis					
001	SW8082	SW3511C	01/29/04	16:00	091260	bcl	1.00	Dry					
Type..... Parameter Name			QF	Result	RP	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHI	CAS Number
Analyte....	AROCLOR-1016		ND	1.0 U		mg/Kg	1.0						12674-11-2
Analyte....	AROCLOR-1221		ND	1.0 U		mg/Kg	1.0						11104-28-2
Analyte....	AROCLOR-1232		ND	1.0 U		mg/Kg	1.0						11141-16-5
Analyte....	AROCLOR-1242		ND	1.0 U		mg/Kg	1.0						53469-21-9
Analyte....	AROCLOR-1248		ND	1.0 U		mg/Kg	1.0						12672-29-6
Analyte....	AROCLOR-1254		Spiked	0.18		mg/Kg	1.0	100	0.18	50 to 130	0.50	40	11097-69-1
Analyte....	AROCLOR-1260		ND	1.0 U		mg/Kg	1.0						11096-82-5
Surrogate..	DECACHLOROBIIPHENYL		qc	0.042		mg/Kg		115	0.036	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	0.035		mg/Kg		95	0.036	27 to 132			877-09-8

FEB-02-2004 MON 15:12

SGS ENVIRONMENTAL

FAX NO. 3043460761

P. 06

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4A0P504 Chain of Custody Number: 013701  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 01/29/04 09:15

Reference: DUP-1 Description: GRAB BLDG 19 STOCKPILE OF SOIL  
 SGS Lab Number: TAAA0P504009 Percent Solids: 92 Sample Type: F

Matrix: SOIL Sampled: 01/28/04 00:00

Run#	Method Code	Prep Code	Prepared	Preparation Batch	Analyst	Report Basis						
001	SW8082	SW9541C	01/29/04 16:00	091260	des	Dry						
			Analyzed: 01/30/04 20:20	Analytical Batch: 091273	Dilution Factor: 5.00	Analytical Run Type: 00						
Type	Parameter Name	QF	Result	RE	Units	PQL	UREC	Spk Amt	Spk Limits	RPD	PDNI	CAS Number
Analyte	AROCLOR-1016	ND	1.0	D	mg/Kg	1.0						12674-11-2
Analyte	AROCLOR-1221	ND	1.0	U	mg/Kg	1.0						11104-26-2
Analyte	AROCLOR-1232	ND	1.0	U	mg/Kg	1.0						11141-16-5
Analyte	AROCLOR-1242	ND	1.0	U	mg/Kg	1.0						53469-21-9
Analyte	AROCLOR-1248	ND	1.0	U	mg/Kg	1.0						12672-29-6
Analyte	AROCLOR-1254	ND	1.0	U	mg/Kg	1.0						11097-69-1
Analyte	AROCLOR-1260	ND	1.0	U	mg/Kg	1.0						11096-82-5
Surrogate	DECACHLOROBIPHENYL	QC	0.031		mg/Kg		85	0.036	50 to 150			2951-24-3
Surrogate	TETRACHLORO-B-XYLENE	QC	0.019		mg/Kg		54	0.036	27 to 132			877-09-8

ENVIRONMENTAL

FAX NO. 3043460761

P. 07



**Stockpiled Soil in Building 19  
Soil Pile Sampling**

**(401.70.010)**

**(Table 1)**

LAB ID	SAMPLE DATE	PCBs (ppm)	SAMPLE MATERIAL	PID READINGS (ppm)	SAMPLE TYPE
19-012804-1	1/28/04	ND	SOIL	0.0	DISCRETE-GRAB
19-012804-2	1/28/04	0.141	SOIL	0.0	DISCRETE-GRAB
19-012804-3	1/28/04	2.4	SOIL	0.0	DISCRETE-GRAB
19-012804-4	1/28/04	0.25	SOIL	0.0	DISCRETE-GRAB
19-012804-5	1/28/04	0.016	SOIL	0.0	DISCRETE-GRAB
19-012804-6	1/28/04	ND	SOIL	0.0	DISCRETE-GRAB

## **Attachment 3**

Approved By:

Date:

### Request For Excavation Approval

Please provide the following information along with site and excavation drawings of your proposed excavation.

Requestor's Name: W. CARTER Request Date: 1/26/04

Location: BLDG 11 ROADWAY Grid: M - 10 (provide map and drawings)

Purpose of excavation: DRILL VENT HOLES FOR GAS LEAK

List dimensions of excavation: 1 1/2" DIA x 3' DEEP

Estimated amount of soil to be excavated: ~ 5-10 GAL cubic yards

Assuming there is no contamination preventing it, is it your intention to backfill if possible or will you be seeking disposal alternatives?

NO BACKFILL

Current and historical use of the excavation site? (please list any former manufacturing or chemical storage facilities and any possible types of contamination)

ROADWAY

\*When is excavation scheduled to begin? 1/27/04 - AM Also 2/19/04 <sup>NOT DONE</sup>

\*Anticipated date of completion? 1/27/04 2/19/04 <sup>33</sup>

\*NOTE: GE approval and DEP notification are required for all types of excavations. Time must be allotted in the planning stage for these requirements. CEP will provide sampling requirements after receipt of this form and approvals will be granted in a timely manner.

For non CEP projects only:

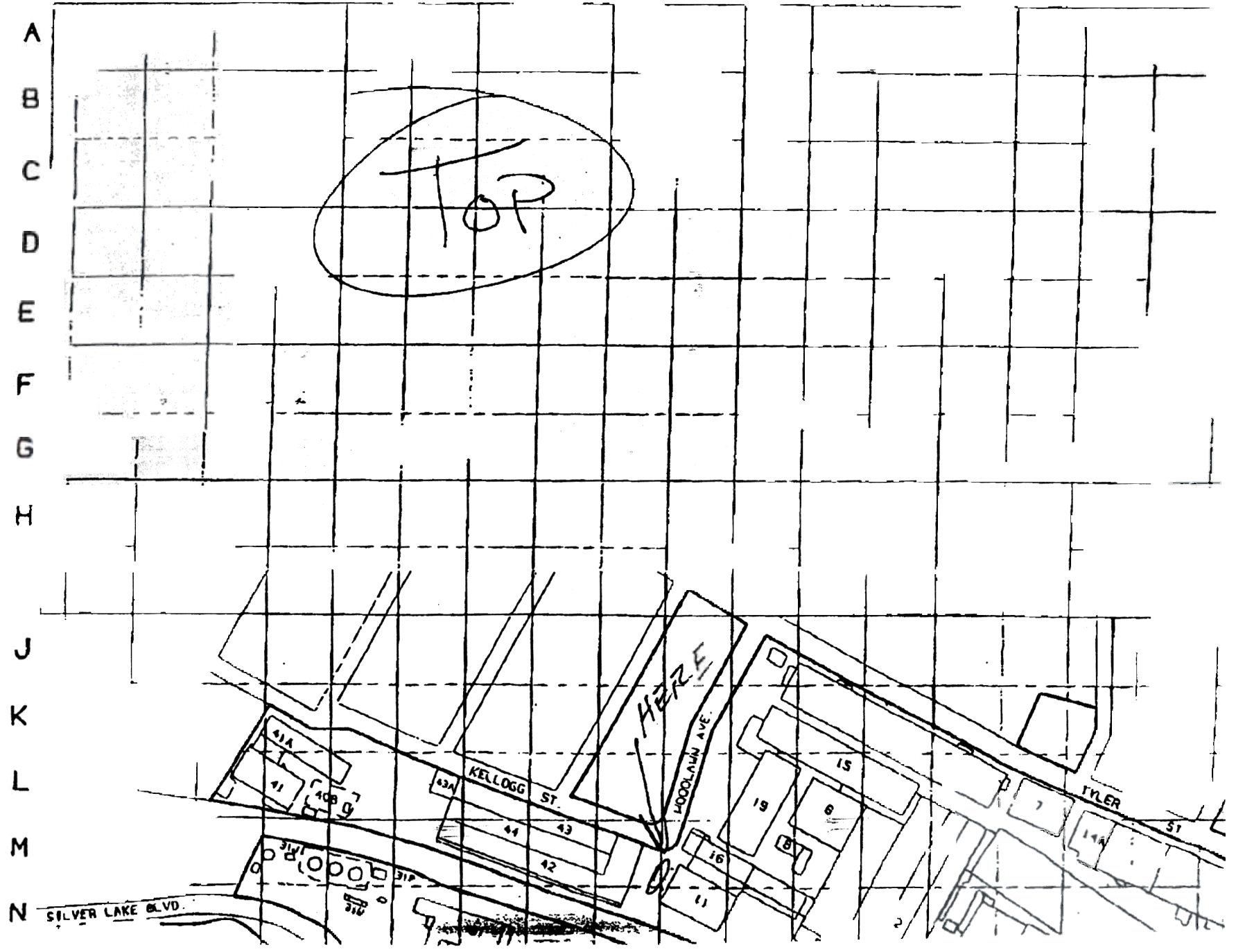
Contact Person: \_\_\_\_\_

Telephone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

Please fax this form to (413) 494-5695

Attention: Jeff Borycki (ONYX)  
Tel.# (413) 494-5358



NYH0654381

STATE OF NEW YORK  
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 DIVISION OF SOLID & HAZARDOUS MATERIALS  
**HAZARDOUS WASTE MANIFEST**  
 P.O. Box 12820, Albany, New York 12212



(Hazardous Waste Manifest 5/00)

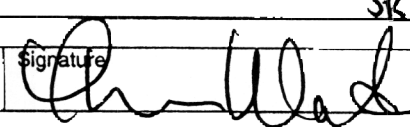
Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>M A D 0 0 2 0 8 4 0 9 3 5 4 3 8 1</b>		Manifest Doc. No. <b>14</b>		2. Page 1 of 1 Information within heavy bold line is not required by Federal Law.	
3. Generator's Name and Mailing Address <b>GENERAL ELECTRIC CO 100 WOODLAWN AVE ATTN: PETER VARLEY PITTSFIELD, MA 01201-4327</b>				A. <b>NYH0654381</b>			
4. Generator's Telephone Number ( 413 ) <b>494-5358</b>				B. Generator's ID <b>SAME</b>			
5. Transporter 1 (Company Name) <b>FRANK'S VACUUM TRUCK SERVICES</b>		6. US EPA ID Number <b>NYD982792814</b>		C. State Transporter's ID <b>AD76298 NY</b>		D. Transporter's Telephone (716) <b>284-2132</b>	
7. Transporter 2 (Company Name)		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Telephone ( )	
9. Designated Facility Name and Site Address <b>CWM CHEMICAL SERVICES, L.L.C 1550 BALMER ROAD MODEL CITY, NY 14107</b>				10. US EPA ID Number <b>NYD049836679</b>		G. State Facility ID	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)				12. Containers Number Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No. EPA
a. <b>RQ, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, UN2315, III</b>				0 0 1 D M	0 0 3 0 5	K	STATE <b>B007</b>
b. <b>RQ, POLYCHLORINATED BIPHENYLS, SOLID MIXTURE, 9, UN2315, III</b>				0 3 3 D M	0 2 0 6 7	K	STATE <b>B007</b>
c. <b>PCB MATERIAL, NONE, NONE</b>				0 0 1 D F	0 0 0 1 0	K	STATE <b>B007</b>
d. <b>PCB MATERIAL, NONE, NONE</b>				0 0 1 D F	0 0 0 2 2	K	STATE <b>B007</b>
J. Additional Descriptions for Materials listed Above				K. Handling Codes for Wastes Listed Above			
a. <b>RESIDENTIAL DEBRIS W&lt;1%PCBS CHO642/MP#497912 ERG#171/MA02</b>		c. <b>DEBRIS W&lt;1%PCBS. T79730/MP#497933 *MA02</b>		a. <input type="checkbox"/>		c. <input type="checkbox"/>	
b. <b>DEBRIS W&lt;1%PCBS. ERG#171 T79730/MP#497933 *MA02</b>		d. <b>RESIDENTIAL DEBRIS W&lt;1%PCBS CHO642/MP#616540 *MA02</b>		b. <input type="checkbox"/>		d. <input type="checkbox"/>	
15. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE (FOR GE) 1-800-424-9300. MA02 FOR MADEP USE ONLY. MATERIAL FROM BLDG 78LTS C/D REQUIRED. PACKING SLIPS ATTACHED. SEE ATTACHED CONTINUATION SHEET FOR UNIQUE DRUM #(S). PCB REMOVED FROM SERVICE DATE(S) AND WEIGHT(S)- EMERGENCY PHONE(ONYX)-INFOTRAC: 1-800-535-5053</b> <b>SR # 78922</b>							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a smaller generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>JOHN J. LEVESQUE</b>				Signature <i>[Signature]</i>		Mo. Day Year <b>05/01/04</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>THOMAS WALSH</b>				Signature <i>[Signature]</i>		Mo. Day Year <b>05/19/04</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Mo. Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name				Signature		Mo. Day Year	



*JH 5/10/04*

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b> <i>(Continuation Sheet)</i>		21. Generator's US EPA ID No. <b>MAD002084093</b>	Manifest Document No. <b>54381</b>	22. Page <b>2 of 4</b>	Information in the shaded areas is not required by Federal law.																																																									
		23. Generator's Name <b>GENERAL ELECTRIC CO</b> 100 WOODLAWN AVE ATTN: PETER VARLEY PITTSFIELD, MA 01201-4327 (413)494-5358		L. State Manifest Document Number <b>NYH0654381</b>		M. State Generator's ID <b>SAME</b>																																																								
24. Transporter 1 Company Name <b>FRANK'S VACUUM TRUCK SERVICES</b>		25. US EPA ID Number <b>NYD982792814</b>		N. State Trans. ID <b>AD 76298 (NY)</b>		O. Trans. Phone <b>(716) 284-2132</b>																																																								
26. Transporter 2 Company Name		27. US EPA ID Number		P. State Trans. ID		Q. Trans. Phone																																																								
28. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		29. Containers		30. Total Quantity	31. Unit Wt/Vol	R. Waste No.																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:5%;">HM</th> <th style="width:65%;">Description</th> <th style="width:10%;">No.</th> <th style="width:10%;">Type</th> <th style="width:10%;">Quantity</th> <th style="width:10%;">Unit</th> <th style="width:10%;">Waste No.</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>PCB MATERIAL, NONE, NONE</td> <td>0 0 1</td> <td>D F</td> <td>0 0 0 2 8</td> <td>K</td> <td>B007</td> </tr> <tr> <td>b.</td> <td>PCB MATERIAL, NONE, NONE</td> <td>0 0 1</td> <td>D M</td> <td>0 0 1 8 3</td> <td>K</td> <td>B007</td> </tr> <tr> <td>c.</td> <td>PCB MATERIAL, NONE, NONE</td> <td>0 0 3</td> <td>D M</td> <td>0 0 2 4 1</td> <td>K</td> <td>B007</td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>e.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>f.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>g.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		HM	Description	No.	Type	Quantity	Unit	Waste No.	a.	PCB MATERIAL, NONE, NONE	0 0 1	D F	0 0 0 2 8	K	B007	b.	PCB MATERIAL, NONE, NONE	0 0 1	D M	0 0 1 8 3	K	B007	c.	PCB MATERIAL, NONE, NONE	0 0 3	D M	0 0 2 4 1	K	B007	d.							e.							f.							g.											
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d.																																																														
e.																																																														
f.																																																														
g.																																																														
S. Additional Descriptions for Materials Listed Above <b>A) CJ2338/WP#878675 MA02</b> <b>B) CJ2338/WP#878675.ERG#171 MA02</b> <b>C) DEBRIS W/ 50-100 PPM PCBs CM1456/WP#878677 MA02</b>				T. Handling Codes for Wastes Listed Above <b>AL BL CL</b>																																																										
32. Special Handling Instructions and Additional Information <b>EMERGENCY PHONE (FOR GE) 1-800-424-9300. MA02 FOR MADEP USE ONLY. MATERIAL FROM BLDG 78LTS C/D REQUIRED. SEE ATTACHED CONTINUATION SHEET FOR UNIQUE DRUM #(S). PCB REMOVED FROM SERVICE DATE(S) AND WEIGHT(S). 28A&amp;B) DRY TYPE TRANSFORMERS W/POTENTIAL SURFACE CONTAMINATION (&lt;500PPM)</b>																																																														
TRANSPORTER	33. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>THOMAS WALSH</b>		Signature 		Date Month Day Year <b>05 10 04</b>																																																									
	34. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date Month Day Year																																																									
35. Discrepancy Indication Space																																																														

*SR# 719922*

## Manifest Continuation Page

Manifest #: NYH0654381

3 OF 4

Date Shipped: 5/10/2004

Line #	Drum #	Profile Number	PCB Removed		Description	Qty	Units	B/C
			From Service	Date				
11A	A0812	CH0642		4/1/2004	PCB Soil & Debris - Residential Rem.	305 KG		22
TOTAL						305 KG		
11B	A0920	T79730		1/1/2004	PCB contaminated dirt &/or concrete	45 KG		25
11B	E0774	T79730		1/9/2004	PCB contaminated dirt &/or concrete	35 KG		32
11B	A0431	T79730		1/12/2004	PCB contaminated dirt &/or concrete	38 KG		31
11B	A0912	T79730		1/13/2004	PCB contaminated dirt &/or concrete	71 KG		31
11B	A1097	T79730		1/16/2004	PCB contaminated dirt &/or concrete	64 KG		30
11B	E0490	T79730		2/18/2004	PCB contaminated dirt &/or concrete	23 KG		8
11B	A0428	T79730		2/12/2004	PCB contaminated dirt &/or concrete	89 KG		30
11B	A1091	T79730		2/27/2004	PCB contaminated dirt &/or concrete	100 KG		30
11B	A0914	T79730		2/10/2004	PCB contaminated dirt &/or concrete	47 KG		38
11B	A0842	T79730		3/10/2004	PCB contaminated dirt &/or concrete	105 KG		30
11B	A1094	T79730		2/12/2004	PCB contaminated dirt &/or concrete	40 KG		31
11B	E0440	T79730		3/16/2004	PCB contaminated dirt &/or concrete	20 KG		8
11B	A1098	T79730		2/17/2004	PCB contaminated dirt &/or concrete	66 KG		31
11B	E0698	T79730		2/20/2004	PCB contaminated dirt &/or concrete	43 KG		32
11B	A1096	T79730		3/4/2004	PCB contaminated dirt &/or concrete	72 KG		25
11B	A0841	T79730		3/11/2004	PCB contaminated dirt &/or concrete	120 KG		30
11B	A0839	T79730		3/12/2004	PCB contaminated dirt &/or concrete	68 KG		38
11B	A2095	T79730		3/3/2004	PCB contaminated dirt &/or concrete	43 KG		28 31
11B	A0840	T79730		3/15/2004	PCB contaminated dirt &/or concrete	96 KG		31
11B	E0842	T79730		4/14/2004	PCB contaminated dirt &/or concrete	24 KG		8
11B	A0828	T79730		3/18/2004	PCB contaminated dirt &/or concrete	22 KG		25
11B	A1089	T79730		4/15/2004	PCB contaminated dirt &/or concrete	37 KG		38
11B	E0489	T79730		4/12/2004	PCB contaminated dirt &/or concrete	18 KG		38
11B	A0827	T79730		3/26/2004	PCB contaminated dirt &/or concrete	100 KG		30
11B	E0856	T79730		3/19/2004	PCB contaminated dirt &/or concrete	27 KG		32
11B	A1082	T79730		4/19/2004	PCB contaminated dirt &/or concrete	89 KG		38
11B	A1087	T79730		4/19/2004	PCB contaminated dirt &/or concrete	83 KG		38
11B	A1088	T79730		4/19/2004	PCB contaminated dirt &/or concrete	61 KG		38
11B	A1081	T79730		4/20/2004	PCB contaminated dirt &/or concrete	88 KG		38
11B	A1080	T79730		4/21/2004	PCB contaminated dirt &/or concrete	119 KG		38
11B	A0836	T79730		4/21/2004	PCB contaminated dirt &/or concrete	64 KG		38
11B	A0824	T79730		3/24/2004	PCB contaminated dirt &/or concrete	35 KG		38
11B	A1079	T79730		4/21/2004	PCB contaminated dirt &/or concrete	115 KG		38
TOTAL						2067 KG		
11C	C0653	T79730		1/27/2004	PCB contaminated dirt &/or concrete	10 KG		32
TOTAL						10 KG		

## Manifest Continuation Page

Manifest #: NYH0654381

4 OF 4

Date Shipped: 5/10/2004

Line #	Drum #	Profile Number	PCB Removed		Description	Qty	Units	B/C
			From Service	Date				
11D	C0463	CH0642		11/3/2003	PCB Soil & Debris - Residential Rem.	22 KG		3
					TOTAL	22 KG		
28A	C0914	CJ2338		4/7/2004	DRY TYPE TRANSFORMER	26 KG		38
					TOTAL	26 KG		
28B	A1086	CJ2338		4/19/2004	DRY TYPE TRANSFORMER	193 KG		38
					TOTAL	193 KG		
28C	A1092	CM1456		2/12/2004	DECON DEBRIS FROM OWS CLEANING	69 KG		31
28C	A1093	CM1456		2/12/2004	DECON DEBRIS FROM OWS CLEANING	61 KG		31
28C	A0846	CM1456		3/4/2004	DECON DEBRIS FROM OWS CLEANING	111 KG		31
					TOTAL	241 KG		

## **Attachment 4**

3-5-04; 1:16PM  
3/5/04 1:16 PM  
3/5/04

Approved By:

Date:

### Request For Excavation Approval

Please provide the following information along with site and excavation drawings of your proposed excavation.

Requestor's Name: WARREN WOOD Request Date: 3/5/04

Location: SOUTH EAST CORNER OF 66 Grid: \_\_\_\_\_ (provide map and drawings)

Purpose of excavation: REPAIR BROKEN FIRE MAIN

List dimensions of excavation: 12' x 12'

Estimated amount of soil to be excavated: 30+ cubic yards

Assuming there is no contamination preventing it, is it your intention to backfill if possible or will you be seeking disposal alternatives?

Current and historical use of the excavation site? (please list any former manufacturing or chemical storage facilities and any possible types of contamination)

UNKNOWN

\*When is excavation scheduled to begin?

3/8/04

\*Anticipated date of completion?

3/9/04

\*NOTE: GE approval and DEP notification are required for all types of excavations. Time must be allotted in the planning stage for these requirements. CEP will provide sampling requirements after receipt of this form and approvals will be granted in a timely manner.

For non CEP projects only:

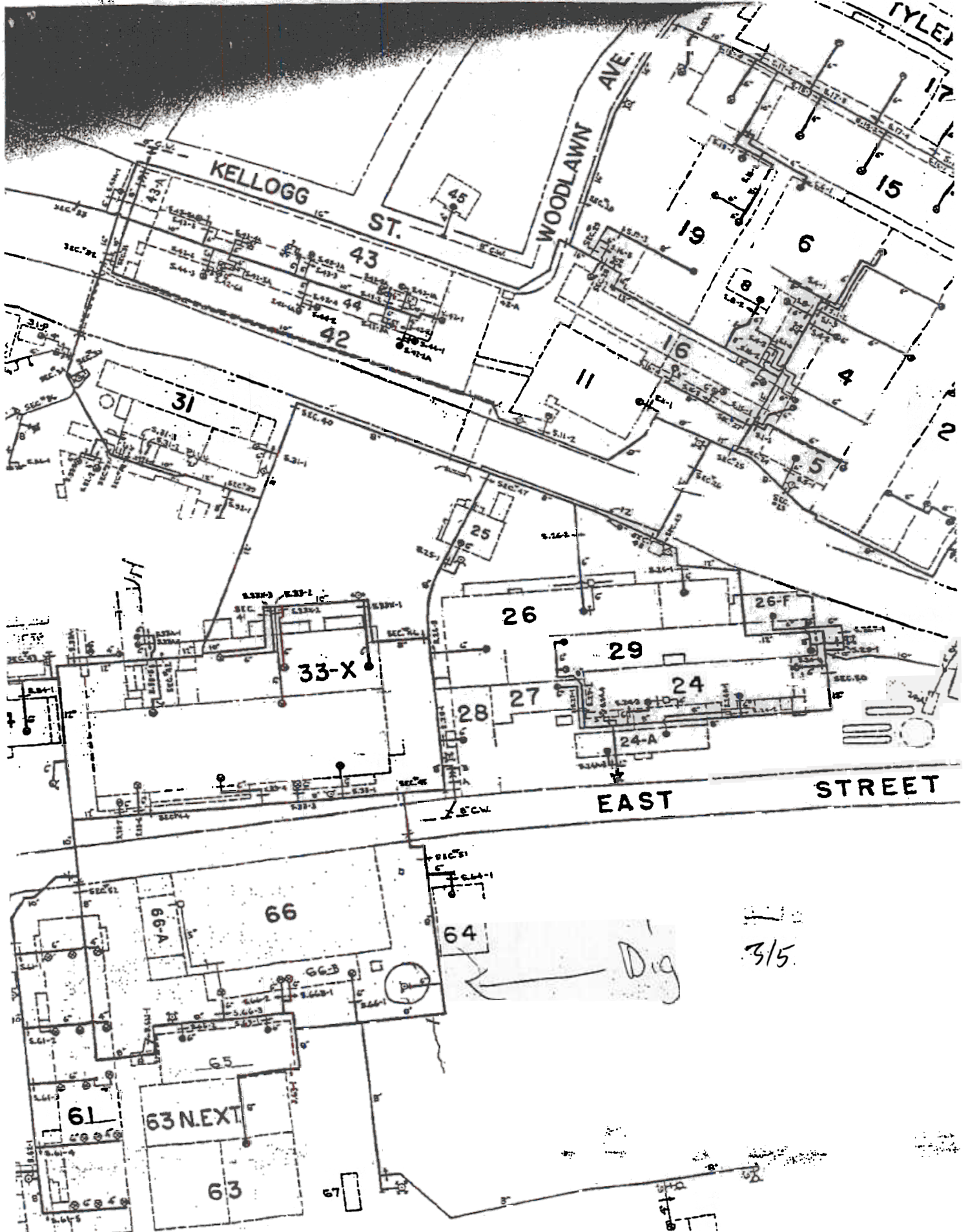
Contact Person: \_\_\_\_\_

Telephone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

Please fax this form to (413) 494-5695

Attention: Jeff Borycki (ONYX)  
Tel.# (413) 494-5358



## **Attachment 5**

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

### Request For Excavation Approval

Please provide the following information along with site and excavation drawings of your proposed excavation.

Requestor's Name: WARRENWOOD Request Date: 4/12/04

Location: EAST ST Grid: R. 9 (provide map and drawings)

Purpose of excavation: CUT + COP 2" WATER LINE TO  
BRD 64

List dimensions of excavation: 8' X 8' X 8'

Estimated amount of soil to be excavated: 19 cubic yards

Assuming there is no contamination preventing it, is it your intention to backfill if possible or will you be seeking disposal alternatives?

Current and historical use of the excavation site? (please list any former manufacturing or chemical storage facilities and any possible types of contamination)

NA

\*When is excavation scheduled to begin? 4/9/04

\*Anticipated date of completion? 4/9/04

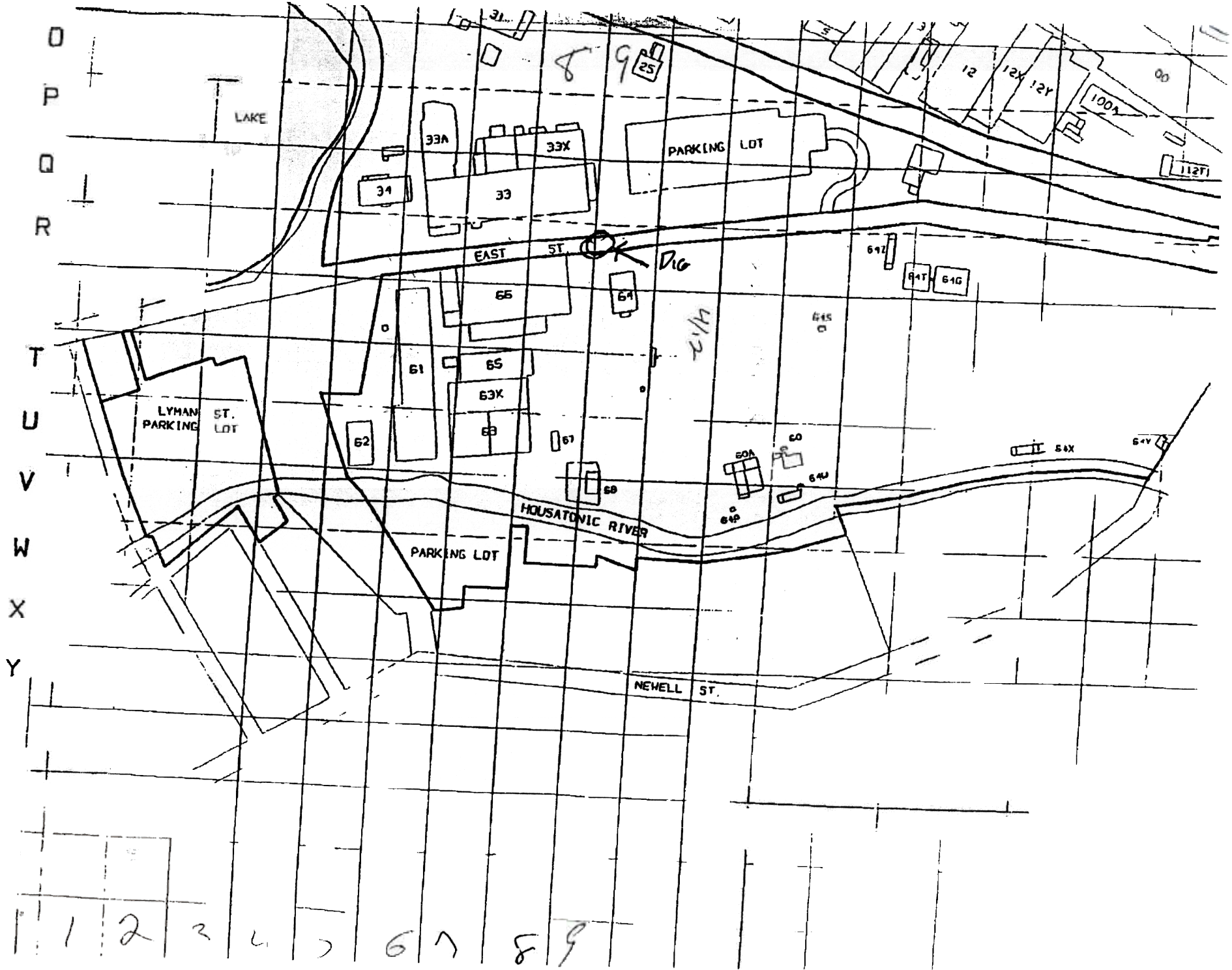
\*NOTE: GE approval and DEP notification are required for all types of excavations. Time must be allotted in the planning stage for these requirements. CEP will provide sampling requirements after receipt of this form and approvals will be granted in a timely manner.

<p><b>For non CEP projects only:</b></p> <p>Contact Person: _____</p> <p>Telephone # _____</p> <p>Mailing Address _____</p>
---

Please fax this form to (413) 494-5695

Attention: Jeff Borycki (ONYX)  
Tel.# (413) 494-5358





## **Attachment 6**

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

### Request For Excavation Approval

Please provide the following information along with site and excavation drawings of your proposed excavation.

Requestor's Name: VARLEY Request Date: 4/7/04

Location: TYLER ST ENTRANCE TO 78<sup>LOT</sup> Grid: \_\_\_\_\_ (provide map and drawings)

Purpose of excavation: INSTALLATION OF NEW GATE

List dimensions of excavation: 72" x 2" x 2"

Estimated amount of soil to be excavated: < 10 yds cubic yards

Assuming there is no contamination preventing it, is it your intention to backfill if possible or will you be seeking disposal alternatives?  
TO OPCH 71

Current and historical use of the excavation site? (please list any former manufacturing or chemical storage facilities and any possible types of contamination)

\*When is excavation scheduled to begin? 4/7/04  
\*Anticipated date of completion? 4/8/04

**\*NOTE: GE approval and DEP notification are required for all types of excavations. Time must be allotted in the planning stage for these requirements. CEP will provide sampling requirements after receipt of this form and approvals will be granted in a timely manner.**

**For non CEP projects only:**

Contact Person: \_\_\_\_\_

Telephone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

Please fax this form to (413) 494-5695

Attention: Jeff Borycki (ONYX)  
Tel.# (413) 494-5358

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ALTRESKO  
PITTSFIELD, INC.

71

**To:** Bruce Eulian  
**Cc:** Jason Lannie, John Novotny  
**From:** Pete Varley – ONYX Environmental  
**Date:** May 19, 2004  
**Subject:** **Sampling of excavated soil from Bldg 78 Tyler Street Extension gate installation.**

Bruce,

Currently there are two stockpiles of soil staged adjacent to the North Side of Building 78 that require sampling. The soil was generated during excavation activities within grid M-28 and N-28 to install a new gate on 4/7/04 and 4/8/04. The soil was placed on and covered with poly upon completion of the excavation on April 8, 2004.

Please sample each pile of excavated material in accordance with the *Protocols for the management of Excavation Activities*. Please take one sample per every 5 yards of material from each pile and have them analyzed for PCB'S (Method 8082). Please ensure that at a minimum 3 discrete samples are taken from each pile. Please also screen the samples with a PID. If the PID comes back higher than 10 units please have that sample analyzed for VOC's and 1,2,4-Trichlorobenzene.

**BBL Project Number:**

**Lab & PO#: BBL Choice**

**Note: We Always need a method detection limit of 1 PPM on soils, Please advise lab on COC.**

**Turnaround: 3-day Turnaround**

**Final Copy to: Peter Varley at Fax Number (413) 494-5695**

**Invoice To: Facilities**



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030591

<b>1</b> CLIENT: <u>CRASHAW, DUKE &amp; LEE</u>					CT&E Reference: <u>TAY-EP529-19</u>		PAGE <u>1</u> OF <u>1</u>	
CONTACT: <u>J. DUKAND</u>		PHONE NO: <u>(415) 1822-0718</u>			NO CONTAINERS	SAMPLE TYPE OR COMP OR GRAB	Preservation Used <u>42</u>	Analysis Required <u>3</u>
PROJECT: <u>7B TRAIL EXT 69TH SOIL</u>		SITE/POSITION: <u>6E PASTURELAND</u>						
REPORTS TO: <u>DUKE EUSAN</u>		FAX NO: <u>(415) 494-2876</u>						
INVOICE TO: <u>DUKE EUSAN</u>		QUOTE # P.O. NUMBER <u>40170-006</u>						
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX				REMARKS
1	7B-TEG-PILE 1-1	5/21/04	1445	SOIL	1	G	X	
2	-2		1450		1		X	
3	-3		1455		1		X	
4	-4		1500		1		X	
5	-5		1505		1		X	
6	7B-TEG-PILE 2-1		1510		1		X	
7	2		1515		1		X	
8	3		1520		1		X	
9	4		1525		1		X	
<b>5</b> Collected/Relinquished By: (1) <u>[Signature]</u>		Date	Time	Received By: <u>[Signature]</u>		<b>4</b> Shipping Carrier: <u>LPS</u>		Samples Received Cold? (Circle) YES NO
Relinquished By: (2) <u>[Signature]</u>		Date	Time	Received By: <u>[Signature]</u>		Shipping Ticket No: <u>LPS</u>		Temperature °C: <u>3.9</u>
Relinquished By: (3)		Date	Time	Received By:		Special Deliverable Requirements:		Chain of Custody Seal: (Circle) <input checked="" type="radio"/> INTACT <input type="radio"/> BROKEN <input type="radio"/> ABSENT
Relinquished By: (3)		Date	Time	Received By: <u>[Signature]</u>		Requested Turnaround Time and Special Instructions: <u>19.044 MAX ALLOWED.</u> <u>*LEAD 21. 11M</u>		

FAX NO. 3043460761  
 P. 07

**SGS - Environmental Services**  
**1258 Greenbrier Street Charleston WV 25311**

Sample Delivery Group: 4E0P529 Chain of Custody Number: 030591  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 05/22/04 10:20

Reference: 78-TEG-PILE-1-1 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4E0P529001 Percent Solids: 93 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 14:45

Prep Code: SW3541C	Prepared: 05/24/04 09:30	Preparation Batch: 096905	Analyst: bcl	Report Basis: Dry							
Run#: 001 Method Code: SW8082	Analyzed: 05/26/04 11:16	Analytical Batch: 096910	Dilution Factor: 1000.00	Analytical Run Type: 00							
Type..... Parameter Name	QP	Result	RF	Units	PQL	%REC	Spk Act	Spk Limits	RPD	PDH	CAS Number
Analyte... AROCLOR-1016	ND	36 U		mg/Kg	36						12674-11-2
Analyte... AROCLOR-1221	ND	36 U		mg/Kg	36						11104-28-2
Analyte... AROCLOR-1232	ND	36 U		mg/Kg	36						11141-16-5
Analyte... AROCLOR-1242	ND	36 U		mg/Kg	36						53469-21-9
Analyte... AROCLOR-1248	ND	36 U		mg/Kg	36						12672-29-6
Analyte... AROCLOR-1254	ND	36 U		mg/Kg	36						11097-69-1
Analyte... AROCLOR-1260	<Hit>	1000		mg/Kg	36						11096-82-5
Surrogate... DECACHLOROBIPHENYL	qc	0.0 D		mg/Kg		0.0	0.036	50 to 150			2051-24-3
Surrogate... TETRACHLORO-M-XYLENE	qc	0.0 D		mg/Kg		0.0	0.036	27 to 132			877-09-8

Reference: 78-TEG-PILE-1-2 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4E0P529002 Percent Solids: 90 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 14:50

Prep Code: SW3541C	Prepared: 05/24/04 09:30	Preparation Batch: 096905	Analyst: bcl	Report Basis: Dry							
Run#: 001 Method Code: SW8082	Analyzed: 05/26/04 11:33	Analytical Batch: 096910	Dilution Factor: 5.00	Analytical Run Type: 00							
Type..... Parameter Name	QP	Result	RF	Units	PQL	%REC	Spk Act	Spk Limits	RPD	PDH	CAS Number
Analyte... AROCLOR-1016	ND	0.18 U		mg/Kg	0.18						12674-11-2
Analyte... AROCLOR-1221	ND	0.18 U		mg/Kg	0.18						11104-28-2
Analyte... AROCLOR-1232	ND	0.18 U		mg/Kg	0.18						11141-16-5
Analyte... AROCLOR-1242	ND	0.18 U		mg/Kg	0.18						53469-21-9
Analyte... AROCLOR-1248	ND	0.18 U		mg/Kg	0.18						12672-29-6
Analyte... AROCLOR-1254	ND	0.18 U		mg/Kg	0.18						11097-69-1
Analyte... AROCLOR-1260	<Hit>	2.4		mg/Kg	0.18						11096-82-5
Surrogate... DECACHLOROBIPHENYL	qc	0.026		mg/Kg		67	0.037	50 to 150			2051-24-3
Surrogate... TETRACHLORO-M-XYLENE	qc	0.026		mg/Kg		69	0.037	27 to 132			877-09-8

ENVIRONMENTAL

FAX NO. 3043460761

P. 02

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4EOP529 Chain of Custody Number: 030591  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 05/22/04 10:20

Reference: 78-TEG-PILE-1-3 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4EOP529003 Percent Solids: 86 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 14:55

Prep Code: SW3541C	Prepared: 05/24/04 09:30	Preparation Batch: 096805	Analyst: des	Report Basis: Dry							
Run#: 001 Method Code: SW002	Analyzed: 05/25/04 16:55	Analytical Batch: 096877	Dilution Factor: 1.00	Analytical Run Type: 00							
Type: Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDNI	CAS Number
Analyte... AROCLOR-1016	ND	0.030 U		mg/Kg	0.030						12674-11-2
Analyte... AROCLOR-1221	ND	0.030 U		mg/Kg	0.038						11104-28-2
Analyte... AROCLOR-1232	NO	0.030 U		mg/Kg	0.038						11141-16-5
Analyte... AROCLOR-1242	ND	0.030 U		mg/Kg	0.038						53469-21-9
Analyte... AROCLOR-1248	ND	0.030 U		mg/Kg	0.038						12672-29-6
Analyte... AROCLOR-1254	ND	0.030 U		mg/Kg	0.038						11097-69-1
Analyte... AROCLOR-1260	<Nit>	0.22		mg/Kg	0.038						11096-82-5
Surrogate.. DECACHLOROBIHENYL	qc	0.025		mg/Kg		64	0.038	50 to 150			2051-24-3
Surrogate.. TETRACHLORO-M-XYLENE	qc	0.033		mg/Kg		86	0.038	27 to 132			877-09-8

Reference: 78-TEG-PILE-1-4 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4EOP529004 Percent Solids: 93 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 15:00

Prep Code: SW3541C	Prepared: 05/24/04 09:30	Preparation Batch: 096805	Analyst: des	Report Basis: Dry							
Run#: 001 Method Code: SW002	Analyzed: 05/25/04 22:55	Analytical Batch: 096887	Dilution Factor: 10.00	Analytical Run Type: 00							
Type: Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDNI	CAS Number
Analyte... AROCLOR-1016	ND	0.36 U		mg/Kg	0.36						12674-11-2
Analyte... AROCLOR-1221	ND	0.36 U		mg/Kg	0.36						11104-28-2
Analyte... AROCLOR-1232	ND	0.36 U		mg/Kg	0.36						11141-16-5
Analyte... AROCLOR-1242	ND	0.36 U		mg/Kg	0.36						53469-21-9
Analyte... AROCLOR-1248	ND	0.36 U		mg/Kg	0.36						12672-29-6
Analyte... AROCLOR-1254	ND	0.36 U		mg/Kg	0.36						11097-69-1
Analyte... AROCLOR-1260	<Nit>	7.0		mg/Kg	0.36						11096-82-5
Surrogate.. DECACHLOROBIHENYL	qc	0.024		mg/Kg		57	0.036	50 to 150			2051-24-3
Surrogate.. TETRACHLORO-M-XYLENE	qc	0.035		mg/Kg		87	0.036	27 to 132			877-09-8



**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4EOP529 Chain of Custody Number: 030591  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 05/22/04 10:20

Reference: 78-TEG-PILE-1-5 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4EOP529005 Percent Solids: 93 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 15:05

Run#	Prep Code	Method Code	Prepared	Time	Preparation Batch	Analyst	Report Basis	Analytical Run Type				
Type	Parameter Name	QF	Result	RF	Units	PQL	REC	Spk Amt	Spk Limits	RPD	PDI	CAS Number
Analyte	AROCLOR-1016	ND	0.72 U		mg/Kg	0.72						12674-11-2
Analyte	AROCLOR-1221	ND	0.72 U		mg/Kg	0.72						11104-28-2
Analyte	AROCLOR-1232	ND	0.72 U		mg/Kg	0.72						11141-16-5
Analyte	AROCLOR-1242	ND	0.72 U		mg/Kg	0.72						53469-21-9
Analyte	AROCLOR-1248	ND	0.72 U		mg/Kg	0.72						12672-29-6
Analyte	AROCLOR-1254	ND	0.72 U		mg/Kg	0.72						11097-69-1
Analyte	AROCLOR-1260	<Hit>	11		mg/Kg	0.72						11096-82-5
Surrogate	DECACHLOROBIIPHENYL	qc	0.0 D		mg/Kg		0.0	0.036	50 to 150			2851-24-3
Surrogate	TETRACHLORO-H-XYLENE	qc	0.0 D		mg/Kg		0.0	0.036	27 to 132			877-09-8

Reference: 78-TEG-PILE-2-1 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4EOP529006 Percent Solids: 90 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 15:10

Run#	Prep Code	Method Code	Prepared	Time	Preparation Batch	Analyst	Report Basis	Analytical Run Type				
Type	Parameter Name	QF	Result	RF	Units	PQL	REC	Spk Amt	Spk Limits	RPD	PDI	CAS Number
Analyte	AROCLOR-1016	ND	9.3 U		mg/Kg	9.3						12674-11-2
Analyte	AROCLOR-1221	ND	9.3 U		mg/Kg	9.3						11104-28-2
Analyte	AROCLOR-1232	ND	9.3 U		mg/Kg	9.3						11141-16-5
Analyte	AROCLOR-1242	ND	9.3 U		mg/Kg	9.3						53469-21-9
Analyte	AROCLOR-1248	ND	9.3 U		mg/Kg	9.3						12672-29-6
Analyte	AROCLOR-1254	ND	9.3 U		mg/Kg	9.3						11097-69-1
Analyte	AROCLOR-1260	<Hit>	140		mg/Kg	9.3						11096-82-5
Surrogate	DECACHLOROBIIPHENYL	qc	0.0 D		mg/Kg		0.0	0.037	50 to 150			2051-24-3
Surrogate	TETRACHLORO-H-XYLENE	qc	0.0 D		mg/Kg		0.0	0.037	27 to 132			877-09-8

MAY 27 2004 THU 11:12

SGS ENVIRONMENTAL

FAX NO. 3043460781

NO. 727

P.4P. 04

**SGS - Environmental Services**  
 1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4E0P529 Chain of Custody Number: 030591  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 05/22/04 10:20

Reference: 78-TEG-PILE-2-2 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4E0P529007 Percent Solids: 87 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 15:15

Run#	Method Code	Prep Code	Prepared	Time	Preparation Batch	Analyst	Dilution Factor	Report Basis	Analytical Run Type			
001	SM2082	SW3541C	05/24/04	09:30	096805	bcl	100.00	Dry	00			
Type..... Parameter Name		QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RSD	PDHI	CAS Number
Analyte....	AROCLOR-1016	ND	3.8 U		mg/Kg	3.8						12674-11-2
Analyte....	AROCLOR-1221	ND	3.8 U		mg/Kg	3.8						11104-20-2
Analyte....	AROCLOR-1232	ND	3.8 U		mg/Kg	3.8						11141-16-5
Analyte....	AROCLOR-1242	ND	3.8 U		mg/Kg	3.8						53469-21-9
Analyte....	AROCLOR-1248	ND	3.8 U		mg/Kg	3.8						12672-29-6
Analyte....	AROCLOR-1254	ND	3.8 U		mg/Kg	3.8						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	69		mg/Kg	3.8						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.0 D		mg/Kg		0.0	0.038	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-K-XYLENE	qc	0.0 D		mg/Kg		0.0	0.038	27 to 132			877-09-0

Reference: 78-TEG-PILE-2-3 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4E0P529008 Percent Solids: 84 Sample Type: f

Matrix: SOIL Sampled: 05/21/04 15:20

Run#	Method Code	Prep Code	Prepared	Time	Preparation Batch	Analyst	Dilution Factor	Report Basis	Analytical Run Type			
001	SM2082	SW3541C	05/24/04	09:30	096805	bcl	500.00	Dry	00			
Type..... Parameter Name		QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RSD	PDHI	CAS Number
Analyte....	AROCLOR-1016	ND	20 U		mg/Kg	20						12674-11-2
Analyte....	AROCLOR-1221	ND	20 U		mg/Kg	20						11104-20-2
Analyte....	AROCLOR-1232	ND	20 U		mg/Kg	20						11141-16-5
Analyte....	AROCLOR-1242	ND	20 U		mg/Kg	20						53469-21-9
Analyte....	AROCLOR-1248	ND	20 U		mg/Kg	20						12672-29-6
Analyte....	AROCLOR-1254	ND	20 U		mg/Kg	20						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	330		mg/Kg	20						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.0 D		mg/Kg		0.0	0.04	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-K-XYLENE	qc	0.0 D		mg/Kg		0.0	0.04	27 to 132			877-09-0

1-1-2004 THU 11:13 000 ENVIRONMENTAL PHU NVU 30430101 00 11.00

**SGS - Environmental Services**  
**1258 Greenbrier Street Charleston WV 25311**

Sample Delivery Group: 4EOP529 Chain of Custody Number: 030591  
 ATTN: Bruce Eulian BLASLAND, BOUCK & LEE, INC. PITTSFIELD MA

Received by SGS 05/22/04 10:20

Reference: 78-TEG-PILE-2-4 Description: GRAB 78 TYLER EXT GATE SAMPLING  
 SGS Lab Number: TA4EOP529009 Percent Solids: 85 Sample Type: F

Matrix: SOIL Sampled: 05/21/04 15:25

Prep Code: SW3541C	Prepared: 05/21/04 09:30	Preparation Batch: 096805	Analyst: bcl	Report Basis: Dry							
Run#: 001 Method Code: SW8062	Analyzed: 05/24/04 12:06	Analytical Batch: 096918	Dilution Factor: 250.00	Analytical Run Type: 00							
Type..... Parameter Name	QF	Result	RZ	Units	PQL	LRBC	Spk Amt	Spk Limits	RED	PDNi	CAS Number
Analyte... AROCLOR-1216	ND	9.8 U		ug/Kg	9.8						12674-11-2
Analyte... AROCLOR-1221	ND	9.8 U		ug/Kg	9.8						11164-28-2
Analyte... AROCLOR-1232	ND	9.8 U		ug/Kg	9.8						11341-16-5
Analyte... AROCLOR-1242	ND	9.8 U		ug/Kg	9.8						53459-21-9
Analyte... AROCLOR-1248	ND	9.8 U		ug/Kg	9.8						12672-29-6
Analyte... AROCLOR-1254	ND	9.8 U		ug/Kg	9.8						11097-69-1
Analyte... AROCLOR-1260	<Hit>	151		ug/Kg	9.8						11096-82-5
Surrogate... DECHLOROBIOPHENYL	qc	0.0 D		ug/Kg		0.0	0.039	50 to 150			2051-24-3
Surrogate... TETRACHLORO-1,4-DIOXINE	qc	0.0 D		ug/Kg		0.0	0.039	27 to 132			877-09-8



**Building 78 Outside (North)  
Tyler St. Extension Gate Installation  
Soil Pile Sampling Program**

**(401.70.006)**

**(Table 1)**

LAB ID	SAMPLE DATE	PCBs (ppm)	SAMPLE MATERIAL	PID READINGS (ppm)	SAMPLE TYPE
78-TEG-PILE 1-1	5/21/04	1000.	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 1-2	5/21/04	2.4	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 1-3	5/21/04	0.22	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 1-4	5/21/04	7.0	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 1-5	5/21/04	11.	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 2-1	5/21/04	140.	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 2-2	5/21/04	49.	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 2-3	5/21/04	330.	SOIL	0.0	DISCRETE-GRAB
78-TEG-PILE 2-4	5/21/04	150.	SOIL	0.0	DISCRETE-GRAB