REPORT

SUPPLEMENTAL PHASE II/ RCRA FACILITY INVESTIGATION REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

VOLUME I OF II

General Electric Company

Pittsfield, Massachusetts

January 1996

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

2

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

VOLUME I OF II

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

JANUARY 1996

BLASLAND, BOUCK & LEE, INC.
6723 TOWPATH ROAD
SYRACUSE, NY 13214-0066

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

TABLES (cont'd)

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

TABLES (cont'd)

FIGURES

SUPPLEMENTAL PHASE II/RCRA FACILITY INVESTIGATION
REPORT FOR HOUSATONIC RIVER AND SILVER LAKE

TABLE OF CONTENTS
(cont'd)

FIGURES (cont'd)

10

SECTION 1 - INTRODUCTION

1.1 General

This report has been prepared to meet two sets of requirements applicable to the General Electric Company (GE) facility in Pittsfield, Massachusetts. First, this document constitutes a Supplemental Phase II Report on a Comprehensive Site Assessment of the Housatonic River and Silver Lake, as required by the Massachusetts Department of Environmental Protection (MDEP) (Site I.D. No. 1-1047) pursuant to the Massachusetts Contingency Plan (MCP) and a Consent Order executed by GE and the MDEP in May 1990.

Second, this document constitutes a report on an investigation of the Housatonic River and Silver Lake pursuant to a permit (the "Permit") issued to GE by the United States Environmental Protection Agency (USEPA) under the corrective action provisions of the federal Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). The Permit was originally issued in February 1991 and was reissued, as modified, effective January 3, 1994. Pursuant to the Permit, this document constitutes a RCRA Facility Investigation (RFI) Report for the Housatonic River and Silver Lake, which are designated by the USEPA as Area 6. This document has been prepared by Blasland, Bouck & Lee, Inc. (BBL) on behalf of GE.

The primary focus of this document is the presentation and evaluation of data generated pursuant to the "MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake," (BBL, June 1994) (hereafter referred to as the "Phase II/RFI Proposal"), as conditionally approved by the MDEP and USEPA (the Agencies) via letter dated September 12, 1994. Data previously reported in the "MCP Interim Phase II Report/Current Assessment Summary for Housatonic River" (Blasland & Bouck, December 1991) (hereafter referred to as the "Interim Phase II Report/CAS") and its addendum (Blasland & Bouck, August 1992a) have been appropriately incorporated as part of these evaluations. Those documents, in their entirety, are incorporated by reference herein. It is important to note, however, that, as detailed in various sections below, several investigations called for in the Phase II/RFI Proposal and/or subsequently required by the Agencies have not yet been completed for various reasons. This report covers activities performed and data received through the end of 1995. Additionally, GE has proposed several additional activities to further expand the understanding of various aspects of the site. These activities are presented in an Addendum to the Phase II/RFI Proposal (BBL, November 1995) which was approved by the Agencies via letter dated December 7, 1995.

Accordingly, the conclusions presented in this report are necessarily limited and preliminary. Upon completion of the outstanding investigations, the results of those additional investigations, as well as overall conclusions on the issues involved, will be presented in an addendum to this report in accordance with the schedule discussed in Section 11.

1.2 Background Information

The Housatonic River and Silver Lake have been the subject of numerous investigations performed over the years, dating back to the mid-1970's. Table 1-1 presents a summary of these investigations. The Housatonic River and Silver Lake are currently designated by the MDEP as being in Phase II (Comprehensive Assessment) of the MCP process. GE has completed numerous MCP Phase II investigations associated with the Housatonic River and Silver Lake. These activities were proposed in a MCP Phase II Scope of Work (SOW) submitted to the MDEP in June 1990 (Blasland & Bouck, June 1990a), accompanied by a

Housatonic River Supplemental Data Summary (Blasland & Bouck, June 1990b), which presented the results of prior investigations of the Massachusetts section of the Housatonic River and Silver Lake. The revised SOW was conditionally approved by the MDEP (subject to certain conditions) on October 2, 1990.

The proposed MCP Phase II investigations were completed in September 1991. The results of these investigations were reported in the Interim Phase II Report/CAS. That document, submitted to the MDEP and the USEPA in December 1991, not only reported the results of the MCP Phase II investigation, but also provided a summary of investigations performed prior to the MCP Consent Order, as well as those performed in the Connecticut portion of the Housatonic River pursuant to the 1990 Cooperative Agreement between GE and the Connecticut Department of Environmental Protection (CDEP). It also identified certain data gaps to be addressed to complete the MCP Phase II investigation. The MDEP provided comments on the Interim Phase II Report/CAS in a letter dated June 15, 1992. In response, an Addendum to the Interim Phase II Report/CAS was submitted to the MDEP and USEPA on August 25, 1992 (Blasland & Bouck, August 1992a), which provided clarification to a number of comments made by the MDEP in its June 15, 1992 letter, as well as the results of additional investigations conducted between December 1991 and August 1992.

In addition, following preliminary review of the Interim Phase II Report/CAS, the MDEP directed GE, via a letter dated March 18, 1992, to submit a plan to evaluate the potential need for short-term measures (STMs) in the floodplain of the Housatonic River, due to the presence of polychlorinated biphenyls (PCBs) in certain floodplain soils. In response, GE submitted a "Plan for Evaluation of Need for Short-Term Measures in Floodplain of Housatonic River" (GE, April 1992) ("STM Evaluation Plan") on April 16, 1992. That proposed plan was conditionally approved by the MDEP on May 8, 1992.

The activities outlined in the STM Evaluation Plan have been completed, satisfying a number of the data gaps identified in the Interim Phase II Report/CAS and in the MDEP's letter of June 15, 1992. Various reports on those activities have been submitted to the MDEP (Blasland & Bouck, August 1992b; Blasland & Bouck, October 1992; Blasland & Bouck, February 1993; ChemRisk, April 1993). In addition, various STM remedial-action activities have been proposed for several "use areas" of the floodplain (Blasland & Bouck, September 1993; Blasland & Bouck, October 1993). The MDEP provided conditional approval of these activities in a letter dated April 22, 1994; and associated remedial design specifications were submitted to the MDEP and Pittsfield Conservation Commission on May 23, 1994. These activities have since been completed, and included at varying locations the posting of signs, installation of exposure barriers (i.e., hedgerows and/or surface capping) and/or soil removal.

Also, pursuant to the MDEP's letter of June 15, 1992, GE provided the MDEP with a Supplemental Phase II SOW on August 25, 1992 (Blasland & Bouck, August 1992c) to address the remaining data gaps identified in the Interim Phase II Report/CAS and the MDEP letter. However, in response to a request from the MDEP dated February 19, 1993, that Supplemental Phase II SOW was revised and reformatted so that it also constituted an RFI Proposal under the Permit. On April 29, 1993, GE submitted a document to the MDEP and USEPA entitled "MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake" (Blasland & Bouck, April 1993). That document incorporated the information contained in the August 1992 Supplemental Phase II SOW, and additional information was added in order for it also constitute an RFI Proposal. That document was prepared in such a manner to facilitate a coordinated agency review.

When the April 1993 Phase II/RFI Proposal was issued, the February 1991 Corrective Action Permit was stayed pending final resolution of an appeal by GE and others. In accordance with a previous settlement of a portion of that appeal, the April 1993 RFI Proposal proposed, to the extent feasible, to rely on existing data and the results of prior investigations conducted for the MDEP and CDEP as a basis for proposing how to accomplish the Permit's goals.

The Agencies issued joint review comments on the April 1993 Phase II/RFI Proposal on April 22, 1994. That letter required GE to submit, within 60 days, a revised Phase II/RFI Proposal addressing the Agencies' comments. That document was submitted to the Agencies on June 21, 1994, and superseded the April 1993 Phase II/RFI Proposal. Via letter dated September 12, 1994, the Agencies conditionally approved the June 1994 Phase II/RFI Proposal, and GE commenced field activities shortly thereafter. These activities were performed in accordance with protocols presented in GE's "Sampling and Analysis Plan/Data Collection and Analysis Quality Assurance Plan" (SAP/DCAQAP) (BBL, May 1994), with subsequent revisions approved by the Agencies.

Pursuant to the Agencies' September 12, 1994 conditional approval letter, GE submitted Quarterly Progress Reports to the Agencies on December 30, 1994, March 24, 1995, June 27, 1995, and September 25, 1995 (BBL, December 1994, March 1995, June 1995, and September 1995, respectively). These reports summarized the activities performed during each respective quarter, summarized analytical data which had been reported during each respective quarter, presented any preliminary conclusions which could be drawn from the data received, and summarized activities to be performed and data anticipated during the next quarter. In addition to these Quarterly Progress Reports, GE submitted monthly summaries identifying the activities performed and the data received during each month.

As indicated above in Section 1.1, this report covers activities performed and data received through the end of 1995. As detailed in various sections below, several activities have not yet been completed for various reasons. Additionally, GE has proposed several additional activities to further expand the knowledge of various aspects of the site. These activities are presented in an Addendum to the June 1994 Phase II/RFI Proposal, which was submitted to the Agencies on November 17, 1995. The Agencies provided joint approval of the proposed activities in a letter dated December 7, 1995; however, in order to expedite the implementation of these efforts, select activities began on November 3, 1995.

It is also important to note that apart from the June 1994 Phase II/RFI Proposal, GE submitted a "Proposal for the Preliminary Investigation of Corrective Measures for Housatonic River and Silver Lake Sediment (PICM Proposal)" (RUST, May 1994) to the Agencies on May 30, 1994 under Special Permit Condition II.A.6.a. The Agencies provided joint comments regarding that document via letter dated January 6, 1995. In accordance with that letter, GE submitted a revised PICM Proposal on March 20, 1995 (Canonie Environmental, March 1995), incorporating the Agencies' January 6, 1995 comments. The Agencies issued a conditional approval of that revised PICM Proposal on July 6, 1995. Activities related to the revised PICM Proposal are ongoing. The PICM report summarizing the results of these activities is scheduled to be submitted May 1, 1996.

1.3 Format of Document

This document has been divided into several sections. It includes a description of site location and history, an overview of previous investigations conducted at the site, the results of the recent Supplemental Phase II/RFI activities completed through the end of 1995, and a characterization of the presence, extent, and migration of PCBs and other hazardous constituents associated with the site (to the extent data are available).

Specifically, Section 1 presents pertinent background, including mainly the history of investigations. Section 2 describes the environmental setting of the site, including an overview of the physical location and extent of the site, associated hydrogeology, climatic conditions, and affected media. Sections 3 through 8 provide a more detailed discussion of the affected media and related investigations. Section 9 presents an assessment of the potential ongoing migration of hazardous constituents associated with the site. Section 10 describes remaining data needs and future activities. Finally, Section 11 discusses a schedule for completing the future activities.

In addition, Appendices A through D and the various tables and figures included herein provide supporting information referenced in this report. Laboratory analytical data sheets for Phase II/RFI analyses performed between June 1994 and December 1995 will be compiled and submitted shortly under separate cover. Based on conversations between GE and the MDEP held on January 19, 1996, one copy of that documentation will be provided to each of the MDEP, the USEPA, and the Berkshire Athenaeum in Pittsfield, Massachusetts.

7

SECTION 2 - ENVIRONMENTAL SETTING

2.1 General

This section provides a general overview of the environmental setting of the Housatonic River and Silver Lake. Much of this information has been presented previously in the Interim Phase II Report/CAS; therefore, as appropriate, the following sections provide a brief overview with reference to appropriate sections of the Interim Phase II Report/CAS. In general, Section 2.2 briefly describes the physical location and extent of the site, while Section 2.3 provides a discussion of regional climatic conditions. Sections 2.4 and 2.5 briefly describe the hydrology and hydrogeology related to the site, respectively. Finally, Section 2.6 presents an overview of affected media based on prior and more recent investigation data.

2.2 Location and Extent of Site

The Housatonic River originates in western Massachusetts, and is formed by the confluence of the east and west branches, which converge in the city of Pittsfield, Massachusetts. Following the confluence, the river flows southward through Berkshire County approximately nine miles to the first significant impoundment, which is Woods Pond (approximately 60 acres). Below Woods Pond, the flow of the river is slightly impeded by the Columbia Mill Dam in Lenoxdale, the Willow Mill Dam in Lee, and the Glendale Dam in Glendale. The next significant impoundment downstream of Woods Pond is Rising Pond (approximately 40 acres) located approximately 18 miles downstream. Below Rising Pond, the river flows along a widened, relatively flat floodplain which includes many meanders and oxbows. The river enters the state of Connecticut approximately one mile north of Canaan, Connecticut. It then continues to flow south approximately 83 miles to the Long Island Sound. Impoundments along this stretch of River include the Falls Village Impoundment (approximately 106 acres), the Bulls Bridge Impoundment (approximately 116 acres), Lake Lillinonah (approximately 1,600 acres), Lake Zoar (approximately 975 acres), and Lake Housatonic (approximately 328 acres).

The total water shed of the Housatonic River and its tributaries covers 1,950 square miles -- 500 in Massachusetts, 218 in New York, and 1,232 in Connecticut (Lawler, Matusky & Skelly (LMS), 1985). Figure 2-1 illustrates the watershed of the Housatonic River basin in Massachusetts, New York, and Connecticut.

The floodplain along the Housatonic River, in general, tends to be relatively narrow adjacent to the GE facility in Pittsfield, Massachusetts; it then begins to widen in the southern portions of Pittsfield near Pomeroy Avenue. Between Pomeroy Avenue and New Lenox Road, the floodplain widens significantly to follow the gentle slope of the local topography. South of New Lenox Road to Woods Pond Dam, the floodplain widens slightly again. Approximately one-half mile south of New Lenox Road, the floodplain along the east bank of the river is confined by October Mountain, while the west bank of the river has a relatively flat topography resulting in an extended floodplain. The floodplain between Woods Pond Dam and Rising Pond Dam tends to be similar to that which is seen between Pomeroy Avenue and New Lenox Road. South of Rising Pond to the Connecticut state border, an extended floodplain is evident as a result of relatively flat topography.

Silver Lake, located adjacent to the GE facility in Pittsfield, Massachusetts (Figure 2-2), has a surface area of approximately 26 acres and a maximum depth of about 30 feet. The lake receives stormwater runoff from several municipal outfalls and stormwater from a portion of the GE facility. Surface water runoff from other adjacent properties also enters Silver Lake.

Silver Lake is hydraulically connected to the Housatonic River by a 48-inch diameter concrete conduit located near the intersection of Fenn Street and East Street. This conduit has a maximum flow capacity of approximately 50 cubic feet per second (cfs) and conveys intermittent discharge from Silver Lake and stormwater runoff from Fenn Street and East Street to the Housatonic River.

2.3 Regional Climatic Conditions

As presented previously in Section 2.10 of the Interim Phase II Report/CAS, the upper Housatonic River Basin in Massachusetts is generally characterized by a temperate climate with warm, humid summers and cold winters. Annual precipitation in the form of rain and snowfall averages approximately 46 inches per year, distributed fairly evenly from month to month. Prevailing winds are from the west. The mean annual temperature reported at the Pittsfield airport is approximately 46°F, while the mean summer and winter temperature are 68°F and 28°F, respectively. The upper basin experiences an average growing season of 120 days (NERBC, 1980).

The climate of the lower basin in Connecticut is characterized by milder winters and hotter summers than those found in the upper basin. Annual precipitation varies throughout the flower basin from 46 to 58 inches per year (NERBC, 1980). The mean annual temperature of the lower basin is approximately 49°F, while the mean summer and winter temperatures are 71°F and 31°F, respectively. The lower basin experiences an average growing season of up to 180 days (NERBC, 1980).

2.4 Hydrology

As previously reported in Section 2.4 of the Interim Phase II Report/CAS, the hydrologic characteristics of the Housatonic River have been documented in studies performed by Stewart Laboratories, the Federal Emergency Management Agency (FEMA), the U.S. Geological Survey (USGS), New England River Basins Commission (NERBC), and the Connecticut Agricultural Experiment Station (CAES) (Stewart, 1982; FEMA, March 1981, December 1981, January 1982a, January 1982b, January 1982c, February 1982, and January 1987; Norvitch et al., 1968; Wilson et al., 1974; NERBC, 1980; and Frink et al., 1982).

The Housatonic River system is fed primarily by runoff from rainfall and melting snow. The annual precipitation in the drainage basin averages approximately 46 inches per year. Approximately 24 inches per year leaves the basin as runoff through the Housatonic River, another 20 inches per year escapes by evaporation and transpiration to the atmosphere, while the remaining 2 inches per year infiltrates into groundwater-bearing zones (Norvitch et al., 1968).

Manmade discharges to the Housatonic River contribute significant flow quantities. The average combined discharge from several industrial facilities located in Massachusetts amounts to approximately 26 cfs of wastewater into the river, and discharges from seven municipal treatment plants located in Massachusetts contribute an additional 22 cfs (Frink et al., 1982). Municipal/industrial discharges into the Connecticut portion of the Housatonic River amount to approximately 35 cfs (Frink et al., 1982).

Information on flow rates of the river at various segments, as well as on the flow from Silver Lake to the river, and on the historical floods that have occurred on the river is described in Section 5.2 of the Interim Phase II Report/CAS.

2.5 Hydrogeology

The hydrogeology of the Housatonic River Basin has been described in detail as part of several prior reports (Norvitch et al., 1968; Wilson et al, 1974; NEBRC, 1980; EHC Corp., 1991; and Harza, 1988) and is summarized in Sections 2.6 and 2.7 of the Interim Phase II Report/CAS.

In general, the overburden material of the Housatonic River Basin has been identified chiefly as sedimentary rock including mainly glacial till and stratified drift. Bedrock of the Housatonic River Basin is characterized mainly as metamorphic rock, such as quartzite, gneiss, limestone, and dolomite. Groundwater varies greatly throughout the basin in terms of both quality and available quantity. In areas where crystalline rock such as gneiss and granite occur, groundwater tends to be only slightly mineralized as a result of the relative insolubility of these rock types. Aquifer yield in these areas can be abundant where bedrock contains significant fractures. However, groundwater quantities are limited where fracturing is not prevalent. In areas where schists predominate, groundwater may contain significant levels of iron and manganese, and aquifer yields may be limited even where fracturing is extensive. Groundwater is typically mineralized in locations such as the lowlands and valleys of the Housatonic River Basin where soluble limestone and dolomitic bedrock predominate. These valleys are generally covered with deep glacial deposits composed of stratified drift. Where these coarse sands and gravels exist, aquifer yields can be significant.

Investigations of the various GE facility sites located along the Housatonic River (see Figure 2-2) have identified these areas to be areas of groundwater discharge to the Housatonic River. In general, groundwater associated with these areas tends to be recharged by upland areas, with the Housatonic River being the ultimate receptor of groundwater discharges.

As for Silver Lake, the recent Supplemental Phase II/RFI activities included an investigation of the relationship between the lake and adjacent groundwater. These activities are discussed in Section 7 of this document.

2.6 Affected Media

As reported in Section 1.3 of the Interim Phase II Report/CAS, PCBs were first identified to be present in sediments and fish of the Housatonic River in the mid-1970's. From 1932 to March 1977, PCBs were used at the General Electric facility in Pittsfield as part of a flame-resistant, insulating liquid for select transformer applications. This synthetic oil, referred to as Pyranol, was used in less than five percent of transformer products manufactured at the facility. Before 1977, inadvertent releases of these materials reached the wastewater and storm systems associated with the facility and were subsequently conveyed to the East Branch of the Housatonic River and to Silver Lake. While use of PCBs at the facility was discontinued in 1977, a number of remedial projects had already been underway since the late 1960s. These projects included source control and cleanup activities, repiping of process and storm system components, installation of oil/water separators, construction of a high temperature thermal oxidizer, and groundwater/oil recovery operations. Since 1977, these projects have been supplemented with further rigorous procedures to control the release of PCBs to the river system.

In addition to PCBs, GE has utilized a wide range of other chemicals at the Pittsfield facility. Some of these constituents have come to be located in areas which have been subject to prior and on going investigations and remedial programs.

Despite the continued implementation of extensive passive and active oil recovery operations designed to mitigate releases to the Housatonic River and

Silver Lake, inputs to the river still occur from other sites associated with the GE facility. Areas which border the river and are currently subject to separate investigations and response efforts include the following:

- Unkamet Brook Area/USEPA Area 1;
- East Street Area 2/USEPA Area 4; and
- Lyman Street Parking Lot/USEPA Area 5B.

The locations of these sites and the various other MCP and USEPA sites associated with the GE facility are shown on Figure 2-2.

Since the mid-1970s, an extensive array of investigations has been conducted to assess the presence and extent of PCBs and other hazardous constituents in the various media related to the Housatonic River and Silver Lake. A brief overview of the impact to various media of the Housatonic River and Silver Lake is provided below in Sections 2.5.1 through 2.5.6.

2.6.1 Sediment

The extensive sediment PCB sampling and analyses and reconnaissance/probing efforts have shown that the predominant load of PCBs present in the sediments of the Housatonic River exists within the approximate 12 mile stretch of the river between the GE facility and Woods Pond Dam. The average PCB concentration in this reach has been determined to be approximately 29 ppm, and the average depth of PCB-containing sediments in this reach has been determined to be approximately 2.4 feet. Aroclor 1260 is the predominant PCB Aroclor detected in sediments of the Housatonic River, constituting approximately 85 percent of the total detections, with the remainder quantitated as Aroclor 1254 (approximately 14 percent of the total) or Aroclor 1242 (less than 1 percent of the total). Further details related to the presence and extent of PCBs in sediments of the Housatonic River are presented in Sections 3.2.1 through 3.2.7 of this document.

In addition to the assessment of PCBs, investigations have also been conducted to characterize the presence and extent of other hazardous constituents in river sediments potentially related to the GE facility. These investigations have identified the presence of various constituents in sediments possibly related to the GE facility; however, these investigations have not been completed. Further details regarding these activities are presented in Section 3.2.8.

Geotechnical analyses generally characterize the composition of sediments between the GE facility and Woods Pond Dam as ranging from mostly gravels and coarse sands near the facility to mostly silts in Woods Pond. Further details on the physical characteristics of these sediments are presented in Section 3.2.3.

As for Silver Lake, investigations have shown PCBs to be present in sediments at an average concentration of 402 ppm, and at an average depth of approximately 5 feet. Aroclor 1254 is found to be the principal Aroclor detected in Silver Lake sediments (averaging 57 percent of the total), with Aroclors 1242 and 1260 also being detected (each averaging about 21 percent of the total). Further details regarding this topic are presented below in Sections 3.3.1 through 3.3.5. In addition, recent (1990 and 1994) investigations of Silver Lake have identified the presence of other hazardous constituents in sediments possibly related to the GE facility. Further information regarding these constituents are presented in Section 3.3.6.

Geotechnical analyses generally characterize the composition of Silver Lake sediments as consisting mostly of silts. Further details on the physical characteristics of these sediments are provided in Section 3.3.2.

2.6.2 Surface Water

Similar to sediment, the various surface water investigations conducted over the years related to the Housatonic River and Silver Lake have produced a significant data base regarding the presence of PCBs, and to a lesser extent other hazardous constituents. These investigations and associated findings are discussed in more detail in Section 4 of this report as well as in Sections 5 and 6 of the Interim Phase II Report/CAS and Section 4.3 of its addendum.

Additionally, as summarized in Section 3.2.3 of the Phase II/RFI Proposal, the general water quality of portions of the Housatonic River was evaluated in 1993 in an attempt to characterize limiting factors to the aquatic life in the river. This study included monthly sampling at five locations in Massachusetts between May and October 1993. Surface water samples were collected and analyzed for nitrate, nitrite, total ammonia, total kjeldahl nitrogen, biochemical oxygen demand, chemical oxygen demand, total suspended solids, total dissolved solids, dissolved oxygen, pH, and temperature. The results of this testing are presented in the report entitled "Aquatic Ecology Assessment of the Housatonic River, Massachusetts" (Chadwick & Associates, 1994). Those results are summarized in Table 4 of that report, which is reproduced as Table 2-1 herein.

2.6.3 Floodplain Soils

As discussed in more detail in Section 5, the recent and prior MCP related investigations of the Housatonic River and Silver Lake have produced a significant data base regarding the presence and extent of

26

PCBs, and to a lesser extent other hazardous constituents, in floodplain soils. In general, these investigations have shown PCBs to be present in floodplain soils between the GE facility and Woods Pond Dam, and to a much lesser degree below Woods Pond Dam. Sampling and hydraulic modeling of the river between the GE facility and Woods Pond Dam has shown PCBs to exist primarily within the 10-year floodplain. PCB concentrations average approximately 16 ppm within this area. In some cases, PCBs are located well within the 10-year floodplain, but in some instances, low levels of PCBs have been found above the approximate 10-year floodplain elevation. Aroclor 1260 is by far the predominant PCB Aroclor detected in the floodplain soils of the Housatonic River, constituting 97.5 percent of the total detections, with the remainder made up of reported detections of Aroclor 1254 (about 1.7 percent of the total) or Aroclor 1242 (about 0.9 percent of the total).

Various Short-Term Measures (STMs) and immediate response actions have been implemented or are currently underway at a number of residential properties in the city of Pittsfield to address elevated PCB concentrations at these locations. These activities include, at various locations, the posting of signs, installation of exposure barriers (i.e., hedgerows and/or surface capping), and/or soil removal.

PCBs have also been detected in the bank soils around Silver Lake in a fairly narrow strip around the lake. PCB concentrations in this area average approximately 21 ppm. The analytical data indicate that the PCBs detected in Silver Lake bank soils consist of an approximately equal combination of Aroclor 1254 and Aroclor 1260.

As for the assessment of other hazardous constituents, the current data base indicates the presence of several constituents other than PCBs in floodplain soils of the Housatonic River and Silver Lake; however more upstream data are needed to complete the evaluation of constituents related to the GE facility.

2.6.4 Biota

An extensive data base regarding PCBs and to a much lesser extent other hazardous constituents in fish of the Housatonic River has been generated as a result of prior investigations. As summarized in Section 5 of the Phase II/RFI Proposal, this data base includes PCB concentrations in various fish species in the river, both in Massachusetts and Connecticut, that have been collected during many distinct sampling years. Data have also been generated for several other species of biota, including frogs, turtles, and benthic invertebrates. Section 6 of this report provides a discussion of the more recent sampling and analysis activities.

2.6.5 Groundwater

Based on the evaluation of groundwater-surface water interactions in the Housatonic River Valley presented in Section 6.2 of the Phase II/RFI Proposal, it does not appear that contaminants found in the surface water and sediments of the Housatonic River and Silver Lake have impacted the groundwater of the Housatonic River Basin. As discussed in Section 7, however, further investigations have been performed to further assess potential groundwater-surface water interactions in the vicinity of Silver Lake.

2.6.6 Air

An ambient air monitoring program for PCBs was conducted in the spring and summer of 1993. This program included monitoring at a station located at Silver Lake. An additional air monitoring program for PCBs was conducted during the spring and summer of 1995 at the same Silver Lake station and also at two locations along the Housatonic River. These programs are discussed in Section 8 below. They showed detectable levels of PCBs in the ambient air during the months monitored.

SECTION 3 - SEDIMENT INVESTIGATIONS

3.1 General

Numerous investigations conducted since the mid-1970s involving the sampling and analysis of sediments in the Housatonic River (in both Massachusetts and Connecticut) and in Silver Lake have produced a large data base related to the nature, extent, and distribution of PCBs and other hazardous constituents. The following sections present, first for the Housatonic River and then for Silver Lake, a brief overview of prior sediment studies with appropriate references to detailed information presented as part of previously submitted documentation (i.e., Interim Phase II Report/CAS, its addendum, the Phase II/RFI Proposal, and others).

In addition to the overview of prior sediment studies, the following sections present discussions of activities performed and data generated as part of the Supplemental Phase II/RFI sediment studies. In general, these sections discuss field reconnaissance/probing activities, the physical characteristics of sediments, further delineation of the extent of PCBs, the evaluation of PCBs in sediments at biota collection areas, a comparison of sediment grain size versus PCBs and oil & grease, an evaluation of sedimentation rates at various locations in the river system, an investigation of other hazardous constituents present in sediments, and updated estimates of the volumes of PCB-containing sediments present in the river system.

For ease of reference, the general sediment characteristics in the Housatonic River between the GE facility and Woods Pond Dam are shown on Figures 3-1 through 3-11, and all PCB data for sediments in this reach of the river, from both prior and recent investigations, are shown on Figures 3-13 through 3-23. All PCB data from Silver Lake sediments, from both prior and recent investigations, are shown on Figure 3-35.

3.2 Housatonic River

3.2.1 Prior Investigations

The sediments of the Housatonic River have been the subject of numerous investigations beginning in the mid-1970s. Following the initial identification of PCBs in the sediments, a study was conducted by the Connecticut Agricultural Experiment Station (CAES), in cooperation with the CDEP and USGS to determine the extent of PCBs in the river sediments (Frink et al., 1982). The study, which focused on the Connecticut section of the river and, to a lesser extent, the Massachusetts section, is described in more detail in Section 4.3.1 of the Interim Phase II Report/CAS.

In accordance with a 1981 Consent Order issued by the MDEP and USEPA, GE commissioned Stewart Laboratories, Inc. (Stewart) to conduct an extensive study of the presence and distribution of PCBs within the Housatonic River system. In general, the Stewart Study included:

- A review of available aerial photographs and topographic maps;
- A site reconnaissance of the river from Center Pond in Dalton, Massachusetts to the Connecticut Border; and
- The collection of 892 sediment samples from 226 sampling stations generally representative of distinct sediment accumulation areas in the river between Center Pond and the Connecticut border. Each of these samples was qualitatively assessed for sediment particle size and was analyzed at various depth increments for PCBs.

The resulting report (Stewart, 1982) provides a comprehensive "baseline" survey of the occurrence, distribution, and transport of PCBs in the Housatonic River and Silver Lake. The results of this study are discussed in more detail in Sections 4.2 and 4.3.2 of the Interim Phase II Report/CAS.

In 1986, LMS, on behalf of GE, collected six sediment cores from the Falls Bridge and Bulls Bridge Impoundments and from Lakes Lillinonah and Zoar in Connecticut. The results of the study are discussed in Section 4.3.3 of the Interim Phase II Report/CAS.

In 1990, GE entered into a Consent Order with the MDEP to further investigate the Housatonic River pursuant to the MCP. As mentioned previously in Section 1.2, this led to the development of a MCP Phase II Investigation of the river system in Massachusetts and Silver Lake, which was carried out in 1990 and 1991. The sediment-related portion of this investigation is described in Section 4.3.4 of the Interim Phase II Report/CAS.

Also in 1991, a sediment sampling program was performed as a cooperative effort by GZA GeoEnvironmental, Inc. (GZA) and GE (with assistance from Blasland & Bouck Engineers, P.C.) in order to identify chemicals which may be present in the sediments of Rising Pond. The purpose of this investigation was to identify any impacts that sediment quality might have on options for rehabilitating or "breaching" the Rising Pond Dam. The results of this study are described in Sections 4.3.5 and 4.4.2 of the Interim Phase II Report/CAS.

Various site investigations were also performed by Blasland & Bouck, under the direction of GE Corporate Research & Development (CRD), related to the Woods Pond Bioremediation Evaluation and Test Station (BETS). A description of the related sampling and analysis activities is contained in Section 4.3.3 of the Interim Phase II Report/CAS, and is separately reported by GE CRD (Semiannual Progress Reports for the Research and Development Program for the Destruction of PCBs).

As part of the Cooperative Agreement between GE and CDEP, a number of sediment-related investigations were conducted in 1992 in Connecticut to verify previous estimates of sediment deposition rates and to provide updated parameters in the fate and transport model being developed as part of the Cooperative Agreement. These sediment data were reported to the Agencies by letter from GE dated February 24, 1994. An evaluation of these data was presented to the CDEP and the USEPA in a report entitled "Housatonic River Connecticut Cooperative Agreement - Task IV.B PCB Fate and Transport Model: Additional monitoring and model verification" dated November 1994. A summary of these data and related findings is provided in Section 3.2.7 of this report.

In addition to the assessment of PCB-containing sediments within the Housatonic River, the MCP Phase II sediment investigation included an assessment of the presence and extent of non-PCB hazardous constituents within Housatonic River sediments. As part of that investigation, samples were collected upstream of, adjacent to, and downstream of the GE facility. These samples were analyzed for the constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents (benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine) (Appendix IX+3).

The evaluation of these data (Section 4.4.3 of the Interim Phase II Report/CAS) tentatively identified PCBs, certain Appendix IX inorganics, and possibly phenols as "target" constituents for further sampling. However, it was felt that additional sediment sampling downstream of the GE facility

3

was needed, since the prior samples contained fairly low levels of PCBs and therefore may not have reflected good sediment depositional areas related to the possible transport of constituents from the GE facility. Accordingly, two additional sediment samples were collected between the Silver Lake Outfall and the Elm Street Bridge at locations where elevated levels of PCBs were found, and these samples were analyzed for Appendix IX+3 constituents.

In addition, supplemental upstream sampling of Appendix IX inorganics was conducted to further define local upstream and/or background levels of the inorganics for comparison with downstream sediment concentrations, thus aiding in the identification of "target" inorganic constituents. This upstream sampling consisted of the collection and analysis of four sediment samples from upstream locations between Center Pond and Hubbard Avenue.

The analytical results from these additional sampling events, together with a subsequent reevaluation of the data, were presented in Section 2.2 of the Addendum to the Interim Phase II Report/CAS.

In addition to the data discussed above, some non-PCB hazardous constituent data area also available for Rising Pond. These data are presented and discussed in Sections 4.4.2.2 and 4.4.3.2 of the Interim Phase II Report/CAS.

Sections 2.2.1.3 and 2.2.2.2 of the Phase II/RFI Proposal presented an evaluation of the prior Housatonic River sediment PCB and Appendix IX+3 data (through June 1994) with respect to the fulfillment of the requirements of the Permit and Phase II of the MCP, and it identified additional data needs. Section 2.2.3 of the Phase II/RFI Proposal proposed activities to fill these data needs and certain other data needs identified specifically by the Agencies or in the May 1994 PICM Proposal.

These investigatory activities (as modified by the Agencies' conditional approval letter dated September 12, 1994) were initiated in October 1994. Sections 3.2.2 through 3.2.8 of this report summarize the activities performed and the conclusions drawn to date. As explained below, certain activities have not yet been completed for various reasons described herein, and therefore no conclusions can be drawn at this time related to these specific tasks. Upon completion of those activities, the resulting data and revised or expanded conclusions will be presented in an addendum to this report.

3.2.2 Field Reconnaissance/Probing/Visual Characterization

Pursuant to Section 2.2.3.1 of the Phase II/RFI Proposal, sediment reconnaissance/probing activities were conducted between October 11 and 26, 1994, to provide additional information related to sediment accumulation/deposition areas between the GE facility and Woods Pond Dam. As part of these activities, the river was divided into seven reaches, based on general geographic features, for subsequent sediment probing/characterization:

- Just upstream of the confluence with Unkamet Brook to the Newell Street Bridge;
- Newell Street Bridge to the Elm Street Bridge;
- Elm Street Bridge to the Holmes Road Bridge;
- Holmes Road Bridge to the New Lenox Road Bridge;
- New Lenox Road Bridge to the approximate midpoint between the New Lenox Road Bridge and Woods Pond headwaters;
- From this midpoint to the Woods Pond headwaters; and
- Woods Pond.

While Woods Pond was the subject of additional sediment sampling activities, no probing activities were performed in this reach due to the large amount of information available on the physical characteristics and depth of these sediments.

The first six reaches were then subdivided into a total of 36 subreaches based on general physical features of the river. Within these subreaches, sediments were physically probed and visually characterized. This activity included visual identification of sediment depositional environments and sediment probing to gauge the extent, thickness, and type of various sediment deposits. It also included visual identification of the type and extent of aquatic vegetation in the probing areas and a general review of the accessibility of the identified sediment deposits from shore, as well as the water depths associated with the various depositional areas, as provided in the PICM Proposal.

The depositional environments represented as part of this effort are described below:

Channel

Channel deposits typically occur in parts of the riverbed that are permanently inundated during low to moderate flow conditions.

Terrace

Terrace deposits occur in parts of the riverbed that are usually inundated during high-flow conditions, but are exposed during low-to-moderate flows.

Aggrading Bar

Aggrading bar deposits, or small islands or mounds, are typically comprised of coarse-grained material (i.e., sands and gravels) and usually occur along the convex sides of channel curves.

Backwater Areas

Backwater areas are quiescent areas adjacent to the main river channel that maintain a hydraulic connection to the river channel. This classification also includes impounded areas such as Woods Pond.

As part of this effort, sediment probing (using a steel bar) was performed to map sediment deposition areas onto large-scale aerial photographs. Sediment cores were collected using clear lexan tubing at the majority of the sediment deposit locations to facilitate a visual characterization of the sediments within the various depositional environments described above. Sediment cores were collected, as necessary, to characterize the sediment in these various depositional environments. Information obtained from the sediment cores was supplemented by probing with a steel bar. The supplemental probing primarily yields information related to thickness of the sediment and underlying materials through the measurement of depth to refusal (and not necessarily any information on the depth of PCB-containing sediments).

The results of this reconnaissance/probing efforts are summarized in Table 3-1 and on Figures 3-1 through 3-11. Specifically, Table 3-1 summarizes the characteristics of each of the depositional areas probed, including the type of depositional environment, approximate water and sediment depths, and type of sediment encountered. In addition, Table 3-1 summarizes the general riverbank and flow characteristics related to these depositional areas. Figures 3-1 through 3-11 also provide an illustration of the locations of the probed deposit areas.

In general, approximately one-half of the 118 sediment deposits identified upstream of the Holmes Road Bridge were characterized as terrace deposits. Approximately 10 deposits within this reach were identified as aggrading bars, with the remaining deposits being characterized as mostly channel deposits. The depths of the sediment deposits (as measured to refusal) within this reach range from a minimal depth of a few inches to approximately 10 feet, with an average depth of approximately 4.5 feet.

Between the Holmes Road Bridge and New Lenox Road Bridge, approximately one-half of the 43 sediment deposits identified were characterized as terrace deposits. There was only one deposit in this reach identified as an aggrading bar, and the remaining deposits were characterized as mostly channel or backwater deposits. The depths of the sediment deposits within this reach are shown to range from approximately 2 to 14 feet, with an average depth of approximately 7 feet.

Between the New Lenox Road Bridge and Woods Pond, the majority of the 60 sediment deposits identified were characterized as backwater deposits. All but one of the remaining deposits were characterized as channel deposits. That deposit was characterized as a terrace deposit. The depths of the sediment deposits within this reach are shown to range from less than 1 foot to approximately 16 feet, with an average depth of approximately 7 feet.

It is important to note that although the average depths of sediment for the three reaches presented above range up to approximately 16 feet, the average depth of PCBs in the sediments of these reaches has been found to be approximately 2.0, 2.6, and 2.1 feet, respectively.

Following the compilation of the probing data base, it was utilized to select sediment sampling locations for purposes of collecting additional analytical data. Specifically, locations were chosen for collecting data regarding various geotechnical parameters (i.e., grain size, specific gravity, bulk density, water content, and time-rate-of-consolidation), PCB concentrations in areas where limited data were available, and information related to historical sedimentation rates. Table 3-2 summarizes the locations chosen for laboratory analyses. These locations were reviewed and approved by the Agencies during discussions held on November 9, 1994. The resulting data are discussed in Sections 3.2.3 through 3.2.6. The sampling locations associated with these analyses are illustrated on Figures 3-13 through 3-23.

3.2.3 Physical Characteristics of Sediments

As indicated in Section 3.2.2, the recent sediment reconnaissance/probing data base was used to select sediment sampling locations for laboratory analysis of various physical characteristics of Housatonic River sediments. These analyses included:

- grain size;
- specific gravity;
- bulk density;
- water content; and
- time-rate-of-consolidation.

These data were collected primarily for the purpose of evaluating potential sediment remediation alternatives associated with the PICM Proposal. Therefore, Sections 3.2.3.1 through 3.2.3.4 provide a brief overview of these data with respect to the four river reaches defined in the PICM Proposal:

- GE facility to confluence with West Branch of the Housatonic River;
- Confluence with West Branch to New Lenox Road;

- New Lenox Road to Woods Pond Headwaters; and
- Woods Pond.

The more detailed results of these analyses are included in Appendix A.

It is important to note that several sediment samples were also collected for the analysis of settleability characteristics. However, these tests are still ongoing and the associated results will be subsequently reported in the addendum to this report.

3.2.3.1 GE Facility to Confluence with West Branch

From the GE facility to the confluence with the West Branch of the Housatonic River, sediments are composed mostly of gravel and coarse sand (based on particle analyses). Specific gravity of these sediments was measured to be approximately 2.7 and bulk density was measured to range between approximately 98 and 108 PCF. Water content was measured to range between approximately 16 and 23 percent, and time-rate-of-consolidation indices for these sediments was measured to be approximately 0.025 square inches per minute.

3.2.3.2 Confluence to New Lenox Road

From the confluence to New Lenox Road, sediments are composed mostly of medium to coarse sands with some fine sands and silts (based on particle size analyses). Specific gravity of these sediments was measured to range from 2.61 to 2.69, and bulk density was measured to range from 80 to 142 PCF. Water content was measured to range from 15 to 58 percent, and time-rate-of-consolidation indices were measured to range from 0.003 to 0.029 square inches per minute.

3.2.3.3 New Lenox Road to Woods Pond Headwaters

From New Lenox Road to the headwaters of Woods Pond, sediments are composed mostly of fine sands and some silts (based on particle size analyses). Specific gravity of these sediments was measured to range from 2.09 to 2.69, and bulk density was measured to range from 89 to 125 PCF. Water content was measured to range from 24 to 556 percent. (Under the method used, ASTM D2216, the water content results are expressed on the basis of weight of water versus weight of sediment. Therefore, a result of greater than 100 percent reflects the presence of more water than sediment on a weight basis.) Time rate of consolidation indices were measured to range from 0.008 to 0.027 square inches per minute.

3.2.3.4 Woods Pond

The sediments within Woods Pond are composed mostly of silts with some fine sands (based on particle size analyses). Specific gravity of these sediments was measured to range from 2.10 to 2.42, and bulk density was measured to range from 65 to 75 PCF. Water content was measured to range from 225 to 661 percent, and time rate of consolidation indices were measured to range from 0.003 to 0.014 square inches per minute.

3.2.4 Further Delineation of Horizontal and Vertical Extent of PCBs

3.2.4.1 GE Facility to New Lenox Road

The sediment reconnaissance/probing data base was used to select additional sampling locations in order to further define the presence of PCBs in sediments where such data were considered limited. As part of these activities, a total of 170 samples (plus eight duplicates) were collected from 25 locations in this reach. The results of these analysis are presented in Table 3-3 and on Figures 3-13 through 3-23.

At each location, sediment cores were collected to refusal, segmented into 6-inch intervals, and submitted for PCB analysis. Sediment samples from the bottom of certain cores that were below the anticipated depth of PCBs (based on visual characteristics and/or nearby data) were initially archived. Several of these archived samples were later analyzed to provide further delineation of the vertical extent of PCBs. Specifically, at locations where initial PCB results in the lowest depth increment analyzed exceeded 1 ppm, and where samples from deeper increments were archived, these archived samples were subsequently analyzed for PCBs. Those data are also presented in Table 3-3 and on Figures 3-13 through 3-23.

At many locations, the deepest sediment samples analyzed in a given core had a non-detectable PCB concentration, thus defining the vertical extent of detectable PCBs at that location. However, at a number of locations, the vertical extent of detectable PCBs was not defined despite the latest sampling efforts. Nevertheless, due to the significant amount of existing PCB data on sediments in this river reach, the data appear to be sufficient to characterize the concentrations and extent of PCBs in the deeper sediments for purposes of risk assessment, and they are also adequate to make a reasonable estimate of the volume of PCB-containing sediments in this reach for purposes of assessing remedial options. In addition, it would be difficult, if not infeasible, to collect deeper sediment cores from a given previously sampled location in this reach, since the previous sediment cores were collected to "refusal". Accordingly, additional sediment sampling for vertical extent of PCBs does not seem warranted at this time.

3.2.4.2 Near Dawes Avenue Bridge

Sediment sampling and analysis just upstream of Dawes Avenue during 1994 indicated the presence of PCBs at a concentration of 1,300 ppm. This concentration was detected at location HCSE-18 (see Figure 3-15) from 0 to 6 inches. This concentration appeared to be anomalously high compared to the existing sediment PCB data base. As such, the associated sample was reanalyzed, and a concentration of 510 ppm was reported. Given these relatively high concentrations, four additional samples were collected in relative close proximity to this location to further evaluate the presence of PCBs at this location. Samples were collected to refusal from two locations at depths of 0 to 3 inches and 3 to 7 inches and from a third location at depths of 0 to 3 inches and 3 to 6 inches. A fourth location was sampled to refusal at a depth of 0 to 4 inches. The samples were submitted for PCB analysis.

PCB data associated with these activities are included in Table 3-3 and on Figure 3-15. These data indicate that PCB concentrations in the immediate vicinity of location HCSE-18 range from 1.6 to 51 ppm. These data indicate that the elevated sediment PCB concentrations detected at location HCSE-18 appear to represent an anomalous localized PCB "hot-spot", just downstream of the outlet of the former raceway of a former dam located in this area.

3.2.4.3 Rising Pond

Additional sediment sampling and analysis activities were recently performed to further define the vertical extent of PCBs in Rising Pond. These activities were performed at three locations previously sampled by GZA GeoEnvironmental in 1991. At these locations, GZ-P8, GZ-S16 and GZ-S20 (see Figure 3-34), the presence of PCBs was previously defined to a depth of 4 feet, with PCB concentrations found in the deepest samples at 15, 16, and 22 ppm, respectively.

As part of the Supplemental Phase II/RFI activities, these locations were re-established with recorded survey information. Samples were collected at depths of 4 to 4.5 feet and 4.5 to 5 feet at location GZ-P8, and at 4 to 4.5 feet at location GZ-S16. Sediment could not be recovered from depths greater than 5 feet and 4.5 feet, respectively. Sediment sampling at depths greater than 4 feet was attempted during the same timeframe at location GZ-S20, but deeper sediments could not be recovered.

PCBs were not detected in sediments below 4 feet at location GZ-P8. However, PCBs were detected at location GZ-S16 at 4 to 4.5 feet at a concentration of 4.2 ppm. The PCB results for these analyses are included in Table 3-3 and on Figure 3-34.

Since PCBs were not detected in the deepest sample at one location, and were present at the other at a relatively low level, no further sampling and analysis activities appear warranted at this time.

It is also important to note that although PCBs were detected at depths greater than 4 feet at these locations, the vertical extent of PCB-containing sediment in Rising Pond averages approximately 3 feet (based on a review of all available data).

3.2.4.4 Co-located Sampling at Biota Collection Sites

As described in more detail in Section 6.2 of this report, additional fish samples were collected during Supplemental Phase II/RFI activities from three locations along the Housatonic River. These sampling locations are illustrated on Figure 6-1, and include an area near the New Lenox Road Bridge (HR2), Woods Pond, and an area near the Connecticut border (HR6).

As part of the evaluation of the biota data from these areas, it was determined that it would be useful to have corresponding sediment PCB data at the biota collection sites. While a large amount of sediment PCB data exist for Woods Pond, limited data were available for locations HR2 and HR6. As such, four sediment samples were collected from location HR2 and three samples were collected from location HR6. Each of these samples were collected from the 0- to 6-inch depth interval and analyzed for PCBs and TOC. These data are included in Table 3-3. PCB concentrations in these samples ranged from less than 1 ppm to 20 ppm at location HR2 and less than 1 ppm in the samples from location HR6. TOC concentrations ranged from 0.4 to 6.2 percent and from 0.7 to 1.4 percent at these locations, respectively.

3.2.5 Grain Size Versus PCBs and Oil & Grease

As part of the Phase II/RFI, sediment sampling and analysis activities were recently performed in an attempt to identify potential correlations associated with sediment PCB concentrations and oil & grease concentrations. This information was intended for use in assessing the performance of several potential treatment technologies as described in the PICM Proposal.

As part of these efforts, two sediment samples were collected from previously sampled locations within each of the reaches described in the PICM Proposal, as set forth below:

Reach Description	Existing Sample ID
GE facility to the Confluence with the West Branch	HCSE-A6, BBS12
Confluence to New Lenox Road	BBS16B, BBS16C
New Lenox Road to Woods Pond Headwaters	BBS17C4, BBS17D19
Woods Pond	BBS1812, BBS18M3

Each of these previously sampled locations (which were found to contain somewhat elevated concentrations of PCBs) were relocated based on survey information. A composite sample from each location was collected, and each sample was separated by particle grain size into the following three categories:

- sediment retained on (i.e., larger than) a No. 10 sieve (coarse sands and gravel);
- sediment passing (i.e., smaller than) a No. 10 sieve, but retained on a No. 200 sieve (medium to fine sands); and
- sediment passing the No. 200 sieve (silts and clays).

Each of these samples was then analyzed for PCBs and oil & grease.

The results of these analyses are presented in Table 3-4. Upon a preliminary review of these data, no clear trends can be distinctively identified.

3.2.6 Evaluation of Historic Sedimentation Rates Between the GE Facility and Woods Pond Dam

Pursuant to Section 2.2.3.1 of the Phase II/RFI Proposal, historical sedimentation rates between the GE facility and Woods Pond Dam were further evaluated using geochronological dating analyses. In addition, the occurrence of silting over in this reach was further evaluated using finely-sectioned PCB analysis. These activities and associated results are discussed below.

3.2.6.1 Overview of Geochronological Dating Analyses

In an area of continuous sediment deposition with very little scouring or mixing, Cesium-137 (Cs-137) will first appear in a sediment profile in sediments deposited after 1952, the first year of extensive atmospheric nuclear weapons testing. Thus, a sudden transition from measurable to non-detectable (or low) concentrations of Cs-137 as the sediment depth increases can be interpreted as the approximate 1952 horizon in the sediment. Again, in an ongoing sediment deposition area, peak Cs-137 concentrations are generally associated with the 1963 peak of atmospheric nuclear testing. The use of Cs-137 as a chronostratigraphic tracer has proven useful in determining the depositional chronology at various aquatic sites. For example, the results of Cs-137 analyses may be useful in determining the relative "age" of sediment deposits, the average sediment deposition rates for two time periods (i.e., 1952 to 1963, and 1963 to present), and whether vertical sediment mixing has occurred.

Beryllium-7 (Be-7) occurs naturally in sediments and was analyzed in the sediment samples as a possible method to evaluate recent deposition. Be-7 is not always detected in sediments; however, if it is detected in surface sediment, the related sediments are representative of deposition occurring within one year (or less) due to the short half-life of this isotope.

3.2.6.2 Description of Two-Phased Investigation

The Phase II/RFI sediment investigations included sampling and analyses activities designed to further evaluate sedimentation between the GE facility and Woods Pond. These efforts included two phases of activities. As part of the initial (screening) phase, sediment cores were collected from 43 locations within this reach and submitted for geochronological dating analyses. The locations of these sediment cores were chosen based on the sediment reconnaissance/probing activities described previously in Section 3.2.2. These locations were discussed with the Agencies on November 9, 1994. These locations are identified in Table 3-2, and on Figures 3-13 through 3-23. The sediment cores were sent to Teledyne Isotopes where various 1-inch segments of each core were analyzed for Cs-137 and Be-7 to generally classify the depositional chronology and identify the maximum depth of Cs-137 presence.

Graphic illustrations of the Cs-137 results for these initial screening activities are presented in Appendix B. Be-7 was detected at only three locations (3-1A, 6-1B, and 6-2G).

As part of the second phase of the assessment, the initial Cs-137 screening results (Appendix B) were reviewed in order to select a subset of the initial locations for the collection of a second core for more detailed analyses. This data would allow for a more definitive evaluation to be made regarding the depositional chronology of various sediments deposition areas.

The following locations were selected for finely-sectioned analyses and approved by the MDEP and USEPA:

Reach	Sample Location	
	Type	Identification
New Lenox Road to Woods Pond Headwaters	Channel Deposit	6-1B
	Backwater Deposit	6-2E
	Channel Deposit	6-2G
	Backwater Deposit	7-1J
	Channel Deposit	7-1K
	Backwater Deposit	7-1Q
	Backwater Deposit	7-1U
	Backwater Deposit	7-1X
Woods Pond	Impoundment	WP-1
	Impoundment	WP-2
	Impoundment	WP-3
	Impoundment	WP-5
	Impoundment	WP-6
	Impoundment	WP-7

In addition, the following locations were selected (and approved by the Agencies) for finely-sectioned analyses as a group of locations exhibiting a more "mixed" depositional pattern. These locations represent several terrace and channel deposits located between the GE facility and Woods Pond headwaters, and are composed of both coarse and finely-grained sediments:

Reach	Sample Location	
	Type	Identification
GE facility to the Confluence with West Branch	Channel Deposit	3-9B
	Terrace Deposit	4-2E
	Terrace Deposit	4-4B
Confluence to New Lenox Road	Terrace Deposit	4-7F
	Terrace Deposit	4-10B
	Channel Deposit	5-1E
	Channel Deposit	5-1I
	Terrace Deposit	5-3A
New Lenox Road to Woods Pond Headwaters	Backwater Deposit	6-2N
	Channel Deposit	6-3J
	Backwater Deposit	7-1A
	Backwater Deposit	7-1F

At each of these locations, an additional sediment core was collected, finely-sectioned, and submitted for analysis of PCBs, Cs-137, Beryllium-7, and TOC. However, it is important to note that laboratory analyses of the second group of locations were performed on a more limited basis, since previous Cs-137 screening results were not particularly meaningful.

3.2.6.3 Results of Geochronological Analysis

PCB and Cs-137 results associated with the finely-sectioned core locations are illustrated on Figures 3-24 through 3-33. The PCB data are also presented in Table 3-3 along with the TOC data.

These data have been evaluated in effort to estimate, to the extent feasible, approximate rates of sedimentation for various river reaches -- i.e., GE facility to the confluence with the west branch of the Housatonic River, the confluence to New Lenox Road, New Lenox Road to the Woods Pond headwaters, and Woods Pond. In general, sedimentation rates were estimated based on review and assessment of the deposition profile of Cs-137 in each sediment core, considering the expected Cs-137 profile (i.e., the first presence of Cs-137 corresponding to an approximate 1952-53 horizon, with the peak Cs-137 concentration corresponding to an approximate 1963 horizon). Based in the relative depths and profiles of the observed PCB and Cs-137 concentrations, an approximate timeframe associated with PCB transport was estimated to the extent practicable.

These cores were also assessed using methods developed by Heit (1984), which involves the evaluation of the total mass of Cs-137 in each sediment core. The mass of Cs-137 anticipated to be found in sediments as a result of atmospheric deposition is between 300 to 400 milliCuries per square kilometer (mCi/km^2) (Heit, 1984). In general, cores collected during Supplemental Phase II/RFI activities that had interpretable Cs-137 profiles had a total Cs-137 mass within this anticipated range. Other sediment cores collected in more efficient or deeper depositional zones had a greater than expected Cs-137 mass, thus indicating additional deposition of sediments with some pre-depositional Cs-137 concentration (by virtue of these sediments or possibly soils being first exposed to Cs-137, while on the surficial layer of sediments [or soils] at another location). Similarly, estimates of Cs-137 mass in sediments that are significantly below the expected mass estimates would be indicative of an erosional zone or possibly a depositional area that was in equilibrium prior to 1953 (and thus has not been subject to deposition since that time).

An overview of the geochronological dating results and several supplemental evaluations are described for each reach below.

<u>GE Facility to Confluence with West Branch</u>

Figures 3-24 and 3-25 illustrate the locations and Cs-137/PCB results collected between the GE facility and the confluence with the west branch. An interpretation of these results indicates the following:

- Results of the three cores collected in this reach (3-9B, 4-2B, and 4-4B) do not support geochronological dating techniques due to the lack of detectable Cs-137 concentrations. This is not unexpected given the physical nature of the majority of the sediments in this reach (i.e., coarse sands).
- PCB concentrations observed in these three cores do not illustrate a consistent pattern -- i.e., cores 3-9B and 4-4B had maximum PCB concentrations at the surface (5.6 and 34 ppm, respectively), while core 4-2B had a consistently decreasing PCB concentration towards the surface (with no PCBs being detected at the surface).

- Cores 3-9B and 4-4B both had detectable Be-7 at the surface, thus indicating relatively recent deposition at these locations.

Confluence with West Branch to New Lenox Road

Figures 3-25 through 3-27 illustrate the locations and Cs-137/PCB results collected between the confluence and New Lenox Road. An interpretation of these results indicates the following:

- Sediment core 5-3A was the only one of five cores within this reach that yielded data that could be used for geochronological dating. (As described in Section 3.2.6.2, based on the results of the screening study, it was acknowledged that the results collected from sediment cores 4-7F, 4-10B, 5-1E, and 5-1I were from areas of more "mixed" depositional patterns, and thus were not anticipated to be particularly useful for evaluation using this technique.)
- The Cs-137 data for sediment core 5-3A yields an estimated deposition rate of approximately 0.5 to 0.65 inches/year. The corresponding PCB concentration peak (160 ppm) is associated with a date of approximately 1970. Following this peak concentration, observed PCB levels decline to the surface with a detected concentration of 17 ppm in the 0- to 0.5-inch segment of this core.
- The mass of Cs-137 was determined to be slightly above the expected range in sediment core 5-3A (475 mCi/km^2), but was lower than expected in cores 4-7F and 4-10B (10 and 50 mCi/km^2, respectively). This observation is probably not meaningful at location 5-3A, but the estimates are indicative of a more erosional zone at locations 4-7F and 4-10B (or possibly

indicative of predominantly pre-1952 deposition as evidenced by the presence of the PCBs at these locations).

- Data collected in finely-sectioned cores at locations 4-7F, 4-10B, 5-1E, 5-1I, and 5-3A indicated a decreasing trend in PCB concentration in surficial sediments (i.e., silting over). Peak PCB concentrations varied from depths of 12 to 18 inches in several cores to a depth of 2 to 3 inches in others.
- In this reach, only sediment core 4-7F had detectable Be-7 at the surface, thus indicating that surficial sediments at this location were recently deposited. (The fact that Be-7 was not detected at the other four locations in this reach does not mean that surficial sediments at these locations are not recently deposited, just that no detectable Be-7 was found.)

New Lenox Road to Woods Pond

Figures 3-29 through 3-32 illustrate the locations and Cs-137/PCB results collected between New Lenox Road and the Woods Pond headwaters. An interpretation of these results indicates the following:

- Nine of the 11 finely-sectioned sediment cores in this reach yielded Cs-137 and PCB data that could be interpreted using geochronological dating techniques.
- The results obtained from sediment core 6-1B are similar to those observed at location 5-3A, located immediately upstream: a sediment deposition rate of approximately 0.5-0.6 inches/year, an observed peak PCB concentration (72 ppm) associated with approximately 1970 followed by a decline in surficial sediment PCB concentrations.

- Sediment cores 6-2E, 6-2G, and 6-2N have interpretable Cs-137 patterns with an observed Cs-137 peak in the 2-3 inch segment. The sedimentation rates observed in these cores appear to be very low (less than 0.1 inches/year), which is most likely due to the location of these depositional areas outside of the direct influence of the river channel. The peak PCB concentration appears earlier than the Cs-137 peak and thus is associated with the pre-1960 timeframe.
- The estimated mass of Cs-137 in cores 6-1B, 6-2N, and 7-1Q was determined to be within the expected range (325, 325, and 300 mCi/km^2, respectively), but it was low at cores 6-2G, 7-1J, and 7-1U (60, 175 and 200 mCi/km^2, respectively) and slightly higher than expected at cores 6-2E, 7-1F, and 7-1X (425, 425, and 475 mCi/km^2, respectively). This information indicates that cores 6-2G, 7-1J, and 7-1U are located in erosional zones (or possibly were subject to predominantly pre-1952 deposition as evidenced by the presence of PCBs at these locations), while cores 6-2E, 7-1F, 7-1X are located in more efficient depositional areas.
- River channel sediment cores 6-3J, 7-1A, and 7-1K did not have an interpretable Cs-137 profile. (As discussed in Section 3.2.6.2 sediment cores 6-3J and 7-1A were collected in areas of a more "mixed" depositional pattern, based in the screening study results, and thus were not anticipated to yield particularly useful results.) The PCB results from these locations were all low (<10 ppm); nonetheless, locations 7-1A and 7-1K indicated a decline in surficial sediment PCB concentrations.

- Five cores were taken in backwater areas off of the main channel (7-1F, 7-1J, 7-1Q, 7-1U, and 7-1X). Peak PCB concentrations ranged from 20 ppm to 220 ppm in these cores. In three of the five cores, the peak Cs-137 concentration was found in the upper 3 inches, indicating net deposition rates of approximately 0.1 inches/year. In four of the five cores, the peak PCB concentration is associated with the early 1960s. Declines in surficial sediment PCB concentrations were evident in three of the five cores, with locations 7-1J and 7-1U being the exceptions.

Woods Pond

Figure 3-33 illustrates the locations and Cs-137/PCB results collected in Woods Pond. An interpretation of these results indicates the following:

- Sediment deposition rates were highest for cores WP-5 (0.4 inches/year) and WP-7 (approximately 1 inch/year) in the eastern half of the pond outside of the channelized portion of the pond. Cores collected near the area of the channelized section of the pond (WP-1, WP-2, WP-6) had estimated sediment deposition rates of approximately 0.1 to 0.25 inches/year.
- The mass of Cs-137 was determined to be within the expected range in core WP-3 (300 mCi/km^2), but it was low in sediment core WP-2 (200 mCi/km^2) and high at cores WP-1, WP-5, WP-6, and WP-7 (450 - 1400 mCi/km^2). These estimated Cs-137 masses indicate that the pond generally acts as an efficient depositional area, with smaller areas within the pond (such as near WP-2) showing less sediment deposition over time.

- PCB concentrations correlated well with Cs-137 in each core. This correlation indicates that PCB transport to Woods Pond peaked in the early 1960s and has been declining since that time.
- None of the sediment cores collected in Woods Pond had detectable Be-7 in the surficial sediments.

Overall Conclusions

In general, cores collected from the main channel of the Housatonic River did not have a vertical Cs-137 profile which enabled reconstruction of a depositional history. However, cores collected from Woods Pond and backwater areas along the river were generally suitable for use in estimating sediment deposition rates and assessing the PCB deposition chronology. In these cores, the estimated deposition rates were relatively variable depending on whether the cores were taken from a predominantly depositional area or from an area subject to erosion or little deposition. For example, the estimated sedimentation rates in the river reach between New Lenox Road and the Woods Pond headwaters ranged from 0.05 to 0.6 inch per year, while those in Woods Pond ranged from 0.1 to 1.0 inch per year. On an overall basis, in cores with interpretable Cs-137 profiles, the observed peak PCB concentration (and thus the maximum PCB transport) was generally associated with the early 1960s, and a historical decline of PCB deposition was noted in many of these cores with the surface PCB concentration in these cores averaging between 17 and 25 percent of the peak PCB concentration. This indicates an average reduction of PCB concentration of about 5 to 6 percent per year.

Further Downstream Assessment of Sedimentation

In addition to the activities described above, it was determined that it would be useful to collect additional data to further evaluate sedimentation rates below Woods Pond. It was concluded that such data would most appropriately be collected from the next significant impoundment downstream of Woods Pond (i.e., Rising Pond). These activities are being performed in accordance with the Addendum to the Phase II/RFI Proposal. Details regarding these activities are presented in Section 2.4 of that addendum.

3.2.6.4 Evaluation of Silting Over

The finely-sectioned PCB data collected as part of the Phase II/RFI activities have been reviewed to evaluate occurrences of "silting over". Silting over is the burial of PCBs in sediments by progressively cleaner sediments, thus isolating these materials from the water column.

Between the GE facility and the confluence with the West Branch, two terrace deposits (4-2B and 4-7F) exhibit the effects of silting over (out of three deposits evaluated). Between the confluence and New Lenox Road, one terrace deposit (5-3A) and one channel deposit (5-1I) exhibit the effects of silting over (out of five deposits evaluated). Between New Lenox Road and the Woods Pond Headwaters, two channel deposits (6-1B and 7-1K) and five backwater deposits (6-2E, 6-2N, 7-1F, 7-1X, and 7-1Q) exhibit the effects of silting over (out of four deposits evaluated), and within Woods Pond, all six cores (WP-2 through-7) exhibit the effects of silting over.

In addition to these data, a number of the other cores taken during prior and Supplemental Phase II/RFI investigations, which were characterized in 6-inch depth intervals, exhibit the effects of silting over. These include six locations between the GE facility and the confluence with the West Branch (BBS09D, 3-6A, 3-10C, 4-4E, 4-5A, and 4-6B -- see Figures 3-14 and 3-15), six locations between the confluence and New Lenox Road Bridge (4-9D, 4-9H, 4-9K, 4-10B, S-15 and 5-2I -- see Figures 3-16 and 3-17) and sixteen locations between the New Lenox Road Bridge and Woods Pond Dam (5-4B, S16C, S17A2, S17A2, BBS17B4, S17B5, S17B7, S17C2, S17C3, BBS17C4, S17C4, S17E8, S17E21, S17E5, S17D19, and BBS17D19 (see Figures 3-18 through 3-22).

3.2.7 Sediment Investigations in Connecticut Portion of the Housatonic River

As indicated above in Section 3.2.1, a number of sediment-related investigations were conducted in 1992 pursuant to the Cooperative Agreement between GE and CDEP. As also indicated in Section 3.2.1, these investigations evaluated trends in PCB concentrations in sediments, and provided updated parameters for the fate and transport model developed as part of the Cooperative Agreement. Specifically, as part of these investigations, sediment samples were collected at a total of 55 stations between Great Barrington, Massachusetts and the Stevenson Dam in Connecticut. At 49 of the stations, a 0- to 3-inch core was collected and analyzed for PCBs, TOC, bulk density, and grain size. The remaining six cores were collected as deep sediment from the two run-of-river impoundments (Falls Village and Bulls Bridge) and the two lakes (Lakes Lillinonah and Zoar). These cores were analyzed in 1-inch increments for PCBs, Cs-137, and TOC. These data were reported to the CDEP and USEPA by letter dated February 24, 1994, and were further evaluated by

LMS (November 1994). Tables 3-5 and 3-6 present these data as reported by LMS (November 1994). A brief summary of these data and associated findings is provided below.

In the 3-inch core samples, sediments were found to be composed primarily of sands and silts; PCB concentrations ranged from non-detect (at a detection limit of 0.05 ppm) to 2.5 ppm; TOC concentrations ranged from 0.07 to 4.6 percent; and bulk density ranged from 35 to 89 PCF. Upon comparison of these more recent data with the historical data base, LMS (November 1994) generally concluded that an apparent diminishment of PCB and TOC concentrations in surface sediments was occurring in the Massachusetts section of the river, the Falls Village Reservoir, and especially in Lakes Lillinonah and Zoar.

As for the deep sediment cores, PCB concentrations ranged from non-detect to 1.7 ppm, and TOC concentrations ranged from 0.05 to 6.8 percent. Compared to the historical data base, LMS (November 1994) concluded that the more recent PCB concentrations were generally lower at all six stations, and that TOC concentrations were lower at four of the six locations.

As for the rates of sediment deposition, the more recent data confirmed prior conclusions related to the two lakes, but no historical deposition trends were noted for the other locations (LMS, November 1994). Specifically, sediment cores collected in 1986 just upstream of the Shepaug Dam (Lake Lillinonah) and the Stevenson Dam (Lake Zoar) (one core per lake) indicated a sedimentation rate of approximately 0.32 inches per year (based on Cs-137 analyses). The analysis of additional cores at these locations (one per lake) in 1992 showed similar Cs-137 profiles as the prior cores, thus indicating a similar sedimentation rate for these areas.

Sediment cores collected further upstream of these locations in each of these two lakes (one core per lake) did not produce any discernible Cs-137 patterns (LMS, November 1994).

In addition to these investigation, GE recently became aware of additional sediment PCB data for Lake Housatonic in Connecticut. These data were generated in 1990 by Baystate Environmental Consultants, Inc., of East Longmeadow, MA (Baystate) as part of a feasibility evaluation involving the dredging of sediments from Lake Housatonic for recreational purposes (Baystate, July 1991). As part of this evaluation, a total of seven composite sediment grab samples were collected from various locations within the lake and submitted for PCB analysis (as well as several other miscellaneous analyses). As reported by Baystate (July 1991), PCBs were not detected in any of these samples (detection limits ranged from 0.048 to 0.246 ppm).

3.2.8 Investigation of Other Hazardous Constituents

As discussed in Section 2.2 of the Addendum to the Interim Phase II Report/CAS, the prior Appendix IX+3 data from sediment samples taken from the river upstream of, adjacent to, and downstream of the GE facility provided important information to identify and determine the location and extent of such constituents in the sediments. An evaluation of the inorganic constituents found in those samples was presented in Section 2.2.2 and Tables 2-12 and 2-13 of the Addendum, while an evaluation of the organic constituents was presented in Section 2.2.3 and Tables 2-14 and 2-15 of the Addendum. The purpose of these evaluations was to identify "target" constituents, if any, that may be attributable to releases from the GE facility and that would warrant further downstream sediment sampling.

However, the Agencies questioned these evaluations and indicated that, following a more careful delineation of river sediments to identify depositional areas, additional sampling and analysis for non-PCB hazardous constituents may be necessary to confirm the presence or absence of previously detected compounds.

Accordingly, as part of the recent Supplemental Phase II/RFI sediment investigations, eight additional sediment samples were collected from eight sediment deposit areas located upstream of, adjacent to, and downstream of the GE facility. These locations are designated HCSE-13 through HCSE-20 and are shown on Figures 3-12 through 3-15. Based on the review of constituents previously detected in river sediments, these samples were analyzed for PCBs and Appendix IX+3 semivolatile organic constituents (SVOCs), polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and inorganics.

The results of these analyses are presented in Tables 3-7 through 3-9 along with the prior sediment Appendix IX+3 data. For PCDDs and PCDFs, the relevant table (Table 3-8) provides total homolog concentrations and total PCDD and PCDF concentrations, as well as congener-specific concentrations for those samples that were analyzed on a congener-specific basis. In addition, to facilitate comparisons of the total PCDD/PCDF data in a way that takes account of the different toxicities among different congeners, Toxicity Equivalency Factors (TEFs) were applied to the PCDD/PCDF results, where feasible, in order to calculate total Toxicity Equivalents (TEQs), which take account of the different toxicities among congeners. Although GE does not accept the TEFs currently in use by the Agencies, and in particular believes that the TEFs used by the MDEP are not scientifically supportable, TEQs have been calculated using both the

USEPA's and the MDEP's TEFs solely to facilitate comparison of the data on an upstream versus downstream basis without having to engage in a dispute with the Agencies on this issue in the present context.

The data from these analyses were evaluated in a manner generally consistent with prior evaluations of this type. Specifically, this evaluation involved a comparison of the types and concentrations of constituents detected at locations downstream of the GE facility with those detected upstream, as well as an evaluation of the concentrations and spatial distribution of the constituents detected downstream. The objective of this evaluation was to identify which of these constituents, if any, should be considered "target" constituents for further downstream sediment sampling, in order to assess the extent of constituents in sediments that are potentially attributable to releases from the GE facility. (It should be noted that this evaluation for "target" constituents was conducted solely for the purpose of determining the need for further downstream sampling. A determination that a constituent is not a "target" constituent for this purpose does not mean that it will be excluded from the risk assessment.) The results of the "target" constituent evaluations were presented in detail to the Agencies in the Third Quarterly Progress Report (BBL, June 1995). These evaluations concluded that there were no non-PCB "target" constituents that would warrant further downstream sediment sampling. (Since these evaluations will be revised, as discussed below, after the collection of additional upstream data, the prior evaluations are not repeated here.)

Prior to receiving a response from the Agencies, GE anticipated that further upstream PCDD/PCDF data would be useful for further assessing the need for downstream sampling and analysis. As such, on July 11, 1995, four Housatonic River sediment samples (plus one duplicate) were collected from four locations upstream of the Hubbard Avenue Bridge, as shown on Figure 3-12. These sampling locations were co-located with locations previously sampled in 1992 for Appendix IX+3 metals. These locations were generally spaced at equal intervals between the Hubbard Avenue Bridge and Center Pond in Dalton and were also chosen to represent sediment deposition areas along this reach. Sediment samples were collected from each of these locations at depth intervals ranging from 0 to 7 inches and 0 to 24 inches. Each of these samples were submitted for PCDD/PCDF analyses. The results are summarized in Table 3-10.

These sediment samples were collected along with two additional sediment samples upstream of the GE facility along Unkamet Brook. These two additional sediment samples were collected from the first two sediment deposition areas (identified based on a field reconnaissance) upstream of Dalton Avenue. These samples were collected at depth intervals of 0 to 12 inches and 0 to 19 inches, respectively, and were each submitted for PCDD/PCDF analyses. The results of these analysis are summarized in Table 3-11.

Tables 3-10 and 3-11 also present total PCDD and PCDF concentrations for the upstream Housatonic River and Unkamet Brook sediment samples, respectively, as well as TEQs calculated for each sample.

In a letter to GE dated September 6, 1995, the Agencies commented on the evaluation presented by GE in the Third Quarterly Progress Report. In that letter, the Agencies criticized some of the upstream locations used by GE in that evaluation, and stated that additional background samples were needed in order to make a meaningful comparison between upstream and downstream levels of Appendix IX+3 constituents. That letter further stated that a memorandum from the MDEP's Office of Research and Standards (ORS) would be provided with further details on the appropriate number of upstream sediment and floodplain soil samples needed to make the upstream versus downstream comparison. The MDEP provided GE with the ORS memorandum as an attachment to a MDEP memorandum dated October, 20, 1995.

GE responded to the Agencies' comments by explaining that, in its view, the upstream sample locations criticized by the Agencies are, in fact, appropriate for the upstream versus downstream comparison. However, GE also provided the Agencies with a proposal for performing additional upstream sediment sampling and analysis as part of the Addendum to the Phase II/RFI Proposal. That proposal was prepared based on careful consideration of the information presented in the ORS memorandum. In general, a total of 12 new upstream samples were proposed to be collected for analysis of SVOCs, inorganics, and PCDDs/PCDFs. That proposal was approved by the Agencies on December 7, 1995. These activities are currently being implemented as detailed in Section 2.2 of the Addendum to the Phase II/RFI Proposal.

The results of this sampling will be presented in an interim report pursuant to the schedule discussed in Section 11. These upstream data, together with prior upstream sediment data that would not be affected by releases from the GE facility, will be compared with existing downstream sediment data for the same constituents in order to complete the evaluation as to the presence of "target" constituents if any, that appear to be attributable to releases from the GE facility and that would warrant further downstream sediment sampling. The results of this revised evaluation will be presented to the Agencies, accompanied, if appropriate, by a proposal for further downstream sediment sampling for any "target" constituents identified.

3.3 Silver Lake Sediments

3.3.1 Prior Investigations

Silver Lake sediment investigations were conducted in 1980 and 1982 as part of the Stewart investigations and in 1991 as part of the initial MCP Phase II activities.

As part of the Stewart investigations, a total of 120 sediment samples were collected from 25 locations representative of both deep-water and peripheral sediments, and analyzed for PCBs. These activities are described in more detail in Section 4.5.1 of the Interim Phase II Report/CAS.

The 1991 MCP Phase II activities included the collection and Appendix IX+3 analysis (including PCBs) of six sediment samples from three locations in the eastern portion of Silver Lake, adjacent to the part of the GE facility designated as Area 4 in the USEPA Permit. These data are described in Section 4.5.2 of the Interim Phase II Report/CAS.

Subsequent to these MCP Phase II activities, three miscellaneous composite sediment samples were collected in November 1992 by Blasland & Bouck Engineers from Silver Lake and submitted for PCB analysis at the request of GE. The results of these analyses were reported to the MDEP and USEPA in the Silver Lake Data Summary (Blasland & Bouck, November 1993).

A number of activities have recently been performed pursuant to the Phase II/RFI Proposal to satisfy several sediment-related data needs. In general, additional investigations have been performed to further characterize:

- the physical characteristics of lake sediments;
- the horizontal and vertical extent of PCBs;
- correlations (if any) regarding grain size versus PCB and oil & grease concentrations;
- sediment deposition;
- the presence of hazardous constituents other than PCBs; and
- the identification of submerged physical structures which may impede remedial activities.

These investigations and findings are discussed below in Sections 3.3.2 through 3.3.7.

3.3.2 Physical Characteristics

As in the case of the Housatonic River described above in Section 3.2.3, Silver Lake sediment samples were collected as part of the Supplemental Phase II/RFI activities to further characterize the physical characteristics of lake sediments. As part of these activities, sediment core samples representative of the full depth of sediments were collected at four locations from within the lake and analyzed for grain size, specific gravity, bulk density, water content, and time-rate-of-consolidation. The locations of these samples are illustrated on Figure 3-35. The results of these analyses are included in Appendix A and summarized below.

In summary, these data indicate that the sediments of Silver Lake are composed mostly of silts (based on particle size analyses). The specific gravity of these sediments was measured to range approximately from 2.33 to 2.43. Bulk density was measured to range from 64 to 83 PCF. Water content was measured to range from 157 to 442 percent, and time rate of consolidation indices were measured to range from 0.003 to 0.023 square inches per minute.

In addition to the activities described above, a bathymetric survey of Silver Lake was performed to define the surface topography of submerged sediments. Figure 4-4 presents the results of these activities which show that the elevation of the lake bottom ranges from approximately 948 to 975 feet above mean sea level (MSL).

Also, lake sediment samples were recently collected for the analysis of settleability characteristics. However, these tests are still ongoing, and the associated results will be subsequently reported in the addendum to this report.

3.3.3 Further Delineation of Horizontal and Vertical Extent of PCBs

3.3.3.1 Results of Additional Deep Water Sediment Cores

Four additional deep-water sediment cores were collected from Silver Lake as part of the Supplemental Phase II/RFI activities. These cores were collected in order to supplement the existing sediment PCB data base and provide for the further delineation of the horizontal and vertical extent of PCBs. Those cores were collected from four locations in Silver Lake as illustrated on Figure 3-35. These cores were collected to refusal and segmented into 6-inch depth interval samples, with each sample being submitted for PCB analysis. The results of these analysis are presented in Table 3-12. These data are also presented on Figure 3-35 along with the prior sediment PCB data. The recent data appear to be consistent with the prior data.

Similar to the Housatonic River, although the vertical extent of PCBs has not been defined to non-detectable levels at a number of locations in Silver Lake, the existing data on the extent of PCBs in deep sediments are adequate to characterize the PCB concentrations in such sediments for risk assessment purposes and are sufficient to allow reasonable volume estimates to be made for purposes of assessing remedial alternatives.

3.3.3.2 Investigation of PCB Presence at Location N02(92)

As illustrated on Figure 3-35, a miscellaneous grab sample collected in 1992 from the northeast portion of the lake exhibited an anomalously high PCB concentration of nearly 21,000 ppm. This sample was collected from a depth of 0 to 1 foot at Location N02(92) (see Figure 3-35). An additional sediment core was collected in the vicinity of Location N02(92) in order to further define the extent of PCBs at this location. Specifically, a core was collected from Location SLS-5 (near Location NO2(92)) to the maximum depth from which samples could manually be obtained (Figure 3-35). This core was segmented into 1-foot depth increment samples, with each sample being submitted for analysis of PCBs and oil & grease. The results of these analyses are presented in Table 3-12, while the PCB data are also shown on Figure 3-35.

The results of those analyses indicate the presence of PCBs at this location from 290 to 18,000 ppm, while oil & grease concentrations range from 0.3 to 2.1 percent.

These data indicate that elevated levels of PCBs and oil & grease exist in this area of the lake and that a general correlation appears to exist between these parameters. These data do not, however, indicate the presence of free product at this location. This fact is further confirmed by sample descriptions made in the field at the time of sample collection. Although a slight sheen was noted for several depth intervals, there was no evidence of free product in any of the samples. As such, it does not appear that further sampling and analysis activities are warranted at this time.

3.3.4 Grain Size Versus PCBs and Oil & Grease

Silver Lake sediment sampling and analysis activities were recently performed in an attempt to identify correlations associated with sediment PCB and oil & grease concentrations. Samples were collected from the previously sampled locations HCSE-11 and HCSE-12 (see Figure 3-35). These samples were collected to be representative of the full depth of sediments at these locations, and were intended to be analyzed in a manner consistent with the Housatonic River sediment samples described above in Section 3.2.4. However, these samples were not properly analyzed by the analytical laboratory, and the resulting data are not useful. As such, these samples must be collected and analyzed again. These samples will be collected this winter after ice has formed on the lake. The results will be presented and evaluated in the addendum to this report.

3.3.5 Evaluation of Sedimentation Characteristics and Silting Over

Sediment cores were collected from four locations in Silver Lake for evaluating sedimentation characteristics. These cores were collected from locations SLS-1 through SLS-4 as illustrated on Figure 3-35. At each of these locations, a sediment core was collected and submitted for finely-sectioned analysis of PCBs, TOC, Cs-137, and Be-7.

The PCB and Cs-137 data related to these activities are illustrated on Figure 3-36, while the PCB and TOC data are presented in Table 3-12. The PCB data are also presented on Figure 3-35.

Based on these data, approximate rates of sediment deposition have been estimated for each location. These rates, described below, were determined in a manner consistent with the methods used to estimate sediment deposition rates in the Housatonic River, as described in Section 3.2.5.

Location	Approximate Sedimentation Rate (inches per year)
SLS-1	0.20 to 0.30
SLS-2	0.35 to 0.50
SLS-3	0.35 to 0.50
SLS-4	0.25 to 0.30

Peak PCB concentrations (and thus the period of maximum PCB transport to Silver Lake) observed in these cores were generally determined to be associated with the 1950s. The mass of Cs-137 was generally high in all four cores (450 - 1000 mCi/km^2), thus indicating that, as expected, these locations represent efficient depositional zones. Be-7 was detected at the surface at all four locations, thus indicating the presence of recently deposited sediments in the 0- to 0.5-inch segments of these cores. PCB concentrations decline towards the surface in all four cores (i.e., silting over). In fact, the surface PCB concentrations averaged only five percent of the peak PCB concentration in these cores. This indicates an average reduction in PCB concentration of about 7 percent per year.

3.3.6 Investigation of Other Hazardous Constituents

As mentioned above in Section 3.3.1, several Silver Lake sediment samples were collected as part of the initial MCP Phase II activities and analyzed for Appendix IX+3 constituents. Although these data provided an adequate assessment of hazardous constituents other than PCBs in deeper-water sediments, it was felt that in order to provide a more accurate assessment of exposure pathways associated with Silver Lake for use in the risk assessment, additional sampling and analysis of near-shore sediments were needed. As such, a total of seven near-shore sediment samples (including one duplicate) were collected as part of Supplemental Phase II/RFI activities from locations SLN-1 through SLN-6 illustrated on Figure 3-35. These locations were selected to provide reasonable spatial coverage of the perimeter of the lake and to include areas where individuals are theoretically most likely to wade into the lake. Those determinations were based on a year-long observation study at Silver Lake from March 1992 to March 1993 (ChemRisk, December 1993) and on visual reconnaissance of the lake to identify areas of potential access and use. At each location, samples were collected at a depth of 0 to 6 inches. Based on review of the constituents previously found in Silver Lake sediments (see Tables 4-13 and 4-14 of the Interim Phase II Report/CAS), all samples were submitted for analysis of PCBs and Appendix IX+3 SVOCs, PCDDs/PCDFs, and inorganics.

The results of these analyses are presented in Tables 3-13 through 3-16. The associated PCB data are also presented on Figure 3-35. Upon review of these data, it is noted that they are generally consistent with the prior deep-water sediment data. The Silver Lake sediment Appendix IX+3 data appear to be adequate for risk assessment purposes. While these data are not sufficient to allow calculations of the volumes of sediments affected by the various non-PCB constituents found, the available PCB data do allow volume estimates of PCB-affected sediments, and those volume estimates should be adequate for purposes of evaluating potential remedial alternatives for Silver Lake sediments. As such, no further Silver Lake sediment Appendix IX+3 sampling and analysis activities are warranted at this time.

71

However, in an attempt to evaluate potential sources of hazardous constituents to Silver Lake which may be unrelated to the GE facility, GE believes that it would be useful to sample sediment (if sediment is found) within the city storm sewer system discharging to Silver Lake along the northwest shore. These samples will be collected following coordination with the Pittsfield Department of Public Works. These samples will be collected as grab samples and will be analyzed for PCBs and Appendix IX+3 SVOCs, PCDDs/PCDFs, and inorganics consistent with the SAP/DCAQAP. The results of these analyses will be presented and evaluated in the addendum to this report.

3.3.7 Identification of Physical Structures

Pursuant to the Agencies' September 12, 1994 conditional approval letter for the Phase II/RFI Proposal, the potential presence of structures within Silver Lake which could potentially interfere with sediment remedial activities was evaluated. This evaluation included the review of historical files and mapping as well as a visual reconnaissance of the lake. Documentation supporting these findings is included in Appendix C.

As a result of this evaluation, the following structures have been identified to exist or potentially exist:

- Two square concrete piers, approximately 5 feet by 5 feet, are present in the southeast corner of Silver Lake, near the existing power lines. The piers are located approximately 10 feet and 20 feet from the shore, and both appear to rise above the water surface.
- A pressure-treated wooden flume extends out approximately 200 feet from the eastern shore of Silver Lake. Approximately 32 pressure-treated wooden piles, approximately 10 inches in

diameter each, also exist in this area to support the flume. The piles end approximately 2.5 to 3 feet below the water surface.

- A second pressure-treated wooden flume is known to have extended out from the northern shore of Silver Lake at the eastern end, near the existing power lines. The distance that this flume extended from shore is unknown. It is also unknown whether or not any of this flume remains today. However, a number of wooden piles and bracing materials used to support this flume do exist, and several of these visibly rise above the water surface. The number of existing piles is unknown.
- A fence line within the water along the northern shore of Silver Lake is depicted on a 1964 map of this area. Although this fence could not be found during reconnaissance activities, wooden piers were located along this line at approximately 50 foot intervals. At least five of these piers are known to exist.
- A "line of proposed diverting dam" along the northern shore of Silver Lake is depicted on a 1921 drawing of this area. This line extends approximately 725 feet along the shore. It is possible that a dam and/or piles exist underwater along this line.
- In the past, a platform used for torpedo guidance testing purposes was located approximately 250 feet from the southern shore in the eastern portion of Silver Lake. The platform was approximately 50 feet by 100 feet, and a walkway extended from the shore out to that platform. Although this platform and walkway have been removed, it is possible that piles or other support structures could still remain.

If appropriate, further investigations will be conducted as part of the Corrective Measures Study to determine whether the structures identified above as potentially present under the surface of Silver Lake still remain.

3.4 Updated Volume Estimates of PCB-Containing Sediments

Volume estimates of PCB-containing sediments in the Housatonic River and Silver Lake were presented in Section 4.6 of the Interim Phase II Report/CAS. However, since new vertical and horizontal sediment PCB data were generated for Silver Lake and various reaches of the Housatonic River as part of the activities described above in Sections 3.2.4 and 3.3.1, the prior volume estimates of PCB-containing sediments for these areas have been updated, as appropriate. The following assumptions were used in updating these volume estimates. These assumptions are generally consistent with prior assumptions.

- River width was estimated, by reach, by averaging all observations of river width in that reach.
- The volume estimates were determined on a reach-by-reach basis to better reflect the distribution of PCBs in the sediments (in-place volume).
- The volume of PCB-containing sediments was determined for five different PCB concentration ranges. These concentration ranges were selected for illustrative purposes only and do not necessarily represent levels of regulatory significance for this project.
- When multiple sediment cores were in close proximity, the core with the higher PCB concentration was used in this analysis.
- The river length represented by an individual sample was assumed to be equal to the sum of half the distances between the adjacent upstream and downstream samples.

- At each sampling location, five depths were determined, corresponding to the deepest presence of PCBs at concentrations greater than 1 ppm, 10 ppm, 50 ppm, 100 ppm, and 500 ppm, respectively. These depths were assumed to be representative of the given river segment calculated as described immediately above. As appropriate, the results of the probing/reconnaissance activities, described in Section 3.2.2, were utilized to refine these calculations.

Based on these assumptions, estimates of the volume of sediments containing greater than 1 ppm, 10 ppm, 50 ppm, 100 ppm, and 500 ppm of PCBs have been developed for the Massachusetts portion of the Housatonic River, as well as Silver Lake. The volumes estimated are:

Reach	Approximate Volumes (cubic yards)				
	Containing Greater than 1 ppm PCBs	Containing Greater than 10 ppm PCBs	Containing Greater than 50 ppm PCBs	Containing Greater than 100 ppm PCBs	Containing Greater than 500 ppm PCBs
Silver Lake	175,000	140,000	70,000	60,000	46,000
GE Facility to Holmes Road	90,000	60,000	40,000	18,000	100
Holmes Road to New Lenox Road	160,000	130,000	50,000	13,000	0
New Lenox Road to Woods Pond Headwaters	310,000	200,000	100,000	43,000	0
Woods Pond	225,000	100,000	60,000	28,000	0
Woods Pond Dam to Rising Pond	430,000	40,000	0	0	0
Rising Pond	190,000	130,000	0	0	0
Rising Pond Dam to CT. Border	180,000	0	0	0	0

As for the Connecticut portion of the river, Section 4.6 of the Interim Phase II Report/CAS presents volume estimates of PCB-continuing sediments made by

Frink et al. (1982). Because very few sediment samples were found containing PCB concentrations greater than 1 ppm, Frink et al. made these estimates by estimating the total volumes of all sediments contained in the studied portions of the river and then calculating (based on the limited data) the mean PCB concentrations of those sediments. The mean PCB concentrations associated with those prior estimates have been updated to include the more recent data collected since that time. Due to the method used, these volume estimates are not comparable to the above-listed estimates for the Massachusetts portion of the river. The revised estimates for Connecticut are as follows:

Location	Approximate Volume (cubic yards)	Mean PCB Concentration
Falls Village	85,000	0.25
Bulls Bridge	93,000	0.07
Lake Lillinonah	9,300,000	0.52
Lake Zoar	4,100,000	0.53

SECTION 4 - SURFACE WATER AND TRANSPORT INVESTIGATIONS

4.1 General

Numerous surface water investigations have been conducted over the past several years to study the presence, extent, and/or transport of PCBs and other hazardous constituents in the water columns of the Housatonic River and Silver Lake. The following sections provide, first for the Housatonic River and then for Silver Lake, a brief overview of prior surface water investigations, with appropriate references to more detailed information presented in prior documentation. These sections also provide discussions of activities performed and data generated through the end of 1995 in the recent and ongoing Supplemental Phase II/RFI activities.

4.2 Housatonic River Surface Water

4.2.1 Description of PCB Sampling and Analysis Activities

4.2.1.1 Prior Investigations

Ambient PCB trend monitoring of the Housatonic River water column has been performed as part of several investigations, as summarized in Section 3.2.1 of the Phase II/RFI Proposal. Specifically, between July 1989 and June 1990, monthly water-column samples were collected from six locations along the Housatonic River in Massachusetts between the GE facility and Great Barrington, Massachusetts. Again, between October 1990 and September 1991, monthly water-column samples were collected (generally during low- to moderate-flow conditions) from the same locations. These investigations are discussed in more detail in Section 5.4 of the Interim Phase II Report/CAS and Section 3.1 of its addendum.

Additionally, high-flow PCB data were collected at Division Street in Great Barrington and at downstream locations in Connecticut during two events in 1991, four events in 1992, and two events in 1993. These activities were performed, on GE's behalf, by LMS as part of the Connecticut Cooperative Agreement. The associated results were presented and evaluated in LMS's November 1994 modeling report which is described in Section 3.2.6 of this report.

Sections 4.2.1.2 and 4.2.1.3 discuss activities performed and data generated through the end of 1995 pursuant to Section 3.2.4.1 of the Phase II/RFI Proposal. Section 4.2.1.4 provides, pursuant to Section 3.2.1.1 of the Phase II/RFI Proposal, an overview of the 1991-1993 high-flow sampling efforts performed downstream of Rising Pond by LMS. Finally, Section 4.2.1.5 describes other surface water activities currently ongoing as part of investigations proposed in the Addendum to the Phase II/RFI Proposal.

4.2.1.2 Suspended Solids Harvesting

As described in Section 3.2.4.1 of the Phase II/RFI Proposal, suspended sediment samples were to be collected from four key Housatonic River locations (Newell Street Bridge, the first Pomeroy Avenue Bridge, New Lenox Road Bridge, and the headwaters of Woods Pond) during three high-flow events that were likely to mobilize fine particulate sediment. An attempt was to be made to collect three such samples at each location during each event. Each of these samples were to be submitted for PCB, total organic carbon (TOC), and grain size analyses. In addition, surface water samples were to be collected and analyzed for total suspended solids (TSS) coincidentally with these suspended sediment samples.

Through the end of 1995, two such events have been performed. The first event, conducted on October 23, 1995, consisted of the collection of one set of suspended sediment and surface water samples, because hydrologic conditions prevented the collection of additional samples. The sediment samples were analyzed for PCBs and TOC; however, grain size analyses could not be performed due to an insufficient sample quantity (also caused by weather-related impacts). The surface water samples were analyzed for TSS as well as for PCBs. The results of these first round activities are presented in Table 4-1 and 4-2. In summary, surface water PCB and TSS concentrations are shown to range from non-detect to 0.00063 ppm and from 4 to 190 ppm, respectively, while suspended solids PCB and TOC concentrations are shown to range from 1.4 to 78 ppm and from non-detect to 47 percent, respectively.

The second event, conducted on November 13, 1995, consisted of the collection of two sets of surface water and suspended sediment samples from the four key river locations as well as one additional location at Schweitzer Bridge, just downstream of the Woods Pond Dam. The relatively short duration of this flow event did not allow for a third set of samples to be collected. The samples collected during this second round were analyzed for the same parameters as the first round of samples ('.e., suspended sediment samples for PCBs and TOC and surface water samples for PCBs and TSS). The results of these analyses are presented in Tables 4-3 and 4-4. In summary, surface water PCB and TSS concentrations are shown to range from non-detect to 0.0011 ppm and from 17 to 2,800 ppm, respectively, while suspended solids PCB and TOC concentrations are shown to range from 1.7 to 26 ppm and from 1.1 to 16 percent, respectively.

Since an additional round of suspended sediment samples must still be collected as part of this investigation, no conclusions have been drawn at this time. The final round of samples will be collected as soon as conditions are favorable for such activities to occur. The data for all three rounds will be presented and evaluated in the addendum to this report, in accordance with the schedule described in Section 11.

4.2.1.3 Woods Pond Sediment Trap Results

As part of the transport investigation, three sediment traps were placed in Woods Pond on October 28, 1994 at locations shown on Figure 3-33. An attempt was made to sample these traps on August 9, 1995. The first trap, located in the southeastern portion of the pond, was not present at the location where it had been placed, and it could not be located. Therefore, samples could not be recovered. The second trap, located in the northern portion of the pond, within the channelized section, was found displaced from its original position and thus compromised. The third trap, located near the former Housatonic Street Bridge abutments, was found undisturbed and contained a sufficient volume of sediment for analyses. A sample of the captured sediment was submitted for PCB, TOC, and grain size analyses. A duplicate sample was also submitted for PCB analysis.

PCB concentrations of 7.8 ppm and 8.7 ppm were reported for the original sediment samples and the duplicate sample, respectively. TOC was reported to be 9.7 percent, and the sediment within the trap was composed of mostly of silts and clays, with some medium to fine sands. Both of the recovered traps were cleaned and replaced in their original locations. The lost trap was replaced on October 10, 1995. However no further sampling of these traps was conducted through the end of 1995.

Since data have been collected from only one sediment trap on one occasion, no conclusions have been drawn at this time. An attempt will be made to collect additional samples from these traps this winter. The associated data will be presented and evaluated in the addendum to this report.

4.2.1.4 Results of Additional High-Flow Sampling Downstream of Rising Pond

LMS performed, on GE's behalf, high-flow surface water sampling and analyses activities in 1991, 1992, and 1993 at Division Street in Great Barrington and at downstream locations in Connecticut. These data were collected to validate/verify information related to fate and transport modeling efforts being performed as part of that study. In general, the scope of these activities includes the monitoring for PCBs, TSS, TOC, and dissolved organic carbon (DOC) within the water column of the Housatonic River during high-flow conditions. This monitoring was performed for two events in 1991, four events in 1992, and two events in 1993. Each event consisted of the collection of approximately four to six samples during a flow event of approximately 1,000 cubic feet per second (cfs) or greater. These data, as reported by LMS (November 1994), are presented in Table 4-5. An overview of the results and conclusions associated with these activities, as previously presented by LMS (November 1994), is provided below.

Surface water PCB concentrations detected as part of these activities ranged from non-detect (at a detection limit of 0.000065

31

ppm) to 0.0011 ppm, while TSS concentrations ranged from non-detect (at a detection limit of 1 ppm) to 588 ppm. According to LMS (November 1994), the highest PCB and TOC concentrations detected as part of these activities were noted to occur during construction activities performed in 1992 to repair Rising Pond Dam. TOC ranged from non-detect to 39 ppm, and DOC ranged from 2 to 8 ppm.

4.2.1.5 Ongoing Sampling and Analysis Activities

As discussed in more detail in Section 2.3 of the Addendum to the Phase II/RFI Proposal, several data needs have recently been identified upon review of the available Housatonic River surface water data base. These data needs are being addressed as part of various ongoing activities approved by the Agencies.

In general, these data needs involve:

- the collection of additional surface water data to further evaluate the presence of PCBs upstream of the GE facility (at the Hubbard Avenue Bridge) as well as just downstream of the GE facility (at the Dawes Avenue Bridge);
- the collection of more up-to-date surface water PCB data for the Massachusetts portion of the river under a comprehensive range of flow conditions, since the prior data base is nearly five years old and is associated mainly with low- to moderate-flow conditions; and
- the collection of more up-to-date surface water PCB data below Rising Pond Dam, since the prior data from this area were collected prior to the dam reconstruction activities conducted in 1992.

As outlined in the Addendum to the Phase II/RFI Proposal additional surface water samples are to be collected on several occasions from the following 13 locations:

- Hubbard Avenue Bridge;
- Newell Street Bridge;
- Footbridge adjacent to the Newell Street Parking Lot;
- Lyman Street Bridge;
- Elm Street Bridge;
- Dawes Avenue Bridge;
- Holmes Road Bridge;
- Adjacent to Joseph Drive;
- New Lenox Road Bridge;
- Woods Pond Headwaters;
- Former Housatonic Street Abutments;
- Schweitzer Bridge; and
- Division Street Bridge.

The locations of these sampling stations are illustrated on Figure 4-1.

Samples are to be collected at each of these locations during a minimum of three distinct flow events generally representative of low-, moderate-, and high-flow conditions. These samples will be submitted for analysis of TSS as well as both filtered and unfiltered PCBs. River flow measurements will also be performed as part of these activities at the following locations:

- Dawes Avenue Bridge;
- Holmes Road Bridge;
- New Lenox Road Bridge; and

- Schweitzer Bridge.

One round of such surface water sampling was already conducted at these locations (with the exception of the Lyman Street Bridge and the location adjacent to Joseph Drive) on November 3, 1995. These samples were collected during flow conditions which appeared to be representative of moderate-flow conditions (approximately 900 cubic feet per second as measured at the USGS gaging station at the Division Street Bridge). The results of these analyses are summarized in Table 4-6, but no conclusions have been drawn from these data at this time, since these analyses represent only the first of at least three rounds of data to be collected. Also, since most of these results indicate PCBs concentration to be below detection limits, alternative methods of analysis are currently being evaluated.

A minimum of two additional such surface water sampling events will be conducted at the 13 locations -- one during low-flow conditions and one during high-flow conditions. Further, following review of the data from these sampling rounds as well as the November 3, 1995 sampling round, it may be deemed useful to collect one or more additional rounds of surface water samples from these locations during a different season (e.g., in summer rather than in the colder months). If so, such additional sampling will be conducted with prior notice to the Agencies.

Following the receipt and evaluation of the analytical data from these additional surface water sampling events, those data will be presented in an addendum to this report, along with overall conclusions (to the extent feasible) regarding the sources and extent of PCBs as well as the transport and fate of PCBs in the water column of the Housatonic River.

4.2.2 Investigation of Other Hazardous Constituents

In addition to the assessment of PCBs in the water column of the Housatonic River, the MCP Phase II water column investigation in 1991 included an assessment of the presence and extent of non-PCB hazardous constituents in the Housatonic River water column. While PCBs in the river water column adjacent to the GE facility are generally expected to be attributable to GE, the presence of other hazardous constituents could have entered the river from a variety of sources (including GE) along the river. To better assess the presence of other hazardous constituents in the water column that are attributable to GE, water column samples were collected upstream of, adjacent to, and downstream of the GE facility, and were analyzed for Appendix IX+3 constituents. Samples were collected during both high-flow and low-flow conditions as determined by monitoring staff gauge readings. River flow rates were also calculated at four locations during each sampling event. Section 5.4.4 of the Interim Phase II Report/CAS presented the analytical data from these sampling events.

The Interim Phase II Report/CAS also presented an assessment of the data on non-PCB hazardous constituents within surface waters of the Housatonic River in an attempt to identify constituents that may be related to releases from the GE facility, that are of potential health or environmental concern, and that would warrant further downstream water column sampling (referred to in the report as "target constituents of concern"). This evaluation, summarized in Table 5-7 of the Interim Phase II Report/CAS, indicated that none of the constituents detected in the water column (apart from PCBs) should be considered target constituents of concern.

In response to comments from the MDEP (which disagreed in part with that evaluation), the hazardous constituent data from the river water column were re-evaluated to address the MDEP's concerns. That re-evaluation is presented in Section 3.2.3 and Tables 3-4 and 3-5 of the Addendum to the Interim Phase II Report/CAS. That report identified certain constituents in the water column which would be included, as appropriate, in the risk assessment, but supported the conclusion that there are no constituents (apart from PCBs) that warrant further downstream sampling.

However, the Agencies commented that several constituents dismissed as "target" constituents may have been dismissed due to potentially inappropriate criteria. Also, the Agencies felt that the number of water column samples collected and analyzed for Appendix IX constituents was not sufficient to define "...chemical quality changes of the river which occur as a result of releases of hazardous waste and/or hazardous constituents from the GE facility and associated sites..."

To address this comment, further water-column sampling and Appendix IX+3 analysis were performed as part of the Supplemental Phase II/RFI activities.

As part of these activities, surface water samples were collected from eight river locations, upstream of, adjacent to, and downstream of the GE facility. Samples were collected from each of these locations during high-flow (March 1995) and low-flow (June 1995) conditions. The approximate sampling locations are shown on Figure 4-2.

The approximate flow rate of the Housatonic River at the time these samples were collected (as recorded by the USGS Coltsville Gaging Station) was 750 cfs during high-flow conditions and 28 cfs during low-flow conditions. These samples were submitted for analysis of PCBs and Appendix IX+3 volatile organic constituents (VOCs), SVOCs, and inorganics. The results of the high-flow analyses are summarized in Table 4-7, while the results of the low-flow analyses are presented in Table 4-8.

In accordance with the Phase II/RFI Proposal, the high-flow and low-flow data generated in 1995 were evaluated in conjunction with previous surface water Appendix IX+3 data collected during high- and low-flow conditions in 1991 at approximately the same locations (see Tables 5-6A and 5-6B of the Interim Phase II Report/CAS and Tables 3-4 and 3-5 of its addendum). A general comparison of the 1995 to the 1991 low-flow and high-flow data indicates that, in 1995, similar compounds were detected at similar locations and at somewhat decreased concentrations.

The constituents detected during the 1995 low-flow and high-flow sampling events (apart from PCBs) have been evaluated in more detail in Tables 4-9 and 4-10, respectively. The objective of this analysis, as described in the Phase II/RFI Proposal, was to determine whether and the extent to which surface water downstream of the GE facility contains hazardous constituents that are at significantly higher concentrations than upstream concentrations, are at more than trace levels, and warrant additional sampling (called "target constituents" in Tables 4-9 and 4-10). To assist in this evaluation, these tables present the concentration ranges detected upstream of (locations HCW-3 and HCW-4), adjacent to (locations HCW-5 through HCW-8), and downstream of (locations HCW-9 and HCW-10) the GE facility for those constituents detected in at least one sample. The various non-PCB constituents detected have been determined not to warrant further downstream sampling and analysis based on one or more of the following conditions:

- Downstream concentrations are below detection;
- Downstream concentrations are above detection, but are at concentrations less than or comparable to upstream concentrations;
- Constituents have been detected only at trace levels below their respective quantitation limits; or
- In a few cases, while downstream concentrations are higher than upstream concentrations, they are either decreasing and approaching the detection limit (chlorobenzene at low flow) or are only very slightly higher than upstream concentrations (lead and zinc at high flow) and do not appear to justify the need for further downstream sampling.

Thus, as shown in Tables 4-9 and 4-10, there do not appear to be any of the non-PCB constituents that would warrant further downstream water column sampling. It is important to note, however, that the various constituents detected in the water column will be addressed, as appropriate, in the risk assessment.

4.3 Silver Lake Surface Water

4.3.1 Prior Investigations

Silver Lake surface water data collected prior to the Supplemental Phase II/RFI activities, were generated as part of both the 1980 and 1982 Stewart investigation and the initial MCP Phase II investigation in 1990-1991.

In April 1982, Stewart collected surface water samples from the Silver Lake Outfall during three days of a storm event. The results of this monitoring showed the minimal discharge of PCBs to the Housatonic River (Stewart, 1982).

The initial MCP Phase II water-column investigation involved the monitoring of Silver Lake surface water for PCBs. PCB monitoring performed for Silver Lake included the collection of surface water samples from the center of Silver Lake and at its discharge point (the Silver Lake Outfall) to the Housatonic River. These locations were sampled on a monthly basis for one hydrologic cycle (one year) and analyzed for PCBs (total and dissolved), TSS, and several other water quality parameters. Flow discharge was also measured at the Outfall during each monitoring event. The results of these activities are presented and discussed in Section 5.4.3.3 of the Interim Phase II Report/CAS.

The initial MCP Phase II Investigation also included the investigation of a full range of hazardous constituents in the surface water of Silver Lake. That study, as described in Section 5.4.4 of the Interim Phase II Report/CAS, included the collection of surface water samples from the center of Silver Lake and the Silver Lake Outfall during "high-flow" and "low-flow" conditions. These samples were analyzed for Appendix IX+3 constituents. The results are presented in Section 5.4.4.3 of the Interim Phase II Report/CAS.

As discussed in the Interim Phase II Report/CAS, the PCB data show that PCB concentrations in the water column of Silver Lake are generally at similar levels to those found in the river water, with most PCB concentrations either very close to or below the detection limit. As for the other Appendix IX+3 constituents, the only constituents detected in the water column of the lake were inorganics. Under both high-flow and low-flow conditions, concentrations of the observed metals were generally similar in the lake center and at the Outfall, except for a few that were higher in the center than at the Outfall.

Upon review of these data, the Agencies commented that the prior Silver Lake water-column data base "...may not provide adequate information on the nature, concentration, and extent of PCBs and other hazardous wastes and/or constituents in the lake's water column." The Agencies also stated that "the vertical and horizontal mixing characteristics of the lake should be discussed with regard to the sampling locations selected and where historic sampling has occurred."

Various activities were performed as part of the recent Supplemental Phase II/RFI activities to address these concerns. These activities included an evaluation of the vertical and horizontal "mixing" patterns of the lake as well as the measurement of the range of fluctuation of the lake's water level. Additionally, surface water sampling and analysis were performed for select Appendix IX+3 constituents. These activities are discussed below in Sections 4.3.2 through 4.3.4.

4.3.2 Evaluation of Mixing Patterns

In order to provide an evaluation of vertical and horizontal "mixing" characteristics of Silver Lake as specifically requested by the Agencies, an overall assessment of water-column velocities was performed at Silver Lake. This analysis was performed on December 13, 1994 and consisted of the collection of water-column velocity profiles at 20 locations based on a standard grid system layout. At each grid location, water-column velocities and information on flow direction were collected at one-foot depth increments until the surface of bottom sediments was encountered. Figure

4-3 provides the approximate grid locations used for these activities as well as the bathymetric data obtained.

It was originally proposed in the Phase II/RFI Proposal that the results of this mixing analysis would be used to choose three representative locations for further water-column sampling and analysis. However, the surface water velocity measurements collected during this study indicated only very limited flow currents in the lake. As such, it was determined that the surface water in the lake was not significantly affected by hydraulic mixing. Therefore, as discussed below in Section 4.3.3 and approved by the Agencies, the three surface water sampling locations were chosen to be geographically representative of the lake.

4.3.3 Investigation of Other Hazardous Constituents

As part of the Phase II/RFI activities, surface water samples were collected from four locations related to Silver Lake (three in the lake and one at the Silver Lake Outfall). As indicated above in Section 4.3.2, the locations sampled in Silver Lake were chosen to be generally representative of the lake from a geographic perspective, since the results of the mixing analysis (also discussed in Section 4.3.2) indicated that Silver Lake surface water is unaffected by hydraulic mixing. Samples were collected from each of these locations coincident with the Housatonic River activities described above in Section 4.2.2. As indicated in Section 4.2.2, these activities were performed during high- and low-flow conditions. The sampling locations shown on Figure 4-2.

Based on the constituents previously detected in the water column of Silver Lake, these samples were analyzed for PCBs and Appendix IX+3 VOCs, SVOCs, and inorganics. The approximate flowrate of the Silver Lake

Outfall was measured to be 0.6 and 3.1 cfs during the low- and high-flow events, respectively.

The results of these analyses are summarized, along with the Housatonic River surface water data, in Tables 4-7 and 4-8. These data indicate the presence of various inorganic constituents under both high- and low-flow conditions and to a much lesser extent certain VOCs and SVOCs, particularly at low-flow conditions. However, most of these constituents (including both organics and inorganics) were detected near the associated quantitation limits or at estimated concentrations below the associated quantitation limits. PCBs (total) were also detected during both events at all four locations at concentrations ranging from 0.00014 to 0.00034 ppm.

A general comparison of these data with the prior 1991 Silver Lake surface water Appendix IX+3 data base (Tables 5-4A and 5-4B of the Interim Phase II Report/CAS) indicates that aside from a few VOCs and SVOCs detected at very low levels (mostly at estimated concentrations below associated quantitation limits), similar constituents were detected at similar concentrations. Based on review of both the prior and the recent data from the Silver Lake surface water, as well as the general consistency of these data sets, it is concluded that the current Appendix IX+3 data base is adequate to satisfy the MCP requirements and the USEPA permit goals with the respect to the water column of Silver Lake.

4.3.4 Evaluation of Water Level Fluctuations

A staff gage was installed along the edge Silver Lake as part of Supplemental Phase II/RFI activities. This staff gage was installed to monitor the overall range of fluctuation of the lake's water level, in addition to the relationship between the lake's water level and groundwater adjacent to the lake along its east and southeast shores.

Measurements of the water level of Silver Lake were obtained (using the staff gage) on approximately a monthly basis beginning in October 1994. At the same time, ground water levels were measured in wells RF-2, RF-3, and RF-16 while a fourth well was added to this program in August 1995 as part of the Lyman Street Parking Lot/Former Oxbow Area E investigation (see Figure 4-4). The results of these activities are summarized in Table 7-1 in Section 7 below. As shown in Table 7-1, the water level of Silver Lake fluctuated over a rather narrow range from 975.60 to 976.23 feet above MSL, and the average level was determined to be 975.93 feet above MSL. The relationship between the lake's water level and adjacent groundwater is discussed in Section 7.

SECTION 5 - FLOODPLAIN INVESTIGATIONS

5.1 General

The presence of PCBs, and to a lesser extent other hazardous constituents, in the floodplain soils of the Housatonic River and Silver Lake has been investigated as part of a multi-phase study by GE. The following sections present, first for the Housatonic River and then for Silver Lake, a brief overview of prior floodplain studies with appropriate references to previous reports. In addition to the overview of prior floodplain studies, the following sections present discussions of activities performed and data collected as part of the recent Supplemental Phase II/RFI floodplain activities.

For convenience, all existing PCB data from the Housatonic River floodplain, from all prior and recent investigations, are shown on Figures 5-2 through 5-26, while all existing PCB data from the Silver Lake floodplain are shown on Figure 5-27.

5.2 Extent of PCBs in Housatonic River Floodplain Soils

5.2.1 Prior Investigations

Select sampling of the Housatonic River floodplain soils on the DeVos property in Lenox, Massachusetts in 1988 and 1989 indicated the limited presence of PCBs. A total of 52 locations were sampled along the eastern bank of the river, and each 0- to 4-inch and 4- to 8-inch soil sample was submitted for PCB analysis. This investigation is described in more detail in Section 8.2 of the Interim Phase II Report/CAS.

PCBs detected in floodplain soils of the DeVos property, coupled with the possibility that historical flood events on the Housatonic River may have produced conditions which were conducive to the transport of PCB-containing sediments onto the floodplain, led to the development of a floodplain investigation as part of the MCP Phase II investigation.

As part of the MCP Phase II activities, 253 floodplain soil samples were collected at 121 locations from a total of 11 floodplain transects positioned along the Housatonic River from just above the GE facility to the Connecticut border. These transect locations, designated FP1 through FP11, were selected based on a review of historical aerial photographs, available floodplain PCB data and topographic mapping, and available information regarding previous river sediment sampling and reconnaissance. The locations were selected to provide a representation of the various types of river conditions present as well as to include likely floodplain deposition areas within the various river reaches. Identification of each area and a description of its physical characteristics were presented in the Interim Phase II Report/CAS.

The results of those activities led to the conclusion that the portion of floodplain which exhibited PCBs above 1 ppm was generally limited to the area between the GE facility and Woods Pond Dam. (The PCB data collected between Woods Pond Dam and the Connecticut border were generally less than detectable, although one sample, near the river, had a PCB concentration of 4.3 ppm.)

As described in Section 8.4 of the Interim Phase II Report/CAS and Section 5 of the Addendum to that report, the floodplain PCB data collected as part of these activities were also evaluated in relationship to the results of a hydraulic analysis of the river and floodplain between the Coltsville, Massachusetts USGS gaging station and the Woods Pond Dam. This analysis used detailed topographic mapping and a HEC-2 hydraulic model developed for this purpose. This evaluation indicated that the presence of PCBs at concentrations of 1 ppm or above was generally within, and at some locations well within, the approximate 10-year floodplain. This conclusion was drawn from the comparison of the approximate 10-year floodplain as predicted by the HEC-2 model and PCB data collected at the floodplain transects in the stretch of river between the GE facility and Woods Pond Dam, as well as data from the DeVos property investigation. A number of questions raised by the MDEP about the HEC-2 modeling, as presented in the Interim Phase II Report/CAS, were addressed in Sections 5.4 and 5.5 of the Addendum to the Interim Phase II Report/CAS.

Additional floodplain sampling and PCB analyses were conducted in 1992 at two transects (FP2 and FP7) to better define the extent of PCBs at these locations. (These were the only two transects between the GE facility and the Woods Pond Dam where the extent of PCBs was not fully defined during prior Phase II activities.) A total of 36 additional samples were collected from these two transects (20 samples from transect FP2 and 16 samples from transect FP7) at 6-inch depth intervals to a total depth of 2 feet. These results also indicated that the extent of PCBs above 1 ppm was within, and at some locations well within, the 10-year floodplain.

A number of additional floodplain sampling events were conducted as part of MDEP-required activities to evaluate the need for STMs at specific floodplain properties. These activities included the collection of approximately 250 additional floodplain soil samples on various occasions between August 1992 and April 1994 at specific floodplain properties identified as areas of likely human use (Blasland & Bouck, October 1992 and February 1993; BBL, February 1994; and GE, May 1994). These data, with the exception of certain anomalies, confirmed the prior conclusion that the extent of PCBs greater than 1 ppm was generally found to be within the approximate 10-year floodplain.

In addition, in May 1994, a total of 14 composites of floodplain soil were collected from certain wildlife habitat areas between New Lenox Road and Woods Pond and were analyzed for PCBs. PCB concentrations in these 14 samples ranged from non-detect to 0.97 ppm. In June 1994, a total of 12 floodplain soil samples were collected from certain additional areas between New Lenox Road and Woods Pond and were analyzed for PCBs. The PCB concentrations of these samples ranged from 3.7 to 32 ppm. A description of these results is presented in the report entitled "Evaluation of Terrestrial Ecosystem of the Housatonic River Valley" (ChemRisk, July 1994).

The prior Housatonic River investigative efforts served to satisfy many of the Permit goals and MCP Phase II requirements; however, additional investigative activities were necessary to support and/or confirm several observations identified based on the available floodplain data base.

Section 4.2.3 of the Phase II/RFI Proposal proposed activities to fill these data needs and certain other data needs identified specifically by the Agencies. These activities were implemented (as modified by the Agencies' conditional approval letter dated September 12, 1994) in September 1994. Sections 5.2.2 and 5.2.3 of this report summarize the activities performed and the conclusions drawn to date. As explained below, certain activities have not yet been completed for various reasons, and therefore no conclusions relating to those activities can be drawn at this time. Upon completion of those activities, the resulting data and associated conclusions will be presented in an addendum to this report.

5.2.2 Further Delineation of Extent of PCBs

5.2.2.1 Supplemental Sampling at Previous Transects

Pursuant to the Phase II/RFI Proposal, supplemental sampling and analysis activities were conducted between September 1994 and December 1995 in order to further define the horizontal and vertical extent of PCBs in floodplain soil along the existing transects FP2 through FP11 located downstream of the GE facility. These activities are discussed below. The locations of these transects are illustrated on Figure 5-1.

Horizontal Extent

As of June 1994, the lateral extent of PCBs in floodplain soil had not been determined to a concentration of non-detect at several existing floodplain transects. Specifically, at five of the existing transects (FP2 through FP5, and FP7), PCBs were detected in the outermost samples at concentrations above the detection limit (but less than 1 ppm). To address a specific request by the Agencies, a number of additional floodplain soil samples were collected at each of these five transects at locations along the previous transect line extending farther away from the river from the outermost location previously sampled. These samples were analyzed for PCBs and TOC until the horizontal extent of PCBs to a concentration of non-detect was defined. The results of these analyses are presented in Table 5-1 and on Figures 5-2 through 5-26. With these data, the lateral extent of PCBs was determined at all the transects, except the east side of transect FP3.

Along the east side of transect FP3, PCBs were detected at the location farthest from the river (FP3-R11) at 0.10 ppm. However, the PCB concentrations at this location are decreasing and are only slightly above the detection limit; therefore, no further sampling and analysis activities are warranted at this location.

Vertical Extent

A significant effort has also been performed to better define the vertical extent of PCBs in floodplain soils along existing transects FP2 through FP11. The results of this effort demonstrate the difficulty in determining the vertical extent of PCBs in floodplain soil to a non-detectable concentration. The protocols set forth in the Phase II/RFI Proposal to define the vertical extent of PCBs along the floodplain transects were modified, in accordance with the Agencies' letter of May 3, 1995, to require sampling to a depth where PCB concentrations were either non-detect in the deepest sample or less than 1 ppm in the two deepest samples.

To better assess the vertical extent of PCBs in the floodplain soils at the transects FP2 through FP11, the location previously exhibiting the highest PCB concentration in the 6- to 12-inch interval was resampled at 6-inch intervals, beginning with the 12- to 18-inch interval, to a depth required by the Agency's protocol. In addition, the transect sample locations farthest from the river on each side which exhibited PCB concentrations greater than 10 ppm in the 6- to 12-inch interval (not including the sample described above with the highest concentration) were resampled in a similar manner. The sampling locations were as follows:

High PCB Concentration	Greater than 10 ppm PCBs farthest from river (west bank)	Greater than 10 ppm PCBs farthest from river (east bank)
FP2L-2	FP2L-4	FP2R-7
FP3L-1	FP3L-3	FP3R-1
FP4R-2	FP4L-4	FP4R-6
FP5L-2	FP5L-4	FP5R-4
FP6L-3	FP6L-2	FP6R*
FP7R-2	FP7L-1	FP7R-3
FP8L-1	not applicable	not applicable
FP9L-2	not applicable	not applicable
FP10R-2	not applicable	not applicable
FP11L-2	not applicable	not applicable

* - Designation given to former DeVos' property sampling location exhibiting PCBs at 15 and 98 ppm. This location was included in this program at the request of the Agencies.

These samples were analyzed for PCBs. The results of these analyses are presented in Table 5-2 and on Figures 5-7 through 5-26. The vertical extent of PCB presence was successfully defined in accordance with the Agencies' protocols at 19 of the 22 locations (exceptions include locations FP3-R1, FP4-R2, and FP6R). However, the current data base characterizes the vertical extent of PCBs at these three remaining locations to depths of four to six feet below the ground surface. The PCB concentrations detected in the deepest samples from these locations are low (i.e., less than 1 ppm to 5.8 ppm) and adequate for risk assessment purposes. As such, GE does not believe that further sampling and analysis is warranted at this time. Further, it may not be technically feasible to attempt to further define the vertical extent of PCBs in floodplain soils below these depths because of limitations associated with the available sampling techniques (i.e., difficulty in manually sampling to greater depths and the potential for cross-contamination of deeper samples with soil from above).

5.2.2.2 Supplemental Transects Between GE Facility and Woods Pond

A preliminary regression analysis and an update to the HEC-2 model were performed in November 1994. These preliminary results were discussed with the MDEP and USEPA on December 7, 1994 and served as the basis for selecting the locations of three additional floodplain transects for sampling between existing transect FP4 and the Woods Pond Dam. These three additional floodplain transects were designated as transects FP4A, FP6A, and FP7A, as illustrated on Figures 5-10, 5-12, and 5-14, respectively. As shown on Figure 5-12, the east side of transect FP4A had to be established approximately 2,000 feet downstream from the west side of this transect (with the Agencies' approval) because the associated property owner denied access for sampling purposes. Floodplain soil samples were collected at 6-inch depth intervals from 10 to 11 locations along each of these three transects. Each sample was analyzed for PCBs, and generally each of the 0- to 6-inch samples was also analyzed for TOC.

The results of these analyses are summarized in Table 5-3. These data indicate PCB concentrations along these transects to be generally consistent with the existing transects along this stretch of the river. The extent of delineation of PCBs at these transects is discussed below.

Horizontal Extent

As shown in Table 5-3 and on Figures 5-10, 5-12, and 5-14, the horizontal extent of PCBs was successfully delineated to non-detect at each of these transects, except along the west side of transect FP4A. However, the PCB concentrations at this location are low (0.19 ppm), and are decreasing (Figure 5-10). As such, GE does not believe further sampling and analysis activities at this transect are necessary at this time.

Vertical Extent

As also shown in Table 5-3 and on Figures 5-10, 5-12, and 5-14, the vertical extent of PCBs along these transects was successfully defined in accordance with the protocols described in Section 5.2.2.1 at all but one location (location FP7A-L3). However, for the reasons explained above in Section 5.2.2.1, GE does not believe that further sampling and analysis activities at this location are warranted at this time (i.e., the current data are adequate for risk assessment purposes, and it may not be technically feasible to further define the vertical extent of PCBs at greater depths).

In addition to the activities discussed above, floodplain samples were recently collected from a backwater area to the west of transect FP6A and analyzed for PCBs. These samples were collected and analyzed as directed by a letter from the Agencies dated September 6, 1995. As illustrated on Figure 5-12, samples were collected and analyzed from two locations (FP6A-BW-1 and -BW-2) at depths of 0 to 6 inches and 6 to 12 inches. The results of these analyses are presented in Table 5-3 and on Figure 5-12. These data indicate the presence of PCBs at these locations to range from non-detect to only slightly above the detection limit (0.38 ppm).

5.2.2.3 Assessment of PCB Extent at Former and Existing Dams

Pursuant to the Phase II/RFI Proposal, additional floodplain soil sampling and analysis activities were recently conducted to further assess the presence and extent of PCBs in the floodplain below Woods Pond Dam. It was the Agencies' concern that the former and existing dams located downstream of the Woods Pond Dam may have caused historical flooding to occur in those areas and may have resulted in the potential deposition of PCBs onto the floodplain in these areas. In general, an iterative sampling and analysis approach was to be used to address these concerns. As part of these activities, samples were collected and analyzed for PCBs along transects established upstream of each of the first four existing dams downstream of the Woods Pond Dam.

The first four existing dams below Woods Pond Dam are the Columbia Mill Dam (transect FP8A), the Willow Mill Dam (Transect FP9A), the Glendale Dam (transect FP9C), and the Rising Pond Dam (transect FP9D). Their locations are shown on Figures 5-17, 5-19, 5-21, and 5-22, respectively. Sampling transects were located immediately upstream of each of these dam locations in consultation with the Agencies. In order to bias the selection of transects and sample locations towards areas of potential sediment deposition, locations were selected based on topography, evidence of past flooding and the presence of areas which may have experienced flooding during prior flood events.

Locations along each transect were sampled on each side of the river depending on topography and floodplain width. Samples were initially collected in 6-inch increments to a depth of 1 foot. These samples were analyzed for PCBs (0- to 6-inch and 6- to 12-inch increments) and TOC (0- to 6-inch samples only). Where appropriate, as determined by the protocols for vertical and horizontal extent delineation, certain locations along the transects were subsequently resampled and analyzed for PCBs. The data associated with these transects are presented in Table 5-3 and on Figures 5-17, 5-19, 5-21, and 5-22.

Horizontal Extent

PCBs detected at all locations along these new transects were at concentrations of less than 10 ppm, except for two instances, locations FP8A-L3 (0- to 6-inch depth) and FP9C-R2 (6- to 12-inch depth), where PCBs were detected at 13 ppm. The majority of the other sample locations were found to contain less than approximately 2 ppm PCBs. Where PCB concentrations of greater than approximately 2 ppm were detected, they were generally found in close proximity to the river.

As shown on Figures 5-17, 5-19, 5-21, and 5-22, the horizontal extent of PCBs has been successfully defined to non-detect in floodplain soil at all but one area at transects FP8A, FP9A, FP9C, and FP9D. Specifically, along the west side of transect FP9D, PCBs were detected at the location farthest from the river (FP9D-L5) at 0.073 ppm. However, since this value is just above the detection limit, and PCBs were not detected for the next two locations towards the river (FP9D-L4 and FP9D-L3), further sampling is not warranted.

The 13 ppm PCB concentration at location FP8A-L3, near the Columbia Mill Dam (see Figure 5-17) was found to present a potential imminent hazard as defined in the MCP since it was over 10 ppm and within 500 feet of a residence. In accordance with the MCP, GE notified the MDEP within two hours of knowledge of this finding. GE then evaluated these conditions and concluded that an imminent hazard did not exist due to the particular location of the elevated PCB concentration in relation to the surrounding topography and land cover. This evaluation was submitted to the MDEP in a letter dated February 21, 1995.

Vertical Extent

As also shown on Figures 5-17, 5-19, 5-21, and 5-22, the vertical extent of PCBs has been successfully defined in accordance with the vertical extent delineation protocols at all but one location at these transects. Specifically, at location FP9A-R1, PCBs were detected at 0.11 ppm in the deepest sample and at 1.1 ppm in the sample collected immediately above it (see Figure 5-19). Because these results nearly meet the vertical delineation protocols, sampling and analysis is not needed at this location.

Need for Additional Sampling at Further Downstream Dams

Based on review of the foregoing data, it was determined in consultation with the Agencies that no additional sampling and analysis activities were needed at further downstream dam locations beyond the four dams identified above. However, sampling and analysis activities were conducted in other select areas downstream of Woods Pond Dam, as discussed in the next section.

5.2.2.4 Supplemental Transects Downstream of Woods Pond Dam

In addition to the four additional transects discussed above, the Agencies required the establishment of additional transects at three areas below Woods Pond to assess the presence and extent of PCBs at the following locations:

- Stockbridge Golf Course;
- Searles Middle School; and
- Sheffield Plan.

The Agencies had also required GE to establish an additional transect at Parcel 2-2 near Valley Mill Pond in Lenox, which is just downstream of Woods Pond Dam (see Figure 5-15). However, prior to initiating sampling activities at this area, the property ownership changed, and the new owner denied access to the property for sampling. The former residential houses on this property were removed, the area was paved, and a commercial building was erected. With the concurrence of the Agencies, no sampling activities were conducted at this area.

A total of five additional transects were established and sampled at the three areas listed above. As shown on Figures, 5-20, 5-24, and 5-25, the associated transects have been designated as FP9B (Stockbridge Golf Course), FP10A, B, and C (Searles Middle School), and FP10D (Sheffield Plain), respectively.

The general locations of these transects were selected in consultation with the Agencies. The precise locations of the transects were determined in the field based on observations made by sampling personnel related to topography, evidence of past flooding, and low-lying areas where ponding of floodwaters may have occurred, in order to bias the selection of transects and sample locations towards areas of potential sediment deposition.

Locations along each transect were sampled on each side of the river depending on topography and floodplain width. A total of 10 to 20 samples were initially collected in 6-inch increments to a depth of 1 foot along each side of each transect. These samples were analyzed for PCBs (0- to 6-inch and 6- to 12-inch increments) and TOC (0- to 6-inch samples only). Where appropriate, the transects were subsequently resampled and analyzed for PCBs to better define the horizontal and vertical extent of PCBs at these areas pursuant to the appropriate protocols.

The data associated with these transects are presented in Table 5-3 and on Figures 5-20, 5-24, and 5-25. In general, these data are consistent with the data obtained for the other transects established downstream of Woods Pond Dam (FP8A, FP9A, FP9C, and FP9D -- see Section 5.2.2.3). The extent of delineation of PCBs at these transects is discussed below.

<u>Horizontal Extent</u>

As shown on Figures 5-20, 5-24, and 5-25, the horizontal extent of PCBs was successfully determined to non-detect at all but one location at transects FP9B and FP10A through D. Specifically, PCBs were detected at 0.49 ppm at the location farthest from the river along the west bank of transect FP10A. However, beyond that point, the area is paved; therefore, no further sampling and analysis could be conducted.

Vertical Extent

As also shown on Figures 5-20, 5-24, and 5-25, the vertical extent of PCBs have been successfully determined (pursuant to the appropriate protocols) at transects FP9B and FP10A through D.

5.2.2.5 Additional Residential Property Sampling

As part of further investigations to define the extent of PCBs in Housatonic River floodplain soils, a number of residential properties were the focus of sampling activities through December 1995. These properties consist of several parcels along Deming Street in Pittsfield (Parcels I7-21-3, I7-21-8, I8-4-1, I8-4-2,3,4, I8-4-5, and I8-4-7), Parcel I7-20 located along Lowden Street in Pittsfield, Parcels I7-2-2 and I7-2-3 located along Pomeroy Avenue in Pittsfield, Parcel J5-2-11 located along Holmes Road in Pittsfield, and Parcel 29-5 located along New Lenox Road in Lenox. Each property was sampled at numerous locations and varying depths with the samples being analyzed for PCBs and, in some cases, TOC. These data are presented in Table 5-4, and Figures 5-3 through 5-11 illustrate the sampling locations and associated PCB results. These activities and associated results are discussed further below.

Deming Street Parcels

Although the initial floodplain HEC-2 modeling results did not indicate that the 10-year floodplain extended into residential properties along Deming Street in Pittsfield, it became apparent, based on Agency discussions with property owners in this area, that flooding previously had occurred on those properties during the time frame that a former dam was present in this area. This dam was subsequently removed in the mid-1960s and its effects had therefore not been considered in the initial HEC-2 modeling. In light of this information, floodplain soil sampling was conducted on a number of properties in this area to assess the potential presence and extent of PCBs. Floodplain soil samples were collected from six properties in this area, namely Parcels I8-4-7, I8-4-5, I8-4-2 through I8-4-4 (same owner), I8-4-1, I7-21-8, and I7-21-3.

Samples were initially collected from 0 to 6 inches and 6 to 12 inches from 17 locations on these properties. The results of these analyses are presented in Table 5-4 and illustrated on Figure 5-5. Nine of these initial samples exhibited PCBs at concentrations greater than 10 ppm in the 0- to 6-inch depth interval within 500 feet of a residence. Specifically, these conditions were identified at Parcels I8-4-7, I8-4-2,3,4, I8-4-1, I7-21-8, and I7-21-3. As such, GE notified the MDEP of the presence of a potential imminent hazard as defined in the MCP.

Thereafter, additional sampling was conducted on these properties on two occasions to further define the presence of PCBs in floodplain soils. Specifically, activities conducted in September 1995 included the collection of 100 soil samples (plus duplicates) from 17 new locations at 6-inch depth intervals from 0 to 24 or 36 inches, as well as the collection of 28 soil samples from seven existing locations at 6-inch depth intervals from 12 to 36 inches. Samples were to be analyzed downward at each of these locations until the PCB concentration was at non-detectable levels or was less than 1 ppm in two consecutive depth intervals. Subsequently, in November 1995, further sampling was conducted, consisting of the collection and PCB analysis of soil samples from other new locations at Parcels I7-21-8, I8-4-1, I8-4-2,3,4, and I8-4-5. The analytical results from both of these sampling events are also included in Table 5-4 and on Figure 5-5.

Following receipt of the latter set of results, GE submitted a revised Immediate Response Action Plan (IRAP) to the Agencies on November 21, 1995. The Agencies verbally approved the revised plan on November 27, and field surveying of the excavation area was initiated the following day.

Soil excavations have been completed at these properties, and geotextile and backfill have been placed. Topsoil application is slated for the Spring of 1996.

Parcels I7-2-2 and I7-2-3

Parcels I7-2-2 and I7-2-3 are located off Pomeroy Avenue. Soil samples were initially collected at four locations at Parcel I7-2-2 in January 1995 to assess the potential presence of PCBs at that location (see Figure 5-6). Samples were collected from 0 to 6 inches and 6 to 12 inches at each of these locations and analyzed for PCBs. The results of these analyses indicated the presence of PCBs at these locations at concentrations between 0.18 to 3 ppm. These concentrations did not warrant further sampling at this parcel.

As for Parcel I7-2-3, soil samples were initially collected in June 1995 at two locations (0- to 6-inch and 6- to 12-inch depths) and analyzed for PCBs. These results of those analyses indicated the presence of a potential imminent hazard (i.e., PCBs detected at greater than 10 ppm in surficial soil within 500 feet of a residence). As such, GE notified the MDEP as required by the MCP, and implemented additional sampling and analysis activities in June 1995 for further define the extent of PCBs at this parcel. As part of these activities, 45 additional soil samples (plus two duplicates) were collected from 12 locations at this parcel and analyzed for PCBs. Subsequently, at the MDEP's request, further sampling activities were conducted, including the PCB analysis of archived soil samples from the 15- to 18-inch depth intervals for two existing locations and from the 9- to 12-inch depth interval from 10 other existing locations. The analytical results from all soil samples collected at this parcel are included in Table 5-4 and illustrated on Figure 5-6. The scope of further action at this property is currently being evaluated.

Parcels I7-2-20 and J5-2-11

Parcel I7-2-20 is located off of Lowden Street (Figure 5-6) and Parcel J5-2-11 is located off of Holmes Road (Figure 5-8). Samples were initially collected at various locations at these parcels in January 1995. These samples were collected at 0- to 6-inch and 6- to 12-inch depth intervals and analyzed for PCBs. The results of these analyses are included in Table 5-4 and on Figures 5-6 and 5-8, respectively.

Based on the initial review of these data, potential imminent hazards (i.e., PCBs greater than 10 ppm detected in surficial soils within 500 feet of a residence) were identified to exist at these parcels. Specifically, these conditions were identified at three locations on Parcel I7-2-20 (at concentrations of up to 40 ppm) and at one location on Parcel J5-2-11 (at 28 ppm). As such, GE notified the MDEP as required by the MCP.

After closer review of the data from these properties, it was determined that no further actions were warranted at Parcel J5-2-11 because it was determined that the location initially identified to be a potential imminent hazard was in fact more than 500 feet from the residence on the property. Additionally, this sample location was located in a thickly vegetated area.

However, at Parcel I7-2-20, additional soil sampling was conducted on several occasions (May 1995, July 1995, and September 1995) to further define the extent of PCBs at this property. In all, these additional sampling events included the collection and PCB analysis of 66 soil samples from 17 locations at various depths. The results of these analyses are included in Table 5-4 and on Figure 5-6. The scope of further action at this property is currently being evaluated.

Parcel 29-5

Six floodplain soil samples were collected from three locations at Parcel 29-5 near the New Lenox Road Bridge in Lenox, to assess the potential presence of PCBs at "use areas" on that property. These samples were collected in 6-inch intervals to a depth of 1 foot and submitted for PCB analysis. The results of these analyses are presented in Table 5-4 and on Figure 5-11. PCBs were not detected at one location, while the other two locations exhibited PCB concentrations of 0.42 ppm or less.

112

5.2.3 Updated HEC-2 Model Analysis of Floodplain PCB Extent

As explained in Section 5.2.1, previous HEC-2 modeling efforts performed for the Housatonic River indicated that between the GE facility and the Woods Pond Dam, the presence of PCBs at concentrations of 1 ppm or greater is generally limited to within the 10-year floodplain. These modeling efforts were last updated in November 1994. Since that time, a considerable amount of floodplain soil PCB data have been produced.

Pursuant to the Phase II/RFI Proposal, the existing HEC-2 model was updated utilizing the additional topographic data produced as part of the Supplemental Phase II/RFI activities described in Sections 5.2.2.1, 5.2.2.2, and 5.2.2.5. In addition, the model was reviewed in the context of recent PCB sampling and analysis information. This information includes soil sampling and PCB analysis (with corresponding elevations) related to:

- Existing transects FP2 through FP7;
- New transects FP4A, FP6A, and FP7A; and
- Parcels I7-2-2, I7-2-3, I7-2-20, J5-2-11, 29-5, as well as several parcels along Deming Street.

In addition, as indicated in Section 5.2.2.5, a dam once existed in the Housatonic River in the Deming Street area, approximately 250 feet upstream of the Dawes Avenue Bridge. Floodplain soil sampling and analysis in this area confirmed the presence of PCBs on several properties along Deming Street. Prior HEC-2 modeling efforts did not consider the effects of this former dam, as it was removed in the mid-1960s and its presence was not known to GE until recently. Thus, the previously modeled approximate 10-year floodplain did not extend into these properties. In the revised modeling, the dimensions of this former dam were incorporated into the updated HEC-2 model to represent hydraulic conditions prior to dam removal.

After updating the HEC-2 model, the approximate elevation of the 1 ppm PCB isopleth was determined for floodplain soils between the GE facility and Woods Pond Dam. This isopleth was determined based on the floodplain soil PCB data illustrated on Figures 5-3 through 5-15 and available topographic information, using linear interpolation of observed PCB concentrations and corresponding surveyed elevations. The method used to determine the 1 ppm isopleth was as follows:

First, the elevation corresponding to the detection of PCBs at 1 ppm was estimated at each distinct group of sampling locations such as floodplain transects or individual property parcels. Once the approximate elevations corresponding to 1 ppm PCBs had been determined at these discrete locations, the revised HEC-2 model was utilized to determine the river flow and corresponding surface water profile which "best fit" these elevations. This was performed using a standard least squares approach. For each model run of various flows, the model-predicted surface water elevations were compared to the corresponding estimated 1 ppm PCB elevations. The differences in the elevations were squared and summed; flow values were varied until the sum of squared differences was minimized. The flood profile with the minimum sum of squares was considered the "best fit" to the estimated 1 ppm PCB elevations.

This flood profile was assumed to constitute the general 1 ppm isopleth in this stretch of the river. This initial isopleth was then modified slightly to fit the PCB data from the backwater area west of the railroad tracks near transect FP6A, described in Section 5.2.2.2 above. This modification to the 1 ppm PCB isopleth was made because the railroad tracks appear to generally restrict the deposition of PCBs onto the floodplain (above 1 ppm) to the eastern side of the railroad tracks. The resulting modified isopleth represents the best current estimate of the approximate floodplain limit corresponding to the presence of PCBs at 1 ppm between the GE facility and Woods Pond Dam. This estimated 1 ppm isopleth is illustrated on Figures 5-3 through 5-15.

The corresponding flow at the Coltsville gaging station which "best fit" the estimated 1 ppm PCB isopleth was 2,950 cfs. This flow corresponds to an approximate recurrence interval of five years. Despite the 20 percent reduction in the "best-fit" flow from the 10-year flow of 3,700 cfs, the new 1 ppm PCB isopleth does not vary significantly from the prior modeled 10-year floodplain limit, except in the Deming Street area, where the former dam backwater increases the flood elevation several feet above the prior modeled 10-year floodplain limit. Throughout the majority of the river between the GE facility and Woods Pond Dam, however, hydraulic characteristics are such that the difference in flood surface elevation between the previously modeled 10-year floodplain limit and the newly modeled 1 ppm isopleth is typically in the range of one foot or less.

Similar to prior predictions, several anomalies were noted where measured PCB concentrations greater than 1 ppm were observed at elevations above the estimated 1 ppm PCB isopleth. These are believed to be due to mapping inaccuracies and/or topographic interpretations. Specifically, a total of 51 locations (approximately 10 percent of all floodplain locations) indicated the presence of PCBs at concentrations greater than 1 ppm at locations higher in elevation than the estimated 1 ppm PCB isopleth. However, 26 of these locations were on Parcels I7-2-2, I7-2-3, and I7-2-20, where soil could have been graded during construction activities. Apart from these, a total of only 25 samples (approximately 5 percent of all floodplain locations) showed PCBs at concentrations greater than 1 ppm above the estimated 1 ppm isopleth. The PCB concentrations at these locations average 6 ppm. Nine of these locations are very close (within a 2-foot contour interval) to the approximate 1 ppm PCB isopleth. The remaining cases can be attributed to small-scale local topographic irregularities that were not reflected in the model cross-sections, possible deviations from the flood profile caused by events such as ice dams or clogged bridges, or anomalies which are an integral part of a least squares analysis.

5.2.4 Overall Summary Regarding the Extent of PCBs in the Housatonic River Floodplain

As noted above, all existing PCB data from the Housatonic River floodplain are presented on Figures 5-2 through 5-26. Revised HEC-2 modeling was utilized to estimate the approximate extent of the flood recurrence interval associated with the approximate 1 ppm PCB isopleth between the GE facility an Woods Pond Dam. Due to the backwater effects of a former dam added to the model upstream of Dawes Avenue, flow less than the 10-year flood produced surface water elevations which best fit the estimated 1 ppm isopleth. The approximate floodplain corresponding to the 1 ppm PCB isopleth in this stretch is shown on Figures 5-3 through 5-15.

Between the GE facility and Woods Pond Dam, PCBs at concentrations of 1 ppm or greater are generally limited to within the approximate 5-year floodplain, with a few exceptions as described in Section 5.2.3. The upper portion of the floodplain, between the GE facility and Holmes Road, is relatively narrow with steep banks, and includes portions of residential properties, some commercial properties, and some wooded areas. The hydraulics of this portion of the Housatonic River are impacted by numerous bridges and were previously impacted by the effects of the former dam near Dawes Avenue. Elevated, PCB concentrations are typically confined to areas close to the river and at low elevations; however, exceptions were observed in this section of the river generally behind bridges and in topographic irregularities where local geography interfered with flood flow conveyance.

Between Holmes Road and Woods Pond, the floodplain widens significantly and is typically very flat. Due to the large cross-sectional areas, surface water elevations are relatively insensitive to flow increases except for extremely large flows. The Housatonic River in this stretch meanders significantly, and the floodplain contains many secondary channels and former oxbows. It is likely that during flood events, increases in flow are conveyed largely in the central channel, while the remainder of the floodplain serves as storage. For example, the low-lying area to the west of the railroad tracks (upstream of Woods Pond) is inherently within the floodplain due to elevation and several hydraulic connections under the railroad. However, during a flood, this area will serve as storage only and will not convey floodwaters. The lack of floodwater deposition is evidenced by the lack of PCB concentrations in the area to the west of the railroad bed (see Figures 5-12 through 5-14). The floodplain between Holmes Road and Woods Pond consists of public property, recreational areas, farmland, and undeveloped wetland areas, with a few residential properties near Holmes Road.

Downstream of Woods Pond Dam, the extent of the PCB-impacted floodplain soil is very limited, with floodplain soil PCB concentrations shown to be low (average PCB concentration of 1.7 ppm) and generally found only in close proximity to the river (usually within 150 feet).

As noted above in Section 2.6.3, the PCBs detected in Housatonic River floodplain soil consist predominantly of Aroclor 1260, which constituted over 97 percent of the total PCBs detected in the floodplain. Estimates of the volumes of PCB-impacted soil in the floodplain exceeding various selected PCB concentrations are presented in Section 5.5 below.

5.3 Investigation of Other Hazardous Constituents in Housatonic River Floodplain Soils

Pursuant to Section 4.2.3.5 of the Phase II/RFI Proposal and the Agencies' September 12, 1994 comment letter, seven soil samples (plus one duplicate) were collected during September 1994 from seven floodplain properties just below the GE facility in Pittsfield. These samples were collected from the 0- to 6-inch depth interval and analyzed for Appendix IX+3 constituents in order to assess the potential presence of other hazardous constituents in floodplain soil of the Housatonic River in addition to PCBs. The locations sampled as part of these activities represented locations previously known to contain PCBs based on prior sampling. These samples were collected from I7-3-7A, I7-3-7D-10, I7-2-34B, I7-2-32A, I7-3-6C-15, I7-99-000B, I7-2-1A, and I6-1-61C-18, which are illustrated on Figures 5-4, 5-6, and 5-7.

Prior to an evaluation of data from these sampling and analysis activities, GE collected three additional floodplain soil samples upstream of the GE facility and related sites. These samples (BG-FP-1 through BG-FP-3) were collected near the existing transect FP1, as illustrated on Figure 5-2. These samples were collected from the 0- to 6-inch depth interval and were analyzed for Appendix IX+3 constituents to facilitate a comparison with the downstream Appendix IX+3 data. This comparison was intended to be used to identify "target" constituents potentially related to the GE facility for which further downstream sampling and analysis may be appropriate.

Table 5-5 presents the upstream and downstream floodplain soil Appendix IX+3 VOC, SVOC, PCB, pesticide, and herbicide data, while Tables 5-6 and 5-7 present the related PCDD/PCDF and inorganic data respectively. As in the case of sediments, the presentation of PCDD/PCDF data in Table 5-6 includes total homolog concentrations, total PCDD and PCDF concentrations, and congener-specific data. It also includes total TEQs using both the USEPA's and the MDEP's TEFs (even though GE does not accept the validity of those TEFs) solely to facilitate the comparison of upstream versus downstream data.

These data were evaluated in a manner consistent with that used for the Housatonic River sediments -- i.e., by comparing the types and concentrations of constituents detected downstream of the GE facility with those detected upstream, as well as by evaluating the levels and spatial distribution of the constituents detected downstream, in order to identify "target" constituents, if any, that are potentially attributable to releases from the GE facility and that would warrant further downstream sampling. The results of these evaluations were presented to the Agencies in the Third Quarterly Progress Report (BBL, June 1995). These evaluations resulted in the conclusion that there were no non-PCB "target" constituents that would warrant further downstream floodplain soil sampling. (Since these evaluations will be revised, as discussed below, after the collection of additional upstream data, the prior evaluations are not repeated here.)

As with the sediment evaluations, the Agencies commented on these floodplain evaluations in a letter to GE dated September 5, 1995. In that letter, the Agencies criticized the upstream locations used by GE in this evaluation, and stated that additional background samples were needed in order to make a complete comparison between upstream and downstream levels of Appendix IX+3 constituents. That letter further stated that a memorandum from the MDEP's ORS would be provided with further details on the appropriate number of upstream sediment and floodplain soil samples needed to make the upstream versus downstream comparison. As noted above, the MDEP provided GE with that ORS memorandum in late October 1995.

GE responded that, in its view, the upstream sample locations criticized by the Agencies are, in fact, appropriate for the upstream versus downstream comparison. However, GE also provided the Agencies with a proposal for performing additional upstream floodplain soil sampling and analysis as part of the Addendum to the Phase II/RFI Proposal. That proposal was prepared based on careful consideration of the information presented in the ORS memorandum. In general, a total of 12 new upstream floodplain soil samples were proposed to be collected for analysis of SVOCs, inorganics, and PCDDs/PCDFs. That proposal was approved by the Agencies, and these activities are currently being implemented as detailed in Section 2.2 of the Addendum to the Phase II/RFI Proposal.

The results of this sampling will be presented in an interim report pursuant to the schedule presented in Section 11. These upstream data, together with prior upstream floodplain soil data that would not be affected by releases from the GE facility, will be compared with existing downstream floodplain soil data for the same constituents in order to complete the evaluation as to the presence of "target" constituents, if any, for further downstream floodplain soil sampling. As with sediments, the results of this revised evaluation will be presented to the Agencies, accompanied, if appropriate, by a proposal for further downstream floodplain soil sampling for any "target" constituents identified.

5.4 Silver Lake Floodplain Soils

5.4.1 Prior Investigations

As previously described in Section 2, Silver Lake sediments were sampled and analyzed for Appendix IX+3 constituents as part of MCP Phase II activities. In general, the results of these analyses showed the presence of PCBs, various SVOCs, metals, cyanide, PCDDs/PCDFs, and to a lesser extent, pesticides and herbicides.

Based on the premise that an impact to the Silver Lake floodplain (if any) would occur primarily as a result of the resuspension, transport, and redeposition of Silver Lake sediments onto the banks of the lake during historical flooding events, there existed a need for data to assess the presence of PCBs and other hazardous constituents on the banks of Silver Lake. Accordingly, sampling and analysis of Silver Lake floodplain soil were performed in May 1994 as part of an STM evaluation, and more recently as part of Supplemental Phase II/RFI activities. These activities are discussed in Sections 5.4.2 and 5.4.3.

5.4.2 Description of PCB Sampling and Analysis Activities

Floodplain soil samples were initially collected along the banks of Silver Lake in May 1994. Those samples were collected as part of a STM evaluation of Silver Lake. As part of these activities, soil samples were collected from six transects (SLB-2 through SLB-7) which were located perpendicular to the water's edge (see Figure 5-27). These locations were selected on the basis of a visual reconnaissance and a year-long observation study (ChemRisk, December 1993) performed to identify the location, type, and frequency of human activity in the vicinity of the lake.

At each of the six transects sampled, soil samples were collected at three locations (at 0- to 6-inch and 6- to 12-inch depths) to represent accessible "bottom-of-bank", "middle-of-bank", and "top-of-bank" positions on the bank. All samples were submitted for PCB analysis, and the samples from the 0- to 6-inch depths were also submitted for TOC analysis.

The results of these activities were previously reported and evaluated in context of the STM evaluation in a report entitled "Report on Silver Lake Short-Term Measure Evaluation and Related Activities," dated July 1994 (BBL, July 1994). These data are presented in Table 5-8. The sampling locations and PCB data are also illustrated on Figure 5-27. The results of these analyses led to a requirement for the placement of warning signs at various locations along the banks of the lake. Such signs were installed in May 1994.

As part of the more recent Phase II/RFI activities, additional soil samples were collected along three additional transects (SLB-1, SLB-8, and SLB-9). Transect SLB-1 was originally proposed for sampling as part of the STM evaluation activities described above; however, this location was dropped from the program based on the heavily vegetated nature of this area. The Agencies September 12, 1994 comment letter on the Phase II/RFI Proposal subsequently required sampling at the SLB-1 transect. Transects SLB-8 and SLB-9 were added following a subsequent reconnaissance of the area performed by GE and the Agencies.

Soil samples were first collected from SLB-1 in January 1995, and included the collection of six soil samples (plus one duplicate) from the bottom-, middle-, and top-of-bank positions along the transect. These samples were collected from the 0- to 6-inch and 6- to 12-inch depth intervals, and were analyzed for PCBs. The 0- to 6-inch samples were also analyzed for TOC. The results of these analyses are presented in Table 5-9. The PCB data and sample locations are shown on Figure 5-27.

PCBs were detected at a concentration greater than 10 ppm in the 0- to 6-inch sample from the bottom-of-bank location at transect SLB-1 (Figure 5-27). Since this location is unfenced and estimated to be within 500 feet of a residence, GE notified the MDEP of a potential imminent hazard as defined in the MCP. On May 3, 1995, GE submitted an IRAP in accordance with the MCP providing for the posting of warning signs along the shoreline in this area. Upon Agency concurrence, that IRAP was implemented later that month.

Samples were also initially collected from the bottom-of-bank positions at transects SLB-8 and SLB-9 in January 1995. These samples were collected from the 0- to 6-inch depth interval from both locations and were analyzed for PCBs. The results of these analyses are presented in Table 5-9 and are illustrated on Figure 5-27.

Following the evaluation of the Silver Lake floodplain soil PCB sampling data described above, it was concluded that additional sampling and analysis activities were needed to further define the vertical and horizontal presence of PCBs in this area. To further define the vertical extent of PCBs, samples were collected at the bottom-of-bank locations at transects SLB-1, SLB-3, and SLB-4 (at 6-inch intervals from 12 to 36 inches). To further define the horizontal extent of PCBs, samples were collected at four transects at the top-of-bank locations or beyond. Specifically, 0- to 6-inch depth samples were collected from transect SLB-1 at locations 10 feet and 50 feet beyond the top of the bank (SLB-1TB-10' and SLB-1TB-50'); from transect SLB-7 at 10 feet beyond the top of the bank (SLB-7TB-10'); from transect SLB-8 at the top of the bank (SLB-8TB); and from transect SLB-9 at the top of the bank and 12 feet beyond that location (SLB-9TB) and SLB-9TB-12'). All samples were submitted for PCB analysis. The results of these analyses are also presented in Table 5-9 and on Figure 5-27.

Based on the review of these data, further sampling and analysis activities are needed to complete the vertical delineation of PCBs at the bottom of the bank at transects SLB-1 and SLB-3. These activities will involve additional 6-inch interval sampling and PCB analysis at these locations to the extent feasible. The results of these activities will be reported in accordance with the schedule discussed in Section 11.

As for the horizontal delineation of PCBs, PCBs were detected at 3.2 ppm at 10 feet beyond the top of the bank at transect SLB-7. However, further extension of this transect is not possible, since the area beyond this point is paved. At transects SLB-1, -8, and -9, the presence of PCBs was found to be either below detection or at low concentrations (less than 1 ppm) at the farthest location sampled. As such, no further sampling is warranted at these locations.

5.4.3 Investigation of Other Hazardous Constituents

As part of the Supplemental Phase II/RFI activities, six Silver Lake floodplain soil samples (plus one duplicate) were initially collected from six transects and analyzed to assess the presence of other hazardous constituents (in addition to PCBs). As directed by the Agencies, these samples were collected from the 0- to 6-inch depth interval at the bottom-of-bank positions at transects SLB-1, -2, -4, -5, -8, and -9 (see Figure 5-27), and were analyzed for Appendix IX+3 SVOCs, PCDDs/PCDFs, and inorganics. These constituents were selected for analysis based on the constituents detected in Silver Lake sediments as described above in Section 3.3.6. The results of these analyses are presented in Table 5-10, and generally show the presence of similar constituents and concentrations as found in the near-shore sediments of Silver Lake.

GE previously evaluated these data in the Third Quarterly Progress Report (BBL, June 1995). It was noted by GE that these data came solely from samples taken from the bottom-of-bank positions, which are likely to have higher concentrations and are less accessible than other bank soils. Nevertheless, it was noted that with the exception of SVOCs, the Appendix IX+3 data base (through the February 23, 1995 sample results) appeared to provide an adequate, although conservative, indicator of bank soil concentrations for purposes of conducting a risk assessment. That was not the case, however, for SVOCs, particularly since high detection limits were reported for some of the SVOC analyses, notably at transect SLB-1 (see Table 5-10). Hence, it was concluded that additional investigations relating to the levels of SVOCs in the bank soils were necessary for the assessment of potential exposures and risks associated with such soils.

As part of these activities, the data were reviewed in conjunction with the analytical laboratory in order to determine the reasons for the much higher detection limits reported for SVOCs at transect SLB-1. As a result, it was found that these detection limits were due to the presence of severe interferences as a result of an indistinguishable hydrocarbon in that sample. Subsequently, additional floodplain soil samples were collected from four transect locations for further SVOC analyses. These samples were collected from the 0- to 6-inch depth interval at the top-of-bank locations at transects SLB-1, -2, -4, and -9. The results of these analyses are presented in Table 5-11. As shown there, the detection limits were much reduced from the prior sampling and analysis efforts, and the overall results are generally consistent with the prior SVOC data at the other transects.

5.5 Estimation of Volumes of Impacted Floodplain Soils

As discussed in Section 8.7 of the Interim Phase II Report/CAS, the volumes of floodplain soil containing greater than 50 ppm PCBs, greater than 10 ppm PCBs, and greater than 1 ppm PCBs were estimated for the Housatonic River reach between New Lenox Road and Woods Pond. The methodology and assumptions under which the estimates were generated are described in detail in the Interim Phase II Report/CAS.

After receipt of the PCB results from the Supplemental Phase II/RFI floodplain soil sampling, all previous and new data on the horizontal and vertical extent of PCBs in floodplain soils were used, in conjunction with available topographic data to generate new volume estimates of PCB-containing floodplain soils along Silver Lake and the Housatonic River between the GE facility and Woods Pond. The floodplain soil volume estimates were based on the following assumptions:

- Data were extrapolated between floodplain sampling locations through the use of available topographic mapping. This was performed for four different concentration ranges -- greater than one ppm, greater than 10 ppm, and greater than 50 ppm. These concentrations were selected for illustrative purposes only and do not represent levels of regulatory significance for this project. Interpolations were performed to develop iso-concentration contours for each of the concentration ranges.
- Average depths of PCB presence were determined for each iso-concentration contour. These values were multiplied by corresponding surface areas of each contour (determined using a digital planimeter).

- Data associated with soil excavated (or planned to be excavated) during STM operations were deleted from the calculations, since such soil is (or shortly will be) no longer present.

The volumes estimated are as follows:

Reach	Approximate Volumes (cubic yards)		
	Containing Greater than 1 ppm PCBs	Containing Greater than 10 ppm PCBs	Containing Greater than 50 ppm PCBs
Silver Lake	5,000	3,200	800
GE Facility to Holmes Road	156,000	47,600	24,700
Holmes Road to New Lenox Road	1,200,000	300,000	76,000
New Lenox Road to Woods Pond Headwaters	800,000	200,000	82,000

SECTION 6 - BIOTA INVESTIGATIONS

6.1 General

Previous investigations have generated a considerable data base related to biota of the Housatonic River, both in Massachusetts and Connecticut. That data base includes information on concentrations of PCBs (and to a lesser extent PCDDs/PCDFs) in fish in the Massachusetts portion of the river, data on PCB concentrations in frogs in Massachusetts, and an assessment of the general health of the aquatic ecosystem in Massachusetts, as well as PCB data on both fish and benthic macroinvertebrates in Connecticut. More recent activities, performed pursuant to the Phase II/RFI Proposal and the Cooperative Agreement between GE and the Connecticut Department of Environmental Protection (CDEP), included the collection of 63 composite young-of-the-year (YOY) fish samples from three locations in Massachusetts and 184 adult (individual) fish samples from five locations in Connecticut. Sections 6.2 and 6.3 discuss the relevant biota data for the Massachusetts and Connecticut portions of the river, respectively.

The Phase II/RFI Proposal also called for the collection of benthic invertebrates at various locations in Massachusetts between the New Lenox Road Bridge and Woods Pond, as well as within Woods Pond. Invertebrates were to be collected in these areas and evaluated for species richness, diversity, and density. However, the Agencies' September 12, 1994 conditional approval letter for the Phase II/RFI Proposal did not approve these activities, as the Agencies wanted to review these proposed activities in conjunction with GE's Ecological Risk Assessment Proposal.

In addition to these activities, fish samples were recently collected from two tributaries to the Housatonic River in Massachusetts, as well as from Laurel Lake in Lee, Massachusetts. Details related to these activities are presented in Section 6.4.

6.2 Biota Sampling in Massachusetts Portion of River

6.2.1 Prior Investigations

Stewart Laboratories collected 721 fish from a 62-mile stretch of the Housatonic River in Massachusetts during 1980 and 1982. These sampling efforts generated a substantial data base and succeeded in establishing a reference base for PCB concentrations in the more common Housatonic River sport fish species.

Fish samples were collected again in November 1990 as part of MCP Phase II activities. These efforts were designed to generate data for a screening-level study meant to supplement the 1980 and 1982 Stewart studies. These data were to be used to assess temporal changes in fish tissue PCB concentrations and to assess the presence of PCDDs/PCDFs in fish tissue.

The results of both the Stewart and MCP sampling activities, together with an analysis of temporal and spatial trends reflected in the data, are presented in Section 9.2 of the Interim Phase II Report/CAS (with certain clarifications noted in Section 6.3 of the Addendum to that report).

In addition to the evaluation of fish, a single composite sample of 12 frogs from Woods Pond was analyzed in 1982 for PCBs. These data are presented in Section 9.5.1 of the Interim Phase II Report/CAS. Frogs were collected again in Woods Pond in 1992 and analyzed for PCBs. These data are presented in Section 6.4 of the Addendum to the Interim Phase II Report/CAS.

Additionally, in September 1992, Chadwick & Associates, Inc., undertook a study to describe the fish community and aquatic habitat of the Housatonic River from the City of Pittsfield downstream to the Connecticut border. Qualitative sampling was conducted at nine sites in the Housatonic River and its branches. In September 1993, additional sampling to provide quantitative information on the diversity, abundance, and condition of fish in the same study reach was conducted. Also as part of this study, benthic invertebrates were sampled, and assessments were made regarding species richness, diversity, and density of the benthic invertebrate community. The details regarding these studies are contained in the report entitled "Aquatic Ecology Assessment of the Housatonic River, Massachusetts" which was submitted to the Agencies on May 26, 1994 (Chadwick & Associates, 1994).

6.2.2 Massachusetts Young-of-the-Year Fish Sampling

As described in Section 5.2.3.1 of the Phase II/RFI Proposal, the PCB data for fish collected during the initial MCP Phase II activities are characteristically variable, as individual largemouth bass, yellow perch, and trout collected in Woods Pond varied in wet-weight PCB concentration from 1.1 to 24 ppm, 5.7 to 14 ppm, and 0.56 to 27 ppm, respectively. Similarly, the largemouth bass sampled in Rising Pond (the only species of which more than one individual was collected) ranged in PCB concentration, on a wet-weight basis, from 5.5 to 39 ppm. While lipid-normalization of the data reduces variability, the large variability in wet-weight PCB concentrations limits the ability to draw conclusions about temporal trends in PCB concentrations in fish in this stretch of the river.

Additional fish sampling was conducted in accordance with the Phase II/RFI Proposal in October 1994 at three locations in the Massachusetts portion of the river. This sampling was conducted in an effort to establish a more sensitive tool for monitoring trends in fish PCB levels. In addition, this sampling was intended to provide useful baseline information for the evaluation of potential remedial approaches.

It was deduced that the most useful samples to collect for potential trend monitoring would be multiple composite samples of YOY fish from several species, as YOY fish are likely to be the most sensitive indicators of year-to-year changes in available PCB concentrations. Composite samples generally reduce the variability in estimates of the population mean PCB concentration in order to allow a better (i.e., more sensitive) base for statistical analysis of trends.

The recent sampling involved the collection of seven whole-body composite samples (5 to 25 fish per composite) of YOY fish of three species -- largemouth bass, yellow perch, and bluegill (or pumpkinseed, if bluegill was not found). These samples were collected from locations HR2, Woods Pond, and HR6 as shown on Figure 6-1, and were analyzed for PCBs and lipids. These locations were selected because they were previously found to contain similar habitat types (i.e., relatively deep water) and sufficient populations of the same species, thereby reducing the potential for intra-species variability (Chadwick & Associates, 1993).

The results of these activities are presented in Tables 6-1 through 6-3. A summary of these data is presented below:

	PCB Concentration (ppm - wet weight)								
	HR2			Woods Pond			HR6		
Species	Range	Mean	Std. Dev.	Range	Mean	Std. Dev.	Range	Mean	Std. Dev.
Bluegill	23-26	25	1.3	3.3-22	17	5.9	2.8-4.2	3.5	0.48
Largemouth Bass	25-34	31	3.2	17-37	23	7.5	3.3-4.8	4.3	0.48
Perch	22-27	25	1.5	32-58	38	8.6	4.3-4.6	4.5	0.15

As indicated above, the YOY fish PCB concentrations detected at location HR2 (New Lenox Road area) and in Woods Pond are generally consistent. However, PCB concentrations in YOY fish at location HR6 (Connecticut border) range generally on the order of three to five times lower than at the two upstream locations. In addition, the variability of PCB concentrations of the various species analyzed is low as evidenced by the standard deviation values summarized above.

Following the review of these data, it is preliminarily concluded that the continued collection and analysis of YOY fish samples would appear to provide data useful for conducting long-term trend monitoring. However, additional data are needed to confirm this position before a final determination can be made. Another round of such sampling and analysis activities is proposed to be conducted during the fall of 1996.

6.2.3 Summary

Both the 1990 sampling of adult fish and the recent YOY fish data indicate that PCB levels in fish in Massachusetts generally remain above the U.S. Food and Drug Administration (FDA) tolerance limit of 2 ppm for fish consumption by humans. However, there appears to be a significant decrease in PCB levels in fish downstream of Woods Pond Dam, close to the Connecticut border, compared to fish from Woods Pond and above. Further, a relatively low variability in PCB concentrations was noted for the YOY of the various species recently analyzed. Preliminarily, these data indicate that the continued monitoring of YOY fish appears to be useful for a long-term monitoring program for the Massachusetts portion of the Housatonic River. Another round of such monitoring will be conducted during the fall of 1996.

6.3 Biota Sampling in Connecticut Portion of the River

6.3.1 Pre-1984 Fish Sampling

Prior to 1984, fish were sampled from the Housatonic River in Connecticut in 1977, 1980, and 1982 by the CDEP, and in 1983 by Stewart Laboratories. The CDEP's sampling of Housatonic River fish was performed in an effort to quantify the extent of PCBs in fish. As part of this sampling, fish were collected from Cornwall, Lake Lillinonah, and Lake Zoar in 1977; from Cornwall, Bulls Bridge, Lake Lillinonah, Lake Zoar, and Lake Housatonic in 1980; and from Cornwall in 1982. Additionally, fish were collected by Stewart Laboratories from Bulls Bridge, Lake Lillinonah, and Lake Zoar in 1983. These sampling events are described and their results reported in Section 9.3.1 of the Interim Phase II Report/CAS.

6.3.2 ANSP Fish Sampling Program

In 1984, the Academy of Natural Sciences of Philadelphia (ANSP) began a fish monitoring program focused on: 1) specimens and sizes likely to be caught by sport fishermen; 2) species likely to have elevated tissue concentrations; 3) species with diverse feeding habits, physiologies, lipid levels, and potential pathways of uptake; and 4) sampling sites where significant sport fishing activity occurs and/or there were previous indications of unusual PCB concentrations (LMS, 1988).

As part of the ANSP study, fish were collected in 1984, 1986, 1988, 1990, and 1992 from Cornwall, Bulls Bridge, Lake Lillinonah, and Lake Zoar. The results of the sampling events conducted between 1984 and 1990 are reported and discussed in Sections 9.3.2 and 9.33 of the Interim Phase II Report/CAS, while the results of the 1992 sampling were reported to the CDEP in August 1993 pursuant to GE's Cooperative Agreement with the CDEP. A copy of that report was also sent to USEPA.

Additionally, pursuant to the Connecticut Cooperative Agreement, fish sampling and analysis activities were conducted in 1994 for various areas of the river in Connecticut. As part of these activities, a total of 36 brown trout and 13 smallmouth bass were collected from Cornwall, and 8 to 10 smallmouth bass were collected from each of Bulls Bridge, Lake Lillinonah, and Lake Zoar. In addition, as requested by the USEPA, in order to identify PCB concentrations in fish in Lake Housatonic, 18 specimens each of white perch, yellow perch, and American eel were collected from that lake along with six specimens each of redbreasted sunfish, pumpkinseed, and bluegill. All samples were analyzed for PCBs and lipid content.

The results of these activities are presented in Table 6-5. These data are also presented and evaluated in a report, prepared on GE's behalf, by the Academy of Natural Sciences of Philadelphia and entitled "PCB Concentrations in Fishes and Benthic Insects from the Housatonic River, Connecticut, in 1984 to 1994," dated May 1995. That document was submitted to the CDEP and USEPA.

As reported by ANSP in that report, the results of this 1994 sampling indicated a clear decrease in PCB concentrations relative to all previous years, and fewer statistically significant differences between sampling stations. ANSP also noted that the proportion of fish with PCB concentrations exceeding the FDA tolerance limit for consumption (2 ppm) was as low as, or lower than, in previous years. An additional round of fish sampling at the Connecticut sampling locations is scheduled for fall 1996 to evaluate whether the decrease in PCB concentrations observed in 1994 still persists.

6.3.3 Benthic Invertebrate Sampling

In addition to the extensive data on fish, benthic invertebrate sampling of the Housatonic River at Cornwall was performed from 1978 through 1994 by the CDEP and the ANSP. Caddisfly larvae were collected to represent a typical filter-feeding aquatic insect, and hellgrammite larvae and stonefly nymphs were collected to represent predatory insects. Insects were sampled in late May or early June, and were collected using aquatic nets and by hand picking river substrate. Composite samples of individual species were analyzed for total PCBs. The results of these studies through 1991 are presented and discussed in Section 9.5.2 of the Interim Phase II Report/CAS, while the subsequent studies and data were reported separately by ANSP (1993 and 1995).

As these investigations showed, total PCB concentrations for caddisfly larvae ranged from 19 ppm in 1978 to 0.5 ppm in 1985. Total PCB concentrations for predatory insects ranged from 23 ppm in 1978 to 0.8 ppm in 1985. The data collected since 1985 have shown some fluctuations in PCB concentration, although an overall declining trend is evident.

Benthic invertebrate sampling is reported in Table 8 of the May 1995 ANSP report. It indicated average PCB concentrations for these taxa to be 1.97, 3.03, and 1.09 ppm, respectively. Compared to the data of previous years, these concentrations are among the lowest since 1978 (ANSP, May 1995).

6.3.4 Summary

The ANSP fish monitoring data base indicates that some fish samples from some locations had PCB levels exceeding the FDA tolerance limit of 2 ppm for fish consumption, while other fish samples had PCB levels below that limit. As discussed in Section 9.4 of the Interim Phase II Report/CAS, following review of the 1990 fish monitoring data, the CDEP determined that PCB levels in certain fish species from certain locations were well below that level, and it modified the fish consumption advisory to exclude such species at such locations (yellow perch from Bulls Bridge; yellow perch and sunfish from Lake Lillinonah; and yellow perch, sunfish, and white perch from Lake Zoar). As noted above, based on review of the 1994 fish sampling data, the ANSP concluded that the proportion of fish with PCB concentrations exceeding the 2 ppm limit was as low as or lower than in previous years. It should also be noted that the mean PCB concentrations in all species of fish sampled in 1994 from all locations in Connecticut were below 2 ppm (see Table 6-5).

The 1994 data also demonstrate a spatial trend in PCB concentrations in Connecticut fish, with PCB levels decreasing with increasing distance downstream. This spatial trend is illustrated in Figure 6-2 for smallmouth bass.

Review of the ANSP data from 1984 through 1994 for temporal trends demonstrates a considerable decline in PCB levels in the 1994 results. This decline is also illustrated in Figure 6-2 for smallmouth bass. As noted above, additional sampling is necessary to verify this observation and to determine whether this decline persists. An additional round of fish sampling in Connecticut will be conducted during the fall of 1996.

Finally, review of the data on benthic invertebrates at Cornwall from 1978 through 1994 likewise suggests an overall declining trend, with the 1994 PCB levels shown to be among the lowest levels detected. This is also illustrated in Figure 6-2.

6.4 Assessment of Fish in Select Housatonic River Tributaries and Laurel Lake

During a public meeting held on April 13, 1995 in Lenox, Massachusetts, concern was raised regarding the possibility that fish containing PCBs are migrating from the Housatonic River to select tributaries, namely the Williams River and the Green River. Accordingly, a very limited fish sampling program was conducted along these tributaries during September 1995. These activities constituted a screening-level study to determine if PCBs are present in certain fish species residing within the lower-most portion of these tributaries.

Fish were collected from these tributaries on September 11, 1995 using a backpack electrofishing unit. These samples were collected from the lower reach of each tributary, where any fish found could have reasonably migrated from the Housatonic River. The sampling location for the Williams River included a stretch of the river approximately 600 feet in length centered on the bridge at Division Street. The sampling location for the Green River included the area from the Route 7 Bridge upstream approximately 450 feet. Both sampling locations, shown on Figure 6-1, are approximately one-quarter to one-half mile upstream from the confluence of each of the tributaries with the Housatonic River.

Smallmouth bass and brown trout were the species targeted for collection. Two individuals from each species were collected from the Williams River. Two brown trout were also collected from the Green River, but smallmouth bass were not observed at this location. Hence, two rock bass were collected as substitute species for the smallmouth bass. Skin-on, scales-off fillet samples were submitted for analysis of PCBs and lipids. The results of these analyses are presented in Table 6-4.

Fish sampled from the lower portion of the Green River exhibited PCB concentrations of 0.16 and 2.3 ppm for rock bass and 14 and 21 ppm for brown trout. Fish sampled from the lower portion of the Williams River exhibited PCB concentrations of 1.1 and 2.5 ppm for smallmouth bass and 0.81 and 1.0 ppm for brown trout.

In addition to the activities described above, fish samples were recently collected from Laurel Lake located in Lee, Massachusetts. These samples were collected on September 12, 1995 in order to evaluate this location as a potential reference location for the proposed fish egg hatchability study included as part of GE's Ecological Risk Assessment Proposal for the Housatonic River (ChemRisk, February 1995).

A total of five largemouth bass were collected as part of this sampling event using hook and line techniques. These samples were analyzed for PCBs and lipids. As shown in Table 6-4, PCBs were not detected (at a detection limit of 0.05 ppm) in four of the five samples, and were detected slightly above the detection limit in the fifth sample at 0.065 ppm. The low PCB concentration detected in the one bass sample is considered to be representative of regional background conditions. According to the U.S. Fish & Wildlife Service (Eisler, 1986), trace concentrations of PCBs are detected in fish from almost every major river in the United States. Although typical background concentrations are not available for Massachusetts, PCBs have been detected in brook trout from remote lakes in New Hampshire at 0.08 ppm (Haines, 1983). Also, in upstate New York, background total PCB concentrations detected in smallmouth bass from a large river ranged from 0.054 to 0.16 ppm (BBL, unpublished data). For these reasons, Laurel Lake appears to be an acceptable reference location for the ecological study of fish in the Housatonic River.

SECTION 7 - GROUNDWATER INVESTIGATION

7.1 General

As explained briefly in Section 4.3, a staff gage was installed along the eastern shore of Silver Lake in October 1994 for the purpose of monitoring the lake's water level. This monitoring was also intended to facilitate the assessment of the relationship between the lake's water level and groundwater levels adjacent to the lake at the East Street Area 2/USEPA Area 4 Site as well as those to the south of the lake. These activities are discussed in more detail in Sections 7.1 and 7.2.

7.2 Assessment of Groundwater Relationship Between Silver Lake and East Street Area 2/USEPA Area 4

Silver Lake is situated on the western perimeter of the GE facility where the land slopes in a south-southwesterly direction. The elevation of the lake is maintained at a fairly constant level of approximately 976 feet by an overflow weir. During the 1991 MCP investigation of the facility, three monitoring wells (RF-2, RF-3, and RF-16) were installed along Silver Lake Boulevard adjacent to the eastern edge of the lake (Figure 4-4) (Blasland & Bouck, June 1992). Groundwater samples were collected from these wells and analyzed for Appendix IX+3 constituents. In all cases, PCBs were not detected. Low concentrations of VOCs and SVOCs were detected at RF-3 and RF-16. Additionally, metals were somewhat elevated in RF-3. [Refer to Tables 4-28 through 4-30 of the East Street Area 2/USEPA Area 4 Interim Phase II Report/CAS (BBL, August 1994).]

In an effort to determine the hydrogeologic relationship between these wells and Silver Lake, water level measurements were taken at the lake and in wells

RF-2, RF-3, and RF-16 in April 1994. The results of these activities indicated that these wells were all upgradient of Silver Lake (i.e., that groundwater in this area flows from the facility to Silver Lake). Based upon this hydrogeologic relationship and the prior results of chemical analyses, it was determined that groundwater quality along the eastern edge of the lake does not appear to be adversely impacted by Silver Lake.

However, in order to further evaluate this relationship as part of Supplemental Phase II/RFI activities, surface water elevations in Silver Lake and groundwater elevations in wells RF-2, RF-3, and RF-16 were measured on approximately a monthly basis between October 1994 and December 1995. These data are summarized in Table 7-1. These data are discussed below for each of the wells individually.

At well RF-2, groundwater was shown to generally flow toward Silver Lake in eight out of 13 events. During these eight events, the difference in elevation between the lake and groundwater in well RF-2 averaged about 6 inches. During the other five events, groundwater flowed away from Silver Lake toward the facility, and the difference in elevation averaged about eight inches. At well RF-3, groundwater was shown to flow toward Silver Lake in five out of 12 events and away from Silver Lake in the remaining seven events, but the overall difference in elevation between the lake and groundwater in well RF-3 averaged less than one-half inch. At well RF-16, groundwater was shown to flow toward the lake in all 14 out of 14 events, and the difference in elevation between the lake and groundwater in well RF-16 averaged about 29 inches during these events.

These data indicate that at well RF-16, groundwater appears to consistently discharge to the lake with a fairly steep gradient. Groundwater also appears to discharge to the lake most of the time at well RF-2 although at a shallower gradient; however, on some occasions the groundwater flow at this well appears to reverse direction. At well RF-3, the groundwater appears to be relatively stagnant.

The Phase II/RFI Proposal also provided that, to further assess the relationship between Silver Lake and groundwater in East Street Area 2/USEPA Area 4, an additional round of groundwater samples would be collected at wells RF-2, RF-3, and RF-16, with analysis for PCBs, VOCs, SVOCs and inorganic constituents. As it further noted, however, these activities would also be included in the Supplemental Phase II/RFI Proposal for East Street Area 2/USEPA Area 4. The latter proposal, as revised, was submitted in July 1995 (BBL, July 1995), and the activities described therein are currently in progress. Accordingly, the sampling and analysis of wells RF-2, RF-3, and RF-16 have not yet been conducted, but should be conducted shortly. It is anticipated that the results of this sampling and analysis will be included and evaluated in the addendum to this report in accordance with the schedule discussed in Section 11.

7.3 Assessment of Groundwater Flow South of Silver Lake

Groundwater monitoring well E-7 was recently installed within the Lyman Street Parking Lot/USEPA Area 5B Site just south of Silver Lake (see Figure 4-4) as part of separate investigations of that site. Since this well is located in rather close proximity to the southeast shore of Silver Lake, it was added to the groundwater/surface water level monitoring program described in Section 7.2. This well was added to this program in August 1995 to assess the general flow direction of groundwater in this area with respect to Silver Lake. On all five sampling occasions, groundwater was shown to flow from Silver Lake toward the Housatonic River (see Table 7-1).

A groundwater sample was collected in December 1995 from this well and analyzed for Appendix IX+3 constituents (excluding herbicides and organophosphate pesticides). These activities were performed as part of the ongoing investigation of the Lyman Street Parking Lot/USEPA Area 5B Site. The results of these analyses are summarized in Table 7-2. They indicate the presence of PCBs (0.00033 ppm in the unfiltered fraction and 0.00042 ppm in the filtered fraction) and most Appendix IX metals. These data will be evaluated in conjunction with the chemical data to be collected from wells RF-2, RF-3, and RF-16, and that evaluation will be included in the addendum to this report.

SECTION 8 - AIR MONITORING

A year-long air monitoring program was conducted at the GE facility from August 1991 to August 1992 to quantify levels of PCBs in ambient air at and near the GE facility (Zorex Environmental Engineers, 1992). An additional air monitoring program was conducted from May to August 1993 in an effort to more accurately identify suspected sources of airborne PCBs at certain air monitoring stations. The latter program included the collection and analysis of both high-elevation and low-elevation air samples from a station located on the eastern shore of Silver Lake. The results of this program were documented in a report by Zorex Environmental Engineers (Zorex, November 1993). Those results are summarized in Tables 4 and 5 of that report, which are reproduced as Tables 8-1 and 8-2 herein with the results from the Silver Lake station highlighted.

Additional ambient air monitoring activities for PCBs were carried out as part of Supplemental Phase II/RFI activities during May to August 1995. These monitoring activities were conducted at the prior Silver Lake station, at two locations on the Housatonic River (Fred Garner Park and Woods Pond), and at a background station (Berkshire Community College). High-volume samplers established in the breathing zone (high elevation) were employed at all stations, while low-volume samplers at both high and low elevation were also used at the Silver Lake station. The sampling program consisted of eight high-volume sampling events and three low-volume sampling events.

The details of this air monitoring program and a presentation and evaluation of the results are provided in a report prepared by Zorex and Berkshire Environmental Consultants, entitled "Ambient Air Monitoring for PCB: May 10, 1995 through August 24, 1995." That report is included as Appendix D to the present document. The conclusions set forth in that report include the following:

- The high-volume PCB sampling results from Silver Lake in 1995 (mean spring/summer concentration of 0.017 ug/m^3) are similar to the results observed at that station in 1993 (mean spring/summer concentration of 0.011 ug/m^3).
- The mean high-volume spring/summer PCB concentrations along the Housatonic River at Fred Garner Park and Woods Pond measured 0.0055 ug/m^3 and 0.0033 ug/m^3, respectively.
- The low-volume samples from high elevation at Silver Lake were all below the low-volume detection limit of approximately 0.029 ug/m^3. The low-elevation low-volume samples showed an average PCB concentration just above the surface of Silver Lake of 0.078 ug/m^3, about one-half of that measured at the same location in 1993.
- As in previous studies, temperature appears to have some impact on the variation in ambient PCB concentrations (i.e., ambient PCB concentrations generally increase with increasing temperature above around 50-60°F). This impact was more pronounced at Silver Lake than at the other high-volume monitoring stations. There is no evidence of a relationship between wind speed or barometric pressure and ambient PCB concentrations.
- Although only three rounds of low-volume sampling were conducted in 1995 at the Silver Lake station, it would not seem necessary or useful to conduct additional low-volume sampling to assess the comparability

of the high-volume and low-volume methods, because the detection limit for the low-volume method is too high (i.e., above the ambient PCB concentration at the high elevation) to provide more definitive data.

SECTION 9 - MIGRATION OF HAZARDOUS CONSTITUENTS

9.1 General

Section 8 of the Phase II/RFI Proposal provides a detailed evaluation of the principal potential migration pathways of interest related to the Housatonic River and Silver Lake. Many of the Supplemental Phase II/RFI activities discussed in the previous sections of this document provide additional information pertaining to the evaluation of migration of PCBs and other hazardous constituents. This information is discussed, as appropriate, in Sections 9.2 through 9.5.

9.2 Migration from the GE Facility to the Housatonic River

As discussed in more detail in Section 8.4.1 of the Phase II/RFI Proposal, potential migration of PCBs and other hazardous constituents from the GE facility to the Housatonic River can occur through one or more of three potential mechanisms: 1) discharges permitted under the National Pollution Discharge Elimination System (NPDES) program; 2) surface water discharges from Unkamet Brook; and 3) groundwater seepage.

While the widespread PCB presence in the sediments of the Housatonic River indicates substantial historical migration of PCBs from the GE facility to the river, the existing data do not suggest any significant ongoing PCB migration from the GE facility. PCBs have a very low solubility in groundwater, and source control measures have been implemented at the East Street Area 2/USEPA Area 4 and Lyman Street Parking Lot/USEPA Area 5B sites to control the groundwater plumes/seeps affecting the river in these areas. Additionally, routine monitoring data for the various NPDES-permitted outfalls associated with the GE facility do not show a significant PCB contribution to the river. Based on these NPDES data, GE has calculated a PCB flux of only about 0.24 pounds per year from these outfalls to the river. Finally, although PCBs have been detected on occasion in Unkamet Brook surface water, the PCB results from the Housatonic River water column just upstream and downstream of the Unkamet Brook confluence (at both high and low flow) do not show any contribution of PCBs from Unkamet Brook to the surface water of the river (see Tables 4-7 and 4-8).

Nevertheless, additional Housatonic River surface water sampling for PCBs will be conducted under various flow conditions, as discussed in Section 4.2.1.5, including at locations upstream of, adjacent to, and downstream of the GE facility. The PCB data from these sampling locations should provide important further information bearing on the question of current PCB migration from the GE facility to the river.

With respect to other hazardous constituents, as described in Section 4.2.2, surface water samples have been collected from various locations along the Housatonic River upstream of, adjacent to, and downstream of the GE facility. These samples were collected under both high- and low-flow conditions and analyzed for various Appendix IX+3 constituents. (Note that the high-flow sampling should include the impacts of stormwater discharges, while the low-flow sampling would primarily address groundwater seepage.) The results of these analyses indicate the presence of various constituents; however, levels are shown to be mostly near or below associated quantitation limits. Moreover, as indicated in Section 4.2.2, constituents detected at downstream locations are generally at concentrations less than or comparable to upstream concentrations. In a few cases, while downstream concentrations are higher than upstream concentrations, they are either decreasing and approaching the detection limits or are only very slightly higher than upstream levels. Thus, on an overall basis, when comparing the downstream data to the upstream data, the data do not indicate any significant ongoing migration of hazardous constituents from the GE facility as a whole to the Housatonic River.

Nevertheless, a detailed review of the sampling data from the various locations adjacent to the GE facility (see Tables 4-7 and 4-8) does show some contributions under some conditions. Most notably, it is apparent that, under low-flow conditions, there is a contribution of certain VOCs (i.e., chlorobenzene and benzene) to the river in the area of Unkamet Brook.

Finally, it should be noted that the ongoing investigations of the sites at the GE facility may provide additional information relevant to the issue of potential migration of hazardous constituents from those sties to the river.

9.3 Migration from the GE facility to Silver Lake

Section 8.5.1 of the Phase II/RFI Proposal provided an overview of existing information regarding the potential migration of hazardous constituents from the GE facility (specifically, the northeast portion of East Street Area 2/USEPA Area 4) to Silver Lake, while Section 8.5.2 of that document proposed several additional activities to assess such possible migration. Some of those activities have been completed. These include the "mixing" analysis discussed in Section 4.3.2 above, the collection and hazardous constituent analysis of additional surface water samples under high-flow and low-flow conditions as discussed in Section 4.3.3, and the assessment of the flow interaction between groundwater in this area of the facility and Silver Lake surface water as discussed in Section 7.2. However, an additional proposed activity to assess such migration -- namely, the additional sampling and hazardous constituent analysis of groundwater from wells RF-2, RF-3, and RF-16 -- has not yet been completed, since this activity will be conducted as part of the ongoing investigations of East Street Area 2/USEPA Area 4. Accordingly, an overall assessment of potential migration of hazardous constituents from that area to Silver Lake has not been completed at this time. It is anticipated that the additional groundwater quality data together with an overall assessment of such potential migration will be included in the addendum to this report, to be submitted in accordance with the schedule discussed in Section 11.

9.4 Migration from Silver Lake to the Housatonic River

As discussed above in Section 4, surface water samples have been collected from Silver Lake and its outfall, as well as from the Housatonic River upstream and downstream of that outfall, under both high-flow and low-flow conditions. Such sampling was previously conducted in 1990 and was conducted again in 1995 as part of Supplemental Phase II/RFI activities. These samples were analyzed for PCBs and other Appendix IX+3 constituents. The analytical results from these sampling events provide substantial information regarding the potential migration of these constituents from Silver Lake to the Housatonic River.

With respect to PCBs, the Silver Lake outfall has been shown to contain detectable concentrations of PCBs during the 1995 sampling event, but not during the 1990 event. The concentrations detected in 1995 were 0.00014 and 0.00029 ppm during high- and low-flow conditions, respectively. However, the flow from the Silver Lake outfall to the river is low -- measuring only 3.1 and 0.6 cfs during the high- and low-flow events, respectively. Based on these measurement, and assuming that high-flow conditions occur 10 percent of the time and that low-flow conditions occur during the remainder of the time, it can be calculated that the PCB flux to the river from the Silver Lake outfall is only about 0.4 pounds per year. As such, the Silver Lake outfall does not make any significant contribution to PCBs in the river water, given the much greater flow of the river (recorded as 750 and 28 cfs at the Coltsville Gaging Station during the high- and low-flow events, respectively).

With respect to other hazardous constituents, the concentrations of a few constituents in the outfall water are slightly higher than those in the river water. Based on the 1995 sampling, these include acetone, toluene (at low flow), bis(2-ethylhexyl)phthalate, phenol and methylphenol (at low flow), and several inorganics, especially lead and zinc (see Tables 4-7 and 4-8). However, concentrations of these constituents were very low -- at estimated concentrations below quantitation limits for all constituents except lead and zinc. Given this fact as well as the significantly greater flow of the river relative to the outfall, no appreciable contribution of these constituents from Silver Lake to the river would be expected.

Indeed, taking the constituent with the highest concentration in the outfall, zinc, calculations show only a very minimal flux contribution to the river. The 1995 analytical data reveal concentrations of zinc in the outfall at 0.0257 ppm and an average of 0.0219 ppm during high- and low-flow conditions, respectively. Using the outfall flow rates during these events (mentioned above) and the assumption of high-flow conditions occurring 10 percent of the time and low-flow conditions during the remainder, it can be calculated that the zinc flux from the outfall to the river is approximately 40 pounds per year. For comparison, using the measured zinc concentrations at Elm Street Bridge, just downstream of the outfall (0.015 and 0.0107 ppm during high- and low-flow conditions, respectively), together with the river flow rates from Coltsville (750 and 28 cfs, respectively) and the same assumed split between high-flow and low-flow conditions, it can be calculated that the zinc load in the river just downstream of the outfall would be approximately 2,820 pounds per year. These calculations thus illustrate the lack of a significant contribution from the outfall to the river.

Moreover, these conclusions are confirmed by comparing the hazardous constituent concentrations in the river water upstream of the outfall (at Lyman Street Bridge) with those just downstream of the outfall (at Elm Street Bridge) as presented in Tables 4-7 and 4-8. Such comparisons do not show any significant increase in concentrations between these stations, thus confirming the lack of significant contribution from the Silver lake outfall.

9.5 Migration Within the Housatonic River

As discussed in Section 4.2, a significant data base exists regarding the presence and migration of PCBs and, to a lesser extent, other hazardous constituents within the Housatonic River. This data base includes surface water PCB data collected during multiple events over various flow conditions as well as surface water Appendix IX+3 data collected during high- and low-flow conditions (two events for each flow condition). In addition, as discussed in Section 3.2, prior studies of PCB transport and sedimentation (see Section 3.2.1) and recent data on PCB sedimentation rates (see Section 3.2.6) provide additional data on the historical transport and fate of PCBs within the Housatonic River.

Based on then-existing data, Section 6 of the December 1991 Interim Phase II Report/CAS provided a detailed discussion and evaluation of PCB fate, transport, and sedimentation in the Housatonic River. This discussion was clarified and expanded in the 1992 Addendum to that report. Again, based on available data, Section 8.2 of the Phase II/RFI Proposal summarized the relevant investigations and key information pertaining to PCB transport in the Housatonic River. Since this is a critical issue for evaluating potential remedial alternatives for the Housatonic River, it is important to have as clear and complete an understanding as possible of PCB transport in the river. Hence, there needs to be a detailed updated discussion and evaluation of this issue.

At the present time, however, a number of investigations that will provide key information on this subject are still underway. First, since prior MCP Phase II water column results indicated that the relative correlation of PCB concentration with flow or TSS may be an indication of the dominant transport mechanism within a given reach, activities involving the collection and PCB analysis of suspended solids samples at four key locations between the GE facility and Woods Pond are being undertaken, as discussed in Section 4.2.1.2. However, since all planned sampling rounds have not yet been completed, no conclusions have been drawn at this time. In addition, the sediment trap sampling discussed in Section 4.2.1.3 may provide useful information on PCB transport and sedimentation. Further, as discussed in Section 4.2.1.5, substantial additional water column sampling for PCBs is being performed, in accordance with the Addendum to the Phase II/RFI Proposal, to provide updated data on PCBs in the water column (since the prior data for the Massachusetts portion of the river are five years old). These activities will include water column sampling and PCB analysis at 13 locations between the GE facility and the Connecticut border, with the objective of providing current information on PCB transport in the various river reaches. Following the completion of all these activities, the results will be presented in the addendum to this report, along with a full and updated discussion and evaluation of PCB transport in the river.

It should also be noted, with respect to the Connecticut portion of the river that Lawler, Matusky, and Skelly Engineers (LMS) have completed a revised PCB fate and transport model covering the river stretch between Great Barrington, Massachusetts, and Stevenson Dam downstream of Lake Zoar in Connecticut. This work was performed pursuant to GE's Cooperative Agreement with the

CDEP, and the report on it was submitted in November 1994 (LMS, November 1994). The model results, as reported by LMS (November 1994), generally indicate that PCB concentrations in sediments of the lower reaches of the river in Massachusetts and upper reaches in Connecticut will continue to decline over the next several decades. However, those of the Connecticut impoundments are currently near equilibrium.

Finally, with respect to other hazardous constituents, the investigation of such constituents has been completed, as described in Section 4.2.2 above. For the reasons given in that section, the various non-PCB constituents detected have been determined not to warrant further downstream water column sampling and analysis. For the same reasons, the data do not indicate any significant transport of such constituents in the water column of the river.

9.6 Assessment of Contribution of Hazardous Constituents from Housatonic River Tributaries

As is the case with any publicly accessible water body, other sources may exist (unrelated to the GE facility) which could have contributed or may be current contributors of PCBs and/or other hazardous constituents to the Housatonic River system. Releases to the river or Silver Lake could occur from many adjacent public, private, or commercial properties, or be conveyed to the river or lake through either permitted or non-permitted discharge points. These potential sources may include:

- Industries and other commercial operations;
- Permitted discharges;
- Landfills and hazardous waste sites; and/or
- Non-point sources.

Such sources may discharge to the main stem of the Housatonic River itself or they may discharge to tributaries. At this point, information has been reviewed relating to potential PCB sources to the river via one such tributary, the Still River in Connecticut.

The study performed by Frink et al. in 1982 noted that the Still River contained evidence of PCBs in sediments. Frink et al. (1982) reported PCBs in sediments of the Still River, primarily Aroclor 1248, ranging up to 2.4 ppm, and averaging 0.25 ppm. Frink et al. (1982) also reported that "the ratio of Aroclor 1248 to 1260 was higher in samples from Lake Zoar and Lillinonah than in samples collected upstream, suggesting that some PCBs entered these lakes from the Still River."

Additionally, in 1992, the ANSP conducted a preliminary assessment of PCB inputs to the Housatonic River from the Still River. These activities included the collection of crayfish and smallmouth bass samples from the Still River and the Housatonic River for comparative PCB analyses. It was reported by ANSP (1993) that several congeners characteristic of Aroclor 1242 were found to be elevated in Still River crayfish and smallmouth bass as compared to the Housatonic River. Since releases from the GE facility have primarily consisted of Aroclor 1260 (with some Aroclor 1254 as well), there appears to be an additional source of PCBs to the Housatonic River in this area.

In addition to this information, the additional water column sampling for PCBs at 13 locations along the Housatonic River in Massachusetts, as described in Section 4.2.1.5, may provide information pertinent to the existence of other sources of PCBs in that stretch of the river.

SECTION 10 - REMAINING DATA NEEDS AND FUTURE ACTIVITIES

As indicated in preceding sections of this report, several field activities that were a part of the original Supplemental Phase II/RFI investigations or have subsequently been determined to be warranted have yet to be completed. These activities are briefly summarized below.

Activities that were proposed in the original Phase II/RFI Proposal or in submittals during the course of that original investigation and which have not yet been completed include the following:

- Analysis of settleability characteristics of sediment from the Housatonic River and Silver Lake;
- Resampling and analysis of Silver Lake sediments for grain size versus PCB and oil & grease;
- Completion of the Housatonic River suspended sediment harvesting and PCB analysis activities;
- Collection of an additional round of sediment samples from Woods Pond sediment traps;
- Additional sampling and analysis to delineate the vertical extent of PCB presence in Silver Lake bank soils; and
- Collection and evaluation of groundwater samples from wells RF-2, RF-3, and RF-16 within East Street Area 2/USEPA Area 4.

Most of these activities are underway, and the results will be reported in the addendum to this report according to the schedule discussed in Section 11.

The Addendum to the Phase II/RFI Proposal proposed a number of additional investigations, which were approved by the Agencies in December 1995. As outlined in more detail in that Addendum, these include the following activities:

- Upstream sediment and floodplain soil sampling and analysis for select Appendix IX+3 constituents to further define upstream/background levels of constituents associated with the Housatonic River, followed by comparison of all upstream data with existing downstream data in order to complete the assessment of the need for further downstream sediment and/or floodplain soil sampling;
- Sediment sampling and analysis to assess sedimentation characteristics in Rising Pond; and
- Surface water sampling and analysis at various locations in the river upstream of, adjacent to, and downstream of the GE facility during various flow conditions to further assess current ambient PCB concentrations in, and transport via, the water column.

These activities are currently underway and the results will be reported according to the schedule described in Section 11.

In addition to the activities summarized above, a couple of other, additional investigations have been identified as appropriate to conduct prior to completion of the Phase II/RFI activities.

First, as discussed in Section 3.3.6, several sediment samples will be collected from the city storm sewers discharging to Silver Lake along its northwest shore, and will be analyzed for PCBs and Appendix IX+3 SVOCs, PCDDs/PCDFs, and inorganic constituents in order to assess potential sources to Silver Lake unrelated to the GE facility. These activities will commence upon coordination with the Pittsfield Department of Public Works.

In addition, since PCBs preferentially partition onto solids, the origin, fate, and transport of solids within the Housatonic River is an important determinant of PCB dynamics in the river system. Further, since solids transport is highest during high-flow periods, it is important to understand solids dynamics during such events. High-flow events in systems such as the Housatonic River are transitory. Typically, solids concentrations increase with increasing river flow velocity until the sediment bed begins to armor itself. Under such conditions, the majority of solids will be transported during the initial periods of a high-flow event. This makes capturing of the solids transport difficult during routine monitoring. Hence, to supplement the additional water column monitoring described above (and in the Addendum to the Phase II/RFI Proposal), GE plans to install battery-operated automated suspended solids samplers within the water column (inside protective PVC pipe casing) at five locations in the river:

- Dawes Avenue Bridge,
- Holmes Road Bridge,
- New Lenox Road Bridge,
- Woods Pond Headwaters, and
- Schweitzer Bridge.

These samplers will be programmed to collect one discrete sample every hour over a 2 to 3 week period during which high-flow events are expected. Samples collected during a high-flow event will be individually analyzed for TSS to provide a temporal profile of solids transport during such events at each of the five stations. If a high-flow event is not encountered over a given 24-hour period, the 24 samples collected from each station will be composited and analyzed for TSS to provide daily average solids concentration data.

The results of the foregoing activities will also be reported in the addendum to this report in accordance with the schedule described in Section 11.

It is also important to note that several additional field activities are also ongoing (or scheduled to be performed) as part of the PICM Proposal. These activities include (but are not limited to) the following:

- Bathymetric survey of Woods Pond;

- Water velocity measurements (five events) in the three distinct channels at the inlet to Woods Pond coincident with measurements of surface water elevation at the Woods Pond headwaters and at Woods Pond Dam; and
- Detailed survey of the geometry of the three distinct channels at the inlet to Woods Pond.

A description of these activities and the associated results will be included in the PICM Report scheduled to be submitted on May 1, 1996.

Finally, as indicated in Section 6, additional YOY fish samples will be collected in fall 1996 from the Massachusetts portion of the Housatonic River, and additional adult fish will be collected in the same season from the Connecticut portion of the river. These samples will again be analyzed for PCBs and lipid content, and the results will be presented in appropriate reports to the MDEP and/or the CDEP and to the USEPA.

SECTION 11 - SCHEDULE

As indicated previously in this report, several investigations have yet to completed before meaningful conclusions can be drawn regarding various aspects of the project. These activities have been summarized in Section 10 and include several activities proposed in the original Phase II/RFI Proposal, the activities described in the Addendum to that proposal, and certain other investigations described in Section 10. Some, but not all, of these activities should be completed during the first quarter of 1996. Notably, it is anticipated that the additional upstream sediment and floodplain soil sampling and analysis for select Appendix IX+3 constituents, as described in Section 2.2 of the Addendum to the Phase II/RFI Proposal, will be completed during this quarter, subject to weather and access constraints. Following the receipt of those results and a comparison to the existing downstream data, GE will submit an interim report presenting the new upstream data, the results of GE's revised evaluation of the data to identify "target" constituents for further sampling, and, if appropriate, a proposal for further sediment and/or floodplain soil sampling for select constituents. That interim report will also describe any other additional investigations that have been conducted by that time and will present any analytical results that have been received by that time. Further, it will provide an update regarding the anticipated timing of all remaining work efforts.

Subsequently, the results of all remaining investigations outlined in Section 10 (other than those that are a part of the PICM and the additional fish monitoring) will be presented and discussed in an addendum to the present report, together with overall conclusions that are affected by those additional data. It is not possible at this time to determine the schedule for the submission of that addendum, since the completion of the remaining investigations depends on various factors such as the occurrence of suitable flow conditions, the need to perform further downstream sampling and analysis activities for non-PCB constituents, etc. It is anticipated that this addendum will be submitted within 60 days from receipt of all the remaining data collected as part of these investigations. An update on the anticipated schedule will be provided in the interim report mentioned in the preceding paragraph.

References

REFERENCES

Academy of Natural Sciences of Philadelphia (ANSP), PCB Concentrations in Fishes From the Housatonic River, Connecticut, 1984 to 1994 (Philadelphia, PA: May 1995).

Baystate Environmental Consultants, Inc., Final Report for the Assessment/Feasibility Evaluation of Lake Housatonic Derby, Oxford, Seymour, Shelton, CT. (East Longmeadow, MA: July 1991).

Blasland & Bouck Engineers, P.C., Housatonic River MCP Phase II Scope of Work (Syracuse, New York: June 1990a).

Blasland & Bouck Engineers, P.C., Housatonic River MCP Phase II Supplemental Data Summary (Syracuse, New York: June 1990b).

Blasland & Bouck Engineers, P.C., MCP Interim Phase II Report/Current Assessment Summary for Housatonic River (Syracuse, New York: December 1991).

Blasland & Bouck Engineers, P.C., MCP Interim Phase II Report for East Street Area 2 and Current Assessment Summary for USEPA Area 4, (Syracuse, New York: June 1992 - Reissued in August 1994).

Blasland & Bouck Engineers, P.C., Addendum to MCP Interim Phase II Report/ Current Assessment Summary for Housatonic River (Syracuse, New York: August 1992a).

Blasland & Bouck Engineers, P.C., Identification of Extent of, and Land Use and Property Ownership Within, Potentially Affected Area of Housatonic River Floodplain (Syracuse, New York: August 1992b).

Blasland & Bouck Engineers, P.C., Housatonic River MCP Supplemental Phase II Scope of Work (Syracuse, New York: August 1992c).

Blasland & Bouck Engineers, P.C., Summary of Housatonic River Floodplain Property Sampling and Analysis (Syracuse, New York: October 1992).

Blasland & Bouck Engineers, P.C., Evaluation of Need for Short-Term Measures in the Housatonic River Floodplain (Syracuse, New York: November 1992).

Blasland & Bouck Engineers, P.C., Report on January 1993 Housatonic River Floodplain Property Sampling and Analysis (Syracuse, New York: February 1993).

Blasland & Bouck Engineers, P.C., MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake (Syracuse, New York: April 1993).

Blasland & Bouck Engineers, P.C., Short-Term Measure Proposals for the "60-Day" Residential Properties Within the Housatonic River Floodplain (Syracuse, New York: September 1993).

Blasland & Bouck Engineers, P.C., Short-Term Measure Proposals for the "90-Day" and "120-Day" Properties Within the Housatonic River Floodplain (Syracuse, New York: October 1993).

REFERENCES
(Cont'd)

Blasland & Bouck Engineers, P.C., Silver Lake Data Summary (Syracuse, New York: November 1993).

Blasland, Bouck & Lee, Inc., Housatonic River Floodplain Properties Results of Supplemental Site Characterization Sampling (Syracuse, NY: February 1994).

Blasland, Bouck & Lee, Inc., Sampling and Analysis Plan/Data Collection and Analysis Quality Assurance Plan (Syracuse, New York: May 1994a).

Blasland, Bouck & Lee, Inc., MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake (Syracuse, New York: June 1994).

Blasland, Bouck & Lee, Inc., Report on Silver Lake Short-Term Measure Evaluation and Related Activities (Syracuse, New York: July 1994).

Blasland, Bouck & Lee, Inc., MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of East Street Area 2/USEPA Area 4 (Syracuse, New York: July 1994).

Blasland, Bouck & Lee, Inc., Housatonic River/Silver Lake MCP Supplemental Phase II Investigation/RCRA Facility Investigation Quarterly Progress Report, September 12, 1994 - December 15, 1994 (Syracuse, New York: December 1994).

Blasland, Bouck & Lee, Inc., Housatonic River/Silver Lake MCP Supplemental Phase II Investigation/RCRA Facility Investigation Quarterly Progress Report, December 16, 1994 - March 15, 1995 (Syracuse, New York: March 1995).

Blasland, Bouck & Lee, Inc., Housatonic River/Silver Lake MCP Supplemental Phase II Investigation/RCRA Facility Investigation Quarterly Progress Report, March 16, 1995 - June 15, 1995 (Syracuse, New York: June 1995).

Blasland, Bouck & Lee, Inc., MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of East Street Area 2/USEPA Area 4 (Syracuse, NY: July 1995).

Blasland, Bouck & Lee, Inc., Housatonic River/Silver Lake MCP Supplemental Phase II Investigation/RCRA Facility Investigation Quarterly Progress Report, June 16, 1995 - September 15, 1995 (Syracuse, New York: September 1995).

Blasland, Bouck & Lee, Inc., Addendum to MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake (Syracuse, New York: November 1995).

Canonie Environmental, Proposal for the Preliminary Investigation of Corrective Measures for Housatonic River Sediment (Porter, Indiana: March 1995).

REFERENCES
(Cont'd)

Chadwick & Associates, Inc., Fisheries Investigation of the Housatonic River, Massachusetts (Littleton, Colorado: 1993).

Chadwick & Associates, Inc. Aquatic Ecology Assessment of the Housatonic River, Massachusetts (Littleton, Colorado: April 1994).

ChemRisk®, Report on the Silver Observation Study (Portland, ME: December 1993).

ChemRisk® Evaluation of Terrestrial Ecosystem of the Housatonic River Valley (Portland, Maine: July 1994).

ChemRisk® Work Plan for the Ecological Risk Assessment of the Housatonic River Site (Portland, Maine: February 28, 1995).

EHC Corporation, Groundwater Resources Investigations - Altresco Cogeneration, Inc. Volume 1, (Clifton Park, New York: June 10, 1991).

Eisler, R., Polychlorinated biphenyl Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review [U.S. Fish Wildl. Serv. Biol. Rep. 85 (1.7); 1986].

Federal Emergency Management Agency, Flood Insurance Study - City of Pittsfield, Massachusetts (Federal Insurance Administration: Revised February 1982).

Federal Emergency Management Agency, Flood Insurance Study - Town of Great Barrington, Massachusetts (Federal Insurance Administration: January 5, 1982a).

Federal Emergency Management Agency, Flood Insurance Study - Town of Lenox, Massachusetts, (Federal Insurance Administration: January 5, 1982b).

Federal Emergency Management Agency, Flood Insurance Study - Town of Stockbridge, Massachusetts, (Federal Insurance Administration: January 5, 1982c).

Federal Emergency Management Agency, Flood Insurance Study - City of Pittsfield, Massachusetts, (Federal Insurance Administration: Revised February 1982).

Federal Emergency Management Agency, Flood Insurance Study - City of Pittsfield, Massachusetts, (Federal Insurance Administration: January 16, 1987).

Frink, C.R., Sawhney, B.L., Kulp, K.P., and Fredette, C.G., Polychlorinated Biphenyls in Housatonic River Sediments in Massachusetts and Connecticut: Determination, Distribution, and Transport: Bulletin 800 (Connecticut Agricultural Experiment Station: December 1982).

GZA GeoEnvironmental, Inc., Sediment Sampling and Analysis Data Report - Rising Paper Company - Great Barrington, Massachusetts, (Newton Upper Falls, Massachusetts: May 1991).

164

REFERENCES
(Cont'd)

General Electric Company, Plan for Evaluation of Need for Short-Term Measures in Floodplain of Housatonic River (Pittsfield, Massachusetts: April 16, 1992).

General Electric Company, Letter to J. Lyn Cutler, MDEP, dated May 23, 1994 (Pittsfield, MA: May 1994).

Haines, T.A. "Organochlorine Residues in Brook Trout From Remote Lakes in the Northeastern United States," Water, Air, Soil Pollut. 20:47-54, (1983).

Lawler, Matusky & Skelly Engineers, Chapter 6 of Housatonic River PCB Sediment Management Study Program for Monitoring the Natural Recovery of the River (Pearl River, New York: April 1988).

Lawler, Matusky & Skelly Engineers, Ambient Trend Monitoring and PCB Fate and Transport Model (Pearl River, New York: April 1988).

Lawler, Matusky & Skelly Engineers, Housatonic River Connecticut Cooperative Agreement - Task IV.B, Fate and Transport Model: Additional Monitoring and Model Verification (Pearl River, New York: November 1994).

New England River Basin Commission, Housatonic River Basin Overview, (Boston, Massachusetts: September 1980).

Norvitch, R.F., Farrell, D.F., Pauszek, F.H., and Peterson, R.G., Hydrology and Water Resources of the Housatonic River Basin, Massachusetts: Hydrologic Investigations Atlas HA-281,(United States Geological Survey: 1968).

RUST Environmental & Infrastructure, Proposal for the Preliminary Investigation of Corrective Measures for Housatonic River and Silver Lake Sediment (Westchester, Illinois: May 1994).

Wilson, W.E., Burke, E.L., and Thomas, C.E., Water Resources Inventory of Connecticut - Part 5 - Lower Housatonic River Basin: Connecticut Water Resources Bulletin No. 19, (United States Geological Survey: 1974).

Zorex Environmental Engineers, Inc., Ambient Air Monitoring for PCB, August 14, 1992, General Electric Co., Pittsfield, MA (Pittsfield, MA: November 13, 1992).

Zorex Environmental Engineers, Inc. Ambient Air monitoring for PCB, May 4, 1993 to August 17, 1993, General Electric Company, Pittsfield, MA, (Pittsfield, MA: November 8, 1993).

Tables

TABLE 1-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF SILVER LAKE AND HOUSATONIC RIVER STUDIES/INVESTIGATIONS: 1977-1995

Author(s)	Associated Organization	Title and Date of Study/Report	General Overview of Study/Investigation
Kapish, Janet	CDEP and CDHS	Summary of Fish PCB Data for 1977, 1981	Investigation of Housatonic River Fish in Connecticut.
Beck, Gerald	CDHS	PCBs in Housatonic River Fish, 1982	Investigation of Housatonic River Fish in Connecticut.
Frink et al.	CAES, CDEP, and USGS	Polychlorinated Biphenyls in Housatonic River Sediments in Massachusetts and Connecticut; Determination, Distribution, and Transport, December 1982	Investigation of sediment and water column in Massachusetts and Connecticut.
Stewart Laboratories, Inc.	GE, CDEP, and USEPA	Housatonic River Study, 1980 and 1982 Investigations, December 1982	Investigation of sediment, water column, and fish in Massachusetts, in addition to fish and sediment near Cornwall, Connecticut. Silver Lake water column and sediment also investigated.
Stewart Laboratories, Inc.	GE and CDHS	August 1983 Fish Investigation: Bulls Bridge, Lake Lillinonah, and Lake Zoar, Connecticut, November 1983	Investigation included over ten species of fish in Connecticut.
Gay, F.G. and Frimpter, M.H.	USGS	Distribution of Polychlorinated Biphenyls in the Housatonic River and Adjacent Aquifer, Massachusetts, 1984	Assessment of PCB impact to groundwater adjacent to Woods Pond.
Kulp, Kenneth P.	USGS and CDEP	Concentration and Transport of Polychlorinated Biphenyls in the Housatonic River Between Great Barrington, Massachusetts, and Kent, Connecticut, 1984-1988, 1991	Investigation of water column at two locations in Massachusetts and three locations in Connecticut.
ANSP	GE and CDEP	PCB Concentrations in Fishes From the Housatonic River, Connecticut 1984 to 1990, July 1991	Investigation of fish in Connecticut during 1984, 1986, 1988 and 1990.
BBE	GE, MDEP, and USEPA	Housatonic River Study, 45-Day Interim Report, Remedial Alternatives Evaluation, October 1984	Evaluation of four potential disposal sites for PCB-containing sediments between the GE facility and Woods Pond Dam.
BBE	GE, MDEP, and USEPA	Housatonic River Study, 90-Day Interim Report, Remedial Alternatives Evaluation, February 1985	Evaluation of three potential remedial actions for PCB-containing sediments between the GE facility and Woods Pond Dam.
BBE	GE, MDEP, and USEPA	Housatonic River Study, 135-Day Interim Report, Assessment of Remedial Alternatives, May 1985	Evaluation of five potential remedial activities for PCB-containing sediments between the GE facility and Woods Pond (four of which were also included in the 40-Day Interim Report).
LMS	GE and CDEP	Housatonic River PCB Management Study (Chapters 1 through 5), June 1985	Screening of remedial alternatives for Connecticut impoundments.
BBE	GE, MDEP, and USEPA	Housatonic River Study, 135-Day Interim Report, Assessment of Remedial Alternatives (Addendum), September 1986	Presentation of additional information on wet dredging techniques, a five-year plan for biodegradation and a sampling plan to confirm characterization of PCB-containing sediments.
BBE	GE, MDEP, and USEPA	Housatonic River Velocity & Sedimentation Control Pilot Study, 1988 and 1989	Investigation of potential effectiveness of velocity and sedimentation control methods.
LMS	GE and CDEP	Housatonic River PCB Sediment Management Study - Chapter 6 - Program for Monitoring the Natural Recovery of the River, April 1988	Presentation of Scope of Work for monitoring the natural recovery of the Housatonic River in Connecticut.
GZA	Rising Paper Company	Sediment Sampling and Analysis Data Report, Rising Paper Company, Great Barrington, Massachusetts, May 1991	Sediment sampling and analysis conducted as part of the rehabilitation of the Rising Pond Dam.
BBE	GE and MDEP	Housatonic River MCP Phase II Investigations, June 1990 - September 1991, December 1991	Investigation of sediment, water column, floodplain, fish and frogs in Massachusetts, and sediment and water column of Silver Lake.

TABLE 1-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF SILVER LAKE AND HOUSATONIC RIVER STUDIES/INVESTIGATIONS 1977-1995

Author(s)	Associated Organization	Title and Date of Study/Report	General Overview of Study/Investigation
LMS	GE and CDEP	Ambient Trend Monitoring and PCB Fate and Transport Model, September 1991	PCB transport modeling at Great Barrington, MA and Falls Village, CT.
BBE	GE, MDEP, and USEPA	MCP Interim Phase II Report/Current Assessment Summary for Housatonic River, December 1991	Compilation of sediment, water column, floodplain, and biota data collected in Massachusetts and Connecticut, and water column and sediment data collected for Silver Lake.
BBE	GE, MDEP, and USEPA	Addendum to MCP Interim Phase II Report/Current Assessment Summary for Housatonic River, August 1992	Sediment, water column, floodplain soils and biota in Massachusetts further evaluated, along with the water column and sediment of Silver Lake.
BBE	GE and MDEP	Plan for Evaluation of Need for Short-Term Measures in Floodplain of Housatonic River, April 1992	Presentation of various tasks associated with the assessment of STMs in floodplain of the Housatonic River.
BBE	GE and MDEP	Identification of Extent of, and Land Use and Property Ownership within, Potentially Affected Area of Housatonic River Floodplain, August 1992	Presentation of additional floodplain topographic information, revised HEC-2 modeling results, results of a land use survey, property ownership information, and an evaluation of non-PCB hazardous "target" constituents in floodplain soils.
BBE	GE and MDEP	Summary of Housatonic River Floodplain Property Sampling and Analysis, October 1992	Thirty-two properties between GE and Woods Pond Dam sampled for PCBs as part of "use area" assessment.
BBE	GE and MDEP	Evaluation of Need for Short-Term Measures in the Housatonic River Floodplain, November 1992	Evaluation of 23 "use areas" between GE and Woods Pond Dam.
Zorex	GE, MDEP, and USEPA	Ambient Air Monitoring for PCBs, August 20, 1991 - August 14, 1992, General Electric Co., Pittsfield, MA, November 1992.	Describes activities and results of year-long air monitoring program conducted at the GE facility.
ANSP	GE and CDEP	PCB Concentrations in Fishes from the Housatonic River, Connecticut, in 1984 to 1992, 1993	Results of 1992 fish sampling are presented with reference to previous work.
BBE	GE and MDEP	Report on January 1993 Housatonic River Floodplain Property Sampling and Analysis, February 1993	Further sampling of 12 "use area" between GE and Woods Pond Dam for PCBs.
BBE	GE and MDEP	Evaluation of Potential Short-Term Measures for Properties within the Housatonic River Floodplain, April 1993	Evaluation of five potential STM alternatives.
ChemRisk	GE and MDEP	Risk Assessment to Evaluate the Need for Short-Term Measures in the Floodplain of the Housatonic River, April 1993	Evaluates those exposure pathways relevant to determining whether an imminent hazard to human health exists due to PCBs in floodplain soils.
ChemRisk	GE, MDEP and USEPA	Preliminary Health and Environmental Assessment Proposal for the Housatonic River, Silver Lake, and their Floodplains, April 1993	Provides proposal to assess potential risks to human health and the environment due to releases of hazardous materials from the GE facility.
BBE	GE and MDEP	Short-Term Measure Proposals for the "60-day" Residential Properties within the Housatonic River Floodplain, September 1993	Proposals provided for four properties in Pittsfield.
BBE	GE and MDEP	Short-Term Measure Proposals for the "90-Day" and "120-Day" Properties within the Housatonic River Floodplain, October 1993.	Proposals provided for seven properties in Pittsfield and Lenox.

TABLE 1-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF SILVER LAKE AND HOUSATONIC RIVER STUDIES/INVESTIGATIONS 1977-1995

Author(s)	Associated Organization	Title and Date of Study/Report	General Overview of Study/Investigation
BBE	GE and MDEP	Silver Lake Data Summary, November 1993	Provides various information related to the lake which was specifically requested by MDEP related to their review of air monitoring data.
Zorex	GE and MDEP	Ambient Air Monitoring for PCBs, May 4, 1993 to August 17, 1993, General Electric Co., Pittsfield, MA, November 8, 1993.	Describes activities and results of supplemental air monitoring performed at the GE facility.
BBL	GE and MDEP	Housatonic River Floodplain Properties - Results of Supplemental Site Characterization Sampling, February 1994	Summary includes sampling conducted between October 1993 and December 1993 for PCBs on eight properties in Pittsfield.
BBL	GE and USEPA	Interim Measure Proposal - Inventory of Stability and Safety of Dams along the Housatonic River, February 1994	Proposal includes four dams in Massachusetts.
BBL	GE and USEPA	Interim Measure Proposal - Control of Oil Seepage into the Housatonic River, February 1994	Proposal includes measures to control releases of oil along the riverbank near Lyman Street Parking Lot and East Street Area 2 in Pittsfield.
C&A	GE, MDEP, and USEPA	Aquatic Ecology Assessment of the Housatonic River, Massachusetts, May 1994	Assessment included description of habitat, and study of water quality, fish populations, and benthic invertebrate populations.
BBL	GE, MDEP, and USEPA	Scope of Work for Evaluation of the Need for a Short-Term Measure at Silver Lake, May 1994	Provided a plan for evaluating the need for STM activities at Silver Lake.
BBL	GE, MDEP, CDEP, and USEPA	MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake, June 1994	Presents overview of available sediment, water column, floodplain soil, biota, groundwater, and air data, in addition to providing proposals to fill the various data gaps associated with each media.
ChemRisk and SGMA	GE, MDEP and USEPA	Evaluation of the Terrestrial Ecosystem of the Housatonic River Valley, July 1994	Evaluation includes Avian population structure and reproductive success as well as small mammal population and age structure and reproductive success.
BBL	GE, MDEP and USEPA	Report on Silver Lake Short-Term Measure Evaluation and Related Activities, July 1994	Provided the results of bank soil samples and an evaluation of these data with respect to the need for a STM.
LMS	GE and CDEP	Housatonic River Connecticut Cooperative Agreement - Task IV.B PCB Fate and Transport Model: Additional Monitoring and Model Verification, November 1994	Presents additional water column and sediment PCB data for Housatonic River below Great Barrington and into Connecticut in addition to fate and transport assessments.
CE, BBL, RUST, ENVIRON, and Duke	GE, MDEP, and USEPA	Proposal for the Preliminary Investigation of Corrective Measures for Housatonic River and Silver Lake Sediment, March 1995.	Proposal provided for evaluating several in-situ and ex-situ technologies for remediating PCB-containing sediments in Silver Lake and the Housatonic River between GE and Woods Pond Dam.
BBL	GE, MDEP and USEPA	Housatonic River/Silver Lake MCP Supplemental Phase II Investigation/RCRA Facility Investigation - Quarterly Progress Reports, December 1994; March 1995; June 1995 and September 1995.	Reports describe status of on-going investigations and present any results received during each quarter of activities.
ANSP	GE, CDEP, and MDEP	PCB Concentrations in Fishes and Benthic Insects from the Housatonic River, Connecticut, in 1984 to 1994, May 1995	Results of 1994 fish and benthic invertebrate sampling are presented with reference to previous work.

TABLE 1-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF SILVER LAKE AND HOUSATONIC RIVER STUDIES/INVESTIGATIONS 1977-1995

Author(s)	Associated Organization	Title and Date of Study/Report	General Overview of Study/Investigation
BBL	GE, MDEP, and USEPA	Addendum to MCP Supplemental Phase II Scope of Work and Proposal for RCRA Facility Investigation of Housatonic River and Silver Lake, November 1995	Proposal provided for additional water column, sediment and floodplain soil sampling.

Note:

1. Abbreviations used:
   - CDHS - Connecticut Department of Health Services
   - CAES - *Connecticut Agricultural Experiment Station*
   - CDEP - Connecticut Department of Environmental Protection
   - USGS - United States Geological Survey
   - ANSP - Academy of Natural Sciences of Philadelphia
   - BBE - Blasland & Bouck Engineers, P.C.
   - GZA - GZA GeoEnvironmental, Inc.
   - LMS - Lawler, Matusky & Skelly Engineers
   - USEPA - United States Environmental Protection Agency
   - MDEP - Massachusetts Department of Environmental Protection
   - STM - Short-Term Measures
   - BBL - Blasland, Bouck & Lee, Inc.
   - CE - Canonie Environmental
   - RUST - Rust Environmental & Infrastructure
   - ENVIRON - ENVIRON Corporation
   - Duke - Duke University Wetland Center
   - C&A - Chadwick & Associates, Inc.
   - SGMA - S.G. Martin & Associates, Inc.
   - Zorex - Zorex Environmental Engineers, Inc.
   - GE - General Electric Company

TABLE 2-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/ RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

RANGES OF WATER CHEMISTRY PARAMETERS MEASURED BY BLASLAND & BOUCK ENGINEERS AT STUDY SITES ON THE HOUSATONIC RIVER - 1993

Site	Water Temp. (°C)	D.O. (mg/L)	pH	Total Ammonia (mg/L)	Unionized Ammonia (mg/L)	Nitrate (mg/L)
Shallow Sites Upstream of GE Facility						
EB1	9-28	7.8 - 10.2	NM	NM	NM	NM
WB1	12-30	6.9 - 9.1	NM	NM	NM	NM
Shallow Sites Downstream of GE Facility						
EB2	11-27	6.6 - 9.4	NM	NM	NM	NM
HR1	11-32	6.7 - 8.8	7.9-8.3	ND - 0.23	0 - 0.02	0.33 - 0.81
HR3	12-30	7.9 - 12.6	8.0 - 9.0	ND - 0.08	0	0.92 - 2.40
HR4	13-29	6.6 - 19.2	7.9 - 8.5	ND - 0.21	0	0.71 - 1.70
Deep Sites Downstream of GE Facility						
HR2	12-26	6.2 - 8.4	NM	NM	NM	NM
HR5	12-29	7.1 - 11.0	8.1 8.8	ND - 0.14	0 - 0.01	0.68 - 1.40
HR6	14-29	6.0 - 15.2	8.0 - 8.6	ND - 0.14	0	0.44 - 0.84
Woods Pond						
WP1	12-33	3.2 - 11.2	NM	NM	NM	NM

Notes:

1. Water temperature and dissolved oxygen (D.O.) measured weekly from 5/25/93 to 9/22/93. Other parameters measured monthly from 5/25/93 to 9/22/93.
2. NM = Not measured.
3. ND = Not detected.

Reference:

Chadwick & Associates, May 1994 - Table 4.

TABLE 3-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
2	Just Upstream of Unkamet Brook to Newell St. Bridge	2-1	- East bank steep. - West bank mostly steep with low bank near low-lying area at railroad tracks. - Slow to moderate flow. - Avg. water depth 2 to 5'.	2-1A	Terrace deposit (approx. 175 ft²)	--	6.0	Dk Br Si overlying FSa.
				2-1B	Aggrading bar (approx. 1200 ft²)	--	6.5	CSa & G overlying Sa & Si.
				2-1C	Channel deposit	1.5	5.0	0-0.6' - Br FSa to Csa. 0.6'-5.0' - Dk Br Si & VFSa w/ traces of CSa & G.
				2-1D	Terrace deposit (approx. 3000 ft²)	--	5.0	FSa & Si overlying CSa & G.
				2-1E	Channel deposit	1.3	4.3	FSa to MSa w/ traces of CSa.
				2-1F	Terrace deposit (approx. 1100 ft²) under railroad bridge	--	4.0	FSa w/ Si.
				2-1G	Channel deposit in backwater area	2.4	5.0-5.5	0-2.3' - Bk LSi w/ traces of VFSa. 2.3'-5.0' - Br FSa.
				2-1H	Channel deposit	0.3	8.0	0-2.0' - Br FSa to CSa. 2.0'-3.5' - Bk Si w/ traces of FSa, Oo/Os noted.
		2-2	- West bank steep. - East bank steep except for low-lying area associated with an oxbow. - Slow to moderate flow. - Avg. water depth 2 to 5 feet. - Avg. sediment depth 3 to 5'.	2-2A	Terrace deposit (approx. 450 ft²)	--	5.0	FSa overlying CSa.
				2-2B	Terrace deposit (approx. 400 ft²)	--	5.0	Br FSa & Si overlying CSa.
				2-2C	Channel deposit/aggrading bar (approx. 240 ft²)	--	5.0 (avg.)	CSa and G.
				2-2D	Terrace deposit (approx. 3600 ft²)	--	5.0	Si & FSa overlying CSa.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
2 (cont'd)	Just upstream of Unkamet Brook to Newell St. Bridge	2-2 (cont'd)	- West bank steep. - East bank steep except for low-lying area associated with an oxbow. - Slow to moderate flow. - Avg. water depth 2 to 5 feet. - Avg. sediment depth 3 to 5'.	2-2E	Terrace deposit (approx. 250 ft²)	--	5.0	Si & FSa overlying CSa & G.
				2-2F	Channel deposit	1.0	5.0	0-1.0' - FSa to MSa. 1.0'-2.3' - Dk Gy Si. 2.3'-2.7' - Lt Gy Si w/ traces of FSa.
				2-2G	Channel deposit	0.5-1.0	4.0+	Tt Br Si.
				2-2H	Low lying oxbow area.	--	4.0 - 6.0 (avg.)	FSa.
		2-3	- Both banks steep. - Slow to moderate flow. - Avg. water depth 4.0'. - Avg. sediment depth 6.0'.	2-3A	Island in middle river channel (approx. 200 ft²)	--	6.0	FSa & Si overlying CSa & G.
				2-3B	Channel deposit near island	0.2	5.0	0-1.0' - Br FSa to CSa. 1.0'-3.0' - Br Si & Pt.
				2-3C	Terrace deposit (approx. 1200 ft²)	--	6.0	Br Si & FSa overlying CSa & G.
				2-3D	Secondary channel	0-1.0	0.4	Si overlying CSa & G.
				2-3E	Terrace deposit (approx. 2000 ft²)	--	5.0	0-4.0' - Si & FSa. 4.0'-5.0' - CSa & G.
				2-3F	Terrace deposit (approx. 200 ft²)	--	2.0	FSa overlying CSa & G.
				2-3G	Channel deposit	2.0	6.0	MSa to CSa & G.
				2-3H	Terrace deposit (approx. 350 ft²)	--	6.0	CSa & G w/ FSa.
				2-3I	Terrace deposit (approx. 1200²)	--	5.0	0-0.5' - FSa & Si. 0.5'-5.0' - FSa to CSa w/ G.
				2-3J	Terrace deposit (approx. 1200 ft²)	--	6.0	FSa to CSa w/ G.
				2-3K	Channel deposit	0.1	7.0	FSa with rocks & boulders.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
2 (cont'd)	Just Upstream of Unkamet Brook to Newell St. Bridge	2-4	- Both banks mostly steep with some minor exceptions. - Avg. water depth 3 to 4'. - Avg. sediment depth 3 to 4'.	2-4A	Terrace deposit (approx. 500 ft²) under East St. Bridge	--	3.0	FSa w/ CSa & G.
				2-4B	Terrace deposit (approx. 2300 ft²) at mouth of former oxbow.	--	4.5	0-0.3' - FSa. >0.3' - MSa to CSa & G.
				2-4C	Channel deposit	1.5	3.0	0-0.3' - Br FSa. 0-0.3'-0.5' - Dk Gry FSa & Si. 0.5'-2.5' - Br Pt w/Si.
				2-4D	Terrace deposit (approx. 500 ft²)	--	4.0	0-0.5' - FSa. 0.5'-4.0' - CSa & G.
				2-4E	Terrace deposit (approx. 8000 ft²)	--	4.0	MSa to CSa & G.
				2-4F-1	Terrace deposit/backwater/ low lying area (approx. 1200 ft²)	--	8.0	Br FSa overlying CSa & G.
				2-4F-2	Terrace deposit/backwater/ low lying area (approx. 2400 ft²)	--	6.0	Br FSa overlying CSa & G.
				2-4G	Aggrading bar (approx. 2500 ft²)	--	6.0	FSa overlying CSa & G.
				2-4H	Aggrading bar (approx. 900 ft²)	--	6.0	FSa to CSa overlying CSa & G.
				2-4I	Terrace deposit (approx. 100 ft²)	--	4.0	FSa to CSa.
				2-4J	Terrace deposit (approx. 3700 ft²)	--	4.5	FSa & Si overlying FSa to Csa.
				2-4K	Terrace deposit (approx. 4400 ft²)	--	6.0	FSa overlying CSa & G.
		2-5	- East bank mostly steep. - West bank moderately steep. - Slow to moderate flow. - Avg. water depth 3 to 4'. - Channel deposits throughout reach (avg. depth 7').	2-5A	Terrace deposit (approx. 1500 ft²)	--	7.0	FSa & Si overlying CSa.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
2 (cont'd)	Just Upstream of Unkamet Brook to Newell St. Bridge	2-5 (cont'd)	- East bank mostly steep. - West bank moderately steep. - Slow to moderate flow. - Avg. water depth 3 to 4'. - Channel deposits throughout reach (avg. depth 7').	2-5B	Channel deposit	1.2	7.0	0-2.3' - Br FSa to MSa w/ traces of CSa. 2.3'-3.0' - Br FSa w/ Si. 3.0'-4.6' - Gy FSa to MSa.
				2-5C	Aggrading bar (approx. 5000 ft^2)	--	10.0	FSa to CSa.
				2-5D	Terrace deposit (approx. 1000 ft^2)	--	10.0	FSa & MSa overlying FSa & CSa.
				2-5E	Terrace deposit (900 ft^2)	--	9.0	FSa.
				2-5F	Channel deposit	5.0	2.4	0-1.3' - Br FSa. 1.3'-2.4' - Gy VFSa.
		2-6	- Mostly rocks and cobblestones. - Some isolated pockets of sand. - Banks steep.	--	Not probed.	--	--	--
3	Newell St. Bridge to Lyman St. Bridge	3-1	- Both banks steep. - Channel deposits throughout reach. - Slow to moderate flow. - Water depth 3 to 5'.	3-1A-1	Channel deposit - three cores along transect	1.6	5.5+	0-0.3' - FSa w/ Dk Br Si. 0.3'-1.2' - Br MSa to CSa w/ G. 1.2'-2.5' - Dk Br to Bk MSa to CSa w/ traces of G. 2.5'-5.5'+ - Lt Br Tt Sa.
				3-1A-2	Channel deposit - three cores along transect	2.8	5.5+	0-1.0' - Br MSa to CSa w/ traces of G. 1.0'-4.5' - Dk Br to Bk MSa to CSa w/ traces of G. 4.5'-5.5'+ - Lt Br Tt Sa.
				3-1A-3	Channel deposit - three cores along transect	3.3	4.5+	0-0.7' - Br FSa & Si. 0.7'-1.7' - Dk Br MSa to CSa. 1.7'-3.5' - Br FSa. 3.5'-4.5'+ - Lt Br Tt Sa.
		3-2	- Both banks steep. - Slow to moderate flow. - Water depth 0 to 2'.	3-2A	Aggrading bar (approx. 6400 ft^2)	--	5.0-5.5 (avg.)	CSa, G & rocks overlying MSa to CSa.
		3-3	- North bank steep to moderately steep. - South bank steep.	-	Channel deposits throughout reach with slow to moderate flow.	2.0-3.0	2.0 (avg.)	MSa to Csa.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
3 (cont'd)	Newell St. Bridge to Lyman St. Bridge	3-4	- North bank steep to moderately steep. - South bank steep.	-	Minimal channel deposits with moderate to fast flow.	1.0-1.5	minimal	CSa, G & rocks.
		3-5	- North bank steep to moderately steep. - Water depth 1 to 3'. - Slow to moderate flow. - Channel deposits throughout reach (avg. depth 3'). - Avg. sediment depth 3'.	3-5A-1	Channel deposit - three cores along transect	2.0	5.5	0-1.2' - Br MSa. 1.2'-5.0' - VTt Lt Br FSa.
				3-5A-2	Channel deposit - three cores along transect	1.0	3.0	0-1.5' - Br to Bk MSa. 1.5'-3.0' - Lt Br Tt FSa.
				3-5A-3	Channel deposit - three cores along transect	1.1	2.5	0-1.5' - MSa to CSa & G. 1.5'-2.5' - Lt Br FSa.
			- North bank steep to moderately steep. - Water depth 1 to 3'. - Slow to moderate flow. - Channel deposits throughout reach (avg. depth 3'). - Avg. sediment depth 3'.	3-5B	Terrace deposit (approx. 1800 ft^2)	--	3.5+	0-1.0' - Br MSa to CSa & G. 1.0'-1.8' - Dk Br to Bk MSa & G. 1.8'-3.5' - Gy FSa & Si. >3.5'- Lt Br Tt FSa.
		3-6	- Both banks steep. - Slow to moderate flow - Water depth 2 to 3'. - Channel deposits throughout reach (depth 1 to 2').	3-6A	Channel deposit	1.8	2.4+	0-1.0' - MSa to CSa & G. 1.0'-1.9' - FSa & Si w/ Os. 1.9'-2.4' - Dk Br to Bk FSa & G w/ Os noted. >2.4' - Pt.
				3-6B	Channel deposit	2.3	1.9	0-1.6' - Br CSa & G. 1.6'-3.2' - Br FSa.
		3-7	- Both banks steep. - Slow to moderate flow. - Water depth 2 to 3'. - Little aquatic vegetation. - Channel deposits throughout reach (depth 1 to 2').	3-7A	Channel deposit	1.7	3.8	0-1.0'- Dk Br CSa & G. 1.0'-1.9'- Lt Br MSa to CSa & G, Os noted.
				3-7B	Backwater area	0.2	4.8	0-1.0' - Dk Br FSa & Si. 1.0'-2.0' - Br MSa & G. >4.8'- Sa & G.
				3-7C	Channel deposit	1.4	1.6	CSa & G.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
3 (cont'd)	Newell St. Bridge to Lyman St. Bridge	3-8	- Both banks steep. - Moderate flow. - Water depth 1 to 2'. - Channel deposits throughout reach (avg. depth 3.0').	3-8A	Backwater area downstream of Lyman St. Bridge.	1.7	3.0	0-0.4' - FSa & Si. 0.4'-3.0' - CSa & G.
				3-8B	Channel deposit	1.2	4.0	0-1.3' - Br CSa & G. 1.3'-2.5' - Dk Br FSa w/ Os noted.
		3-9	- Both banks steep. - Slow to moderate flow. - Water depth 2 to 3'. - Channel deposits throughout reach (avg. depth 2 to 3').	3-9A	Terrace deposit	--	4.0-7.5	0-1.5' - Br MSa w/ some FSa. 1.5'-2.0' - Dk Br FSa w/ OM.
				3-9B	Channel deposit	2.3	2.7	MSa to CSa w/ some G.
				3-9C	Terrace deposit	--	5.0-7.0	FSa w/ some Si.
				3-9D	Channel deposit	0.7	5.8	0-2.0' - Br FSa w/ traces of Si & OM. 2.0'-2.9' - Dk Br FSa & Si.
		3-10	- Both banks steep - Slow flow. - Water depth 3 to 4'. - Channel deposits throughout reach (avg. depth 3 to 4').	3-10A	Channel deposit	3.5	3.5	0-2.0' - Br MSa to CSa. 2.0'-3.5' - Br FSa & Si
				3-10B	Terrace deposit	--	7.0 (5.0-6.0 avg.)	FSa & Si.
				3-10C	Channel deposit	2.5	3.5	FSa & Si.
4	Elm St. Bridge to Holmes Rd. Bridge	4-1	- Both banks steep. - Fast flow. - Water depth 1 to 3'. - Minimal sediment deposition.	4-1A	Channel deposit	2.7	2.3	0-0.6' - Br FSa. 0.6'-1.1' - Gy FSa & Si. 1.1'-1.8' - Dk Gy to Br FSa.
		4-2	- Both banks steep. - Fast flow. - Water depth 1 to 2'. - Minimal sediment deposition.	4-2A	Terrace deposit/sand bar (approx. 350 ft^2)	--	2.0	Br FSa.
				4-2B	Terrace deposit/sand bar (approx. 800 ft^2)	--	7.0-8.0	Br FSa w/ traces of Si.

176

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
4 (cont'd)	Elm St. Bridge to Holmes Rd. Bridge	4-3	- Both banks steep. - Fast flow. - Water depth 1 to 2'. - Minimal sediment deposition.	4-3A	Terrace deposit (approx. 1000 ft²)	--	0.5	Rocks and boulders.
		4-4	- Banks mostly steep except for portions of east bank. - Slow to moderate flow. - Water depth 1.5 to 2'. - Channel deposits throughout reach (avg. depth 1.5 to 2').	4-4A	Channel deposit	0.2	2.0	0-0.5' - Br FSa & Si. 0.5'-1.0' - Dk Br to Bk FSa, Oo noted. 1.0'-2.0' - Br FSa overlying CSa & G.
				4-4B	Terrace deposit (approx. 700 ft²)	--	5.0 (avg.)	FSa to CSa w/ traces of G.
				4-4C	Terrace deposit (approx. 400 ft²)	0.3	6.0 (avg. 4.0')	Br to Dk Br FSa to MSa w/ traces of CSa, Os noted.
				4-4D	Terrace deposit (approx. 300 ft²)	--	1.5 (avg.)	FSa.
				4-4E	Aggrading bar (approx. 3100 ft²)	--	3.0 (avg.)	MSa to CSa & G.
		4-5	- Banks vary from steep to low. - Slow to moderate flow. - Water depth 1.5 to 2'. - Channel deposits throughout reach (depth 2 to 2.5').	4-5A	Channel deposit	0.5	5.5	0-2.0' - Dk Gy to Bk FSa to MSa. 2.0'-3.0' - Dk Gy to Bk FSa to MSa, Oo noted
				4-5B	Terrace deposit (approx. 5600 ft²)	--	3.0 (4.0 avg.)	0-0.3' - Br FSa w/ Si. 0.3'-3.0' - Br FSa.
				4-5C	2 aggrading bars (approx. 900 and 1050 ft², respectively)	--	3.0 (avg.)	FSa to CSa w/ G.
				4-5D	Terrace deposit (approx. 1600 ft²)	--	3.5 (avg.)	Portions contain Si & FSa while others contain FSa to CSa.
				4-5E	Channel deposit	1.3	2.0	MSa to CSa & G.
		4-6	- West bank steep. - East bank low. - Moderate flow. - Water depth 1.5 to 2.0'.	4-6A	Terrace deposit (approx. 1500 ft²)	--	3.0 (avg.)	FSa to CSa w/ G.
				4-6B	Channel deposit	2.0	6.0	Br FSa to CSa.
				4-6C	Terrace deposit (approx. 800 ft²)	--	4.0 (avg.)	Si & FSa overlying FSa.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
4 (cont'd)	Elm St. Bridge to Holmes Rd. Bridge	4-6 (cont'd)	- West bank steep. - East bank low. - Moderate flow. - Water depth 1.5 to 2.0'.	4-6D	Terrace deposit (approx. 400 ft^2)	--	3.5 (avg.)	Si & FSa.
				4-6E	Aggrading bar (approx. 200 ft^2)	--	3.5 (avg.)	FSa to CSa w/ G.
				4-6F	Terrace deposit (approx. 400 ft^2)	--	4.5 (avg.)	FSa to CSa.
				4-6G	Channel deposit	0.5	9.0+ (4.5 avg.)	0-3.0' - Br FSa. 3.0'-4.5' - Dk Gy to Bk FSa to MSa, Os/Oo noted.
		4-7	- West bank low to moderately steep. - East bank low. - Moderate flow. - Avg. water depth 2 to 7'. - Channel deposits throughout reach (avg. depth 3 to 6').	4-7A	Terrace deposit (approx. 2800 ft^2) at former oxbow	--	2.0 (avg.)	Br FSa & Si overlying CSa & G.
				4-7B	Terrace deposit (approx. 1200 ft^2)	--	3.0 (avg.)	FSa & Si.
				4-7C	Channel deposit	2.2	6.3	0-4.0' - Br FSa to MSa w/ traces of CSa.
				4-7D	Channel deposit	3.2	4.0	0-1.4' - Br FSa w/ traces of MSa. 1.4'-1.8' - Br to Bk FSa, Oo noted. 1.8'-2.5' - Gy/Br VFSa & Si.
				4-7E	Terrace deposit (approx. 300 ft^2)	--	4.0 (avg.)	Br FSa overlying CSa.
				4-7F	Terrace deposit (approx. 1800 ft^2)	--	4.0 (avg.)	Si & FSa overlying FSa.
				4-7G	Aggading bar (approx. 240 ft^2)	--	6.0 (avg.)	Br FSa.
		4-8	- West bank steep except for low lying area near pond outlet. - East bank steep to moderately steep. - Moderate flow. - Avg. water depth 2.5 to 3.0'. - Channel deposits throughout reach (avg. depth 3').	4-8A	Terrace deposit (approx. 750 ft^2)	--	4.0	Br Si & FSa overlying CSa.

178

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
4 (cont'd)	Elm St. Bridge to Holmes Rd. Bridge	4-8 (cont'd)	- West bank steep except for low lying area near pond outlet. - East bank steep to moderately steep. - Moderate flow. - Avg. water depth 2.5 to 3.0'. - Channel deposits throughout reach (avg. depth 3').	4-8B	Channel deposit in backwater area.	1.5	4.0	Br FSa.
				4-8C	Terrace deposit (approx. 200 ft^2)	--	6.0 (avg.)	Br Si & FSa.
				4-8D	Terrace deposit (approx. 800 ft^2)	--	3.0 (avg.)	Br Si & FSa overlying CSa.
				4-8E	Channel deposit	3.0	4.0	FSa w/ OM.
				4-8F	Terrace deposit (approx. 700 ft^2)	--	3.0 - 3.5	Br Si & FSa.
		4-9	- North bank low to moderately steep. - South bank steep. - Moderate flow. - Water depth 1 to 5'. - Channel deposits throughout reach (depth 1 to 4').	4-9A	Terrace deposit (approx. 2300 ft^2)	--	4.0	Br Si & FSa.
				4-9B	Terrace deposit (approx. 450 ft^2)	--	3.0	Br Si overlying FSa.
				4-9C	Terrace deposit (approx. 1500 ft^2)	--	7.0	Si & FSa overlying CSa & G.
				4-9D	Channel deposit	4.0	3.0	Br FSa.
				4-9E	Aggrading bar (approx. 250 ft^2)	--	1.5	CSa & G.
				4-9F	Terrace deposit (approx. 2800 ft^2)	--	4.0 - 4.5	Br FSa & Si.
				4-9G	Terrace deposit (approx. 1000 ft^2)	--	5.0	Br FSa & Si overlying FSa.
				4-9H	Channel deposit	2.0	4.0	Br FSa w/ traces of MSa.
				4-9I	Terrace deposit (approx. 600 ft^2)	--	4.0 - 4.5	Br FSa & Si.
				4-9J	Terrace deposit (approx. 1200 ft^2)	--	5.0	Br FSa & Si.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
4 (cont'd)	Elm St. to Holmes Rd. Bridge	4-9 (cont'd)	- North bank low to moderately steep. - South bank steep. - Moderate flow. - Water depth 1 to 5'. - Channel deposits throughout reach (depth 1 to 4').	4-9K	Terrace deposit (approx. 2500 ft²)	--	4.5	0-1.0' - Br FSa & Si. 1.0'-4.5' - FSa to CSa & G.
				4-9L	Terrace deposit (approx. 250 ft²)	--	4.0	Br Si & FSa.
		4-10	- North bank mostly low. - South bank steep. - Avg. water depth 3'. - Avg. sediment depth 3'.	4-10A	Channel deposit	1.0	6.0	0-2.5' - FSa to CSa 2.5'-5.0' - FSa w/ traces of MSa.
				4-10B	Terrace deposit (approx. 1900 ft²)	--	8.0	Br FSa to CSa.
				4-10C	Channel deposit	2.0	6.0	0-1.0' - Dr Br Si w/ FSa. 1.0'-3.2' - FSa. 3.2'-3.5' - Bk Si w/ some FSa, Os/Oo noted. >3.5' - CSa & G.
5	Holmes Rd. Bridge to New Lenox Rd. Bridge	5-1	- Both banks low to moderately steep. - Avg. water depth 3 to 4'. - Channel deposits throughout reach (avg. 5 to 6').	5-1A	Channel deposit	0.2	4.0	0-1.5' - Br FSa to MSa w/ traces of CSa. 1.5'-2.8' - Gy FSa to MSa. 2.8'-3.1' - Dk Gy FSa & Si, Os/Oo noted.
				5-1B	Terrace deposit (approx. 1100 ft²)	--	6.5 (avg.)	0-1.5' Dk Br FSa & Si. 1.5'-4.5' FSa to CSa. 4.5'-6.5 - Dk Gy FSa & Si, Os/Oo noted.
				5-1C	Terrace deposit (approx. 1200 ft²)	--	5.0 (avg.)	FSa & Si to CSa.
				5-1D	Terrace deposit (approx. 1900 ft²)	--	2.5 (avg.)	FSa & Si overlying CSa.
				5-1E	Channel deposit	1.5	9.0	0-4.5'- FSa to MSa.
				5-1F	Aggrading bar (approx. 2800 ft²)	--	6.0	FSa to Csa.
				5-1G	Terrace deposit (approx. 1900 ft²)	--	6.0 (avg.)	FSa to MSa w/ traces of CSa.

(See Notes on Page 20)

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
5 (cont'd)	Holmes Rd. Bridge to New Lenox Rd. Bridge	5-1 (cont'd)	- Both banks low to moderately steep. - Avg. water depth 3 to 4'. - Channel deposits throughout reach (avg. 5 to 6').	5-1H	Terrace deposit (approx. 240 ft²)	--	7.0 (avg.)	FSa to MSa w/ traces of CSa.
				5-1I	Channel deposit	1.0	6.0	0-1.5' - Si w/ traces of FSa. 1.5'-2.5' - Br FSa & Si. 2.5'-3.5' - Bk Si & FSa, Os/Oo noted.
				5-1J	Terrace deposit (approx. 600 ft²)	--	5.0 (avg.)	FSa & Si overlying CSa.
		5-2	- Banks moderately steep to low. - Moderate flow. - Avg. water depth 4 to 5'. - Channel deposits throughout reach (avg. depth 6 to 7').	5-2A	Terrace deposit (approx. 2900 ft²)	--	7.0 (avg.)	Si & FSa.
				5-2B	Channel deposit	2.5	7.5+	FSa & Si overlying FSa, Os noted.
				5-2C	Terrace deposit (approx. 1200 ft²)	--	6.0 (avg.)	FSa to CSa & G.
				5-2D	Terrace deposit (approx. 2250 ft²)	--	6.5	FSa overlying CSa.
				5-2E	Terrace deposit (approx. 2500 ft²)	--	9.0 (avg.)	FSa overlying CSa.
				5-2F	Channel deposit	0.5	7.5	FSa & Si overlying CSa.
				5-2G	Terrace deposit (approx. 1250 ft²)	--	8.0 (avg.)	FSa & Si overlying CSa.
				5-2H	Low-lying area at oxbow	--	7.0	FSa overlying CSa.
				5-2I	Channel deposit	0.5	9.0+	0-1.3' - FSa & Si. 1.3'-3.8' - FSa. 3.8'-5.0' - FSa to MSa.
				5-2J	Terrace deposit (approx. 1900 ft²)	--	7.0	FSa & Si overlying FSa.
				5-2K	Terrace deposit (approx. 1000 ft²)	--	5.5	FSa overlying FSa to MSa.

181

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
5 (cont'd)	Holmes Rd. Bridge to New Lenox Rd. Bridge	5-2 (cont'd)	- Banks moderately steep to low. - Moderate flow. - Avg. water depth 4 to 5'. - Channel deposits throughout reach (avg. depth 6 to 7').	5-2L	Channel deposit	0.5	7.0	0-1.5' - Dk Br Si w/ traces of FSa. 0.5'-1.5' - Dk Br Si & FSa. 1.5'-2.5' - Br FSa to MSa. 2.5'-4.5' - Br FSa.
		5-3	- Banks moderately steep. - Moderate flow. - Avg. water depth 4'. - Channel deposits throughout reach (avg. 7'.)	5-3A	Terrace deposit (approx. 2300 ft²)	--	4.5 (avg.)	FSa & Si overlying FSa, Os noted.
				5-3B	Channel deposit	1.5	3.5	0-0.6' - Dk Gy to Bk FSa & Si, Os noted. 0.6'-1.1' - Dk Gy FSa, Os/Oo noted. 1.1'-2.1' - Br FSa to MSa, w/ traces of CSa & G.
				5-3C	Terrace deposit (approx. 1200 ft²)	--	9.0	FSa & Si overlying FSa.
				5-3D	Terrace deposit (approx. 1500 ft²)	--	7.0	FSa.
				5-3E	Terrace deposit (approx. 500 ft²)	--	7.0	FSa overlying CSa to G.
				5-3F	Terrace deposit (approx. 1000 ft²)	--	7.5	MSa to CSa & G.
				5-3G	Channel deposit	2.5	5.0	FSa overlying G.
				5-3H	Terrace deposit (approx. 1100 ft²)	--	8.0	FSa & Si overlying CSa & G
				5-3I	Channel deposit	0.5	7.5	Si w/ FSa overlying MSa to CSa, Os noted.
				5-3J	Terrace deposit (approx. 1800 ft²)	--	6.0	FSa & G overlying CSa & G.
				5-3K	Backwater area	1.0	13.0	FSa w/ traces of Si, Os noted
				5-3L	Channel deposit in oxbow	4.5	5.5	0-2.0' - Dk Br Si. 2.0'-4.0' - Dk Gy FSa & Si, Os/Oo noted. 4.0'-6.0' - Dk Gy to Bk FSa, Os/Oo noted. >6.0' - CSa & G.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
5 (cont'd)	Holmes Rd. Bridge to New Lenox Rd. Bridge	5-3 (cont'd)	- Banks moderately steep. - Moderate flow. - Avg. water depth 4'. - Channel deposits throughout reach (avg. 7').	5-3M	Terrace deposit (approx. 1100 ft²)	--	10+	FSa & Si w/ OM.
				5-3N	Terrace deposit (approx. 1900 ft²)	--	14	FSa & Si w/ OM.
		5-4	- Banks low to moderate. - Moderate flow. - Avg. water depth 6'. - Channel deposits throughout reach (avg. 6 to 7').	5-4A	Channel deposit	1.5	7.5	0-4.0' - Dk Br Si & FSa, Os noted. 4.0'-7.5' - Dk Br Si & FSa overlying FSa to MSa, Os/Oo noted.
				5-4B	Channel deposit in oxbow	--	11	0-7.0' - Si w/ FSa, Os noted. 7.0'-11' - FSa.
				5-4C	Terrace deposit (approx. 600 ft²)	--	8.0	Si & FSa overlying CSa & G.
				5-4D	Channel deposit	2.0	8.0	0-4.0' - Br to Gy FSa to MSa w/ traces of CSa. 4.0'-8.0' - CSa & G.
				5-4E	Terrace deposit (approx. 600 ft²)	--	8.0	FSa & Si overlying FSa.
				Between 5-4E and 5-4F (5-4E-1)	Channel deposit	1.5	9.0	LSi.
				5-4F	Channel deposit	3.5	2.0	0-1.7' - Br Si w/ traces of FSa. 1.7'-2.0' - Dk Gy to Bk Si w/ traces of FSa, Os/Oo noted.
6	New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-1	- Banks low to moderately steep. - Moderate to slow flow. - Avg. water depth 7'. - Channel deposits throughout reach (avg. depth 6').	6-1A	Channel deposit	11	6.0	Dk Br to Bk Si & FSa, Os noted.

(See Notes on Page 20)

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
6 (cont'd)	New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-1 (cont'd)	- Banks low to moderately steep. - Moderate to slow flow. - Avg. water depth 7'. - Channel deposits throughout reach (avg. depth 6').	6-1B	Channel deposit	7.0	9.0	0-2.1' - Br to Dk Br Si, Os noted. 2.1'-2.4' - Wood w/ some FSa. 2.4'-3.1' - Br FSa. 3.1'-3.5' - Gy Clay w/ FSa.
				6-1C	Terrace deposit (approx. 2000 ft^2)	--	11.5	0-1.8' - Si & Dk Br FSa 1.8'-4.0' - Gy FSa. 4.0'-5.0' - Gy FSa w/ traces of MSa.
		6-2	- Banks mostly low lying - Slow to minimal flow. - Avg. water depth 9-10'. - Channel deposits throughout reach (avg. depth 7').	6-2A	Channel deposit	7.0	9.0	0-1.5' - Dk Br FSa w/ traces of Si. 1.5'-2.0' - Dk Br FSa & Si. 2.0'-4.0' - Dk Gy FSa & Si, Os noted.
				6-2B	Backwater deposit	5.5	10.5	0-3.5' - Bk Si w/ Os, Oo noted >3.5' - Br Si w/ Br FSa, Oo noted
				6-2C	Backwater deposit	1.7	12.3	0-3.5' - Bk Si w/ OM, Os noted. >3.5' - Br Si & Sa.
				6-2D	Channel deposit	8.0	7.0	0-2.2' - Gy FSa to MSa. 2.2'-2.7' - Gy FSa w/ Si & MSa. 2.7'-3.3' - Dk Gy Si w/ traces of FSa. 3.3'-4.5' - Gy FSa to MSa.
				6-2E	Backwater deposit	0.5	10.5	0-1.3' - Br Si. 1.3'-1.7' - Br Si, Os/Oo noted 1.7'-2.5' - Gy Tt FSa.
				6-2F	Backwater deposit	1.6	10.4	0-2.0' - Dk Br Si, Os noted. 2.0'-2.4' - Gy to Br Si w/ traces of FSa. 2.4'-2.8' - Br Si w/ FSa & OM.
				6-2G	Channel deposit	10	4.0	Gy FSa to MSa.
				6-2H	Channel deposit	4.0	8.0	0-0.9' - Dk Br FSa & Si. 0.9'-2.9' - Gy Br FSa 2.8'-3.3' - Gy FSa w/ traces of Si & wood. 3.3'-4.7' - Gy Br FSa w/ Si.
				6-2I	Backwater deposit	1.0	11.0	0-4.5' - Dk Br Si, w/ traces of FSa, Os/Oo noted. >4.5' - Gy Sa & Si.

184

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
6 (cont'd)	New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-2 (cont'd)	- Banks mostly low lying - Slow to minimal flow. - Avg. water depth 9-10'. - Channel deposits throughout reach (avg. depth 7').	6-2J	Channel deposit	5.0	6.5	0-4.0' - FSa to MSa.
				6-2K	Backwater deposit	1.0	7.0	0-1.5' - Dk Br Si & OM, Os noted. 1.5'-2.3' - Br Si & OM. 2.3'-4.0' - Br Si & FSa.
				6-2L	Backwater deposit	2.5	7.0	0-2.0' - Dk Br Si & OM. 2.0'-2.6' - Br Si & OM. 2.6'-3.9 - Gy FSa w/ traces of Si.
				6-2M	Channel deposit	8.0	7.0	FSa w/ traces of MSa, Os noted.
				6-2N	Backwater deposit	1.0	8.5	0-2.2' - Dk Br to Dk Gy Si, Os/Oo noted. 2.2'-2.6' - Dk Gy Si. 2.6'-4.0 - Br Si.
		6-3	- Banks low lying with numerous backwater areas. - Avg. water depth 10 to 11' in channel, 2' in backwater areas. - Channel deposits throughout reach (Avg. depth 5 to 8').	6-3A	Backwater deposit	4.0	11.0	0-2.9' - Dk Br to Bk Si, Os/Oo noted. 2.9'-3.9' - Br Si & FSa 3.9'-5.0' - Gy FSa.
				6-3B	Backwater deposit	2.0	4.0	0-0.8' - Dk Br to Dk Gy Si. 0.8'-2.0' - Gy Tt Si.
				6-3C	Channel deposit	9.0	6.5	0-1.2' - Gy FSa to MSa. 1.2'-3.0' - Gy FSa. 3.0'-4.0' - Gy MSa, Os noted.
				6-3D	Channel deposit	1.0	13	0-0.5' - Gy Br FSa w/ some Si. 0.5'-0.9 - Dk Gy Si w/ some FSa, Os noted. 0.9'-2.0' - Gy FSa. 2.0'-3.1 - Dk Br to Bk FSa, Os noted. 3.1'-5.0' - Gy FSa w/ traces of MSa & OM >5.0' - Gy FSa to MSa.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
6 (cont'd)	New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-3 (cont'd)	- Banks low lying with numerous backwater areas. - Avg. water depth 10 to 11' in channel, 2' in backwater areas. - Channel deposits throughout reach (Avg. depth 5 to 8').	6-3E	Backwater deposit	0.5	10.5	0-1.5' - Dk Br Si. 1.5'-3.5' - Bk Si, Os noted. 3.5'-4.0' - Gy FSa & OM.
				6-3F	Channel deposit	8.0	7.0	0-1.6' - Gy FSa w/ traces of MSa. 1.6'-3.8' - Gy FSa & Msa w/ wood, Os noted.
				6-3G	Backwater deposit	2.0	6.0	0-1.4' - Dk Br to Dk Gy Si, Os/Oo noted. 1.4'-2.4' - Lt Br to Br Si w/ traces of FSa & OM. 2.4'-2.7' - Br FSa & Si.
				6-3H	Backwater deposit	3.0	9.0	Dk Br Si & Tt FSa.
				6-3I	Backwater deposit	1.5	13.5	0-1.6' - Dk Br Si. 1.6'-2.7' - Dk Br to Bk Si, Os/Oo noted. 2.7'-3.9' - Br Si w/ OM.
				6-3J	Channel deposit	10.5	3.5	0-3.0' - Gy FSa & MSa. 3.0'-3.5' - Gy MSa, Csa & G.
				6-3K	Channel deposit	7.5	9.5	0-5.5' - Gy FSa & MSa w/ traces of CSa, Os noted.
				6-3L	Backwater deposit	2.5	5.5	0-0.7' - Dk Br Si & OM. 0.7'- 2.3' - Dk Br to Bk Si, Os/Oo noted. 2.3'-2.8' - Gy VFSa & Si. 2.8'-5.5' - Gy FSa.
				6-3M	Backwater deposit	1.5	6.5	0-0.5' - Dk Br Si & OM. 0.5'-1.6' - Dk Br to Bk Si, Oo noted. 1.6'-2.2' - Gy Si & FSa.
				6-3N	Backwater deposit	1.5	7.0	Dk Br Si w/ OM overlying Lt Br Tt Si.
				6-3O	Backwater deposit	2.5	6.0	0-1.5' - Dk Gy Si, Oo noted. 1.5'-1.9' - Gy Si. >1.9' - Lt Br to Gy Si & FSa.
				6-3P	Backwater deposit	2.0	0.5+	Dk Br Si & OM overlying Tt clay.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
6 (cont'd)	New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-3 (cont'd)	- Banks low lying with numerous backwater areas. - Avg. water depth 10 to 11' in channel, 2' in backwater areas. - Channel deposits throughout reach (Avg. depth 5 to 8').	6-3Q	Backwater deposit	1.0	8.0	0-2.0' - Dk Br Si. 2.0'-3.1' - Dk Gy Si, Os/Oo noted. 3.1'-4.1' - Br FSa & Tt Si.
				6-3R	Backwater deposit	1.6	5.4	0-1.6' - Dk Br Si w/ OM. 1.6'-2.3' - Gy Si w/ FSa. 2.3'-4.1' - Gy FSa w/ Si.
				6-3S	Channel deposit	12	5.0	0-0.7' - Gy FSa to MSa. 0.7'-1.9' - Gy FSa 1.9'-3.0' - Dk Gy Si, Os/Oo noted.
7	From approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond to the inlet of Woods Pond	7-1	- Banks low lying with numerous backwater areas. - Avg. water depth 12 to 13' in channel and 2 to 2.5' in backwater areas. - Channel deposits throughout reach (Avg. depth 6 to 8').	7-1A	Backwater deposit	3.5	3.5	0-1.5' - Gy Si w/ FSa. 1.5'-2.6' - Gy Br Si & FSa w/ clay.
				7-1B	Backwater deposit	2.5	10	0-1.0' - Dk Br Si. 1.0'-2.0' - Dk Br to Dk Gy Si. 2.0'-5.6' - Gy FSa.
				7-1C	Backwater deposit	2.1	6.0	0-0.8' - LSi & OM. 0.8'-1.5' - Dk Br Si, Os/Oo noted. 1.5'-1.9' - Gy Si & FSa. 1.9'-4.0' - Gy FSa.
				7-1D	Backwater deposit	1.5	6.5	0-0.5' - Dk Br Si. 0.5'-1.0' - Br Si. 1.0'-1.2' - Dk Gy to Bk Si, Os/Oo noted. 1.2'-2.2' - Br Si & OM. 2.2'-3.0' - Gy FSa & Si.
				7-1E	Channel deposit	7.0	9.0	0-0.9' - Br FSa w/ traces of Si. 0.9'-2.2' - Dk Br to Bk Si. 2.2'-3.9' - Gy FSa w/ traces of MSa.
				7-1F	Backwater deposit	2.0	6.0	0-0.9' - LSi w/ OM. 0.9'-1.8' - Dk Br Si, Os/Oo noted. 1.8'-2.5' - Br Si w/ OM. 2.5'-3.4' - Lt. Gy Si. 3.4'-3.8' - Dk Br Si & Pt.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
7 (cont'd)	From approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond to the inlet of Woods Pond	7-1 (cont'd)	- Banks low lying with numerous backwater areas. - Avg. water depth 12 to 13' in channel and 2 to 2.5' in backwater areas. - Channel deposits throughout reach (Avg. depth 6 to 8').	7-1G	Backwater deposit	2.5	8.0	0-0.7' - Dk Br Si & OM. 0.7'-1.6' - Br Si & Pt. w/ OM. 1.6'-2.3' - Gy Si & clay.
				7-1H	Backwater deposit	2.5	7.0	0-1.2' - Dk Br Si. 1.2'-1.8' - Br Si & OM. 1.8'-2.9' - Br Si. 2.9'-3.5' - Gy Si.
				7-1I	Backwater deposit	3.0	0.5+	Dk Br LSi w/ OM overlying Gy Tt Si & clay.
				7-1J	Backwater deposit	2.5	6.5	0-1.7' - Dk Br Si w/ OM, Os/Oo noted. 1.7'-2.5' - Dk Br Tt Si w/ OM.
				7-1K	Channel deposit	10	10	0-1.0' - Dk Br FSa & Si. 1.0'-6.0' - Gy FSa w/ traces of MSa.
				7-1L	Backwater deposit	0.8	10	0-0.5' - Dk Br Si w/ OM. 0.5'-1.6' - Dk Br to Bk Si, Os/Oo noted. 1.6'-3.5' - Gy Br Si w/ FSa.
				7-1M	Channel deposit	11	7.0	0-4.0' - Gy FSa w/ traces of MSa, Os noted.
				7-1N	Backwater deposit	2.5	15.5	0-0.7' - LSi w/ OM. 0.7'-1.8' - Dk Br To Dk Gy Si & OM, Oo noted. 1.8'-3.9' - Br Pt.
				7-1O	Backwater deposit	3.0	3.6	0-1.5' - Dk Br LSi & OM. 1.5'-2.6' - Br FSa, MSa, & Si. 2.6'-3.6'- Br Pt, Si & FSa.
				7-1P	Backwater deposit	1.8	4.4	0-0.5' - Br LSi & OM. 0.5'-1.2' - Br Si & OM, Os/Oo noted. 1.2'-2.5' - Gy Si & clay.
				7-1Q	Backwater deposit	3.5	2.6	0-0.6' - Dk Br LSi & OM. 0.6'-1.4' - Dk Gy to Dk Br Si, Os/Oo noted. 1.4'-2.6' - Gy Si w/ traces of FSa.

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

Reach No.	Reach Description	Sub Id.	Subreach Description	Deposit Id.	Depositional Environment	Approx. Water Depth (ft)	Approx. Probing Depth (ft)	Sediment Description
7 (cont'd)	From approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond to the inlet of Woods Pond	7-1 (cont'd)	- Banks low lying with numerous backwater areas. - Avg. water depth 12 to 13' in channel and 2 to 2.5' in backwater areas. - Channel deposits throughout reach (Avg. depth 6 to 8').	7-1R	Backwater deposit	2.8	6.0	0-0.5' - Dk Br LSi & OM 0.5'-1.7' - Dk Gy to Dk Br Si & OM, Os noted. 1.7'-3.4' - Gy Si w/ traces of FSa.
				7-1S	Channel deposit	14	2.5	0-2.5' - Br Tl Si.
				7-1T	Backwater deposit	2.5	2.7	0-0.5' - LSi & OM. 0.5'-1.3' - Dk Br Si, Os noted. 1.3'-2.5' - Br Si & OM, w/ some clay. 2.5'-2.7' - Br Pt.
				7-1U	Backwater deposit	2.3	3.2	0-0.8' - LSi & OM. 0.8'-1.4' - Dk Br Si. 1.4'-2.7' - Br Pt. 2.7'-32. - Gy Si.
				7-1V	Backwater deposit	3.0	2.3	0-0.5' - LSi & OM. 0.5'-1.1' - Dk Br to Dk Gy Si, Os noted. 1.1'-1.5' - Br Si. 1.5'-2.3' - Gy Si & clay.
				7-1W	Channel deposit	13	3.6+	0-2.5' - Dk Br to Br Si, Os/Oo noted. 2.5'-3.6' - Dk Gy to Bk Si, Os/Oo noted. >3.6 - Dk Gy FSa to CSa.
				7-1X	Backwater deposit	2.5	12.5	0-1.5' - Dk Br to Dk Gy Si, Os noted. 1.5'-1.9' - Br Pt & OM. 1.9'-2.7' - Gy Si & clay.
8	Woods Pond	--	Not probed.	--	Impoundment	--	--	--

TABLE 3-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING INFORMATION - OCTOBER 1994

NOTES:

1. Site reconnaissance/characterization data collected by Blasland, Bouck & Lee, Inc. during October 10-26, 1994.

2. Descriptions regarding odor and oil presence represent only qualitative information (i.e., observations noted by Blasland, Bouck & Lee field personnel at the time of reconnaissance).

3. Qualifications of bank steepness and river flow velocities are as follows:

   Banks
   Low Bank - Approx. 0 to 3 feet.
   Moderate Bank - Approx. 3 to 6 feet.
   Steep Bank - Greater than 6 feet.

   Velocities
   Slow Flow - less than 1 foot per second.
   Moderate Flow - approx. 1 to 2 feet per second.
   Fast Flow - greater than 2 feet per second.

4. Abbreviations used:

- Dk - Dark	- MSa - Medium Sand	- VTt - Very tight
- Br - Brown	- FSa - Fine Sand	- Pt - Peat
- Bk - Black	- VFSa - Very Fine Sand	- Os - Oil Sheen
- Gy - Gray	- Si - Silt	- Oo - Organic Odor
- Lt0 - Light	- LSi - Loose Silt	- w/ - with
- Sa - Sand	- OM - Organic Matter	- & - and
- CSa - Coarse Sand	- Tt - Tight	- Avg. - Average
- G - Gravel	- Approx. - Approximately	

TABLE 3-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING - BASED LABORATORY ANALYSES

Reach Description	Deposit Id.	Depositional Environment	Laboratory Analyses
Just upstream of Unkamet Brook to Newell St. Bridge	2-2H	Low lying oxbow area.	- One full depth core for PCBs.
Newell St. Bridge to Lyman St. Bridge	3-1A-1	Channel Deposit	- One full-depth core for Cesium-137 screening.
	3-2A	Aggrading bar	- One full-depth composite core for SG, BG, WC, and TROC.
	3-6A	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for PCBs. - One full-depth core for Cesium-137 screening.
	3-7A	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for SG, BD, WC, SET, and TROC.
	3-9B	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	3-10C	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
Elm St. Bridge to Holmes Rd. Bridge	4-2B	Terrace deposit/sand bar	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-4B	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-4E	Aggrading bar	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs.
	4-5A	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-5E	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.

(See Notes on Page 5)

TABLE 3-2
(cont'd)
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING - BASED LABORATORY ANALYSES

Reach Description	Deposit Id.	Depositional Environment	Laboratory Analyses
Elm St. Bridge to Holmes Rd. Bridge (cont'd)	4-6B	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-6G	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-7F	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs.
	4-9D	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
	4-9H	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	4-10B	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth composite core of SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
Holmes Rd. Bridge to New Lenox Rd. Bridge	5-1E	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
	5-1I	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	5-2I	Channel deposit	- One core for PCBs.

(See Notes on Page 5)

TABLE 3-2
(cont'd)
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING - BASED LABORATORY ANALYSES

Reach Description	Deposit Id.	Depositional Environment	Laboratory Analyses
Holmes Rd. Bridge to New Lenox Rd. Bridge (cont'd)	5-2L	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
	5-3A	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	5-3F	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	5-3L	Channel deposit in oxbow	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	5-4B	Channel deposit in oxbow	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs.
	5-4E	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One core for PCBs. - One full-depth core for Cesium-137 screening.
	Between 5-4E and 5-4F (5-4E-1)	Channel deposit	- One full-depth core for Cesium-137 screening.
New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond	6-1A	Channel deposit	- One full-depth composite core for GS, O/G, & TOC.
	6-1B	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	6-1C	Terrace deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for SG, BD, WC, and TROC.

(See Notes on Page 5)

TABLE 3-2
(cont'd)
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING - BASED LABORATORY ANALYSES

Reach Description	Deposit Id.	Depositional Environment	Laboratory Analyses
New Lenox Rd. to approx. midpoint between New Lenox Rd. Bridge and inlet of Woods Pond (cont'd)	6-2E	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	6-2G	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
	6-2N	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	6-3B	Backwater deposit	- One full-depth composite core for GS, O/G and TOC.
	6-3H	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC.
	6-3I	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC.
	6-3J	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for GS, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
From approx. midpoint New Lenox Rd. Bridge and inlet of Woods Pond to the inlet of Woods Pond	7-1A	Backwater deposit	- One full-dept composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	7-1B	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	7-1F	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	7-1G	Backwater deposit	- One full-depth core for Cesium-137 screening.
	7-1H	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full depth core for Cesium-137 screening.
	7-1J	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
	7-1K	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.

(See Notes on Page 5)

TABLE 3-2
(cont'd)
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT RECONNAISSANCE/PROBING - BASED LABORATORY ANALYSES

Reach Description	Deposit Id.	Depositional Environment	Laboratory Analyses
From approx. midpoint New Lenox Rd. Bridge and inlet of Woods Pond to the inlet of Woods Pond (cont'd)	7-1M	Channel deposit	- One full-dept composite core for GS, O/G, and TOC.
	7-1N	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for SG, BD, WC, and TROC. - One full-depth core for Cesium-137 screening.
	7-1O	Backwater deposit	- One full-depth core for Cesium-137 screening.
	7-1Q	Backwater deposit	- One full-depth core for Cesium-137 screening.
	7-1S	Channel deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth composite core for SG, BD, WC, and TROC.
	7-1U	Backwater deposit	- One full-depth core for Cesium-137 screening.
	7-1W	Channel deposit	- One full-depth composite core for GS, O/G, and TOC.
	7-1X	Backwater deposit	- One full-depth composite core for GS, O/G, and TOC. - One full-depth core for Cesium-137 screening.
Woods Pond	—	Impoundment	- Four full-depth composite cores for GS, O/G, and TOC. - Three full-depth composite cores for SG, BD, WC, and TROC. - Six full-depth cores for Cesium-137 screening.

Notes:

1. Site reconnaissance/characterization data collected by Blasland, Bouck & Lee, Inc. during October 10-26, 1994.
2. Abbreviations used:
   - GS - Grain Size
   - Approx. - Approximately
   - SG - Specific Gravity
   - WC - Water Content
   - O/G - Oil & Grease
   - TOC - Total Organic Carbon
   - BD - Bulk Density
   - TROC - Time Rate of Consolidation

195

TABLE 3-3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
2-1H	0-6	ND(0.024)	0.054	0.071	0.12	NA	NA
	6-12	ND(0.022)	ND(0.045)	ND(0.045)	ND(0.045)	NA	NA
	12-18	ND(0.023)	0.061*	0.052	0.11	NA	NA
	18-24	ND(0.023) [ND(0.024)]	ND(0.046) [ND(0.048)]	ND(0.045) [ND(0.048)]	ND(0.045) [ND(0.048)]	NA	NA
	24-30	ND(0.036) [ND(0.071)]	0.26* [0.24*]	0.086 [ND(0.14)]	0.35 [0.24]	NA	NA
	30-36	ND(0.83)	2.6*	3.4	6.0	NA	NA
	36-42	ND(0.35)	0.71*	0.77	1.5	NA	NA
	42-48	ND(0.34)	ND(0.68)	0.93	0.93	NA	NA
	48-53	ND(1.9)	ND(3.8)	4.7	4.7	NA	NA
	0-54	NA	NA	NA	NA	NA	1,080
3-2A	0-54	NA	NA	NA	NA	5,640	ND(500)
3-6A	0-6	ND(0.046)	0.12*	0.18*	0.30	NA	NA
	6-12	ND(1.5)	ND(2.1)	5.2*	5.2	NA	NA
	12-18	ND(0.12)	0.24*	1.2*	1.4	NA	NA
	18-24	ND(0.07)	ND(0.14)	ND(0.14)	ND(0.14)	NA	NA
	0-24	NA	NA	NA	NA	4,220	ND(500)
3-7A	0-22	NA	NA	NA	NA	4,710	ND(500)
3-9B	0-0.5	ND(0.49)	ND(0.98)	5.6	5.6	4,200	NA
	0.5-1	ND(0.43)	ND(1.0)	5.3	5.3	3,700	NA
	1-2	ND(0.045)	ND(0.089)	0.23	0.23	ND(2,000)	NA
	2-3	ND(0.045)	ND(0.089)	0.36	0.36	2,900	NA
	6-7	ND(0.026)	ND(0.051)	0.11	0.11	53,000	NA
	12-13	ND(0.13)	ND(0.27)	1.2	1.2	86,000	NA
	0-23	NA	NA	NA	NA	9,010	ND(500)
3-10C	0-6	1.6*	2.6*	5.4*	9.6	NA	NA
	6-12	3.3*	7.6*	26*	37	NA	NA
	12-18	1.5*	8.3*	26*	36	NA	NA
	18-24	ND(1.1)	4.4*	21*	25	NA	NA
	24-30**	ND(0.021)	ND(0.042)	0.059*	0.059	NA	NA
	30-36**	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA	NA
	0-24	NA	NA	NA	NA	4,740	ND(500)
4-2B	0-0.5	ND(1.1)	ND(2.8)	1.3	1.3	3,800	NA
	0-6	2.1*	5.1*	26*	33	NA	NA
	0.5-1	ND(0.46)	ND(1.5)	4.8	4.8	2,200	NA
	1-2	ND(0.49)	ND(1.3)	5.5	5.5	2,300	NA
	2-3	ND(1.2) [ND(1.2)]	ND(2.5) [ND(2.4)]	13 [7.9]	13 [7.9]	2,500[2,700]	NA
	6-7	ND(1.2)	ND(2.4)	12	12	2,300	NA
	6-12	ND(2.1)	13*	64*	77	NA	NA
	12-13	ND(1.3)	ND(2.6)	14	14	2,200	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
4-2B (cont'd)	12-18	ND(1.2)	7.9*	35*	43	NA	NA
	18-24	25.0* [ND(12.0)]	18* [30*]	53* [81*]	96 [110]	NA	NA
	24-30	3.3*	6.1*	23*	32	NA	NA
	30-36	ND(1.1)	7.2*	25*	32	NA	NA
	36-42**	ND(2.1)	ND(5.9)	21*	21	NA	NA
	42-48**	ND(4.3)	ND(8.6)	40*	40	NA	NA
	48-62**	ND(4.5)	ND(9.0)	29*	29	NA	NA
	0-36	NA	NA	NA	NA	11,600	ND(500)
4-4B	0-0.5	ND(1.4)	ND(5.8)	34	34	9,400	NA
	0-6	ND(2.1)	5.3*	27*	32	NA	NA
	0.5-1	ND(1.1)	ND(2.7)	14	14	4,900	NA
	1-2	ND(0.42)	ND(1.0)	4.0	4.0	ND(2,000)	NA
	2-3	ND(0.11)	ND(0.41)	1.4	1.4	ND(2,000)	NA
	6-7	ND(0.42)	ND(1.2)	3.1	3.1	ND(2,000)	NA
	6-12	ND(5.2)	ND(10.0)	55*	55	NA	NA
	12-13	ND(1.0)	ND(2.4)	15	15	2,200	NA
	12-18	ND(1.0)	ND(2.0)	2.9*	2.9	NA	NA
	18-24**	ND(4.10)	ND(8.2)	27*	27	NA	NA
	24-35	ND(0.43)	1.7*	10	12	NA	NA
	0-24	NA	NA	NA	NA	4,800	ND(500)
4-4E	0-6	ND(0.21)	ND(0.42)	0.93*	0.93	NA	NA
	6-12	ND(1.1)	2.4*	15*	17	NA	NA
	12-18	ND(1.0)	2.1*	9.0*	11*	NA	NA
	18-24	ND(0.43)	1.1*	3.6*	4.7	NA	NA
	24-28	2.0*	9.7*	20*	30	NA	NA
	0-28	NA	NA	NA	NA	8,600	910
4-5A	0-6	ND(0.1)	0.57*	1.0*	1.6	NA	NA
	6-12	ND(5.1)	ND(10.0)	50*	50	NA	NA
	12-18	ND(1.0)	5.2*	30*	35	NA	NA
	18-24**	ND(2.0)	ND(4.1)	7.8*	7.8	NA	NA
	24-30**	ND(1.0)	ND(2.0)	3.9*	3.9	NA	NA
	30-35**	ND(4.2)	ND(8.5)	12*	12	NA	NA
	0-30	NA	NA	NA	NA	4,810	ND(500)
4-5E	0-6	ND(0.46)	1.1*	3.6*	4.7	NA	NA
	6-12	ND(1.1)	ND(2.3)	4.4*	4.4	NA	NA
	12-18	ND(0.44)	ND(0.87)	1.8*	1.8	NA	NA
	18-24	ND(0.43)	ND(0.85)	1.6*	1.6	NA	NA
	24-26	ND(0.023)	ND(0.047)	ND(0.047)	ND(0.047)	NA	NA
	0-23	NA	NA	NA	NA	3,400	ND(500)
4-6B	0-6	ND(0.12)	0.5*	1.2*	1.7	NA	NA
	6-12	ND(1.2)	4.1*	22.0*	26.0	NA	NA
	12-18	ND(0.24)	0.56*	1.6*	2.2	NA	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
4-6B (cont'd)	18-24	ND(0.23)	0.48*	1.4*	1.9	NA	NA
	24-30	ND(1.1)	ND(2.2)	4.1*	4.1	NA	NA
	30-36	0.19*	0.58	0.51*	1.3	NA	NA
	36-42	ND(0.024)	ND(0.049)	ND(0.049)	ND(0.049)	NA	NA
	0-36	NA	NA	NA	NA	3,790	ND(500)
4-6G	0-6	ND(1.2)	3.2*	14.0*	17.0	NA	NA
	6-12	ND(1.2)	3.8*	20.0*	24.0	NA	NA
	12-18	ND(1.2)	2.9*	13.0*	16.0	NA	NA
	18-24	ND(3.1)	ND(6.2)	11.0*	11.0	NA	NA
	24-30	3.0*	6.3*	21.0*	30.0	NA	NA
	30-36	3.0*	8.0*	17.0*	28.0	NA	NA
	36-42	2.9*	5.1*	9.4*	17.0	NA	NA
	42-48	0.8* [1.2*]	0.99* [ND(2.3)]	2.0* [5.2]	3.8 [6.4]	NA	NA
	48-54	0.34*	0.71	0.87*	1.9	NA	NA
	54-60**	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA	NA
	0-54	NA	NA	NA	NA	49,000	590
4-7F	0-0.5	ND(4.9)	ND(9.8)	15	15	9,600	NA
	0-6	ND(25.0)	36.0*	170*	210	NA	NA
	0.5-1	ND(4.6)	ND(9.1)	19	19	5,800	NA
	5-6	ND(4.7) [ND(4.9)]	ND(9.3) [ND(9.8)]	28 [41]	28 [41]	19,000[2,200]	NA
	6-12	ND(2.8)	8.1*	31.0*	39.0	NA	NA
	11-12	ND(5.1)	ND(10)	29	29	18,000	NA
	12-18	2.4*	9.5*	34.0*	46.0	NA	NA
	17-18	ND(14)	ND(28)	57	57	3,100	NA
	18-24	ND(2.7)	19.0*	58.0*	77.0	NA	NA
	24-30	ND(1.2)	ND(2.4)	4.0*	4.0	NA	NA
	0-30	NA	NA	NA	NA	8,030	ND(1,000)
4-8E	0-6	ND(1.3)	7.8	43.0*	51.0	NA	NA
	6-12	ND(1.2)	5.1*	26.0*	31.0	NA	NA
	12-18	ND(0.23)	ND(0.47)	1.6*	1.6	NA	NA
	18-24	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA	NA
	24-30	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	NA	NA
4-9D	0-6	ND(1.2)	ND(2.5)	6.3*	6.3	NA	NA
	6-12	ND(1.2)	4.0*	19.0*	23.0	NA	NA
	12-18	ND(1.2) [ND(1.2)]	10.0* [6.2*]	57.0* [34.0*]	67.0 [44.0]	NA	NA
	18-24	ND(5.6)	13.0*	64.0*	77.0	NA	NA
	24-30	ND(0.21)	0.47*	1.1*	1.6	NA	NA
	30-36	ND(0.046)	ND(0.092)	0.12*	0.12	NA	NA
	0-36	NA	NA	NA	NA	2,490	ND(500)

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
4-9H	0-6	ND(1.1)	1.7*	6.3*	8.0	NA	NA
	6-12	ND(1.2)	3.5*	20.0*	23.0	NA	NA
	12-18	ND(1.2)	3.5*	17.0*	20.0	NA	NA
	18-24	ND(0.44)	1.3*	4.1*	5.4	NA	NA
	24-30	ND(24.0) [ND(24.0)]	ND(48.0) [67*]	200* [210]	200 [280]	NA	NA
	30-36**	ND(13.0) ND(6.5)RE	ND(25.0) ND(31)RE	100* 150*RE	100 150RE	NA	NA
	36-42**	ND(2.3) ND(2.2)RE	ND(4.5) ND(4.5)RE	17* 10*RE	17 10*RE	NA	NA
	42-48**	ND(0.15)	0.54*	1.1*	1.6	NA	NA
	0-30	NA	NA	NA	NA	8,830	ND(500)
4-9K	0-6	ND(1.5)	ND(3.1)	5.6*	5.6	NA	NA
	6-12	ND(1.4)	ND(2.8)	5.6*	5.6	NA	NA
	12-18	ND(1.4)	ND(2.8)	6.2*	6.2	NA	NA
	18-24	2.4*	ND(3.2)	11*	13	NA	NA
	24-30	ND(1.2)	4.5	6.9*	11	NA	NA
	30-36**	ND(0.26)	3.6*	4.8*	8.4	NA	NA
	36-41**	ND(0.021)	ND(0.042)	0.091*	0.091	NA	NA
4-10B	0-6	ND(1.2)	7.6*	33	41	NA	NA
	0-0.5	ND(1.3)	ND(3.0)	12	12	2,900	NA
	0.5-1	ND(1.2)	ND(5.3)	33	33	ND(2,000)	NA
	1-2	ND(4.9)	ND(20)	96	96	8,100	NA
	2-3	ND(1.2)	ND(3.3)	20	20	2,700	NA
	6-7	ND(1.2) [ND(1.2)]	ND(6.2) [ND(4.4)]	36 [25]	36 [25]	2,300 [ND(2,000)]	NA
	6-12	ND(1.2)	9.1*	45*	54	NA	NA
	12-13	ND(1.2)	ND(2.4)	7.4	7.4	ND(2,000)	NA
	12-18	ND(2.9)	14*	43*	57	NA	NA
	18-24	2.9*	7.2*	21*	31	NA	NA
	24-30	1.4*	ND(2.1)	4.9*	6.3	NA	NA
	30-36	2.0*	ND(3.3)	16*	18	NA	NA
	36-42	ND(26.0)	73*	370*	440	NA	NA
	42-48	37.0*	81*	490*	610	NA	NA
	48-54	10.0*	34*	37*	81	NA	NA
	54-60	10.0*	26*	37*	72	NA	NA
	60-65	ND(15.0)	65*	92*	160	NA	NA
	0-54	NA	NA	NA	NA	5,950	ND(500)
5-1E	0-6	ND(5.1)	13*	39*	52	NA	NA
	0-0.5	ND(1.1)	ND(2.3)	8.2	8.2	2,900	NA
	0.5-1	ND(1.1)	ND(2.3)	7.1	7.1	2,100	NA
	1-2	ND(1.1)	ND(2.3)	8.8	8.8	ND(2,000)	NA
	2-3	ND(1.2)	ND(4.6)	23	23	ND(2,000)	NA
	6-7	ND(1.2)	ND(2.9)	11	11	5,100	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
5-1E (cont'd)	6-12	ND(1.0)	2.5*	9.3*	12	NA	NA
	12-13	ND(0.03)	ND(0.06)	0.08	0.08	36,000	NA
	12-18	ND(1.2)	4.7*	20*	25	NA	NA
	18-24	ND(0.25)	1.5*	2.1*	3.6	NA	NA
	24-30	ND(0.053)	ND(0.11)	ND(0.11)	ND(0.11)	NA	NA
	30-36	ND(0.045)	ND(0.091)	ND(0.091)	ND(0.091)	NA	NA
	0-42	NA	NA	NA	NA	9,080	1,990
5-1I	0-0.5	ND(5.4)	ND(11)	16	16	5,600	NA
	0-6	ND(13.0) [6.5*]	ND(26.0) [29.0*]	82* [110*]	82 [150]	NA	NA
	0.5-1	ND(1.2)	ND(4.8)	28	28	7,900	NA
	1-2	ND(25)	ND(50)	92	92	3,600	NA
	2-3	ND(13)	ND(26)	49	49	7,400	NA
	6-7	ND(6.1)	ND(12)	29	29	19,000	NA
	6-12	26.0*	40*	190*	260	NA	NA
	12-13	ND(88)	ND(180)	370	370	66,000	NA
	12-18	2.5*	14*	56*	72	NA	NA
	18-24	18.0*	17*	72*	110	NA	NA
	24-30	ND(8.0)	28*	52*	80	NA	NA
	30-36	ND(1.2)	8.6*	15	24	NA	NA
	36-42	ND(2.6)	15*	25*	40	NA	NA
	42-50	ND(4.9)	11*	17*	28	NA	NA
	0-42	NA	NA	NA	NA	47,600	4,200
5-2I	0-6	ND(1.4)	ND(2.7)	7.2*	7.2	NA	NA
	6-12	ND(2.8)	6.2*	26*	32	NA	NA
	12-18	1.5*	3.4*	7.7*	13	NA	NA
	18-24	1.3*	3.5*	17*	22	NA	NA
	24-30	ND(2.4)	6.1*	28*	34	NA	NA
	30-36**	ND(2.6)	ND(5.1)	21*	21	NA	NA
	36-42**	ND(2.6)	ND(5.1)	17*	17	NA	NA
	42-48**	ND(2.6)	ND(5.1)	9.4*	9.4	NA	NA
5-2L	0-6	ND(1.6)	ND(3.2)	11*	11	NA	NA
	6-12	ND(0.55)	ND(1.1)	1.6*	1.6	NA	NA
	12-18	ND(0.032)	ND(0.063)	ND(0.063)	ND(0.063)	NA	NA
	18-24	ND(0.031)	ND(0.062)	ND(0.062)	ND(0.062)	NA	NA
	0-24	NA	NA	NA	NA	18,900	ND(500)
5-3A	0-0.5	ND(8.0)	ND(16)	17	17	35,000	NA
	0-6	ND(1.5)	7.2*	33*	40	NA	NA
	0.5-1	ND(6.4)	ND(13)	23	23	27,000	NA
	1-2	ND(1.7)	ND(7.9)	40	40	25,000	NA
	2-3	ND(0.61)	ND(4.7)	24	24	19,000	NA
	5-6	ND(14)	ND(3.2)	16	16	12,000	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
5-3A (cont'd)	6-12	2.5*	3.5*	12*	18	NA	NA
	11-12	ND(37)	ND(70)	160	160	37,000	NA
	12-18	4.3* [6.0*]	7.2* [9.1*]	22* [30*]	34 [45]	NA	NA
	14-15	ND(33)	ND(74)	140	140	40,000	NA
	17-18	ND(16)	ND(32)	45	45	65,000	NA
	18-24	ND(0.48)	ND(0.96)	2.8*	2.8	NA	NA
	24-30	ND(0.23)	ND(0.45)	0.86*	0.86	NA	NA
	25-26	ND(5.6)	ND(11)	22	22	28,000	NA
	30-36**	ND(0.023)	ND(0.045)	ND(0.045)	ND(0.045)	NA	NA
	0-30	NA	NA	NA	NA	13,300	650
5-3B	0-6	9.0*	9.9*	32*	51	NA	NA
	6-12	ND(1.4)	3.2*	9.9*	13	NA	NA
	12-18	ND(0.48)	ND(0.97)	1.8*	1.8	NA	NA
	18-24	ND(0.045)	ND(0.089)	0.35*	0.35	NA	NA
	24-29	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA	NA
5-3F	0-46	NA	NA	NA	NA	7,880	550
5-3L	0-6	ND(2.3)	5.0*	12*	17	NA	NA
	6-12	ND(1.5)	ND(2.9)	7.3*	7.3*	NA	NA
	12-18	2.2*	2.7*	8.0*	13*	NA	NA
	18-24	4.5*	3.9*	9.3*	18	NA	NA
	24-30	ND(1.8)	9.0*	15*	24	NA	NA
	30-36	ND(0.5)	1.5*	2.1*	3.6	NA	NA
	36-42	ND(0.026)	ND(0.051)	ND(0.051)	ND(0.051)	NA	NA
	0-42	NA	NA	NA	NA	14,800 [15,300]	1,240 [1,400]
5-4B	0-6	ND(2.0)	ND(3.9)	8.9*	8.9	NA	NA
	6-12	ND(4.6)	15*	29*	44	NA	NA
	12-16	ND(3.9) [ND(4.0)]	19* [14*]	33* [24*]	52 [38]	NA	NA
	18-24	ND(0.31)	0.71*	1.3*	2.0	NA	NA
	24-30	ND(0.17)	ND(0.34)	0.38*	0.38	NA	NA
	30-36	ND(0.033)	ND(0.066)	0.093*	0.093	NA	NA
	0-36	NA	NA	NA	NA	45,000	2,080
5-4E	0-6	ND(1.8)	ND(3.7)	16*	16	NA	NA
	6-12	ND(1.5)	ND(3.0)	12*	12	NA	NA
	12-18	ND(2.0)	ND(4.0)	9.0*	9.0	NA	NA
	18-24	ND(1.6)	ND(3.2)	7.8*	7.8	NA	NA
	24-30	ND(1.6)	ND(3.6)	9.1*	9.1	NA	NA
	30-36	ND(1.2)	ND(3.1)	7.7*	7.7	NA	NA
	36-43	ND(1.3)	ND(2.6)	5.8*	5.8	NA	NA
	0-36	NA	NA	NA	NA	19,000	830

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
6-1A	0-42	NA	NA	NA	NA	65,900	14,200
6-1B	0-0.5	ND(3.0)	ND(6.0)	9.0	9.0	54,000	NA
	0.5-1	ND(2.9)	ND(5.7)	15	15	62,000	NA
	1-2	ND(1.6)	ND(3.2)	6.8	6.8	12,000	NA
	2-3	ND(1.4)	ND(2.7)	3.2	3.2	10,000	NA
	6-7	ND(1.4)	ND(2.9)	5.4	5.4	12,000	NA
	12-13	ND(13)	ND(25)	72	72	3,400	NA
	15-16	ND(1.9) [ND(17)]	ND(3.7) [ND(34)]	5.0 [69]	5.0 [69]	46,000 [65,000]	NA
	19-20	ND(3.5)	ND(7.4)	30	30	35,000	NA
	27-28	ND(2.8)	ND(5.7)	10	10	14,000	NA
	0-36	NA	NA	NA	NA	35,400	6,200
6-1C	0-36	NA	NA	NA	NA	14,000	770
6-2E	0-0.5	ND(2.4)	ND(4.8)	12	12	37,000	NA
	0.5-1	ND(1.9)	ND(3.8)	11	11	22,000	NA
	1-2	ND(1.5)	ND(3.1)	9.3	9.3	21,000	NA
	2-3	ND(6.8)	ND(14)	52	52	53,000	NA
	6-7	ND(8.3)	ND(19)	80	80	80,000	NA
	9-10	ND(4.1)	ND(8.2)	22	22	65,000	NA
	12-13	ND(4.8)	ND(16)	37	37	87,000	NA
	21-22	ND(0.037)	ND(0.073)	ND(0.073)	ND(0.073)	39,000	NA
	0-32	NA	NA	NA	NA	22,800	4,600
6-2G	0-0.5	ND(2.4)	ND(4.8)	10	10	34,000	NA
	0.5-1	ND(2.2)	ND(4.4)	9.7	9.7	59,000	NA
	1-2	ND(2.5)	ND(4.9)	11	11	37,000	NA
	2-3	ND(1.7)	ND(3.4)	7.6	7.6	18,000	NA
	5-6	ND(2.4)	ND(4.8)	13	13	46,000	NA
	11-12	ND(1.4)	ND(2.9)	4.9	4.9	18,000	NA
	14-15	ND(0.53)	ND(1.1)	2.0	2.0	4,300	NA
	17-18	ND(0.52) [ND(0.54)]	ND(1.0) [ND(1.1)]	1.9 [2.9]	1.9 [2.9]	3,600 [3,100]	NA
	23-24	ND(0.23)	ND(0.45)	0.76	0.76	4,700	NA
	0-30	NA	NA	NA	NA	10,100	ND(500)
6-2N	0-0.5	ND(1.4)	ND(2.9)	3.5	3.5	56,000	NA
	0.5-1	ND(1.2)	ND(2.4)	3.6	3.6	57,000	NA
	1-2	ND(0.61)	ND(1.6)	3.6	3.6	53,000	NA
	2-3	ND(1.2)	ND(2.5)	4.8	4.8	44,000	NA
	5-6	ND(0.72)	ND(1.4)	2.1	2.1	35,000	NA
	11-12	ND(2.0)	ND(3.9)	7.0	7.0	44,000	NA
	14-15	ND(2.0)	ND(4.0)	7.9	7.9	42,000	NA
	17-18	ND(0.24)	0.86*	0.66*	1.5	47,000	NA
	27-28	ND(0.041) [ND(0.042)]	ND(0.082) [ND(0.083)]	ND(0.082) [ND(0.083)]	ND(0.082) [ND(0.083)]	32,000 [37,000]	NA
	0-36	NA	NA	NA	NA	50,000	ND(500)

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
6-3B	0-18	NA	NA	NA	NA	39,000	ND(500)
6-3H	0-34	NA	NA	NA	NA	33,100	630
6-3J	0-0.5	ND(1.3)	ND(2.6)	2.8	2.8	10,000	NA
	0.5-1	ND(0.043)	ND(0.11)	0.27	0.27	2,200	NA
	1-2	ND(0.11)	ND(0.22)	0.3	0.3	2,100	NA
	2-3	ND(0.11)	ND(0.21)	0.28	0.28	ND(2,000)	NA
	6-7	ND(0.043)	ND(0.085)	0.21	0.21	ND(2,000)	NA
	12-13	ND(0.023)	ND(0.045)	ND(0.045)	ND(0.045)	4,100	NA
	0-36	NA	NA	NA	NA	5,840	ND(500)
6-3I	0-36	NA	NA	NA	NA	45,600	1,430
7-1A	0-0.5	ND(0.048)	ND(0.24)	0.16	0.16	50,000	NA
	0.5-1	ND(0.12)	ND(0.24)	0.45	0.45	54,000	NA
	1-2	ND(0.30)	ND(0.59)	ND(0.59)	ND(0.59)	52,000	NA
	2-3	ND(0.052)	ND(0.10)	ND(0.10)	ND(0.10)	51,000	NA
	6-7	ND(0.052)	ND(0.10)	ND(0.10)	ND(0.10)	57,000	NA
	12-13	ND(0.046)	ND(0.093)	ND(0.093)	ND(0.093)	38,000	NA
	0-24	NA	NA	NA	NA	25,800	970
7-1B	0-24	NA	NA	NA	NA	37,400 [31,200]	ND(500) [ND(500)]
7-1F	0-0.5	ND(11)	ND(22)	28	28	121,000	NA
	0.5-1	ND(11)	ND(22)	27	27	114,000	NA
	1-2	ND(4.8)	ND(9.6)	18	18	123,000	NA
	2-3	ND(11)	ND(22)	31	31	123,000	NA
	6-7	ND(14)	ND(39)	70	70	102,000	NA
	8-9	ND(11)	ND(21)	32	32	97,000	NA
	12-13	ND(0.062)	ND(0.14)	0.22	0.22	70,000	NA
	17-18	ND(0.038)	ND(0.076)	ND(0.076)	ND(0.076)	59,000	NA
	0-24	NA	NA	NA	NA	43,400	1,620
7-1H	0-24	NA	NA	NA	NA	282,000	ND(500)
7-1J	0-0.5	ND(110)	ND(220)	220	220	113,000	NA
	0.5-1	ND(11)	ND(22)	44	44	98,000	NA
	1-2	ND(16)	ND(32)	75	75	104,000	NA
	2-3	ND(5.1)	ND(10)	18	18	77,000	NA
	5-6	ND(0.065)	ND(0.13)	ND(0.13)	ND(0.13)	64,000	NA
	8-9	ND(0.048)	ND(0.096)	ND(0.096)	ND(0.096)	49,000	NA
	11-12	ND(0.041)	ND(0.081)	ND(0.081)	ND(0.081)	36,000	NA
	14-15	ND(0.038)	0.080	ND(0.076)	0.080	35,000	NA
	17-18	ND(0.038)	ND(0.076)	ND(0.076)	ND(0.076)	31,000	NA
	0-18	NA	NA	NA	NA	100,500	ND(500)
7-1K	0-42	NA	NA	NA	NA	11,400	ND(500)
	0-0.5	ND(2.1)	ND(4.3)	4.3	4.3	28,000	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
7-1K (cont'd)	0.5-1	ND(1.8)	ND(3.7)	6.5	6.5	18,000	NA
	1-2	ND(1.8)	ND(3.6)	7.5	7.5	17,000	NA
	2-3	ND(1.7)	ND(3.4)	8.3	8.3	19,000	NA
	6-7	ND(1.8)	ND(3.5)	8.5	8.5	24,000	NA
	12-13	ND(0.042)	ND(0.084)	ND(0.084)	ND(0.084)	28,000	NA
7-1M	0-36	NA	NA	NA	NA	5,920	ND(500)
7-1N	0-24	NA	NA	NA	NA	202,000	ND(1,000)
7-1Q	0-0.5	ND(8.8)	ND(18)	31	31	87,000	NA
	0.5-1	ND(8.8)	ND(18)	44	44	89,000	NA
	1-2	ND(1.3)	ND(35)	92	92	108,000	NA
	2-3	ND(23)	ND(60)	99	99	97,000	NA
	5-6	ND(0.087)	ND(0.62)	1.2	1.2	83,000	NA
	8-9	ND(0.072) [ND(0.071)]	ND(0.15) [ND(0.14)]	0.15 [0.21]	0.15 [0.21]	72,000 [75,000]	NA
	11-12	ND(0.068)	ND(0.14)	ND(0.14)	ND(0.14)	58,000	NA
	14-15	ND(0.051)	ND(0.10)	ND(0.10)	ND(0.10)	45,000	NA
	17-18	ND(0.032)	ND(0.064)	ND(0.064)	ND(0.064)	22,000	NA
7-1S	0-17	NA	NA	NA	NA	88,300	ND(500)
7-1U	0-0.5	ND(16)	ND(31)	46	46	166,000	NA
	0.5-1	ND(13)	ND(25)	45	45	194,000	NA
	1-2	ND(9.5)	ND(19)	21	21	178,000	NA
	2-3	ND(3.1)	ND(6.9)	13	13	210,000	NA
	5-6	ND(0.19)	ND(0.42)	0.67	0.67	199,000	NA
	8-9	ND(0.17)	ND(0.34)	0.41	0.41	264,000	NA
	11-12	ND(0.16)	ND(0.32)	ND(0.32)	ND(0.32)	276,000	NA
	14-15	ND(0.14) [ND(0.14)]	0.46 [ND(0.27)]	ND(0.30) [ND(0.27)]	0.46 [ND(0.27)]	219,000 [218,000]	NA
	17-18	ND(0.11)	ND(0.21)	ND(0.21)	ND(0.21)	213,000	NA
7-1W	0-48	NA	NA	NA	NA	89,600	7,380
7-1X	0-0.5	ND(0.93)	ND(1.9)	3.6	3.6	80,000	NA
	0.5-1	ND(0.65)	ND(1.3)	4.3	4.3	75,000	NA
	1-2	2.1*	ND(3.7)	7.6	9.7	69,000	NA
	2-3	ND(1.8)	ND(3.6)	15	15	79,000	NA
	5-6	ND(5.0)	ND(10)	20	20	109,000 [116,000]	NA
	8-9	ND(1.1)	2.4*	3.6	6.0	91,000	NA
	11-12	ND(0.11)	ND(0.21)	0.35	0.35	91,000	NA
	14-15	ND(0.11)	ND(0.22)	0.22	0.22	132,000	NA
	17-18	ND(0.08)	ND(0.16)	ND(0.16)	ND(0.16)	140,000	NA
	0-18	NA	NA	NA	NA	90,400	1,930
HR2-1	0-6	ND(1.8)	5.7	14	20	56,000	NA
HR2-2	0-6	ND(0.24)	1.8*	3.5	5.3	11,000	NA
HR2-3	0-6	ND(0.12)	ND(0.25)	0.73	0.73	4,060	NA

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
HR2-4	0-6	ND(1.8)	5.3	13	18	62,200	NA
HR6-1	0-6	ND(0.030)	0.067	0.22	0.29	12,200	NA
HR6-2	0-6	ND(0.028)	0.079	0.249	0.32	14,200	NA
HR6-3	0-6	ND(0.026)	0.082*	0.088	0.17	7,280	NA
HCSE-18A	0-3	ND(2.7)	ND(5.4)	17	17	NA	NA
	3-6	ND(4.5)	ND(9.0)	24	24	NA	NA
HCSE-18B	0-3	ND(13)	ND(26)	51	51	NA	NA
	3-7	ND(1.1)	ND(2.2)	2.8	2.8	NA	NA
HCSE-18C	0-3	ND(1.3)	ND(2.7)	3.1	3.1	NA	NA
	3-7	ND(2.5)	ND(5.0)	12	12	NA	NA
HSCE-18D	0-4	ND(0.46)	ND(0.93)	1.6	1.6	NA	NA
WP-1	0-0.5	ND(1.3)	ND(2.6)	8.1	8.1	NA	NA
	0.5-1	ND(1.3)	ND(3.3)	11	11	52,000	NA
	1-2	ND(3.1)	ND(6.1)	13	13	53,000	NA
	2-3	ND(3.0)	ND(6.1)	25	25	77,000	NA
	5-6	ND(7.0)	ND(14)	51	51	95,000	NA
	8-9	ND(6.4)	ND(14)	27	27	106,000	NA
	11-12	ND(6.6)	25*	43	68	78,000	NA
	14-15	ND(1.4)	4.3*	5.3	9.6	64,000	NA
	17-18	ND(0.12)	ND(0.24)	0.72	0.72	80,000	NA
WP-2	0-0.5	ND(1.6)	ND(3.3)	3.6	3.6	36,000	NA
	0.5-1	ND(0.87)	ND(1.7)	2.0	2.0	22,000	NA
	1-2	ND(1.9)	ND(3.9)	4.1	4.1	22,000	NA
	2-3	ND(1.9)	ND(3.7)	6.2	6.2	39,000	NA
	5-6	ND(5.3)	ND(11)	16	16	74,000	NA
	8-9	ND(2.8)	ND(5.6)	10	10	66,000	NA
	11-12	ND(1.1)	ND(2.1)	2.1	2.1	56,000	NA
	14-15	ND(0.056)	ND(0.11)	ND(0.11)	ND(0.11)	74,000	NA
	17-18	ND(.043)	ND(0.086)	ND(0.086)	ND(0.086)	48,000	NA
WP-3	0-0.5	ND(9.4)	ND(19)	27	27	NA	NA
	0.5-1	9.2*	ND(21)	33	42	NA	NA
	1-2	ND(15)	ND(30)	65	65	NA	NA
	2-3	ND(40)	ND(80)	160	160	NA	NA
	6-7	ND(8.4)	ND(18)	28	28	NA	NA
	12-13	ND(0.081)	ND(0.16)	0.25*	0.25	NA	NA
	0-18	NA	NA	NA	NA	118,000	1,300

TABLE 3-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Sample Location ID	Depth (inches)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
WP-4	0-22	NA	NA	NA	NA	88,300	ND(500)
WP-5	0-0.5	ND(7.5)	ND(15)	16	16	66,000	NA
	0.5-1	ND(5.8)	ND(12)	16	16	63,000	NA
	1-2	ND(5.6)	ND(11)	18	18	61,000	NA
	2-3	ND(5.6)	ND(11)	19	19	65,000	NA
	5-6	ND(9.0)	ND(18)	61	61	71,000	NA
	8-9	ND(18)	ND(36)	90	90	92,000	NA
	11-12	ND(19) [ND(19)]	ND(38) [ND(38)]	86 [76]	86 [76]	101,000 [100,000]	NA
	14-15	ND(55)	ND(110)	150	150	121,000	NA
	17-18	ND(29)	ND(68)	120	120	145,000	NA
	26-27	ND(0.16)	ND(0.33)	ND(0.33)	ND(0.33)	192,000	NA
	0-42	NA	NA	NA	NA	235,000	ND(1,000)
WP-6	0-0.5	ND(1.3)	ND(2.6)	3.3	3.3	51,000	NA
	0.5-1	ND(1.6)	ND(3.2)	3.3	3.3	51,000	NA
	1-2	ND(1.7)	ND(3.3)	4.2	4.2	50,000	NA
	2-3	ND(1.5)	ND(3.0)	5.5	5.5	50,000	NA
	5-6	ND(4.1)	ND(8.3)	16	16	81,000	NA
	8-9	ND(0.52)	ND(1.0)	1.5	1.5	71,000	NA
	11-12	ND(0.072)	ND(0.23)	0.41	0.41	102,000	NA
	14-15	ND(0.051)	ND(0.10)	ND(0.10)	ND(0.10)	77,000	NA
	17-18	ND(0.034)	ND(0.068)	ND(0.068)	ND(0.068)	22,000	NA
WP-7	0-0.5	ND(7.5)	ND(15)	24	24	NA	NA
	0.5-1	ND(7.5)	ND(15)	27	27	NA	NA
	1-2	ND(6.8)	ND(14)	28	28	NA	NA
	2-3	ND(7.0)	ND(14)	24	24	NA	NA
	5-6	ND(6.5)	ND(13)	26	26	NA	NA
	11-12	ND(14)	ND(28)	50	50	NA	NA
	14-15	ND(13)	ND(28)	85	85	NA	NA
	17-18	ND(23)	ND(45)	110	110	NA	NA
	23-24	ND(22)	ND(44)	120	120	NA	NA
	27-28	ND(20)	ND(41)	130	130	NA	NA
	0-42	NA	NA	NA	NA	246,000 [212,000]	3,630 [2,530]

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB, TOC, and Oil & Grease analyses.
2. * - Samples exhibited alteration of standard aroclor pattern.
3. ND(0.021) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] - Indicates field duplicate analysis.
5. NA - Not Analyzed
6. ** - Archived sample released for analysis in order to provide further vertical delineation of PCB presence.
7. RE - Indicates reanalysis results.

TABLE 3-4

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT GRAINSIZE VERSUS PCB AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in wet weight parts per million, ppm)

Location ID	Depth (feet)	Aroclor 1016, 1232, 1242, and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	Oil & Grease
BBS-12 >#10	0-1.8	ND(0.2)	ND(0.4)	1.9*	1.9	NA
BBS-12 <#10,>#200	0-1.8	ND(0.41)	ND(0.81)	5.8*	5.8	ND(500)
BBS-12 <#10,>#200 HA	0-1.8	ND(0.41)	ND(0.83)	5.0*	5.0	ND(500)
BBS-12 <#200	0-1.8	ND(0.2)	ND(0.55)	3.7*	3.7	NA
BBS-16B >#10	0-3.8	ND(0.41)	ND(1.1)	11*	11	ND(500)
BBS-16B <#10,>#200	0-3.8	ND(0.39)	ND(1.9)	18*	18	ND(500)
BBS-16B <#10,>#200 HA	0-3.8	ND(0.4)	ND(1.1)	13*	13	ND (500)
BBS-16B <#200	0-3.8	ND(2.1)	ND(7.5)	48*	48	NA
BBS-18M3 >#10	0-1.5	ND(0.3)	ND(0.6)	1.8*	1.8	NA
BBS-18M3 <#10,>#200	0-1.5	ND(1.0)	ND(2.0)	7.6*	7.6	ND(1,200)
BBS-18M3 <#10,>#200 HA	0-1.5	ND(0.2)	ND(0.42)	1.7*	1.7	NA
BBS-18M3 <#200	0-1.5	ND(0.2)	ND(2.0)	6.1*	6.1	NA
AHCSEA6 <#200	0-3	ND(0.04)	ND(0.08)	0.20	0.20	ND(250)
AHCSEA6 <#10, >#200	0-3	ND(0.10)	ND(0.20)	0.51	0.51	ND(250)
AHCSEA6 >#10	0-3	ND(0.40)	ND(0.81)	1.4	1.4	250
BBS16C <#200(*)	0-3.5	NA	NA	NA	NA	NA
BBS16C <#10, >#200	0-3.5	ND(1.0)	ND(2.5)	11	11	5,300
BBS16C >#10	0-3.5	ND(1.0)	ND(4.0)	17	17	6,600
BBS17C4 <#200	0-3	NA	NA	NA	NA	NA
BBS17C4 <#10, >#200	0-3	ND(0.20)	ND(0.71)	2.3	2.3	950
BBS17C4 >#10	0-3	ND(0.20)	ND(1.0)	3.4	3.4	3,800
BBS17D19 <#200	0-3	ND(0.59)	ND(1.2)	ND(1.2)	ND(1.2)	NA
BBS17D19 <#10, >#200	0-3	ND(4.0)	ND(8.0)	14	14	4,700
BBS17D19 >#10	0-3	ND(4.1)	ND(8.1)	16	16	5,900
BBS18I2 <#200(*)	0-5	NA	NA	NA	NA	NA
BBS18I2 <#10, >#200	0-5	ND(4.3)	ND(8.5)	29	29	17,000
BBS18I2 >#10	0-5	ND(4.2)	ND(8.4)	24	24	16,000

TABLE 3-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER SEDIMENT GRAINSIZE VERSUS PCB AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in wet weight parts per million, ppm)

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc. and submitted to Quanterra Environmental Services for PCB, oil and grease, and grain size analyses.
2. ND(0.04) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
3. NA - Not Analyzed due to insufficient sample quantity.
4. >#10 - coarse sands and gravels.
5. <#10, >#200 - medium to fine sands.
6. <#200 - silts and clays.
7. (*) - No sediment was retained by #200 sieve tray.
8. * - Samples exhibited alteration of standard Aroclor pattern.
9. HA - Analyzed for grain size by use of hydrometer, while all others were analyzed for grain size using sieve trays.

TABLE 3-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

1992 HOUSATONIC SURFICIAL SEDIMENT DATA COLLECTED BY LMS

SAMPLE ID	DATE	RIVER MILE	SAMPLE DEPTH (in)	AROCLOR 1248 mg/kg dry	AROCLOR 1254 mg/kg dry	AROCLOR 1260 mg/kg dry	TOTAL PCB mg/kg dry	TOTAL ORGANIC CARBON mg/kg dry	DRY BULK DENSITY (PCF)	% GRAIN SIZE BY WEIGHT GRAVEL	SAND	SILT	CLAY	DESCRIPTION
32002	08/25	108.2	0-3	0.05 ND	0.05 ND	0.12 *	0.12	20551.26	60.5	0	95.5	4	0.5	Tan, Grey Sandy Clay
32004	08/25	103.1	0-1	0.05 ND	0.05 ND	0.83 *	0.83	22046.43						Lt. Fluff, Sand
32004	08/25	103.1	1-2	0.09 ND	0.18 ND	2.5 *	2.5	40286.48						Lt. Fluff, Sand
32004	08/25	103.1	2-3	0.11 ND	0.18 ND	2.1 *	2.1	86795.07						Lt. Fluff, Sand
32005	08/25	101.5	0-1	0.05 ND	0.05 ND	0.96 *	0.96	20404.96						Sand, Gravel
32005	08/25	101.5	0-2	0.05 ND	0.05 ND	1.1 *	1.1	17961.36						Sand, Gravel
32005	08/25	101.5	2-3	0.05 ND	0.05 ND	0.59 *	0.59	25320.02						Sand, Gravel
32006	08/26	98.7	0-3	0.05 ND	0.05 ND	0.86 *	0.86	32500.51	48.4	3.5	49.7	43.3	3.5	Lt. Fluff, Sand
32008	08/26	98.1	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	3630.50						Gravel
32009	08/26	98	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	667.32						Gravel, Sand
32010	08/26	94.4	0-1	0.05 ND	0.05 ND	0.32 *	0.32	4190.32						Gravel, Sand, Fluff
32010	08/26	94.4	1-2	0.05 ND	0.05 ND	0.43 *	0.43	6427.27						Gravel, Sand, Fluff
32010	08/26	94.4	2-3	0.05 ND	0.05 ND	0.36 *	0.36	6813.57						Gravel, Sand, Fluff
32011	08/26	93.56	0-3	0.05 ND	0.05 ND	0.2 *	0.2	3371.37	95.0	0	84.8	13.8	1.4	Sand, Gravel, Clay
32014	08/27	91.26	0-3	0.05 ND	0.05 ND	0.23 *	0.23	1630.09						Sandy, Fluff, Gravel
32015	08/27	89.7	0-1	0.05 ND	0.05 ND	0.51 *	0.51	5295.66						Packed Sand, Fluff
32015	08/27	89.7	1-2	0.05 ND	0.05 ND	0.4 *	0.4	3514.94						Packed Sand, Fluff
32015	08/27	89.7	2-3	0.05 ND	0.05 ND	0.28 *	0.28	2191.78						Packed Sand, Fluff
32016	08/27	86.4	0-3	0.05 ND	0.05 ND	0.9 *	0.9	13431.40	86.2	0.9	47.6	48.5	3	Mud, Clay, Fluff
33751	08/27	84.6	0-3	0.05 ND	0.05 ND	0.3 *	0.3	10694.25						
33752	08/27	82.7	0-1	0.05 ND	0.05 ND	0.1 *	0.1	9015.07						Sand
33753	08/27	82.7	1-2	0.05 ND	0.05 ND	1 *	1	8636.30	79.6		79.6			
33753	08/27	82.7	2-3	0.05 ND	0.05 ND	0.07 *	0.07	7119.39						
33754	08/27	81.3	0-3	0.05 ND	0.05 ND	1.1 *	1.1	12397.33		0	50.1	47.7	2.2	Clay, Silt
33755	08/27	79.4	0-3	0.05 ND	0.05 ND	0.44 *	0.44	13129.82						Clay, Silt
33756	08/28	78	0-3	0.05 ND	0.05 ND	0.33 *	0.33	22694.35						Clay, Silt
33757	08/28	77.9	0-3	0.05 ND	0.05 ND	0.44 *	0.44	18327.22	58.9	0	30.3	66.6	3.1	Silt, Clay
33759	08/28	77.7	0-3	0.05 ND	0.05 ND	0.25 *	0.25	14627.89						Silt, Clay
33761	08/28	77.5	0-3	0.05 ND	0.05 ND	0.32 *	0.32	25869.97						
33763	09/01	75	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	6677.19						
33764	09/01	71.8	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	8099.47						
33765	09/01	67	0-3	0.05 ND	0.05 ND	0.06 *	0.06	4797.15	64.0	0	76	22.3	1.7	Silt, Clay, Rocks
33767	09/01	61	0-3	0.05 ND	0.05 ND	0.07 *	0.07	11473.60						Sand, Silt, Clay
33768	09/01	59	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	5672.01						Sand, Clay
33769	09/01	57	0-3	0.05 ND	0.05 ND	0.19 *	0.19	30165.91						Silt, Clay
33770	09/01	56	0-3	0.05 ND	0.05 ND	0.16 *	0.16	17924.07						Sand, Clay
33771	09/01	55	0-3	0.05 ND	0.05 ND	0.14 *	0.14	34605.69						Clay, Silt
33772	09/01	54	0-3	0.05 ND	0.05 ND	0.37 *	0.37	31007.75						Clay, Silt
33776	09/01	53.2	0-3	0.05 ND	0.05 ND	0.23 *	0.23	9563.41	86.7	3.4	77.1	18	1.5	
33774	09/01	53.1	0-3	0.05 ND	0.05 ND	0.18 *	0.18	21134.20						Silt, Clay
33780	09/02	49.7	0-1	0.05 ND	0.05 ND	0.07 *	0.07	13169.96						Sand, Silt
33780	09/02	49.7	1-2	0.05 ND	0.05 ND	0.06 *	0.06	21351.23						Sand, Silt
33780	09/02	49.7	2-3	0.05 ND	0.05 ND	0.09 *	0.09	14050.86						Sand, Silt
33781	09/02	48.3	0-3	0.05 ND	0.05 ND	0.1 *	0.1	18129.08						Silt, Sand
33773	09/02	47.1	0-3	0.05 ND	0.05 ND	0.06 *	0.06	17799.35						Silt
33782	09/02	43.9	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	8067.72						Sandy
33783	09/02	42.6	0-3	0.05 ND	0.05 ND	0.09 *	0.09	12636.79						Sandy, Silt
33784	09/03	40.1	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1830.07						Sandy, Silt
33785	09/03	39	0-3	0.05 ND	0.05 ND	0.09 *	0.09	27436.26						Silt
33786	09/03	36.7	0-3	0.05 ND	0.05 ND	0.12 *	0.12	20947.69						Silt
33787	09/03	33.9	0-3	0.05 ND	0.05 ND	0.18 *	0.18	31729.24	52.4	4.6	41	50.2	4.2	
33790	09/03	32.3	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	13666.69						
33791	09/03	31	0-3	0.05 ND	0.05 ND	0.07 *	0.07	9559.21						Sand, Silt
33792	09/03	25.7	0-3	0.05 ND	0.05 ND	0.09 *	0.09	26276.61						Sand, Silt
33793	09/03	24.7	0-3	0.05 ND	0.05 ND	0.06 *	0.06	17327.69						Sand, Silt
33794	09/03	23.8	0-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	16396.57						Sand, Silt, Clay
33795	09/03	22.7	0-3	0.05 ND	0.05 ND	0.06 *	0.06	26639.63	35.1	3.9	45.9	45.6	3.7	Sand
33797	09/03	21.5	0-3	0.05 ND	0.05 ND	0.07 *	0.07	19444.44						Silt
33801	09/04	19.5	0-1	0.05 ND	0.05 ND	0.06 *	0.06	44483.99						Silt, Clay
33801	09/04	19.5	1-2	0.05 ND	0.05 ND	0.14 *	0.14	39271.69						
33801	09/04	19.5	2-3	0.05 ND	0.05 ND	0.18 *	0.18	45823.05						Silt, Clay

NOTES:
1. AROCLOR 1248 - Aroclor 1016, 1232, 1242 and/or 1248.
2. ND - Compound was analyzed for but not detected. The number is detection limit for the sample.
3. * - Sample exhibits alteration of standard Aroclor pattern.

REFERENCE:
Reproduced from LMS, November 1994 - Attachment 2-2.

TABLE 3-6

GENERAL ELECTRIC COMPANY – PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

1992 HOUSATONIC DEEP SEDIMENT DATA COLLECTED BY LMS

SAMPLE ID	DATE	RIVER MILE	CORE DEPTH (in)	AROCLOR 1248 mg/kg dry	AROCLOR 1254 mg/kg dry	AROCLOR 1260 mg/kg dry	TOTAL PCB mg/kg dry	TOTAL ORGANIC CARBON mg/kg dry	CESIUM 137 pCi/gm dry
31452	08/05	19.7	0-1	0.05 *	0.05 ND	0.25 *	0.30	39643.21	3.31E-01
31453	08/05	19.7	1-2	0.06 *	0.05 ND	0.31 *	0.37	30106.90	
31454	08/05	19.7	2-3	0.05 ND	0.05 ND	0.10 *	0.10	30518.43	
31455	08/05	19.7	3-4	0.05 ND	0.05 ND	0.19 *	0.19	42791.31	
31456	08/05	19.7	4-5	0.09 *	0.05 ND	0.52 *	0.61	43148.37	4.06E-01
31457	08/05	19.7	5-6	0.05 ND	0.05 ND	0.06 *	0.06	33990.48	
31458	08/05	19.7	6-7	0.05 ND	0.05 ND	0.14 *	0.14	43741.59	
31459	08/05	19.7	7-8	0.07 *	0.05 ND	0.49 *	0.56	38119.44	
31460	08/05	19.7	8-9	0.05 ND	0.05 ND	0.08 *	0.08	43699.93	
	08/05	19.7	9-10						1.27E+00
31462	08/05	19.7	10-11	0.05 ND	0.05 ND	0.16 *	0.16	30134.45	
	08/05	19.7	11-12						3.98E-01
	08/05	19.7	13-14						3.30E-01
31466	08/05	19.7	14-15	0.05 ND	0.05 ND	0.21 *	0.21	34291.74	
31467	08/05	19.7	15-16	0.05 ND	0.05 ND	0.55 *	0.55	30504.71	1.35E+00
31464	08/05	19.7	13-14	0.08 *	0.05 ND	1.1 *	1.2	32554.01	
31465	08/05	19.7	12-13	0.11 *	0.05 ND	1.8 *	1.9	45952.83	
31468	08/05	19.7	16-17	0.05 *	0.05 ND	1.2 *	1.2	22000.00	
31469	08/05	19.7	17-18	0.05 ND	0.05 ND	1.1 *	1.1	26308.35	2.00E-01 ND
31470	08/05	19.7	18-19	0.05 ND	0.05 ND	0.96 *	0.96	31347.98	
31471	08/05	19.7	19-20	0.05 ND	0.05 ND	0.05 ND	0.05 ND	12694.13	1.00E-01 ND
31472	08/05	19.7	20-21	0.05 ND	0.05 ND	0.05 ND	0.05 ND	16802.91	
31473	08/05	19.7	21-22	0.05 ND	0.05 ND	0.06 *	0.06	24444.44	2.00E-01 ND
31474	08/05	19.7	22-23	0.05 ND	0.05 ND	0.05 ND	0.05 ND	16077.95	
31477	08/05	26.1	0-1	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1701.57	1.49E-01
31478	08/05	26.1	1-2	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2923.98	
31479	08/05	26.1	2-3	0.05 ND	0.05 ND	0.05 ND	0.05 ND	881.39	
	08/05	26.1	3-4						9.81E-02
31481	08/05	26.1	4-5	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2178.75	
	08/05	26.1	5-6						7.38E-02
31483	08/05	26.1	6-7	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1240.69	
31484	08/05	26.1	7-8	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2644.10	2.00E-01 ND
31485	08/05	26.1	8-9	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1612.47	
31486	08/05	26.1	9-10	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2421.83	1.49E-01
31487	08/05	26.1	10-11	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1474.14	
31488	08/05	26.1	11-12	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2296.68	1.57E-01
31489	08/05	26.1	12-13	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2201.13	
31490	08/05	26.1	13-14	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2500.69	2.00E-01 ND
31411	08/05	29.8	0-1	0.08 * ^	0.05 ND	0.62 *	0.70	67732.12	7.94E-01
31412	08/05	29.8	1-2	0.09 * ^	0.05 ND	0.69 *	0.78	45787.56	
31413	08/05	29.8	2-3	0.05 ND ^	0.05 ND	0.31 *	0.31	51210.43	
	08/05	29.8	3-4						9.22E-01
31415	08/05	29.8	4-5	0.05 ND ^	0.05 ND	0.24 *	0.24	38240.13	
31417	08/05	29.8	6-7	0.11 * ^	0.05 ND	0.54 *	0.65	46992.48	6.75E-01
31419	08/05	29.8	8-9	0.38 * ^	0.05 ND	1.3 *	1.7	46475.60	
	08/05	29.8	9-10						8.11E-01
31421	08/05	29.8	10-11	0.25 * ^	0.05 ND	1.3 *	1.6	43028.17	
	08/05	29.8	11-12						1.08E+00
31423	08/05	29.8	12-13	0.28 * ^	0.05 ND	1.2 *	1.5	52356.02	1.57E+00
31424	08/05	29.8	13-14	0.05 ND	0.05 ND	0.10 *	0.10	10848.76	2.99E+00
31425	08/05	29.8	14-15	0.05 ND	0.05 ND	0.12 *	0.12	9924.57	1.75E+00
31426	08/05	29.8	15-16	0.09 *	0.05 ND	0.32 *	0.41	54192.61	2.96E+00
31427	08/05	29.8	16-17	0.05 ND	0.05 ND	0.23 *	0.23	43307.09	1.46E+00
31428	08/05	29.8	17-18	0.05 ND	0.05 ND	0.05 ND	0.05 ND	26130.65	6.20E-01
31429	08/05	29.8	18-19	0.05 ND	0.05 ND	0.07 *	0.07	2422.56	
31430	08/05	29.8	19-20	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1459.86	1.00E-01 ND
31431	08/05	29.8	20-21	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2544.19	
	08/05	29.8	21-22						5.00E-02
31433	08/05	29.8	22-23	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1254.08	
31435	08/05	29.8	24-25	0.05 ND	0.05 ND	0.05 ND	0.05 ND	294.42	
	08/05	29.8	25-26						6.00E-02
31437	08/05	29.8	26-27	0.05 ND	0.05 ND	0.05 ND	0.05 ND	494.78	
31380	08/05	34.2	0-1	0.05 ND	0.05 ND	0.22	0.22	31722.61	5.04E-01
31382	08/05	34.2	1-2	0.05 ND	0.05 ND	0.25 *	0.25	33211.56	
31383	08/05	34.2	2-3	0.05 ND	0.05 ND	0.47	0.47	31669.54	
	08/05	34.2	3-4						4.72E-01
31385	08/05	34.2	4-5	0.05 ND	0.05 ND	0.36	0.36	38636.65	
31386	08/05	34.2	5-6	0.05 ND	0.05 ND	0.77	0.77	41592.39	
31387	08/05	34.2	6-7	0.05 ND	0.05 ND	0.41 *	0.41	31270.57	1.01E+00
31390	08/05	34.2	8-9	0.05 ND	0.05 ND	0.36 *	0.36	29146.79	
	08/05	34.2	9-10						5.64E-01
31392	08/05	34.2	10-11	0.05 ND	0.05 ND	0.28 *	0.28	35460.99	
	08/05	34.2	11-12						6.59E-01
31394	08/05	34.2	12-13	0.05 ND	0.05 ND	0.45 *	0.45	26413.10	
31395	08/05	34.2	13-14	0.05 ND	0.05 ND	0.49 *	0.49	26826.48	6.43E-01
31397	08/05	34.2	14-15	0.05 ND	0.05 ND	0.36 *	0.36	39774.29	
31398	08/05	34.2	15-16	0.05 ND	0.05 ND	0.20 *	0.20	16696.81	7.44E-01
31400	08/05	34.2	16-17	0.05 ND	0.05 ND	0.30 *	0.30	26954.99	
31401	08/05	34.2	17-18	0.06 *	0.05 ND	0.37 *	0.43	31578.95	8.29E-01
31403	08/05	34.2	18-19	0.09 *	0.05 ND	0.43 *	0.52	34373.35	
31404	08/05	34.2	19-20	0.11 *	0.05 ND	0.56 *	0.67	28729.73	9.51E-01
31406	08/05	34.2	20-21	0.06 *	0.05 ND	0.49 *	0.55	32042.72	
	08/05	34.2	21-22						8.96E-01
31408	08/05	34.2	22-23	0.08 *	0.05 ND	0.38 *	0.46	24074.07	
31410	08/05	34.2	24-25	0.05 ND	0.05 ND	0.14 *	0.14	28335.91	
31308	08/05	53.2	0-1	0.05 ND	0.05 ND	0.31 *	0.31	30363.09	
31309	08/05	53.2	1-2	0.05 ND	0.05 ND	0.19 *	0.19	20049.50	
31310	08/05	53.2	2-3	0.05 ND	0.05 ND	0.09 *	0.09	39930.12	
31312	08/05	53.2	4-5	0.05 ND	0.05 ND	0.10 *	0.10	19879.59	
31315	08/05	53.2	7-8	0.05 ND	0.05 ND	0.11 *	0.11	19572.95	
31317	08/05	53.2	9-10	0.05 ND	0.05 ND	0.10 *	0.10	11516.30	
31319	08/05	53.2	11-12	0.05 ND	0.05 ND	0.06 *	0.06	4570.51	
31320	08/05	53.2	12-13	0.05 ND	0.05 ND	0.06 *E	0.06	5044.47	
31321	08/05	53.2	13-14	0.05 ND	0.05 ND	0.06 *E	0.06	6683.60	
31322	08/05	53.2	14-15	0.05 ND	0.05 ND	0.24 *	0.24	5539.85	
31323	08/05	53.2	15-16	0.05 ND	0.05 ND	0.55 *	0.55	22375.92	
31324	08/05	53.2	16-17	0.05 ND	0.05 ND	0.32 *	0.32	15608.37	
31325	08/05	53.2	17-18	0.05 ND	0.05 ND	0.50 *	0.50	16743.55	
31326	08/05	53.2	18-19	0.05 ND	0.05 ND	0.25 *	0.25	13939.84	
31327	08/05	53.2	19-20	0.05 ND	0.05 ND	0.17 *	0.17	11020.47	
31328	08/05	53.2	20-21	0.05 ND	0.05 ND	0.16 *	0.16	14298.75	

TABLE 3-6

GENERAL ELECTRIC COMPANY – PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVER AND SILVER LAKE

1992 HOUSATONIC DEEP SEDIMENT DATA COLLECTED BY LMS

SAMPLE ID	DATE	RIVER MILE	CORE DEPTH (in)	AROCLOR 1248 mg/kg dry	AROCLOR 1254 mg/kg dry	AROCLOR 1260 mg/kg dry	TOTAL PCB mg/kg dry	TOTAL ORGANIC CARBON mg/kg dry	CESIUM 137 pCi/gm dry
31336	08/05	77.7	0-1	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1377.24	
31337	08/05	77.7	1-2	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2717.74	
31338	08/05	77.7	2-3	0.05 ND	0.05 ND	0.06 *	0.06	1989.39	
31340	08/05	77.7	4-5	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2316.79	
31343	08/05	77.7	7-8	0.05 ND	0.05 ND	0.05 ND	0.05 ND	3373.31	
31344	08/05	77.7	8-9	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1159.80	
31345	08/05	77.7	9-10	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1353.18	
31346	08/05	77.7	10-11	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1371.08	
31347	08/05	77.7	11-12	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2119.97	
31348	08/05	77.7	12-13	0.05 ND	0.05 ND	0.05 ND	0.05 ND	3040.99	
31349	08/05	77.7	13-14	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1581.32	
31350	08/05	77.7	14-15	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1067.00	
31351	08/05	77.7	15-16	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2146.74	
31353	08/05	77.7	17-18	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1869.84	
31355	08/05	77.7	19-20	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2017.65	
31357	08/05	77.7	21-22	0.05 ND	0.05 ND	0.05 ND	0.05 ND	1619.13	
31359	08/05	77.7	23-24	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2458.81	
31361	08/05	77.7	25-26	0.05 ND	0.05 ND	0.05 ND	0.05 ND	2499.36	

NOTES:
1. AROCLOR 1248 – Aroclor 1016, 1232, 1242 and/or 1248.
2. ND – Compound was analyzed for but not detected. The number is detection limit for the sample.
3. Total PCB (sum of aroclors) rounded to two significant figures.
4. * – Sample exhibits alteration of standard Aroclor pattern.
5. ^ = Aroclor pattern identified and/or calculated as Aroclor 1248.
6. E = Estimated value.

REFERENCE:
Reproduced from LMS, November 1994 – Attachment 2-1.

TABLE 3-7

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT APPENDIX IX+3 SVOC AND PCB DATA - NOVEMBER 1990 THROUGH NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

	Upsteam of GE Facility and Related Sites						Adjacent to GE Facility and Related Sites										Downstream of GE Facility and Related Sites				
	Hubbard Ave. Bridge	Upstream of Unkamet Brook Confluence			Downstream of Unkamet Brook Confluence		Newell Street Bridge	"Boomed" Area Near East Street Area 2	Lyman Street Bridge		Upstream of Silver Lake Outfall	Downstream from Silver Lake Outfall	Between Silver Lake Outfall and Elm Street Bridge			Elm Street Bridge	Between Elm Street Bridge and Dawes Avenue Bridge			Between Dawes Avenue Bridge and Pomeroy Avenue Bridge	
Parameter	HCSE-9 (0-18")	HCSE-8 (0-20")	HCSE-13 (0-18")	HCSE-14 (0-22")	HCSE-7 (0-19")	HCSE-7A (0-19")	HCSE-6 (0-11")	HCSE-5 (0-13")	HCSE-4 (0-19")	HCSE-15 (0-22")	HCSE-3 (0-18")	HCSE-2 (0-19")	HCSE-A5 (11"-16")	HCSE-A6 (2"-8")	HCSE-A6 (2"-8" Dup.)	HCSE-1 (0-18")	HCSE-16 (0-13")	HCSE-17 (0-22")	HCSE-18 (0-6")	HCSE-19 (0-24")	HCSE-20 (0-23")
Acenaphthene	ND(0.81)	0.13J	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	0.19J	ND(0.88)	6.4	ND(0.97)	ND(1.2)	4.4	0.21J	0.058J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Acenapthylene	0.19J	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	0.24J	0.67J	0.16J	0.37J	0.38J	0.11J	0.1J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	0.88J	ND(3.7)
Aniline	ND(4.2)	ND(4.6)	ND(4.1)	ND(4.1)	ND(4.8)	ND(5.0)	ND(4.2)	ND(4.2)	ND(4.5)	0.93J	ND(5.0)	ND(6.3)	ND(2.5)	ND(1.1)	ND(0.98)	ND(8.7)	ND(5.1)	ND(3.9)	ND(3.7)	ND(3.8)	ND(3.7)
Anthracene	0.29J	0.14J	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	1.0	2.9J	0.18J	0.26J	1.3J	0.37J	0.13J	ND(1.7)	0.60J	ND(3.9)	ND(3.7)	1.2J	ND(3.7)
Benzo(a)anthracene	0.63J	0.31J	ND(4.0)	ND(4.0)	0.26J	0.2J	ND(0.81)	ND(0.81)	1.10	0.84J	0.37J	0.47J	1.4J	0.96J	0.54J	ND(1.7)	ND(5.0)	ND(3.9)	0.59J	2.2J	ND(3.7)
Benzo(b)Fluoranthene	0.41J	0.23J	ND(4.0)	ND(4.0)	0.28J	0.19J	ND(0.81)	ND(0.81)	0.58J	0.73J	0.31J	0.44J	1.8JX	1.8X	0.82J	ND(1.7)	ND(5.0)	ND(3.9)	0.54J	1.5J	ND(3.7)
Benzo(k)Fluoranthene	0.6J	0.27J	ND(4.0)	ND(4.0)	0.23J	0.2J	ND(0.81)	ND(0.81)	0.65J	0.69J	0.34J	0.43J	1.8JX	1.8X	0.35J	ND(1.7)	ND(5.0)	ND(3.9)	0.42J	2.0J	ND(3.7)
Benzo(g,h,i)Perylene	0.33J	0.16J	ND(4.0)	ND(4.0)	0.17J	0.14J	ND(0.81)	ND(0.81)	0.5J	ND(4.5)	0.26J	0.36J	0.44J	0.53J	0.32J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	1.1J	ND(3.7)
Benzo(a)pyrene	0.54J	0.27J	ND(4.0)	ND(4.0)	0.23J	0.18J	ND(0.81)	ND(0.81)	0.96	0.90J	0.33J	0.57J	1.1J	0.86J	0.57J	ND(1.7)	ND(5.0)	ND(3.9)	0.51J	2.0J	ND(3.7)
Bis(2-ethylhexyl)phthalate	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	0.34J	0.18J	0.37J	0.55BJ	1.2B	ND(4.5)	0.97B	1.1BJ	0.25J	0.25J	0.17J	1.2BJ	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Chrysene	0.64J	0.33J	ND(4.0)	ND(4.0)	0.33J	0.24J	0.1J	0.1J	1.10	1.1J	0.46J	0.6J	1.5J	1.2	0.62J	ND(1.7)	ND(5.0)	ND(3.9)	0.57J	2.4J	ND(3.7)
Dibenz(a,h)anthracene	0.16J	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	0.16J	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	0.13J	0.055J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Dibenzofuran	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.5)	ND(0.97)	ND(1.2)	0.56J	0.14J	ND(0.98)	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
1,3-Dichlorobenzene	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	0.53J	ND(0.97)	ND(1.2)	ND(2.5)	0.056J	ND(0.98)	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Diphenylamine	ND(0.81)	ND(0.89)	ND(4.1)	ND(4.1)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.6)	ND(0.97)	ND(1.2)	ND(2.5)	ND(1.1)	0.077JX	ND(1.7)	ND(5.1)	ND(3.9)	ND(3.7)	ND(3.8)	ND(3.7)
1,4-Dichlorobenzene	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	0.18J	0.28J	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	0.42J	0.38J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Fluoranthene	1.10	0.71J	0.64J	ND(4.0)	0.63J	0.47J	0.17J	0.68J	2.10	2.2J	0.9J	0.81J	3.5	2.7	1.4	ND(1.7)	1.0J	0.62J	1.3J	5.2	ND(3.7)
Fluorene	0.099J	0.11J	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	0.094J	0.13J	3.9J	ND(0.97)	ND(1.2)	3.5	0.23J	0.062J	ND(1.7)	0.60J	ND(3.9)	ND(3.7)	0.51J	ND(3.7)
Indeno(1,2,3-cd)Pyrene	0.31J	0.17J	ND(4.0)	ND(4.0)	0.15J	0.13J	ND(0.81)	ND(0.81)	0.45J	ND(4.5)	0.17J	0.31J	0.37J	0.44J	0.26J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	0.99J	ND(3.7)
1-Methylnaphthalene	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.5)	ND(0.97)	ND(1.2)	0.87J	0.097J	ND(0.98)	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
2-Methylnaphthalene	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	5.6	ND(0.97)	ND(1.2)	ND(2.5)	0.082J	ND(0.98)	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
3-Methylphenol	ND(0.81)	ND(0.89)	ND(4.1)	ND(4.1)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.6)	ND(0.97)	ND(1.2)	ND(2.5)	0.075JX	ND(0.98)	ND(1.7)	ND(5.1)	ND(3.9)	ND(3.7)	ND(3.8)	ND(3.7)
4-Methylphenol	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	0.075JX	ND(0.98)	0.46J	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Naphthalene	ND(0.81)	0.11J	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	0.1J	0.78J	ND(0.97)	ND(1.2)	ND(2.5)	0.37J	0.1J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
N-Nitrosodiphenylamine***	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	ND(1.1)	0.077JX	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
3-Nitroaniline	ND(3.9)	ND(4.3)	ND(20)	ND(19)	ND(4.5)	ND(4.7)	ND(3.9)	ND(3.9)	ND(4.2)	ND(22)	ND(4.7)	ND(5.9)	ND(4.9)	ND(2.2)	ND(2.0)	8.0J	ND(24)	ND(19)	ND(18)	ND(18)	ND(18)
Pentachlorobenzene	ND(1.6)	ND(1.8)	ND(8.1)	ND(8.1)	ND(1.9)	ND(2.0)	ND(1.6)	ND(1.6)	ND(1.8)	ND(9.1)	ND(2.0)	ND(2.5)	ND(2.5)	ND(1.1)	ND(0.98)	ND(3.4)	ND(10)	ND(7.8)	0.42J	ND(7.5)	ND(7.4)
Phenanthrene	0.87	0.72J	0.45J	ND(4.0)	0.48J	0.27J	0.091J	0.13J	1.20	14.0	0.47J	0.36J	15.0	1.2	0.32J	ND(1.7)	0.62J	0.40J	1.0J	3.9	ND(3.7)
Phenol	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	ND(0.88)	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	0.089J	ND(0.98)	3.30	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Pyrene	1.20	0.62J	0.58J	ND(4.0)	0.57J	0.4J	0.17J	0.96	2.40	2.5J	0.82J	ND(1.2)	4.1	3.6	2.0	ND(1.7)	0.87J	0.57J	1.1J	4.7J	ND(3.7)
1,2,4-Trichlorobenzene	ND(0.81)	ND(0.89)	ND(4.0)	ND(4.0)	ND(0.92)	ND(0.97)	ND(0.81)	ND(0.81)	1.90	ND(4.5)	ND(0.97)	ND(1.2)	ND(2.5)	0.23J	0.2J	ND(1.7)	ND(5.0)	ND(3.9)	ND(3.7)	ND(3.7)	ND(3.7)
Total PCBs(IT Analytical/ Quanterra Environmental)	0.90	ND(0.22)	0.06	ND(0.048)	0.19J	0.2J	ND(0.2)	ND(0.2)	15.0	100	8.6	10.0	47.0	54.0	NA	3.2J	0.25	17.0	1,300 [510 RE]	3.3	5.3
Total PCBs(OBG Laboratories)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	60.0	140	NA	NA	NA	NA	NA	NA	NA

TABLE 3-7
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT APPENDIX IX+3 SVOC AND PCB DATA - NOVEMBER 1990 THROUGH NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

NOTES:

1. All samples were collected by Blasland & Bouck Engineers, P.C./Blasland, Bouck & Lee, Inc. Those from locations HCSE-A5 and HCSE-A6 were collected in May 1992. Those from locations HCSE-13 through HCSE-20 were collected in October and November 1994. The others were collected in 1990-1991.
2. Samples collected prior to 1994 were submitted to IT Analytical Services, Knoxville, Tennessee, or CompuChem Laboratories, Inc., Research Triangle Park, NC for the analysis of Appendix IX+3 constituents. (OBG Laboratories also performed PCB analyses on samples from locations HCSE-A5 and HCSE-A6.) Samples collected in 1994 were submitted to Quanterra Environmental Services.
3. Only those parameters which were detected in at least one sample are presented.
4. ND(4.2) = Not detected, number in parenthesis is the detection limit.
5. J = Indicates an estimated value less than the CLP required quantitation limit.
6. B = Analyte was also detected in the associated method blank.
7. X = Coeluting isomers were noted by the laboratory.
8. NA = Not Analyzed.
9. *** = N-Nitrosodiphenylamine could not be distinguished from Diphenylamine.
10. PCB analysis was also performed inadvertently by CompuChem Laboratories on samples from locations HCSE-A5 and HCSE-A6; the results were reported on a wet-weight basis as follows:
    HCSE-A5 = 15.0 ppm
    HCSE-A6 = 20.7 ppm
    HCSE-A6 (dup) = 16.0 ppm
11. [510 RE] - Indicates reanalysis results.

TABLE 3-8
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT PCDDs/PCDFs DATA - NOVEMBER 1990 THROUGH NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

	Upstream of GE Facility and Related Sites				Adjacent to GE Facility and Related Sites					
	Hubbard Ave. Bridge	Upstream of Unkamet Brook Confluence			Downstream of Unkamet Brook Confluence		Newell Street Bridge	"Boomed" Area Near East Street Area 2	Lyman Street Bridge	
Parameter	HCSE-9 (0-18")	HCSE-8 (0-20")	HCSE-13 (0-18")	HCSE-14 (0-22")	HCSE-7 (0-19")	HCSE-7A (0-19")	HCSE-6 (0-11")	HCSE-5 (0-13")	HCSE-4 (0-19")	HCSE-15 (0-22")
TCDDs (TOTAL)	ND(0.00042)	ND(0.00021)	0.00000072	0.00000057	ND(0.00056)	ND(0.00052)	ND(0.0013)	ND(0.0016)	ND(0.0096)	0.00017
2,3,7,8-TCDD	ND(0.00061)	ND(0.00017)	ND(0.00000019)	ND(0.00000011)	ND(0.00075)	ND(0.00023)	ND(0.0032)	ND(0.0033)	ND(0.0068)	0.0000082
PeCDDs (TOTAL)	ND(0.00095)	ND(0.00027)	ND(0.00000081)	ND(0.00000052)	ND(0.00083)	ND(0.00074)	ND(0.0024)	ND(0.0016)	ND(0.0152)	0.00035
1,2,3,7,8-PeCDD	NA	NA	ND(0.00000019)	ND(0.00000013)	NA	NA	NA	NA	NA	0.000019
HxCDDs (TOTAL)	ND(0.00049)	ND(0.00027)	0.000012	0.0000097	ND(0.00049)	ND(0.00055)	ND(0.00082)	ND(0.0041)	ND(0.0181)	0.00093
1,2,3,4,7,8-HxCDD	NA	NA	ND(0.00000068)	ND(0.00000052)	NA	NA	NA	NA	NA	0.000033
1,2,3,6,7,8-HxCDD	NA	NA	ND(0.0000021)	ND(0.0000014)	NA	NA	NA	NA	NA	0.00008
1,2,3,7,8,9-HxCDD	NA	NA	ND(0.0000011)	ND(0.00000072)	NA	NA	NA	NA	NA	0.000058
HpCDDs (TOTAL)	NA	NA	0.000074	0.000044	NA	NA	NA	NA	NA	0.0013
1,2,3,4,6,7,8-HpCDD	NA	NA	0.000039	0.000022	NA	NA	NA	NA	NA	0.00069
OCDD (TOTAL)	NA	NA	0.00042	0.00022	NA	NA	NA	NA	NA	0.0053 E
Total PCDDs	ND	ND	0.000507	0.000274	ND	ND	ND	ND	ND	0.00805
TCDFs (TOTAL)	ND(0.00019)	ND(0.00006)	0.0000032	0.0000026	ND(0.00057)	ND(0.00046)	ND(0.00042)	ND(0.00086)	0.0149(I)	0.0017
2,3,7,8-TCDF	NA	NA	0.000002J**	0.0000014J**	NA	NA	NA	NA	NA	0.00021
PeCDFs (TOTAL)	ND(0.0004)	ND(0.00011)	0.0000037	0.0000043	ND(0.00076)	ND(0.0011)	ND(0.0008)	ND(0.00084)	0.0295(I)	0.0038
1,2,3,7,8-PeCDF	NA	NA	ND(0.00000074)	ND(0.00000041)	NA	NA	NA	NA	NA	0.00014
2,3,4,7,8-PeCDF	NA	NA	ND(0.00000081)	ND(0.00000059)	NA	NA	NA	NA	NA	0.00023
HxCDFs (TOTAL)	ND(0.00099)	ND(0.00047)	0.000015	0.000025	ND(0.0007)	ND(0.00073)	ND(0.0076)	ND(0.0044)	0.0143(I)	0.0055
1,2,3,4,7,8-HxCDF	NA	NA	ND(0.0000016)	ND(0.00000095)	NA	NA	NA	NA	NA	0.00063
1,2,3,6,7,8-HxCDF	NA	NA	ND(0.00000083)	ND(0.00000047)	NA	NA	NA	NA	NA	0.00026
2,3,4,6,7,8-HxCDF	NA	NA	ND(0.00000094)	ND(0.00000073)	NA	NA	NA	NA	NA	0.0003
1,2,3,7,8,9-HxCDF	NA	NA	ND(0.00000024)	ND(0.00000023)	NA	NA	NA	NA	NA	ND(0.000022)*
HpCDFs (TOTAL)	NA	NA	0.00012	0.000083	NA	NA	NA	NA	NA	0.0091
1,2,3,4,6,7,8-HpCDF	NA	NA	0.000071	0.000047	NA	NA	NA	NA	NA	0.0052 E
1,2,3,4,7,8,9-HpCDF	NA	NA	ND(0.00000070)	ND(0.00000045)	NA	NA	NA	NA	NA	0.0002
OCDF (TOTAL)	NA	NA	0.000042	0.000027	NA	NA	NA	NA	NA	0.003 E
Total PCDFs	ND	ND	0.000184	0.000142	ND	ND	ND	ND	0.0587	0.0231
Total TEQs (EPA TEFs)	NC	NC	0.0000018	0.0000011	NC	NC	NC	NC	NC	0.00037
Total TEQs (DEP TEFs)	NC	NC	0.000013	0.0000084	NC	NC	NC	NC	NC	0.0013

	Adjacent to GE Facility and Related Sites						Downstream of GE Facility and Related Sites				
	Upstream of Silver Lake Outfall	Downstream from Silver Lake Outfall	Between Silver Lake Outfall and Elm Street Bridge			Elm Street Bridge	Between Elm Street Bridge and Dawes Avenue Bridge			Between Dawes Avenue Bridge and Pomeroy Avenue Bridge	
Parameter	HCSE-3 (0-18")	HCSE-2 (0-19")	HCSE-A5 (11"-16")	HCSE-A6 (2"-8")	HCSE-A6 (2"-8" Dup.)	HCSE-1 (0-18")	HCSE-16 (0-13")	HCSE-17 (0-22")	HCSE-18 (0-6")	HCSE-19 (0-24")	HCSE-20 (0-23")
TCDDs (TOTAL)	ND(0.00021)	ND(0.00066)	ND(0.000025)	ND(0.000041)	ND(0.000028)	ND(0.00015)	ND(0.00000042)	0.0000021	ND(0.00000039)	ND(0.00000043)	ND(0.00000028)
2,3,7,8-TCDD	ND(0.00013)	ND(0.00086)	ND(0.000025)	ND(0.000041)	ND(0.000028)	ND(0.00018)	ND(0.000000082)	ND(0.00000032)	ND(0.00000012)	ND(0.00000021)	ND(0.00000015)
PeCDDs (TOTAL)	ND(0.00037)	ND(0.0015)	ND(0.000042)	ND(0.0001)	ND(0.000088)	ND(0.00032)	ND(0.00000040)	ND(0.0000019)	ND(0.00000086)	ND(0.00000075)	ND(0.00000016)
1,2,3,7,8-PeCDD	NA	NA	NA	NA	NA	NA	ND(0.000000087)	ND(0.00000052)	ND(0.00000019)	ND(0.00000049)	ND(0.00000011)
HxCDDs (TOTAL)	ND(0.00058)	ND(0.0011)	ND(0.000045)	ND(0.0002)	ND(0.00014)	ND(0.00026)	ND(0.0000013)	0.000015	ND(0.0000029)	0.000012	ND(0.0000021)
1,2,3,4,7,8-HxCDD	NA	NA	NA	NA	NA	NA	ND(0.00000017)	ND(0.00000092)	ND(0.00000039)	ND(0.00000059)	ND(0.00000016)
1,2,3,6,7,8-HxCDD	NA	NA	NA	NA	NA	NA	ND(0.00000023)	ND(0.0000024)	ND(0.00000095)	ND(0.0000018)	ND(0.00000029)
1,2,3,7,8,9-HxCDD	NA	NA	NA	NA	NA	NA	ND(0.00000034)	ND(0.0000023)	ND(0.00000074)	ND(0.0000013)	ND(0.00000021)
HpCDDs (TOTAL)	NA	NA	ND(0.00015)	0.00056	0.00045	NA	ND(0.000003)	0.000066	0.000035	0.000084	ND(0.0000025)
1,2,3,4,6,7,8-HpCDD	NA	NA	NA	NA	NA	NA	ND(0.000003)	0.000037	0.000016	0.000044	ND(0.0000025)
OCDD (TOTAL)	NA	NA	0.00075	0.0022	0.002	NA	0.00003	0.00036	0.00015	0.0004	0.000022
Total PCDDs	ND	ND	0.00075	0.00276	0.00245	ND	0.00003	0.000443	0.000185	0.000496	0.000022
TCDFs (TOTAL)	0.0007(I)	ND(0.00069)	ND(0.000036)	ND(0.000051)	ND(0.00016)	ND(0.000081)	0.0000081	0.00012	0.000088	0.000017	0.000037
2,3,7,8-TCDF	NA	NA	ND(0.000036)	ND(0.000051)	ND(0.000048)	NA	0.0000033	0.000021	0.000016	0.0000028	0.000006
PeCDFs (TOTAL)	0.00065(I)	ND(0.0013)	ND(0.00011)	ND(0.00031)	0.00028	ND(0.000046)	ND(0.0000026)	0.00021	0.00021	0.000024	0.000027
1,2,3,7,8-PeCDF	NA	NA	NA	NA	NA	NA	ND(0.0000012)	0.000012	0.000014	ND(0.0000015)	ND(0.0000023)
2,3,4,7,8-PeCDF	NA	NA	NA	NA	NA	NA	ND(0.00000085)	0.000029	0.000028	ND(0.0000024)	ND(0.0000026)
HxCDFs (TOTAL)	0.00041(I)	0.00083(I)	ND(0.00017)	ND(0.00065)	0.00057	ND(0.00014)	ND(0.0000015)	0.00014	0.00034	0.000030	0.000011
1,2,3,4,7,8-HxCDF	NA	NA	NA	NA	NA	NA	ND(0.0000012)	0.000051	0.00016	0.000004 J**	0.0000038 J**
1,2,3,6,7,8-HxCDF	NA	NA	NA	NA	NA	NA	ND(0.00000069)	0.000015	0.000019	ND(0.0000018)	ND(0.0000012)
2,3,4,6,7,8-HxCDF	NA	NA	NA	NA	NA	NA	ND(0.00000043)	0.000017	0.000019	ND(0.0000025)	ND(0.0000015)
1,2,3,7,8,9-HxCDF	NA	NA	NA	NA	NA	NA	ND(0.00000013)	ND(0.00000070)	0.000015	ND(0.00000043)	ND(0.00000052)
HpCDFs (TOTAL)	NA	NA	ND(0.00025)	0.0014	0.00089	NA	ND(0.0000032)	0.00014	0.00067	0.000029	0.0000073
1,2,3,4,6,7,8-HpCDF	NA	NA	NA	NA	NA	NA	ND(0.0000032)	0.000086	0.00016	0.000013	0.0000034 J**
1,2,3,4,7,8,9-HpCDF	NA	NA	NA	NA	NA	NA	ND(0.00000029)	0.0000069	0.00014	ND(0.0000011)	ND(0.00000091)
OCDF (TOTAL)	NA	NA	0.00016	0.00052	0.00032	NA	ND(0.0000032)	0.000007	0.0013	0.000017	0.0000074 J**
Total PCDFs	0.00176	0.00083	0.00016	0.00192	0.00206	ND	0.0000081	0.000680	0.002608	0.000117	0.0000897
Total TEQs (EPA TEFs)	NC	NC	NC	NC	NC	NC	0.00000036	0.000027	0.000042	0.0000017	0.000001
Total TEQs (DEP TEFs)	NC	NC	NC	NC	NC	NC	0.00000041	0.000055	0.000091	0.0000091	0.0000031

NOTES:
1. All samples were collected by Blasland & Bouck Engineers, P.C./Blasland, Bouck & Lee, Inc. Those from locations HCSE-A5 and HCSE-A6 were collected in May 1992 and analyzed by CompuChem Laboratories, Inc.
Those from locations HCSE-13 through HCSE-20 were collected in October and November 1994 and analyzed by Quanterra Environmental Services, Inc.
The others were collected in 1990-1991 and analyzed by CompuChem Laboratories, Inc.
2. Only constituents detected in at least one sample are presented.
3. ND(0.00042) = Not detected, number in parenthesis is the detection limit.
4. J** - Result is an estimated value that is below the lower calibration limit but above the target detection limit.
5. * - Elevated detection limit due to chemical interference.
6. E - Concentration exceeded calibration range.
7. NA - Not Analyzed.
8. (I) - Intereferences from polychlorinated diphenylethers are suspected by the laboratory.
9. Total PCDDs/PCDFs determined as sum of total homolog concentrations; non-detect values considered to be zero.
10. Total TEQs were calculated, where feasible, using both USEPA's Toxicity Equivalency Factors (TEFs) and MDEP's TEFs for all PCDD/PCDF congeners, although GE does not accept the validity of these TEFs.
"NC" denotes samples for which congener-specific data are not available and hence TEQs could not be calculated.

TABLE 3-9
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SEDIMENT INORGANICS DATA – NOVEMBER 1990 THROUGH NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

Upstream of GE Facility and Related Sites

Parameter	Between Center Pond and Hubbard Avenue				Hubbard Ave. Bridge	Upstream of Unkamet Brook Confluence		
	BM-92-1 (0-7")	BM-92-2 (0-16")	BM-92-3 (0-6")	BM-92-4 (0-6")	HCSE-9 (0-18")	HCSE-8 (0-20")	HCSE-13 (0-18")	HCSE-14 (0-22")
Aluminum	6,340	6,020	6,190	5,530	NA	NA	3,670	4,530
Antimony	ND(8.5)	ND(8.6)	ND(8.2)	ND(7.3)	ND(3.0)	ND(3.0)	ND(6.0)	ND(5.9)
Arsenic	5.1	3.4	2.9	1.3 J*	ND(4.0)	ND(4.0)	0.86 J*	0.99 J*
Barium	41.0	30.0 J*	32.2	23.9 J*	11.7	14.6	13.2 J*	32.2
Beryllium	0.32J*	0.40 J*	0.35 J*	0.29 J*	0.1	0.1	0.31 J*	0.15 J*
Calcium	39,500	50,400	22,500	26,300	NA	NA	5,600	4,400
Chromium	13.1	12.3	11.3	8.3	4.0	6.0	7.1	7.5
Cobalt	5.4 J*	7.3 J*	6.2 J*	5.3 J*	3.0	5.0	6.0	6.8
Copper	31.4	28.1	31.0	12.5	13.0	10.0	14.5	9.3
Cyanide	NA	NA	NA	NA	ND(1.0)	ND(1.0)	ND(0.61)	ND(0.55)
Iron	11,500	15,700	13,400	12,000	NA	NA	13,300	15,800
Lead	52.0	66.0	73.4	26.1	14.0	11.0	26.3	10.8
Magnesium	26,100	34,300	16,400	19,700	NA	NA	5,030	4,350
Manganese	162	219	140	140	NA	NA	111	417
Mercury	0.18	ND(0.16)	0.38	ND(0.14)	ND(0.1)	ND(0.1)	ND(0.12)	ND(0.12)
Nickel	10.5	18.0	13.3	9.9	7.0	7.0	11.5	9.9
Potassium	556 J*	566 J*	694 J*	473 J*	NA	NA	235 J*	271 J*
Selenium	ND(0.47)	ND(0.48)	ND(0.45)	ND(0.41)	ND(6.0)	ND(6.0)	ND(0.23)	ND(0.24)
Silver	ND(1.6)	ND(1.6)	3.8	ND(1.4)	ND(0.5)	ND(0.5)	ND(0.60)	ND(0.59)
Sodium	232 J*	153 J*	93.9 J*	89.1 J*	NA	NA	71.2 J*	50.9 J*
Sulfide	NA	NA	NA	NA	110	93.0	700	460
Tin	19.4	ND(3.5)	17.2	13.2	ND(2.0)	4.0	ND(59.6)	ND(59.2)
Vanadium	10.0	28.3	13.0	11.1	4.0	5.0	11.5	7.8
Zinc	114	86.1	82.9	49.8	37.8	30.3	50.8	51.7

Adjacent to GE Facility and Related Sites

Parameter	Downstream of Unkamet Brook Confluence		Newell Street Bridge	"Boomed" Area Near East Street Area 2	Lyman Street Bridge		Upstream of Silver Lake Outfall	Downstream from Silver Lake Outfall	Between Silver Lake Outfall and Elm Street Bridge			Elm Street Bridge
	HCSE-7 (0-19")	HCSE-7A (0-19")	HCSE-6 (0-11")	HCSE-5 (0-13")	HCSE-4 (0-19")	HCSE-15 (0-22")	HCSE-3 (0-18")	HCSE-2 (0-19")	HCSE-A5 (11"-16")	HCSE-A6 (2"-8")	HCSE-A6 (2"-8" Dup.)	HCSE-1 (0-18")
Aluminum	NA	NA	NA	NA	NA	7,410	NA	NA	4,200	5,410	4,470	NA
Antimony	ND(3.0)	ND(3.0)	ND(4.0)	ND(4.0)	17.0	ND(6.6)	ND(4.0)	ND(6.0)	ND(6.8)	ND(9.1)	ND(8.1)	ND(8.0)
Arsenic	ND(4.0)	ND(4.0)	ND(5.0)	ND(5.0)	ND(5.0)	2.8	ND(6.0)	ND(7.0)	7.4	2.7	2.2	ND(10.0)
Barium	18.8	21.7	9.6	15.3	13.7	86.7	13.4	19.6	13.7 J*	21.8 J*	16.0 J*	21.3
Beryllium	0.1	0.1	ND(0.1)	ND(0.1)	ND(0.1)	0.27 J*	ND(0.1)	ND(0.2)	0.16 J*	0.24 J*	0.19 J*	ND(0.2)
Calcium	NA	NA	NA	NA	NA	8,530	NA	NA	5,020	6,220	5,490	NA
Chromium	7.0	7.0	6.0	18.0	19.0	26.2	12.0	33.0	9.2	16.6	12.8	8.0
Cobalt	4.0	4.0	5.0	6.0	13.0	6.1 J*	7.0	7.0	5.2 J*	6.4 J*	5.0 J*	ND(5.0)
Copper	12.0	15.0	10.0	20.0	37.0	129	18.0	22.0	19.9	28.4	22.7	23.0
Cyanide	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(0.68)	ND(1.0)	ND(2.0)	NA	NA	NA	ND(3.0)
Iron	NA	NA	NA	NA	NA	16,300	NA	NA	11,900	14,100	11,300	NA
Lead	13.0	14.0	6.0	20.0	15,500	140	15.0	26.0	22.8	55.6	47.3	10.0
Magnesium	NA	NA	NA	NA	NA	7,540	NA	NA	4,580	5,710	4,920	NA
Manganese	NA	NA	NA	NA	NA	174	NA	NA	117	156	129	NA
Mercury	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.28	ND(0.1)	ND(0.2)	ND(0.13)	ND(0.17)	ND(0.15)	ND(0.2)
Nickel	6.0	6.0	14.0	17.0	15.0	13.9	12.0	22.0	9.0	23.8	19.2	10.0
Potassium	NA	NA	NA	NA	NA	551 J*	NA	NA	ND(361)	ND(481)	ND(431)	NA
Selenium	ND(6.0)	ND(6.0)	ND(7.0)	ND(7.0)	ND(8.0)	0.38 J*	ND(9.0)	ND(11.0)	ND(0.38)	ND(0.5)	ND(0.45)	ND(15.0)
Silver	ND(0.5)	ND(0.5)	ND(0.6)	ND(0.6)	ND(0.7)	ND(0.66)	ND(0.7)	ND(0.9)	ND(1.3)	ND(1.7)	ND(1.5)	ND(1.3)
Sodium	NA	NA	NA	NA	NA	107 J*	NA	NA	116 J*	144 J*	109 J*	NA
Sulfide	350	100	220	180	330	48	580	500	NA	NA	NA	290
Tin	3.0	ND(2.0)	5.0	14.0	7,000	ND(66.4)	4.0	7.0	17.6	125	19.2	13.0
Vanadium	5.0	5.0	5.0	7.0	17.0	11.4	7.0	9.0	5.2 J*	7.6 J*	6.3 J*	5.0
Zinc	32.7	38.6	34.2 B	40.4 B	51.2B	157	68.5 B	123 B	69.5	98.9	96.2	58.2B

Downstream of GE Facility and Related Sites

Parameter	Between Elm Street Bridge and Dawes Avenue Bridge			Between Dawes Avenue Bridge and Pomeroy Avenue Bridge	
	HCSE-16 (0-13")	HCSE-17 (0-22")	HCSE-18 (0-6")	HCSE-19 (0-24")	HCSE-20 (0-23")
Aluminum	6,010	4,390	3,300	4,480	3,230
Antimony	ND(7.6)	ND(6.0)	ND(5.6)	ND(5.4)	ND(5.2)
Arsenic	1.6	0.67 J*	0.82 J*	1.1	0.76 J*
Barium	27.5 J*	13.3 J*	74.6	7.4 J*	7.0 J*
Beryllium	0.27 J*	ND(0.12)	ND(0.11)	ND(0.11)	0.16 J*
Calcium	4,580	7,500	3,690	5,950	1,710
Chromium	15.7	7.5	18.2	6.4	7.9
Cobalt	6.8 J*	4.7 J*	4.2 J*	6.9	2.9 J*
Copper	22.6	14.9	10.5	18.9	12.4
Cyanide	ND(0.71)	ND(0.49)	0.88	ND(0.46)	ND(0.52)
Iron	15,700	12,900	12,200	15,300	9,870
Lead	66.6	20.8	206	59.6	21.8
Magnesium	4,400	6,250	4,390	4,110	1,830
Manganese	202	127	279	178	162
Mercury	0.67	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)
Nickel	11.4	8.3	10.4	11.2	8.1
Potassium	433 J*	319 J*	158 J*	200 J*	173 J*
Selenium	ND(0.3)	ND(0.24)	ND(0.22)	ND(0.21)	ND(0.22)
Silver	ND(0.76)	ND(0.6)	ND(0.56)	ND(0.54)	ND(0.52)
Sodium	103 J*	48.3 J*	40.8 J*	61.8 J*	40.4 J*
Sulfide	330	740	140	290	680
Tin	ND(76)	ND(59.6)	ND(55.6)	ND(54.3)	ND(57.8)
Vanadium	9.2	7.2	5.8	7.8	5.0 J*
Zinc	59.1	59.6	95.7	66.3	42.9

NOTES:

1. All samples were collected by Blasland & Bouck Engineers, P.C./Blasland, Bouck & Lee, Inc. Those from locations HCSE-A5, HCSE-A6, and BM-92-1 through BM-92-4 were collected in May 1992 and analyzed by CompuChem Laboratories, Inc. Those from locations HCSE-13 through HCSE-20 were collected in October and November 1994 and analyzed by Quanterra Environmental Services, Inc. The others were collected in 1990-1991 and analyzed by CompuChem Laboratories, Inc.
2. Only those parameters which were detected at least one sample are presented.
3. ND(1.4) = Not detected, number in parenthesis is the detection limit.
4. J* – Indicates an estimated value between the CLP required detection limit and the instrument detection limit.
5. B – Analyte was also detected in the associated method blank.
6. NA – Not Analyzed.

TABLE 3-10

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

ADDITIONAL HOUSATONIC RIVER SEDIMENT PCDD/PCDF DATA - UPSTREAM OF GE FACILITY - JULY 1995
(Concentrations are presented in parts per million, ppm)

Location ID: Depth (inches)	BD95-1 0-18	BD95-2 0-24	BD95-3 0-12	BD95-4 0-7
Furans				
TCDFs (total)	0.000019	0.000200	0.000070	0.000049 [0.000093]
2,3,7,8-TCDF	0.0000028J**	0.000013	ND(0.0000066)*	0.000015 [0.000019]
PeCDFs (total)	0.000027	0.000120	0.000049	0.000069 [0.000140]
1,2,3,7,8-PeCDF	ND(0.0000015)	ND(0.0000031)	ND(0.0000017)	ND(0.0000033) [ND(0.0000050)]
2,3,4,7,8-PeCDF	ND(0.0000010)	ND(0.0000066)	ND(0.0000032)	ND(0.0000042) [ND(0.0000047)]
HxCDFs (total)	0.000110	0.000320	0.000120	0.000170 [0.000360]
1,2,3,4,7,8-HxCDF	ND(0.0000032)	ND(0.000010)	ND(0.0000042)	ND(0.0000065) [0.000013]
1,2,3,6,7,8-HxCDF	ND(0.0000072)	ND(0.000030)*	ND(0.000014)*	ND(0.000021)* [ND(0.000038)*]
2,3,4,6,7,8-HxCDF	ND(0.0000016)	ND(0.0000037)	ND(0.0000018)	ND(0.0000039) [0.000011J**]
1,2,3,7,8,9-HxCDF	ND(0.00000014)	ND(0.0000024)	ND(0.00000023)	ND(0.00000036) [ND(0.00000094)]
HpCDFs (total)	0.000380	0.001200	0.000510	0.000630 [0.001100]
1,2,3,4,6,7,8-HpCDF	0.000140	0.000620	0.000140	0.000200 [0.000450]
1,2,3,4,7,8,9-HpCDF	ND(0.0000047)	ND(0.0000070)	0.0000078J**	0.000012J** [0.000026]
OCDF	0.000180	0.000380	0.000230	0.000550 [0.000910]
TOTAL PCDFs	0.000716	0.002220	0.000979	0.001468 [0.002603]
Dioxins				
TCDDs (total)	ND(0.0000011)	0.0000055	0.000038	0.000018 [0.000036]
2,3,7,8-TCDD	ND(0.00000094)	0.0000025J**	0.0000024J**	0.0000050J** [0.000013]
PeCDDS (total)	ND(0.0000041)	ND(0.0000096)	ND(0.000022)	ND(0.000029) [0.000064]
1,2,3,7,8-PeCDD	ND(0.00000044)	ND(0.0000013)	ND(0.0000015)	ND(0.0000038) [0.000017]
HxCDDs (total)	0.000073	0.000110	0.000270	0.000350 [0.001200]
1,2,3,4,7,8-HxCDD	ND(0.0000020)	ND(0.0000021)	ND(0.0000031)	0.0000093J** [0.000038]

TABLE 3-10
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

ADDITIONAL HOUSATONIC RIVER SEDIMENT PCDD/PCDF DATA - UPSTREAM OF GE FACILITY - JULY 1995
(Concentrations are presented in parts per million, ppm)

Location ID: Depth (inches)	BD95-1 0-18	BD95-2 0-24	BD95-3 0-12	BD95-4 0-7
1,2,3,6,7,8-HxCDD	0.000011J**	0.000017	0.000026	0.000045 [0.000150]
1,2,3,7,8,9-HxCDD	ND(0.0000034)	ND(0.0000055)	0.000011J**	0.000023 [0.000120]
HpCDDs (total)	0.000730	0.000800	0.001100	0.002500 [0.006000]
1,2,3,4,6,7,8-HpCDD	0.000360	0.000420	0.000560	0.001300 [0.003100E]
OCDD	0.004400	0.004800	0.005700E	0.016000E [0.031000E]
TOTAL PCDDs	0.005203	0.005716	0.007108	0.018368 [0.038300]
Total TEQs				
TOTAL TEQ (EPA TEFs)	0.00001096	0.00002108	0.00001911	0.0000459 [0.0001243]
TOTAL TEQ (DEP TEFs)	0.00006529	0.0001363	0.00009887	0.0002065 [0.0005040]

Notes:

1. * - Elevated detection limit due to chemical interference.
2. J** - Result is an estimated value that is below the lower calibration limit but above the target detection limit.
3. E - Concentration exceeds calibration range.
4. [ ] - Indicates field duplicate analysis.
5. ND(6.6) - Not Detected; numbers in parentheses reflect detection limits reported by laboratory.
6. Samples collected on July 11, 1995 by Blasland, Bouck & Lee, Inc. and analyzed by Quanterra Environmental Services, Inc.
7. Total PCDFs/PCDDs determined as sum of total homolog concentrations; non-detect values considered to be zero.
8. TEQs were calculated for comparative purposes using both the USEPA's and the MDEP's Toxicity Equivalent Factors (TEFs) for all PCDD/PCDF congeners, although GE does not accept the validity of those TEFs. In these calculations, non-detect values were considered to be zero.

TABLE 3-11

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

UNKAMET BROOK SEDIMENT PCDD/PCDF DATA-UPSTREAM OF GE FACILITY - JULY 1995
(Concentrations are presented in parts per million, ppm)

LOCATION ID: Depth (Inches)	UBB-1 0-12	UBB-2 0-19
FURANS		
TCDFs (total)	0.000036	0.000170
2,3,7,8-TCDF	0.0000042J**	0.000016
PeCDFs (total)	0.000049	0.000360
1,2,3,7,8-PeCDF	ND(0.0000024)	ND(0.0000042)
2,3,4,7,8-PeCDF	ND(0.0000024)	0.000010
HxCDFs (total)	0.000022	0.000320
1,2,3,4,7,8-HxCDF	ND(0.0000021)	0.0000090J**
1,2,3,6,7,8-HxCDF	ND(0.000012)*	ND(0.000057)*
2,3,4,6,7,8-HxCDF	ND(0.0000016)	0.000014
1,2,3,7,8,9-HxCDF	ND(0.00000020)	ND(0.00000025)
HpCDFs (total)	0.000020	0.000120
1,2,3,4,6,7,8-HpCDF	0.0000079J**	0.000059
1,2,3,4,7,8,9-HpCDF	ND(0.0000013)	ND(0.0000039)
OCDF	0.000018J**	0.000057
TOTAL PCDFs	0.000145	0.001027
DIOXINS		
TCDDs (total)	ND(0.0000010)	0.0000075
2,3,7,8-TCDD	ND(0.00000065)	ND(0.0000014)
PeCDDs (total)	ND(0.0000023)	ND(0.0000054)
1,2,3,7,8-PeCDD	ND(0.00000028)	ND(0.0000010)
HxCDDs (total)	ND(0.0000044)	0.000017
1,2,3,4,7,8-HxCDD	ND(0.00000056)	ND(0.0000013)
1,2,3,6,7,8-HxCDD	ND(0.0000015)	ND(0.0000046)
1,2,3,7,8,9-HxCDD	ND(0.0000012)	ND(0.0000034)
HpCDDs (total)	0.000039	0.000140
1,2,3,4,6,7,8-HpCDD	0.000021	0.000073
OCDD	0.000200	0.000670
TOTAL PCDDs	0.000239	0.000835
TOTAL TEQs		
TOTAL TEQ (EPA TEFs)	0.000000927	0.00001095
TOTAL TEQ (DEP TEFs)	0.00000682	0.00004637

1/ 6
2/ 363N

(See Notes on Page 2)

TABLE 3-11
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

UNKAMET BROOK SEDIMENT PCDD/PCDF DATA-UPSTREAM OF GE FACILITY - JULY 1995
(Concentrations are presented in parts per million, ppm)

Notes:

1. Samples collected on July 10, 1995 by Blasland, Bouck & Lee, Inc. and analyzed by Quanterra Environmental Services, Inc.
2. * - Elevated detection limit due to chemical interference.
3. J** - Result is an estimated value that is below the lower calibration limit but above the target detection limit.
4. ND - Not Detected; numbers in parentheses reflect detection limits reported by laboratory.
5. Total PCDFs/PCDDs determined as sum of total homolog concentrations; non-detect values considered to be zero.
6. TEQs were calculated for comparative proposes using both the USEPA's and the MDEP's Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF congeners, although GE does not accept the validity of those TEFs. In these calculations, non-detect values were considered to be zero.

TABLE 3-12

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE DEEP-WATER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are reported in parts per million, ppm)

Location ID	Depth (inches)	Aroclor 1016, 1232, 1242, and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
HCSE-12	0-66	NA	NA	NA	NA	95,000	3,800
SLS-1	0-0.5	4.6*	7.4*	7.8	20	75,000	NA
	0-6	3.2*	7.3*	7.1	18	NA	NA
	0.5-1	17*	26*	22	65	68,000	NA
	1-2	3.3*	6.2*	5.9	15	61,000	NA
	2-3	2.6*	5.0*	5.4	13	66,000	NA
	6-7	ND(0.92)	5.1*	5.7	11	80,000	NA
	6-12	9.1*	60*	35	100	NA	NA
	12-13	ND(23)	140*	150	290	119,000	NA
	12-18	320*	360*	ND(160)	680	NA	NA
	18-19	130*	230*	120	480	125,000	NA
	18-24	78*	330*	110	520	NA	NA
	24-25	2.9*	2.7*	1.3	6.9	74,000	NA
	24-30	12*	7.3*	4.9	24	NA	NA
	30-31	1.0*	2.2*	1.2	4.4	50,000	NA
	30-36	8.7*	21*	ND(4.5)	30	NA	NA
	36-37	6.4*	19*	ND(4.1)	25	51,000	NA
	36-42	5.3*	13*	ND(3.4)	18	NA	NA
	42-43	1.2*	2.9*	1.2	5.3	43,000	NA
	42-48	3.3*	8.7*	ND(3.6)	12	NA	NA
	48-54	10*	37*	ND(11)	47	NA	NA
	54-55	4.1*	5.7*	ND(2.6)	9.8	264,000	NA
	54-60	1.7*	2.2*	ND(1.2)	3.9	NA	NA
	0-66	NA	NA	NA	NA	79,000	2,800
	60-66	0.47*	0.44*	N(0.25)	0.91	NA	NA
	66-67	15*	24*	ND(14)	39	119,000	NA
	66-72	ND(0.11)	ND(0.21)	ND(0.21)	ND(0.21)	NA	NA
	78-79	ND(0.29)	ND(0.58)	ND(0.58)	ND(0.58)	200,000	NA
	90-91	ND(0.19)	ND(0.37)	ND(0.37)	ND(0.37)	93,000	NA
	102-103	0.42*	1.4*	ND(0.70)	1.8	142,000	NA
	102-108**	ND(0.14)	ND(0.29)	ND(0.29)	ND(0.29)	NA	NA
SLS-2	0-0.5	2.1*	4.1*	3.2	9.4	57,000	NA
	0-6	3.9*	14*	10	28	NA	NA
	0.5-1	1.8*	4.3*	3.1	9.2	52,000	NA
	1-2	ND(2.8)	24*	ND(5.6)	24	47,000	NA
	2-3	ND(1.3)	3.6*	2.7	6.3	65,000	NA
	6-7	2.2*	7.5*	6.5	16	68,000	NA
	6-12	ND(1.9)	9.3*	14	23	NA	NA
	12-13	ND(1.7)	5.7*	13	19	NA	NA
	12-18	290*	660*	ND(210)	950	NA	NA
	18-19	28*	190*	110	330	NA	NA
	18-24	3.2*	10*	6.8	20	NA	NA
	24-25	2.6*	12*	5.9	20	NA	NA

TABLE 3-12
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE DEEP-WATER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are reported in parts per million, ppm)

Location ID	Depth (inches)	Aroclor 1016, 1232, 1242, and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
SLS-2 (cont'd)	24-30	0.72* [3.5*]	0.99* [ND(3.6)]	0.55 [ND(3.6)]	2.3 [3.5]	NA	NA
	30-31	1.3*	2.1*	1.1	4.5	NA	NA
	30-36	11*	32*	ND(5.7)	43	NA	NA
	36-37	4.3*	7.5*	3.6	15	NA	NA
	36-42	16*	19*	10	45	NA	NA
	42-43	ND(4.1)	23*	ND(8.2)	23	222,000	NA
	42-48	13*	18*	ND(6.8)	31	NA	NA
	48-54	0.36*	0.90*	0.34	1.6	NA	NA
	0-54	NA	NA	NA	NA	87,000 [88,000]	2,900 [4,600]
	54-55	1.1*	2.6*	1.4	5.1	NA	NA
	54-60	ND(0.15)	ND(0.29)	ND(0.29)	ND(0.29)	NA	NA
	60-66	ND(0.17)	ND(0.33)	ND(0.33)	ND(0.33)	NA	NA
	66-67	0.62*	1.3*	ND(1.0)	1.9	NA	NA
	66-72	ND(0.19)	ND(0.37)	ND(0.37)	ND(0.37)	NA	NA
	78-79	ND(0.32)	ND(0.64)	ND(0.64)	ND(0.64)	NA	NA
	90-91	ND(0.17)	ND(0.34)	ND(0.34)	ND(0.34)	NA	NA
	102-103	ND(0.11)	ND(0.22)	ND(0.22)	ND(0.22)	NA	NA
SLS-3	0-0.5	27*	38*	26	91	NA	NA
	0-6	ND(5.6)	25*	16	41	NA	NA
	0.5-1	24*	40*	27	91	NA	NA
	1-2	9*	16*	15	40	NA	NA
	2-3	13*	26*	22	61	NA	NA
	6-7	21*	36*	74	130	NA	NA
	6-12	ND(7.4)	41*	60	100	NA	NA
	12-13	8.7*	34*	64	110	NA	NA
	12-18	100*	380*	220*	700	NA	NA
	18-19	200*	500*	ND(260)	700	NA	NA
	18-24	74* [140*]	250* [1,100*]	68 [ND(260)]	390 [1,200]	NA	NA
	24-25	25*	34*	25	84	NA	NA
	24-30	0.30* [1.1*]	0.54* [4.2*]	0.31 [1.4]	1.1 [6.7]	NA	NA
	30-31	6.0*	ND(5.2)	ND(5.2)	6.0	NA	NA
	30-36	0.88*	2.1*	1.1	3.9	NA	NA
	36-37	36*	54*	ND(33)	90	NA	NA
	36-42	3.2*	12*	5.5	21	NA	NA
	42-43	0.21*	0.34*	0.28	0.83	NA	NA
	42-48	3.7*	17*	11	32	NA	NA
	48-54	0.34*	1.5*	0.46	2.3	NA	NA
	54-55	0.70* [0.77*]	1.1* [1.3*]	ND(0.94) [0.76]	1.8 [2.8]	NA	NA
	54-60	ND(1.5) [ND(0.43)RE]	5.9* [2.5*RE]	ND (2.2) [ND (0.87)RE]	5.9 [2.5RE]	NA	NA
	0-60	NA	NA	NA	NA	112,000	4,300
	60-66	0.27*	1.7*	0.50	2.5	NA	NA
	66-67	ND(0.19)	ND(0.38)	ND(0.38)	ND(0.38)	NA	NA

226

TABLE 3-12
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE DEEP-WATER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are reported in parts per million, ppm)

Location ID	Depth (inches)	Aroclor 1016, 1232, 1242, and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC	Oil & Grease
SLS-3 (cont'd)	66-72	ND (0.22)	ND(0.44)	ND(0.44)	ND(0.44)	NA	NA
	78-79	ND(0.16)	ND(0.31)	ND(0.31)	ND(0.31)	NA	NA
	90-91	ND(0.053)	ND(0.11)	ND(0.11)	ND(0.11)	NA	NA
SLS-4	0-0.5	24*	46*	30	100	NA	NA
	0-6	ND(6.1)	21*	13	34	NA	NA
	0.5-1	38*	37*	27	100	NA	NA
	1-2	8.6*	20*	18	47	NA	NA
	2-3	42*	45*	44	130	NA	NA
	6-7	14*	62*	93	170	NA	NA
	6-12	ND(44) [9.6*]	140* [97*]	150 [110]	290 [220]	NA	NA
	12-13	ND(94)	270*	280*	550	NA	NA
	12-18	ND(420)	3,100	ND(840)	3,100	NA	NA
	18-19	ND(480)	1,400*	ND(960)	1,400	NA	NA
	18-24	ND(6.1)	44*	19	63	NA	NA
	24-25	22*	18*	15	55	NA	NA
	24-30	6.7*	22*	12	41	NA	NA
	30-31	27*	94*	ND(18)	120	NA	NA
	30-36	5.8*	40*	ND(9.9)	46	NA	NA
	36-37	24*	54*	ND(30)	78	NA	NA
	36-42	1.3* [ND(0.84)RE]	8.4* [5.1*RE]	3.3 [2.3*RE]	13 [7.4 RE]	NA	NA
	42-43	2.4*	2.4*	ND(2.1)	4.8	NA	NA
	42-48	0.56*	1.9*	0.78	3.2	NA	NA
	48-54	0.49* [ND(0.36)RE]	2.1* [2.3*RE]	ND(0.73) [ND(0.73)RE]	2.6 [2.3 RE]	NA	NA
	0-54	NA	NA	NA	NA	106,000	3,000
	54-55	0.71*	0.89*	0.55	2.2	NA	NA
	54-60	ND(0.15)	0.76*	0.29	1.0	NA	NA
	60-66	ND(0.14)	0.33*	ND(0.28)	0.33	NA	NA
	66-67	ND(0.16)	ND(0.33)	ND(0.33)	ND(0.33)	NA	NA
	66-72	ND(0.14)	ND(0.27)	ND(0.27)	ND(0.27)	NA	NA
	78-79	ND(0.27)	ND(0.54)	ND(0.54)	ND(0.54)	NA	NA
	90-91	0.18* [ND(0.18)]	ND(0.36) [ND(0.35)]	ND(0.36) [ND(0.35)]	0.18 [ND(0.35)]	NA	NA
	90-96**	ND(0.16)	ND(0.32)	ND(0.32)	ND(0.32)	NA	NA
	102-103	0.19*	0.50*	ND(0.37)	0.69	NA	NA
SLS-5	0-12	93*	260*	ND(84)	350	NA	4,200
	12-24	95*	210*	ND(85)	300	NA	3,400
	24-36	130*	290*	ND(84)	42	NA	4,400
	36-48	140*	410*	88	640	NA	3,900
	48-60	87*	200*	ND(110)	290	NA	9,800
	60-72	420* [490*]	9,400* [11,000*]	1,100 [1,300]	11,000 [13,000]	NA	32,000 [21,000]
SLS-5 (cont'd)	72-80	700*	16,000*	1,400	18,000	NA	40,000

1/26/96
02961383A (See Notes on Page 4)

TABLE 3-12
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE DEEP-WATER SEDIMENT PCB, TOC, AND OIL & GREASE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are reported in parts per million, ppm)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB, TOC, and Oil & Grease analyses.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ND(2.6) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] = duplicate sample result.
5. RE - Reanalysis.
6. ** - Samples initially archived and later analyzed (outside of the normal holding time) in order to provide further vertical delineation of PCB presence.
7. NA - Not analyzed.

224

TABLE 3-13

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE NEAR-SHORE SEDIMENT APPENDIX IX+3 SVOCs DATA - NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

	SAMPLE LOCATION ID.						
ANALYTE	SLN-1 (0-0.5 ft.)	SLN-2 (0-0.5 ft.)	SLN-3 (0-0.5 ft.)	SLN-3 Dup. (0-0.5 ft.)	SLN-4 (0-0.5 ft.)	SLN-5 (0-0.5 ft.)	SLN-6 (0-0.5 ft.)
acenaphthene	ND(120)	0.81 J	0.99 J	ND(11)	ND(43)	ND(60)	ND(8.4)
acenaphthylene	ND(120)	0.51 J	1.1 J	ND(11)	ND(43)	ND(60)	ND(8.4)
aniline	0.11 J	ND(3.7)	0.78 J	ND(11)	9.8 J	59 J	ND(8.5)
anthracene	ND(120)	0.96 J	2.3 J	2.1 J	10.0 J	ND(60)	0.98 J
benzo(a)anthracene	ND(120)	2.4 J	7.2	6.3 J	8.1 J	ND(60)	1.8 J
benzo(a)pyrene	ND(120)	2.0 J	6.8	6.1 J	7.6 J	ND(60)	1.8 J
benzo(b)fluoranthene	ND(120)	1.7 J	6.1	6.5 J	6.8 J	ND(60)	1.4 J
benzo(ghi)perylene	ND(120)	1.2J	4.8 J	4.3 J	ND(43)	ND(60)	ND(8.4)
benzo(k)fluoranthene	ND(120)	2.3 J	7.7	5.4 J	6.5 J	ND(60)	1.9 J
bis(2-ethylhexyl)phthalate	ND(120)	ND(3.6)	1.3 J	1.4 J	ND(43)	ND(60)	1.2 J
chrysene	ND(120)	2.8 J	7.8	7.2 J	8.5 J	ND(60)	2.2 J
dibenzofuran	ND(120)	0.43 J	ND(5.9)	ND(11)	ND(43)	ND(60)	ND(8.4)
dibenz(a,h)anthracene	ND(120)	0.53 J	2.0 J	ND(11)	ND(43)	ND(60)	ND(8.4)
di-n-butylphthalate	ND(120)	ND(3.6)	4.1 BJ	4.1 BJ	ND(43)	ND(60)	ND(8.4)
fluoranthene	ND(120)	7.0	16.0	14.0	15.0 J	6.7 J	4.2 J
fluorene	ND(120)	0.86 J	1.0 J	ND(11)	ND(43)	ND(60)	ND(8.4)
indeno(1,2,3-cd)pyrene	ND(120)	1.1 J	4.3 J	3.8 J	ND(43)	ND(60)	ND(8.4)
naphthalene	18.0 J	0.41 J	ND(5.9)	ND(11)	ND(43)	ND(60)	ND(8.4)
phenanthrene	ND(120)	5.3	9.8	8.2 J	ND(43)	ND(60)	3.7 J
phenol	ND(120)	ND(3.6)	2.6 J	1.3 J	ND(43)	ND(60)	ND(8.4)
pyrene	ND(120)	5.3	13.0	12.0	16.0 J	6.5 J	4.3 J

NOTES:
1. Samples were collected by Blasland, Bouck & Lee, Inc., on November 1, 1994 and submitted to Quanterra Environmental Services for analysis of Appendix IX+3 semivolatiles.
2. Only constituents detected in at least one sample are presented.
3. ND(120) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. J - Indicates an estimated value below the CLP-required quantitation limit.
5. B - Analyte was also detected in the associated method blank.
6. Dup. - Indicates field duplicate analysis.

TABLE 3-14

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE NEAR-SHORE SEDIMENT PCDD/PCDF DATA - NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

	SAMPLE LOCATION ID. AND DEPTH						
	SLN-1	SLN-2	SLN-3	SLN-3 Dup.	SLN-4	SLN-5	SLN-6
ISOMER	0 - 0.5 ft.	0 - 0.5 ft.	0 - 0.5 ft.	0 - 0.5 ft.	0 - 0.5 ft.	0 - 0.5 ft.	0 - 0.5 ft.
TCDFs (TOTAL)	0.0088	0.000017	0.0019	0.002	0.0029	0.00045	0.000099
2,3,7,8-TCDF	0.00056	0.0000013 J**	0.00025	0.00026	0.00061	0.000031	0.0000078
PeCDFs (TOTAL)	0.011	0.000033	0.0056	0.0058	0.0036	0.0007	0.000013
1,2,3,7,8-PeCDF	0.00016	ND (0.00000047)	0.00011	0.0001	0.00043	ND (0.000014*)	ND (0.0000027)
2,3,4,7,8-PeCDF	0.00021	ND (0.00000087)	0.00022	0.0002	0.00015	0.000029	0.0000054 J**
HxCDFs (TOTAL)	0.0068	0.0000092	0.0077	0.0075	0.0036	0.00062	0.00012
1,2,3,4,7,8-HxCDF	0.0014	ND (0.0000013)	0.0014	0.0014	0.00094	0.000047	0.0000093
1,2,3,6,7,8-HxCDF	0.00039	ND (0.00000085)	0.00062	ND (0.00059*)	ND (0.00033*)	0.00002	0.0000049 J**
2,3,4,6,7,8-HxCDF	0.00018	ND (0.0000017)	0.00075	0.00074	0.00031	0.000044	0.0000084
1,2,3,7,8,9-HxCDF	0.00025	ND (0.00000032)	ND (0.000047*)	ND (0.00015*)	ND (0.00029*)	0.0000061 J**	ND (0.00000076)
HpCDFs (TOTAL)	0.0043	0.000014	0.0034	0.0039	0.0018	0.00019	0.00065
1,2,3,4,6,7,8-HpCDF	0.0018	0.0000061	0.0015	0.0017	0.00068	0.000077	0.000026
1,2,3,4,7,8,9-HpCDF	0.00053	ND (0.00000041)	0.00043	0.00057	0.00034	0.0000095	ND (0.0000026)
OCDF	0.0012	0.00001 J**	0.00078	0.001	0.00066	0.00008	0.000037
TCDDs (TOTAL)	0.00067	ND (0.00000043)	0.00017	0.00015	0.00035	0.000018	0.0000024
2,3,7,8-TCDD	0.000055	ND (0.000000095)	0.0000054	0.0000056	0.000048	0.00000086 J**	ND (0.00000024)
PeCDDs (TOTAL)	0.00023	ND (0.00000055)	0.00022	0.0001	0.00052	0.000022	ND (0.0000011)
1,2,3,7,8-PeCDD	ND (0.000043*)	ND (0.00000035)	0.000022	0.000018	0.000022	ND (0.0000034)	ND (0.00000053)
HxCDDs (TOTAL)	0.0022	0.000016	0.00085	0.00074	0.0013	0.00012	0.000031
1,2,3,4,7,8-HxCDD	0.00012	ND (0.0000015)	0.000058	0.000046	0.00014	0.0000069	ND (0.0000011)
1,2,3,6,7,8-HxCDD	0.00024	ND (0.0000026)	0.000068	0.000064	0.0001	0.000011	0.0000037 J**
1,2,3,7,8,9-HxCDD	0.00016	0.0000037 J**	0.000058	0.000047	0.000085	0.000013	ND (0.000003)
HpCDDs (TOTAL)	0.0036	0.00019	0.0013	0.0012	0.0017	0.00039	0.00013
1,2,3,4,6,7,8-HpCDD	0.002	0.00011	0.00066	0.00059	0.00089	0.00019	0.000073
OCDD	0.0068 E	0.00068	0.005 E	0.0036	0.0025	0.0011	0.00062

NOTES:
1. Samples were collected by Blasland, Bouck & Lee, Inc., on November 1, 1994 and submitted to Quanterra Environmental Services for analysis of PCDDs/PCDFs.
2. Only constituents detected in at least one sample are presented.
3. ND(0.000003) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. J** - Result is an estimated value that is below the lower calibration limit but above the target detection limit.
5. * - Elevated detection limit due to chemical interference.
6. E - Concentration exceeded calibration range.
7. Dup. - Indicates field duplicate analysis.

TABLE 3-15

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE NEAR-SHORE SEDIMENT APPENDIX IX INORGANICS DATA - NOVEMBER 1994
(Concentrations are presented in dry-weight parts per million, ppm)

ANALYTE	SAMPLE LOCATION ID.						
	SLN-1 (0-0.5 ft.)	SLN-2 (0-0.5 ft.)	SLN-3 (0-0.5 ft.)	SLN-3 Dup. (0-0.5 ft.)	SLN-4 (0-0.5 ft.)	SLN-5 (0-0.5 ft.)	SLN-6 (0-0.5 ft.)
Aluminum	9,570	2,980	7,410	9,170	4,260	7,470	3,570
Arsenic	12.2	1.1	2.8	2.7	2.2	3.5	1.4
Barium	176	16.9 J*	59.0	59.0	29.2	67.0	13.3 J*
Beryllium	0.46 J*	ND(0.1)	0.37 J*	0.48 J*	0.19 J*	0.51 J*	0.49 J*
Cadmium	38.8	ND(0.51)	1.3	2.2	5.9	25.2	0.77
Calcium	37,200	16,600	24,000	25,900	24,600	8,640	17,700
Chromium	179	6.4	32.4	32.4	21.9	82.1	4.2
Cobalt	20.4	4.2 J*	8.5 J*	8.9	6.3 J*	10.6	16.7
Copper	2,020	12.5	380	549	235	696	35.6
Iron	58,900	12,600	22,900	24,500	16,200	30,200	42,000
Lead	3,910	44.1	542	795	227	569	72.0
Magnesium	4,570	5,860	15,900	17,200	11,200	5,010	7,320
Manganese	1,680	251	414	396	239	262	477
Mercury	5.2	ND(0.11)	2.9	2.2	0.64	2.2	0.21
Nickel	201	8.4	54.0	57.7	24.5	87.6	24.2
Potassium	704 J*	135 J*	393 J*	625 J*	224 J*	566 J*	141 J*
Selenium	2.6	ND(0.2)	0.47 J*	0.46 J*	0.37 J*	1.1	ND(0.26)
Silver	17.9	ND(0.51)	5.0	9.9	2.8	23.6	ND(0.65)
Sodium	361 J*	48.6 J*	111 J*	145 J*	139 J*	195 J*	106 J*
Vanadium	43.3	6.5	171	178	20.0	76.5	18.2
Zinc	1,890	60.3	559	584	228	843	216
Cyanide	4.0	ND(0.51)	ND(0.88)	ND(0.71)	0.75	ND(0.89)	ND(0.58)

NOTES:

1. Samples were collected by Blasland, Bouck & Lee, Inc., on November 1, 1994 and submitted to Quanterra Environmental Services for analysis of Appendix IX inorganic constituents.
2. Only constituents detected in at least one sample are presented.
3. ND(0.1) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. J* - Indicates an estimated value between the CLP-required quantitation limit and the instrument detection limit.
5. Dup. - Indicates field duplicate analysis.

TABLE 3-16

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE NEAR-SHORE SEDIMENT PCB DATA - NOVEMBER 1994
(Concentrations are presented in dry weight parts per million, ppm)

Sample ID	Depth (Inches)	Aroclor 1016, 1232, 1242, &/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors
SLN-1	0-6	180*	220	ND(14)	400
SLN-2	0-6	ND(0.11)	0.40	ND(0.22)	0.40
SLN-3	0-6	12.0* [ND(17.0)]	290 [290]	ND(69.0) [44.0]	300 [330]
SLN-4	0-6	58.0*	67.0	38.0	160
SLN-5	0-6	1.5*	8.9	12.0	22.0
SLN-6	0-6	0.63*	3.3	3.8	7.7

Note:
1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB analysis.
2. * - Sample exhibited alternations of the Standard Aroclor pattern.
3. ND(0.14) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] = duplicate result.

TABLE 4-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SUSPENDED SOLIDS PCB DATA - ROUND 1 - OCTOBER 1995
(Concentrations are presented in parts per million, ppm)

Location: Sample ID:	Newell St. Bridge SSW-1-1-1,-2,-3,-4,-5	First Pomeroy Ave. Bridge SSW-2-1-1,-2,-3,-4,-5	New Lenox Road Bridge SSW-3-1-1,-2,-3,-4,-5	Woods Pond Headwaters SW-4-1-1,-2,-3,-4,-5
Total Organic Carbon	56,000 [>44,000]	>42,000	470,000	ND
PCB Concentrations				
Aroclor 1242	0.60 [0.44]	ND	ND	NA
Aroclor 1260	1.1 [0.70]	9.7	78	NA
Total PCBs	1.7 [1.1]	9.7	78	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee Inc. on October 22, 1995 and were submitted to Quanterra Environmental Services for analysis of PCBs and total organic carbon.
2. Only those Aroclors which were detected in at least one sample are presented.
3. ND - Not Detected.
4. NA - Not analyzed due to inconsistent filter weights.
5. [ ] = duplicate result.

TABLE 4-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SURFACE WATER PCB AND TSS DATA - ROUND 1 OF SUSPENDED SOLIDS STUDY - OCTOBER 1995
(Concentrations are presented in parts per million, ppm)

Location: Sample ID:	Newell St. Bridge Composite SSW-1-1-A,-B-C	First Pomeroy Ave. Bridge Composite SSW-2-1,-A,-B,-C	New Lenox Road Bridge Composite SSW-3-1-A,-B,-C	Woods Pond Headwaters Composite SW-4-1-A,-B,-C
Total Suspended Solids (TSS)	120	190	30	4.0
PCB Concentrations (unfiltered)				
Aroclor 1016	ND(0.000065)	ND(0.000065)	ND(0.00016)	ND(0.00021)
Aroclor 1221	ND(0.00035)	ND(0.00025)	ND(0.000065)	ND(0.000065)
Aroclor 1232	ND(0.00065)	ND(0.00065)	ND(0.00016)	ND(0.00021)
Aroclor 1242	ND(0.00065)	ND(0.00065)	ND(0.00016)	ND(0.00021)
Aroclor 1248	ND(0.00065)	ND(0.00065)	ND(0.00016)	ND(0.00021)
Aroclor 1254	ND(0.00065)	ND(0.00045)	ND(0.00011)	ND(0.00012)
Aroclor 1260	ND(0.00008)	0.00063	0.00022	ND(0.000065)
Total PCBs	ND(0.00008)	0.00063	0.00022	ND(0.00021)

Notes:

1. Samples were collected by Blasland, Bouck & Lee Inc. on October 22, 1995 and analyzed by Quanterra Environmental Services.
2. ND(0.00065) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit. Detection limits greater than 0.000065 ppm are due to matrix interferences.

TABLE 4-3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SUSPENDED SOLIDS PCB DATA - ROUND 2 - NOVEMBER 1995
(Concentrations are presented in parts per million, ppm)

Location:	Newell St. Bridge		First Pomery Ave. Bridge		New Lenox Road Bridge		Woods Pond Headwaters		Schweitzer Bridge	
Sample ID:	SSW-1-2-1,-2,-3,-4,-5	SSW-1-3-1,-2,-3,-4,-5	SSW-2-2-1,2-,-3,-4,-5	SSW-2-3-1,-2,-3,-4,-5	SSW-3-2-1,-2,-3,-4,-5	SSW-3-3-1,-2,-3,-4,-5	SSW-4-2-1,-2,-3,-4,-5	SSW-4-3-1,-2,-3,-4,-5	SSW-5-1-1,-2,-3,-4,-5	SSW-5-2-1-,2-,-3,-4,-5
Total Organic Carbon	37,000 [8,000]	11,000	34,000	22,000	64,000	86,000	160,000	52,000	21,000	16,000
PCB Concentrations										
Aroclor 1242	0.84 [0.40]	0.69	2.1	3.3	NA	5.8	6.0	5.2	3.5	2.6
Aroclor 1260	0.95 [1.1]	1.2	5.1	8.3	NA	16	20	19	14	12
Total PCBs	1.8 [1.5]	1.9	7.2	12	NA	22	26	24	18	15

Notes:

1. Samples were collected by Blasland, Bouck & Lee Inc. on November 13, 1995 and were submitted to Quanterra Environmental Services for analysis of PCBs and total organic carbon.
2. Only those Aroclors which were detected in at least one sample are presented.
3. NA - Not analyzed due to inconsistent filter weights.
4. [ ] = duplicate result.

TABLE 4-4

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER SURFACE WATER PCB AND TSS DATA -
ROUND 2 OF SUSPENDED SOLIDS STUDY - NOVEMBER 1995
(Concentrations are presented in parts per million, ppm)

Location:	Newell St. Bridge		First Pomeroy Ave. Bridge		New Lenox Road Bridge		Woods Pond Headwaters		Schweitzer Bridge	
Sample ID:	SSW-1-2	Composite SSW-1-3	SSW-2-2	Composite SSW-2-3	SSW-3-2	Composite SSW-3-3	SSW-4-2	Composite SW-4-3	SSW-5-1	SSW-5-2
Total Suspended Solids (TSS)	35	2,800	17	450	72	24	37 [66]	32	26	53
PCB Concentrations (unfiltered)										
Aroclor 1016	ND(0.000065)	ND(00.000080)	ND(0.000092)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000080)	ND(0.000065)	ND(0.000065)
Aroclor 1221	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor 1232	ND(0.000065)	ND(0.000080)	ND(0.000092)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000080)	ND(0.000065)	ND(0.000065)
Aroclor 1242	ND(0.000065)	ND(0.000080)	ND(0.000092)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000080)	ND(0.000065)	ND(0.000065)
Aroclor 1248	ND(0.000065)	ND(0.000080)	ND(0.000092)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000080)	ND(0.000065)	ND(0.000065)
Aroclor 1254	ND(0.000065)	ND(0.00041)	ND(0.00030)	ND(0.00016)	ND(0.00041)	ND(0.00031)	ND(0.00031)	ND(0.00029)	ND(0.00012)	ND(0.00033)
Aroclor 1260	ND(0.000065)	0.00054	0.00052	0.00020	0.00093	0.00038	0.00051	0.00046	0.00023	0.0011
Total PCBs	ND(0.000065)	0.00054	0.00052	0.00020	0.00093	0.00038	0.00051	0.00046	0.00023	0.0011

Notes:

1. Samples were collected by Blasland, Bouck & Lee Inc. on November 13, 1995 and analyzed by Quanterra Environmental Services.
2. ND(0.00065) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit. Detection limits greater than 0.000065 ppm are due to matrix interferences.
3. * - Indicates an elevated detection limit due to matrix interference.
4. [ ] = duplicate result.

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVE AND SILVER LAKE

HOUSATONIC WATER COLUMN DATA COLLECTED BY LMS - 1991 THROUGH 1993

SURVEY	DATE	TIME	STATION	SAMPLE ROUND	SAMPLE TYPE	SAMPLE DEPTH (ft)	INSTANTANEOU FLOWRATE AT DSB (cfs)	TOTAL PCBS AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	TOTAL PCBS AROCLOR 1254 (ug/l)	TOTAL PCBS AROCLOR 1260 (ug/l)	TOTAL PCBS TOTAL AROCLORS (ug/l)	DISSOLVED PCBS AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	DISSOLVED PCBS AROCLOR 1254 (ug/l)	DISSOLVED PCBS AROCLOR 1260 (ug/l)	DISSOLVED PCBS TOTAL AROCLORS (ug/l)	DISSOLVED OXYGEN (mg/l)	TOTAL ORGANIC CARBON (mg/l)	TOTAL SUSPENDED SOLIDS (mg/l)
1	3/5/91	11:55	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	8
1	3/5/91	21:19	DSB-P	1	R	Integrated	1310	ND 0.03	ND 0.065	0.097	0.097						3	3
1	3/6/91	00:45	DSB-P	2	R	Integrated	1260	ND 0.03	ND 0.065	0.068	0.068						2	ND 1
1	3/6/91	01:50	DSB-E-CS		R	Integrated	1240											2
1	3/6/91	01:57	DSB-P-CS		R	Integrated	1260											2
1	3/6/91	02:04	DSB-P-W-CS		R	Integrated	1230											8
1	3/6/91	02:09	DSB-P-WW-CS		R	Integrated	1230											7
1	3/6/91	03:05	DSB-P	3	R	Integrated	1230	ND 0.03	ND 0.065	0.086	0.086	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	8
1	3/6/91	03:05	DSB-P	3	D	Integrated	1230											7
1	3/6/91	03:05	DSB-P	3	D2	Integrated	1230											9
1	3/6/91	06:15	DSB-P	4	R	Integrated	1190	ND 0.03	ND 0.065	0.082	0.082						3	5
1	3/6/91	09:00	DSB-P	5	R	Integrated	1140	ND 0.03	ND 0.065	0.086	0.086	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	2	5
1	3/6/91	12:00	DSB-P	6	R	Integrated	1090	ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	ND 1
1	3/6/91	13:10	DSB-E-CS		R	Integrated	1080											4
1	3/6/91	13:10	DSB-E-CS		D	Integrated	1080											14
1	3/6/91	13:17	DSB-P-CS		R	Integrated	1080											4
1	3/6/91	13:17	DSB-P-CS		D	Integrated	1080											11
1	3/6/91	13:23	DSB-W-CS		R	Integrated	1070											8
1	3/6/91	13:23	DSB-W-CS		D	Integrated	1070											8
1	3/6/91	13:30	DSB-WW-CS		R	Integrated	1070											3
1	3/6/91	13:30	DSB-WW-CS		D	Integrated	1070											9
2	8/19/91	20:10	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	1
2	8/19/91	20:45	DSB-P	1	R	Integrated	905	ND 0.03	ND 0.065	0.12	0.12						4	29
2	8/19/91	20:45	DSB-P	1	D	Integrated	905											30
2	8/20/91	00:02	DSB-P	2	R	Integrated	905	ND 0.03	ND 0.065	0.1	0.1						5	28
2	8/20/91	00:02	DSB-P	2	D	Integrated	905											28
2	8/20/91	06:05	DSB-P	3	R	Integrated	985	ND 0.03	ND 0.065	0.1	0.1						7	25
2	8/20/91	06:05	DSB-P	3	D	Integrated	985											28
2	8/20/91	11:00	DSB-P	4	R	Integrated	985	ND 0.03	ND 0.065	0.13	0.13						7	23
2	8/20/91	11:00	DSB-P	4	D	Integrated	985											23
2	8/20/91	17:00	DSB-P	5	R	Integrated	1050	ND 0.03	ND 0.065	0.12	0.12	ND 0.03	ND 0.065	ND 0.065	ND 0.065	5	6	17
2	8/20/91	17:00	DSB-P	5	D	Integrated	1050											18
2	8/20/91	22:00	DSB-P	6	R	Integrated	985	ND 0.03	ND 0.065	0.14	0.14						5	15
2	8/20/91	22:00	DSB-P	6	D	Integrated	985											17
2	8/21/91	07:20	DSB-P	7	R	Integrated	850	ND 0.03	ND 0.065	0.13	0.13	ND 0.03	ND 0.065	ND 0.065	ND 0.065	5	5	14
2	8/21/91	07:20	DSB-P	7	D	Integrated	850											15
2	8/21/91	11:30	DSB-P	8	R	Integrated	850	0.04	ND 0.065	0.13	0.17						5	17
2	8/21/91	11:30	DSB-P	8	D	Integrated	850											19
2	8/21/91	11:30	DSB-P	8	BD2	Integrated	850											13
2	8/21/91	11:30	DSB-P	8	BD	Integrated	850	ND 0.03	ND 0.065	0.14	0.14						6	13
2	8/22/91	11:05	DSB-P	9	R	Integrated	610	ND 0.03	ND 0.065	ND 0.065	ND 0.065					8	7	12
3	3/26/92	23:50	DSB-P	1	R	Integrated	375	ND 0.03	ND 0.065	ND 0.065	ND 0.065						2	9
3	3/27/92	06:30	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	7
3	3/27/92	06:40	DSB-P	2	R	Integrated	700	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	2	2	20
3	3/27/92	06:40	DSB-P	2	D	Integrated	700											21
3	3/27/92	09:30	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065						4	153
3	3/27/92	10:45	ARB	1	R	Integrated	1050											85
3	3/27/92	11:15	MAB	1	R	Integrated	1120											66
3	3/27/92	11:50	KRB	1	R	Integrated	1120											72
3	3/27/92	12:25	DSB-P	3	R	Integrated	1130	ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	12
3	3/27/92	14:20	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	4	4	143
3	3/27/92	14:20	FVB-C	2	D	Integrated												136
3	3/27/92	15:10	DSB-P	4	BD	Integrated	1120	ND 0.03	ND 0.065	ND 0.065	ND 0.065							

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVE AND SILVER LAKE

HOUSATONIC WATER COLUMN DATA COLLECTED BY LMS - 1991 THROUGH 1993

SURVEY	DATE	TIME	STATION	SAMPLE ROUND	SAMPLE TYPE	SAMPLE DEPTH (ft)	INSTANTANEOU FLOWRATE AT DSB (cfs)	TOTAL PCBS				DISSOLVED PCBS				DISSOLVED OXYGEN (mg/l)	TOTAL ORGANIC CARBON (mg/l)	TOTAL SUSPENDED SOLIDS (mg/l)
								AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)	AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)			
3	3/27/92	15:40	DSB-P	4	R	Integrated	1200	ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	33
3	3/27/92	16:40	KRB	2	R	Integrated	1200											27
3	3/27/92	17:05	MAB	2	R	Integrated	1200											76
3	3/27/92	17:25	ARB	2	R	Integrated	1270											53
3	3/27/92	18:00	FVB-C		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	8
3	3/27/92	18:00	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065						4	171
4	4/16/92	17:20	LZ-C	1	R	Integrated										2	2	4
4	4/16/92	18:45	LL-C	1	R	Integrated										2	2	2
4	4/16/92	20:40	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065					2	2	3
4	4/16/92	23:00	DSB-P	1	R	Integrated	410	ND 0.07	ND 0.065	1.1	1.1					3	3	134
4	4/17/92	07:35	DSB-P	2	R	Integrated	444	ND 0.1	ND 0.065	0.98	0.98	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	109
4	4/17/92	07:35	DSB-P	2	D	Integrated	444					ND 0.03	ND 0.065	ND 0.065	ND 0.065			109
4	4/17/92	09:55	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	5
4	4/17/92	09:55	FVB-C	2	D	Integrated						ND 0.03	ND 0.065	ND 0.065	ND 0.065			12
4	4/17/92	13:10	KRB	1	R	Integrated	551											17
4	4/17/92	14:10	MAB	1	R	Integrated	551											22
4	4/17/92	14:35	ARB	1	R	Integrated	551											9
4	4/17/92	15:50	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065					3	2	8
4	4/18/92	07:00	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	3
4	4/18/92	07:00	DSB-P	3	R	Integrated	780	ND 0.03	ND 0.065	0.15	0.15						3	126
4	4/18/92	07:00	DSB-P	3	D	Integrated	780											144
4	4/18/92	09:25	KRB	2	R	Integrated	780											43
4	4/18/92	09:45	MAB	2	R	Integrated	780											49
4	4/18/92	10:05	ARB	2	R	Integrated	780											26
4	4/18/92	10:45	FVB-C	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	17
4	4/18/92	10:45	FVB-C	4	D	Integrated												18
4	4/18/92	11:30	DSB-P	4	BD	Integrated	780	ND 0.06	ND 0.065	0.84	0.84							
4	4/18/92	12:10	DSB-P	4	R	Integrated	780	ND 0.03	ND 0.065	0.29	0.29	ND 0.03	ND 0.065	ND 0.065	ND 0.065	4	3	122
4	4/18/92	13:20	KRB	3	R	Integrated	780											40
4	4/18/92	13:45	MAB	3	R	Integrated	780											31
4	4/18/92	14:10	ARB	3	R	Integrated	780											25
4	4/18/92	14:35	FVB-C	5	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	16
4	4/18/92	17:05	LL-C	2	R	Integrated										3	2	4
4	4/18/92	17:50	LZ-C	2	R	Integrated										3	2	6
4	4/18/92	19:40	ARB	4	R	Integrated	850											24
4	4/18/92	20:15	MAB	4	R	Integrated	850											28
4	4/18/92	20:45	KRB	4	R	Integrated	850											32
4	4/18/92	21:15	DSB-P	5	R	Integrated	850	ND 0.03	ND 0.065	0.17	0.17	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	96
4	4/19/92	06:15	DSB-P	6	R	Integrated	905	ND 0.03	ND 0.065	0.3	0.3					7	3	100
4	4/19/92	07:50	FVB-C		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	1
4	4/19/92	07:50	FVB-C	6	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065					3	3	19
4a	4/22/92	09:05	DSB-P	1	R	Integrated	985	ND 0.03	ND 0.065	0.26	0.26	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	29
4a	4/22/92	10:45	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	6
4a	4/22/92	13:05	DSB-P	2	R	Integrated	985											34
4a	4/22/92	13:05	DSB-P	2	D	Integrated	985											18
4a	4/22/92	14:10	KRB	1	R	Integrated	985											9
4a	4/22/92	14:35	MAB	1	R	Integrated	985											5
4a	4/22/92	15:00	ARB	1	R	Integrated	985											8
4a	4/22/92	15:30	FVB-C	2	R	Integrated												8
4a	4/22/92	15:30	FVB-C	2	D	Integrated												7
5	5/31/92	19:00	DSB-P	1	R	Integrated	238	0.08	ND 0.065	1	1.08						3	588
5	5/31/92	20:05	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065						2	10
5	6/1/92	07:07	DSB-P	2	R	Integrated	395	ND 0.07	ND 0.065	0.98	0.98	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	270

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVE AND SILVER LAKE

HOUSATONIC WATER COLUMN DATA COLLECTED BY LMS - 1991 THROUGH 1993

SURVEY	DATE	TIME	STATION	SAMPLE ROUND	SAMPLE TYPE	SAMPLE DEPTH (ft)	INSTANTANEOU FLOWRATE AT DSB (cfs)	TOTAL PCBS AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	TOTAL PCBS AROCLOR 1254 (ug/l)	TOTAL PCBS AROCLOR 1260 (ug/l)	TOTAL PCBS TOTAL AROCLORS (ug/l)	DISSOLVED PCBS AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	DISSOLVED PCBS AROCLOR 1254 (ug/l)	DISSOLVED PCBS AROCLOR 1260 (ug/l)	DISSOLVED PCBS TOTAL AROCLORS (ug/l)	DISSOLVED OXYGEN (mg/l)	TOTAL ORGANIC CARBON (mg/l)	TOTAL SUSPENDED SOLIDS (mg/l)
5	6/1/92	08:40	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	8
5	6/1/92	11:40	DSB-P	3	R	Integrated	530	ND 0.07	ND 0.065	0.8	0.8	ND 0.03	ND 0.065	ND 0.065	ND 0.065		4	210
5	6/1/92	11:40	DSB-P	3	D	Integrated	530					ND 0.03	ND 0.065	0.077	0.077			213
5	6/1/92	12:25	KRB	1	R	Integrated	530											60
5	6/1/92	12:40	MAB	1	R	Integrated	530											64
5	6/1/92	13:05	ARB	1	R	Integrated	530											19
5	6/1/92	13:30	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	8
5	6/1/92	13:30	FVB-C	3	D	Integrated						ND 0.03	ND 0.065	ND 0.065	ND 0.065			1
5	6/1/92	15:45	LL-C	1	R	Integrated										2	2	6
5	6/1/92	16:20	LZ-C	1	R	Integrated										2	2	ND 1
5	6/1/92	17:50	FVB-C	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	3	6
5	6/1/92	18:55	DSB-P	4	R	Integrated	600	0.06	ND 0.065	0.87	0.93	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	3	122
5	6/1/92	20:00	DSB-P	4	BD	Integrated	600	ND 0.04	ND 0.065	0.5	0.5							
5	6/2/92	06:25	DSB-P		FB		600	ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	2
5	6/2/92	06:50	DSB-P	5	R	Integrated	625	0.05	ND 0.065	0.47	0.52					3	3	152
5	6/2/92	07:05	DSB-P	5	D	Integrated	625											196
5	6/2/92	07:55	FVB-C		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	ND 1
5	6/2/92	08:15	FVB-C	5	R	Integrated		ND 0.03	ND 0.065	0.083	0.083					3	2	12
5	6/2/92	08:30	FVB-C	5	D	Integrated												16
5	6/2/92	12:30	FVB-C	6	R	Integrated		ND 0.03	ND 0.065	0.072	0.072	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	12
5	6/2/92	12:30	FVB-C	6	D	Integrated						ND 0.03	ND 0.065	ND 0.065	ND 0.065			
5	6/2/92	13:17	ARB	2	R	Integrated	625											40
5	6/2/92	13:35	MAB	2	R	Integrated	625											52
5	6/2/92	14:50	KRB	2	R	Integrated	625											44
5	6/2/92	15:20	DSB-P	6	R	Integrated	625	ND 0.04	ND 0.065	0.33	0.33					3	3	144
5	6/2/92	16:25	FVB-C	7	R	Integrated		ND 0.03	ND 0.065	0.072	0.072						3	14
5	6/2/92	16:25	FVB-C	7	D	Integrated												12
5	6/3/92	06:35	DSB-P	7	R	Integrated	498	0.04	ND 0.065	0.46	0.5	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	4	132
5	6/3/92	06:35	DSB-P	7	D	Integrated	498					ND 0.03	ND 0.065	ND 0.065	ND 0.065			100
5	6/3/92	08:07	FVB-C	8	R	Integrated		ND 0.03	0.069	0.078	0.147					4	3	8
5	6/3/92	09:30	LL-C	2	R	Integrated										3	3	10
5	6/3/92	10:05	LZ-C	2	R	Integrated										3	2	10
6	12/17/92	09:45	DSB-P	1	R	Integrated	498	ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	10
6	12/17/92	11:15	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	16
6	12/17/92	20:35	DSB-P	2	R	Integrated	728	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	4	3	14
6	12/17/92	21:45	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	5	49
6	12/17/92	22:50	DSB-P	3	R	Integrated	850	ND 0.03	ND 0.065	ND 0.065	ND 0.065						4	27
6	12/18/92	06:45	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065						3	54
6	12/18/92	07:45	DSB-P	4	R	Integrated	1050	ND 0.03	ND 0.065	0.079	0.079	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	3	37
6	12/18/92	07:45	DSB-P	4	D	Integrated	1050	ND 0.03	ND 0.065	0.079	0.079							
6	12/18/92	12:40	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	10
6	12/18/92	12:40	DSB-P	5	R	Integrated	1120	ND 0.05	ND 0.065	0.114	0.114	ND 0.03	ND 0.065	ND 0.065	ND 0.065	4	3	47
6	12/18/92	12:40	DSB-P	5	D	Integrated	1120											46
6	12/18/92	15:10	FVB-C		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						ND 1	ND 1
6	12/18/92	15:10	FVB-C	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	69
6	12/18/92	15:10	FVB-C	4	D	Integrated												57
6	12/18/92	21:00	DSB-P	6	R	Integrated	1200	ND 0.03	ND 0.065	0.1	0.1	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	45
6	12/18/92	21:00	DSB-P	6	D	Integrated	1200											33
6	12/18/92	22:20	FVB-C	5	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	64
6	12/18/92	22:20	FVB-C	5	D	Integrated												41
6	12/18/92	23:30	DSB-P	7	R	Integrated	1200	ND 0.03	ND 0.065	0.122	0.122						3	42
6	12/19/92	07:50	DSB-P	8	R	Integrated	1200	ND 0.03	ND 0.065	0.084	0.084	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	18
6	12/19/92	07:50	DSB-P	8	BD	Integrated	1200	ND 0.03	ND 0.065	0.103	0.103							

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVE AND SILVER LAKE

HOUSATONIC WATER COLUMN DATA COLLECTED BY LMS - 1991 THROUGH 1993

SURVEY	DATE	TIME	STATION	SAMPLE ROUND	SAMPLE TYPE	SAMPLE DEPTH (ft)	INSTANTANEOU FLOWRATE AT DSB (cfs)	TOTAL PCBS				DISSOLVED PCBS				DISSOLVED OXYGEN (mg/l)	TOTAL ORGANIC CARBON (mg/l)	TOTAL SUSPENDED SOLIDS (mg/l)
								AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)	AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)			
6	12/19/92	09:45	FVB-C	6	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065	3	3	38
7	3/29/93	16:10	DSB-P	1	R	Integrated	2166	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		39	6
7	3/29/93	17:10	KRB	1	R	Integrated												95
7	3/29/93	17:40	MAB	1	R	Integrated												109
7	3/29/93	18:05	ARB	1	R	Integrated												46
7	3/29/93	18:40	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065			75
7	3/29/93	20:10	ARB	2	R	Integrated												85
7	3/29/93	20:30	MAB	2	R	Integrated												51
7	3/29/93	20:50	KRB	2	R	Integrated												65
7	3/29/93	21:20	DSB-P	2	R	Integrated	2704	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		32	25
7	3/30/93	06:15	DSB-P		FB			ND 0.03	ND 0.065	ND 0.065	ND 0.065						15	ND 1
7	3/30/93	06:20	DSB-P	3	R	Integrated	3519	ND 0.03	ND 0.065	0.12	0.12	ND 0.03	ND 0.065	ND 0.065	ND 0.065		23	37
7	3/30/93	07:05	KRB	3	R	Integrated												106
7	3/30/93	07:20	MAB	3	R	Integrated												82
7	3/30/93	07:35	ARB	3	R	Integrated												135
7	3/30/93	08:35	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		26	129
7	3/30/93	09:10	ARB	4	R	Integrated												85
7	3/30/93	09:30	MAB	4	R	Integrated												56
7	3/30/93	09:40	KRB	4	R	Integrated												75
7	3/30/93	11:20	KRB	5	R	Integrated												81
7	3/30/93	11:35	MAB	5	R	Integrated												68
7	3/30/93	11:50	ARB	5	R	Integrated												91
7	3/30/93	12:20	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	0.079	0.079	ND 0.03	ND 0.065	ND 0.065	ND 0.065		10	169
7	4/2/93	09:40	FVB-C	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		22	18
7	4/2/93	10:36	ARB	6	R	Integrated												33
7	4/2/93	10:55	MAB	6	R	Integrated												39
7	4/2/93	11:10	KRB	6	R	Integrated												42
7	4/2/93	11:40	DSB-P	4	R	Integrated	3987	ND 0.03	ND 0.065	0.076	0.076	ND 0.03	ND 0.065	ND 0.065	ND 0.065		33	100
8	4/22/93	17:10	DSB-P	1	R	Integrated	1396	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	6
8	4/22/93	17:45	KRB-C	1	R	Integrated												39
8	4/22/93	18:00	MAB-C	1	R	Integrated												32
8	4/22/93	18:15	ARB-C	1	R	Integrated												26
8	4/22/93	18:45	FVB-C	1	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	43
8	4/22/93	20:00	ARB-C	2	R	Integrated												50
8	4/22/93	20:20	MAB-C	2	R	Integrated												50
8	4/22/93	20:30	KRB-C	2	R	Integrated												45
8	4/22/93	20:50	DSB-P	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065							
8	4/22/93	20:50	DSB-P	2	R	Integrated	1558					ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	2
8	4/22/93	22:00	FVB-C	2	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		2	41
8	4/22/93	22:30	ARB-C	3	R	Integrated												90
8	4/22/93	22:45	MAB-C	3	R	Integrated												57
8	4/22/93	23:00	KRB-C	3	R	Integrated												60
8	4/23/93	06:55	DSB-P	3	R	Integrated	2258	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	11
8	4/23/93	07:15	KRB-C	4	R	Integrated												38
8	4/23/93	07:25	MAB-C	4	R	Integrated												52
8	4/23/93	07:40	ARB-C	4	R	Integrated												209
8	4/23/93	08:40	FVB-C	3	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		4	84
8	4/23/93	09:00	ARB-C	5	R	Integrated												121
8	4/23/93	09:15	MAB-C	5	R	Integrated												47
8	4/23/93	09:30	KRB-C	5	R	Integrated												45
8	4/23/93	11:40	KRB-C	6	R	Integrated												33
8	4/23/93	11:50	MAB-C	6	R	Integrated												52
8	4/23/93	12:00	ARB-C	6	R	Integrated												65

TABLE 4-5

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF
HOUSATONIC RIVE AND SILVER LAKE

HOUSATONIC WATER COLUMN DATA COLLECTED BY LMS - 1991 THROUGH 1993

SURVEY	DATE	TIME	STATION	SAMPLE ROUND	SAMPLE TYPE	SAMPLE DEPTH (ft)	INSTANTANEOU FLOWRATE AT DSB (cfs)	TOTAL PCBS				DISSOLVED PCBS				DISSOLVED OXYGEN (mg/l)	TOTAL ORGANIC CARBON (mg/l)	TOTAL SUSPENDED SOLIDS (mg/l)
								AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)	AROCLOR 1016, 1232 1242, and/or 1248 (ug/l)	AROCLOR 1254 (ug/l)	AROCLOR 1260 (ug/l)	TOTAL AROCLORS (ug/l)			
8	4/23/93	14:40	DSB-P	4	FB		2443	ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065			11
8	4/23/93	14:50	DSB-P	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	16
8	4/23/93	15:05	KRB-C	7	R	Integrated												42
8	4/23/93	15:15	MAB-C	7	R	Integrated												46
8	4/23/93	15:25	ARB-C	7	R	Integrated												76
8	4/23/93	15:50	FVB-C	4	R	Integrated		ND 0.03	ND 0.065	ND 0.065	ND 0.065	ND 0.03	ND 0.065	ND 0.065	ND 0.065		3	84

Abbreviations:
DSB-P = Division Street Bridge Platform (MP 106.2)
FVB-C = Falls Village Rt. 7 Bridge-Center (MP 75.0)
ARB = Andrus Road Bridge (MP 86.2)
MAB = Maple Avenue Bridge (MP 93.5)
KRB = Kellog Road Bridge (MP 97.6)
LL-C = Lake Lillinonah at Rt. 133 Bridge-Center (MP 34.2)
LZ-C = Lake Zoar at Glen Rd. Bridge-Center (MP 27.3)
R = Regular
FB = Field Blank
D = Duplicate
BD = Blind Duplicate
D-PCB = Dissolved PCB
ND = Sample analyzed but not detected. Value indicated is the detection limit

Notes:
Stations DSB-W-CS, DSB-WW-CS, DSB-P-CS, DSB-E-CS are for TSS samples taken along cross section (CS) at Division Street Bridge at West (W), West of W (WW), Platform (P), and East (E) stations.

References:
Reproduced from LMS, November 1994 - Attachment 2-3.

238

TABLE 4-6

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF ADDITIONAL HOUSATONIC RIVER SURFACE WATER PCB DATA - NOVEMBER 1995
(Concentrations are presented in parts per million, ppm)

Parameter	Hubbard Ave. Bridge		Newell St. Bridge		Footbridge Adjacent to Newell St. Parking Lot		Elm St. Bridge		Dawes Ave. Bridge		Holmes Bridge	
	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered
Aroclor 1016	ND(0.000065)	ND(0.00015)	ND(0.000065)	ND(0.00019)	ND(0.000065)	ND(0.000090)	ND(0.00015)	ND(0.00014)	ND(0.000077)	ND(0.00031)	ND(0.000065)	ND(0.000065)
Aroclor 1221	ND(0.00022)	ND(0.00048)	ND(0.00017)	ND(0.00029)	ND(0.00028)	ND(0.00021)	ND(0.00038)	ND(0.000065)	ND(0.000065)	ND(0.00069)	ND(0.00019)	ND(0.00013)
Aroclor 1232	ND(0.000065)	ND(0.00034)	ND(0.000065)	ND(0.00036)	ND(0.000065)	ND(0.00016)	ND(0.00015)	ND(0.00029)	ND(0.000077)	ND(0.00063)	ND(0.000065)	ND(0.00012)
Aroclor 1242	ND(0.000065)	ND(0.00043)	ND(0.000065)	ND(0.00029)	ND(0.000065)	ND(0.00081)	ND(0.00015)	ND(0.00017)	ND(0.000077)	ND(0.00061)	ND(0.000065)	ND(0.00024)
Aroclor 1248	ND(0.000065)	ND(0.00022)	ND(0.000065)	ND(0.00015)	ND(0.000065)	ND(0.00030)	ND(0.00015)	ND(0.00010)	ND(0.000077)	ND(0.00026)	ND(0.000065)	ND(0.00013)
Aroclor 1254	ND(0.000065)	ND(0.00010)	ND(0.000065)	ND(0.00011)	ND(0.000065)	0.00034	ND(0.000065)	ND(0.000073)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.00010)
Aroclor 1260	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.00023)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.00022	ND(0.000065)
Total PCBs	ND(0.00022)	ND(0.00048)	ND(0.00017)	ND(0.00036)	ND(0.00028)	0.00034	ND(0.00038)	ND(0.00029)	ND(0.000077)	ND(0.00069)	0.00022	ND(0.00024)

(See Notes on Page 2)

TABLE 4-6
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF ADDITIONAL HOUSATONIC RIVER SURFACE WATER PCB DATA - NOVEMBER 1995

(Concentrations are presented in parts per million, ppm)

Parameter	New Lenox Bridge		Woods Pond Headwaters		Former Housatonic St. Bridge Abutments		Schweitzer Bridge		Division St. Bridge	
	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered	filtered	unfiltered
Aroclor 1016	ND(0.000065)	ND(0.00023)	ND(0.000073)	ND(0.00017)	ND(0.000065)	ND(0.00015)	ND(0.00010)	ND(0.00015)	ND(0.000065) [ND(0.00013)]	ND(0.00020) [ND(0.00012)]
Aroclor 1221	ND(0.000065)	ND(0.000065)	ND(0.00012)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.00011)	ND(0.000065)	ND(0.000065) [ND(0.00012)]	ND(0.00021) [ND(0.00020)]
Aroclor 1232	ND(0.000065)	ND(0.00036)	ND(0.000073)	ND(0.00027)	ND(0.000065)	ND(0.00023)	ND(0.00010)	ND(0.00023)	ND(0.000065) [ND(0.00013)]	ND(0.00035) [ND(0.00020)]
Aroclor 1242	ND(0.000065)	ND(0.00042)	ND(0.000073)	ND(0.00048)	ND(0.000065)	ND(0.00031)	ND(0.00010)	ND(0.00049)	ND(0.000065) [(ND(0.00013)]	ND(0.00023) [ND(0.00019)]
Aroclor 1248	ND(0.000065)	ND(0.00023)	ND(0.000073)	ND(0.00024)	ND(0.000065)	ND(0.00020)	ND(0.00010)	ND(0.00023)	ND(0.000065) [(ND(0.00013)]	ND(0.00016) [ND(0.00016)]
Aroclor 1254	ND(0.000065)	0.00038	ND(0.000065)	0.00028	0.000099	0.00025	0.00011	0.00029	ND(0.000065) [ND(0.000065)]	0.00012 [ND(0.00011)]
Aroclor 1260	ND(0.000065)	ND(0.00030)	ND(0.000065)	ND(0.00018)	ND(0.000065)	ND(0.00019)	ND(0.000065)	ND(0.00020)	ND(0.000065) [ND(0.000065)]	ND(0.000080) [ND(0.00080)]
Total PCBs	ND(0.000065)	0.000038	ND(0.00012)	0.00028	0.000099	0.00025	0.00011	0.00029	ND(0.000065) [ND(0.000065)]	0.00012 [ND(0.00080)]

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc. on November 3, 1995 and analyzed by Quanterra Environmental Services.
2. ND(0.013) - Not detected. The number in parentheses is the detection limit. Detection limits greater than 0.000065 ppm are due to matrix interferences.
3. [ ] = duplicate result.

TABLE 4-7

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER/SILVER LAKE WATER COLUMN (HIGH-FLOW) PCBs, APPENDIX IX+3, AND TOTAL SUSPENDED SOLIDS (TSS) DATA - MARCH 1995

(High-flow concentrations are presented in parts per million, ppm)

Sample ID: Location Description:	SILVER LAKE				HOUSATONIC RIVER							
	HCW-1 Middle of Silver Lake	HCW-1A East End of Silver Lake	HCW-1B West End of Silver Lake	HCW-2 Silver Lake Outfall	HCW-3 Hubbard Ave. Bridge	HCW-4 Upstream of Unkamet Brook Confluence	HCW-5 Downstream of Unkamet Brook Confluence	HCW-6 Newell Street Bridge	HCW-7 Downstream Edge of East St. Area 2/USEPA Area 4 Site (Footbridge)	HCW-8 Lyman St. Bridge	HCW-9 Elm St. Bridge	HCW-10 Dawes Ave. Bridge
VOLATILE ORGANIC COMPOUNDS (VOCs)												
Acetone	0.005J	0.007J	0.012 [ND(0.01)]	0.004J	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.002J	ND(0.01)	ND(0.01)	ND(0.01)
2-Butanone	0.007J	ND(0.01)	ND(0.01) [ND(0.01)]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)
Chlorobenzene	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	ND(0.005)
Toluene	0.001J	0.002J	0.001J [ND(0.005)]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)												
bis(2-Ethylhexyl) Phthalate	0.001J	ND(0.01)	ND(0.010) [0.001J]	ND(0.01) [ND(0.01)RE]	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.002J	ND(0.01)
INORGANICS												
Barium	0.0232J*	0.024J*	0.022J* [0.0221J*]	0.0194J*	0.0119J*	0.0121J*	0.0119J*	0.0131J*	0.0117J*	0.0135J*	0.0138J*	0.0147J*
Beryllium	ND(0.00020)	0.00021J*	ND(0.00020) [0.00021J*]	ND(0.00020)	ND(0.00020)	0.00026J*	ND(0.00020)	0.00026J*	0.00022J*	0.00021J*	0.00025J*	0.00028J*
Chromium	ND(0.0018)	ND(0.0018)	0.0019J* [ND(0.0018)]	ND(0.0018)	ND(0.0018)	ND(0.0018)	0.0021J*	ND(0.0018)	ND(0.0018)	0.0022J*	0.0021J*	0.0024J*
Cobalt	ND(0.0014)	ND(0.0014)	ND(0.0014) [ND(0.0014)]	ND(0.0014)	ND(0.0014)	0.0014J*	ND(0.0014)	ND(0.0014)	ND(0.0014)	ND(0.0014)	0.0014J*	0.0022J*

TABLE 4-7
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER/SILVER LAKE WATER COLUMN (HIGH-FLOW) PCBs, APPENDIX IX+3, AND TOTAL SUSPENDED SOLIDS (TSS) DATA - MARCH 1995
(High-flow concentrations are presented in parts per million, ppm)

	SILVER LAKE				HOUSATONIC RIVER							
Sample ID:	HCW-1	HCW-1A	HCW-1B	HCW-2	HCW-3	HCW-4	HCW-5	HCW-6	HCW-7	HCW-8	HCW-9	HCW-10
INORGANICS (CONT'D)												
Copper	0.0065J*	0.0072J*	0.0063J* [0.0065J*]	0.0073J*	0.0025J*	0.0035J*	0.0090J*	0.0092J*	0.0076J*	0.0036J*	0.0045J*	0.0058J*
Lead	0.0039	0.0029J*	0.0048 [0.0032]	0.0084	0.0011J*	0.0015J*	0.0011J*	0.0022J*	0.0011J*	0.0023J*	0.0027J*	0.0036
Vanadium	0.0016J*	0.0020J*	0.0018J* [0.0016J*]	0.0016J*	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.0015)	0.0024J*	0.0026J*
Zinc	0.0312	0.0273	0.0249 [0.0254]	0.0257	0.0117J*	0.0118J*	0.0129J*	0.0128J*	0.0127J*	0.013J*	0.015J*	0.0155J*
Tin	ND(0.0089)	ND(0.0089)	ND(0.0089) [ND(0.0089)]	ND(0.0089)	0.0114J*	0.010J*	0.0093J*	ND(0.0089)	0.0119J*	ND(0.0089)	0.0098J*	ND(0.0089)
TOTAL SUSPENDED SOLIDS (TSS)												
TSS Concentration	5.0	ND(4.0)	8.0 [12]	12	12	24	20	41	17	40	47	76
POLYCHLORINATED BIPHENYLS (PCBs)												
Total PCBs	0.00015	0.00025	0.0002 [0.0003]	0.00014	0.00011	0.00013	ND(0.000071)	0.00014	0.00012	0.00017	0.00028	0.00022

Notes:

1. Samples were collected by Blasland, Bouck & Lee on March 9-10, 1995 and submitted to Quanterra Environmental Services for analyses of PCBs, Appendix IX+3 VOCs, SVOCs, and inorganics, and total suspended solids.
2. Only those parameters which were detected in at least one sample are presented.
3. ND(0.013) - Not detected. The number in parentheses is the detection limit for PCBs and inorganics and the quantitation limit for other constituents.
4. J = Indicates an estimated value less than the CLP required quantitation limit.
5. J* = Indicates an estimated value greater than instrument detection limit, but less than contract required quantitation limit.
6. [ ] = duplicate result.
7. RE = Reanalysis

TABLE 4-8

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER/SILVER LAKE WATER COLUMN (LOW FLOW) PCB, APPENDIX IX+3, AND TOTAL SUSPENDED SOLIDS (TSS) DATA - JUNE 1995
(Low-Flow Concentrations are presented in parts per million, ppm)

	SILVER LAKE				HOUSATONIC RIVER							
Sample ID: Location Description:	HCW-1 Middle of Silver Lake	HCW-1A East End of Silver Lake	HCW-1B West End of Silver Lake	HCW-2 Silver Lake Outfall	HCW-3 Hubbard Ave. Bridge	HCW-4 Upstream of Unkamet Brook Confluence	HCW-5 Downstream of Unkamet Brook Confluence	HCW-6 Newell Street Bridge	HCW-7 Downstream Edge of East St. Area 2/USEPA Area 4 Site (Footbridge)	HCW-8 Lyman St. Bridge	HCW-9 Elm St. Bridge	HCW-10 Dawes Ave. Bridge
VOLATILE ORGANIC COMPOUNDS (VOCs)												
Acetone	ND(0.010)	ND(0.010)	ND(0.010)	0.016B [0.024]	0.005BJ	ND(0.010)	0.002BJ	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.006BJ
Benzene	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	ND(0.005)	ND(0.005)	0.004J	0.002J	0.001J	0.001J	0.001J	ND(0.005)
Chlorobenzene	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	ND(0.005)	ND(0.005)	0.015	0.006	0.007	0.008	0.008	0.004J
Chloroform	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	0.002J	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cis 1, 2-Dichloroethene	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.004J	0.005	0.004J
Trichloroethene	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005) [ND(0.005)]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.001J	0.001J
Toluene	ND(0.005)	ND(0.005)	ND(0.005)	0.003J [0.003J]	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)												
bis (2-Ethylhexyl) Phthalate	0.012B	0.002BJ	0.004BJ	0.018B [0.005BJ]	0.006BJ	0.005BJ	0.004BJ	0.007BJ	0.004BJ	0.006BJ	0.002BJ	0.002BJ
Diethylphthalate	0.068	ND(0.010)	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Phenol	ND(0.010)	ND(0.010)	ND(0.010)	0.003J [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)

TABLE 4-8
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER/SILVER LAKE WATER COLUMN (LOW FLOW) PCB, APPENDIX IX+3, AND TOTAL SUSPENDED SOLIDS (TSS) DATA - JUNE 1995
(Low-Flow Concentrations are presented in parts per million, ppm)

	SILVER LAKE				HOUSATONIC RIVER							
Sample ID:	HCW-1	HCW-1A	HCW-1B	HCW-2	HCW-3	HCW-4	HCW-5	HCW-6	HCW-7	HCW-8	HCW-9	HCW-10
Location Description:	Middle of Silver Lake	East End of Silver Lake	West End of Silver Lake	Silver Lake Outfall	Hubbard Ave. Bridge	Upstream of Unkamet Brook Confluence	Downstream of Unkamet Brook Confluence	Newell Street Bridge	Downstream Edge of East St. Area 2/USEPA Area 4 Site (Footbridge)	Lyman St. Bridge	Elm St. Bridge	Dawes Ave. Bridge
3 and 4 Methyl Phenol	ND(0.010)	ND(0.010)	ND(0.010)	0.006J [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
POLYCHLORINATED BIPHENYLS (PCBs)												
Total PCBs	0.00027	0.00031	0.00034	0.00029 [ND(0.00019)]	0.00012	ND(0.00025)	ND(0.00007)	ND(0.00013)	0.00014	ND(0.000065)	0.00013	0.00007
INORGANICS												
Arsenic	ND(0.0025)	ND(0.0025)	ND(0.0025)	0.0052J* [0.0025J*]	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
Barium	0.0274J*	0.0261J*	0.0237J*	0.022J* [0.0229J*]	0.0213J*	0.0254J*	0.0265J*	0.0287J*	0.0286J*	0.0339J*	0.0287J*	0.0329J*
Chromium	ND(0.0018)	ND(0.0018)	0.0027J*	ND(0.0018) [0.0021J*]	ND(0.0018)	ND(0.0018)	ND(0.0018)	ND(0.0018)	ND(0.0018)	0.0051J*	ND(0.0018)	ND(0.0018)
Copper	0.0114J*	0.0065J*	0.0056J*	0.0126J* [0.0087J*]	ND(0.0032)	ND(0.0032)	ND(0.0032)	0.0033J*	ND(0.0032)	ND(0.0032)	ND(0.0032)	ND(0.0032)
Lead	ND(0.0012)	ND(0.0012)	0.0018J*	0.0038 [0.0031]	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)
Nickel	ND(0.0036)	0.0044J*	ND(0.0036)	ND(0.0036) [ND(0.0036)]	ND(0.0036)	ND(0.0036)	ND(0.0036)	ND(0.0036)	ND(0.0036)	ND(0.0036)	ND(0.0036)	ND(0.0036)
Thallium	ND(0.0059)	ND(0.0059)	0.007J*	ND(0.0059) [ND(0.0059)]	ND(0.0059)	ND(0.0059)	ND(0.0059)	ND(0.0059)	ND(0.0059)	ND(0.0059)	ND(0.0059)	ND(0.0059)
Vanadium	0.0019J*	0.0032J*	0.0028J*	0.0035J* [0.0032J*]	ND(0.0017)	ND(0.0017)	0.0019J*	ND(0.0017)	ND(0.0017)	0.0031J*	ND(0.0017)	ND(0.0017)

(See Notes on Page 3)

242

TABLE 4-8
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER/SILVER LAKE WATER COLUMN (LOW FLOW) PCB, APPENDIX IX+3, AND TOTAL SUSPENDED SOLIDS (TSS) DATA - JUNE 1995
(Low-Flow Concentrations are presented in parts per million, ppm)

	SILVER LAKE				HOUSATONIC RIVER							
Sample ID:	HCW-1	HCW-1A	HCW-1B	HCW-2	HCW-3	HCW-4	HCW-5	HCW-6	HCW-7	HCW-8	HCW-9	HCW-10
Location Description:	Middle of Silver Lake	East End of Silver Lake	West End of Silver Lake	Silver Lake Outfall	Hubbard Ave. Bridge	Upstream of Unkamet Brook Confluence	Downstream of Unkamet Brook Confluence	Newell Street Bridge	Downstream Edge of East St. Area 2/USEPA Area 4 Site (Footbridge)	Lyman St. Bridge	Elm St. Bridge	Dawes Ave. Bridge
Zinc	0.0148J*	0.012J*	0.0112J*	0.019J* [0.0247]	0.0099J*	0.0114J*	0.0117J*	0.0125J*	0.010J*	0.0144J*	0.0107J*	0.0082J*
Tin	ND(0.0221)	0.0246J*	ND(0.0221)	0.0248J* [ND(0.0221)]	0.0228J*	ND(0.0221)	0.0282J*	0.0234J*	0.0226J*	ND(0.0221)	ND(0.0221)	ND(0.0221)
Sulfide	ND(1.0)	ND(1.0)	5.7	ND(1.0) [ND(1.0)]	ND(1.0)	1.5	2.9	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
TOTAL SUSPENDED SOLIDS (TSS)												
TSS Concentration	9.0	6.0	7.0	13[9.0]	ND(4.0)	6.0	8.0	ND(4.0)	4.0	5.0	8.0	7.0

Notes:

1. Samples were collected by Blasland, Bouck & Lee on June 19-20, 1995 and submitted to Quanterra Environmental Services for analyses of PCBs, Appendix IX+3 VOCs, SVOCs, and inorganics, and total suspended solids.
2. Only those parameters which were detected in at least one sample are presented.
3. ND(0.013) - Not detected. The number in parentheses is the detection limit for PCBs and inorganics and the quantitation limit for other constituents.
4. J = Indicates an estimated value less than the CLP required quantitation limit.
5. J* = Indicates an estimated value greater than instrument detection limit, but less than contract required quantitation limit.
6. B = Analyte was also detected in the associated method blank. Acetone was detected in two method blanks at 0.004 ppm (estimated below quantitation limit) and 0.014 ppm, respectively. Bis (2-Ethylhexyl) Phthalate was also detected in one method blank at 0.008 ppm (also estimated below quantitation limit).
7. [ ] = duplicate results.

TABLE 4-9

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

EVALUATION OF DETECTED SURFACE WATER CONSTITUENTS-
1995 HIGH-FLOW (EXCLUDING PCBs)
(All Concentrations are in ppm)

Inorganics	Concentration Range: Upstream of GE Facility	Adjacent to GE Facility	Downstream of GE Facility	Target Constituent?
Acetone	ND(0.01)	ND(0.01)-0.002J	ND(0.01)	No; downstream levels are non-detect.
Chlorobenzene	ND(0.005)	ND(0.005)-0.002J	ND(0.005)	No; downstream levels are non-detect.
bis(2-ethylhexyl)phthalate	ND(0.01)	ND(0.01)	ND(0.01)-0.002J	No; no increase in concentration was observed adjacent to GE facility at four locations; downstream concentration is very low and below quantitation limits.
Barium	0.0119J*-0.0121J*	0.0117J*-0.0135J*	0.0138J-0.0147J*	No; downstream levels are not significantly higher than upstream levels. All concentrations are estimated and below the quantitation limit.
Beryllium	ND(0.0002)-0.00026J*	ND(0.0002)-0.00025J*	0.00025J*-0.00028J*	No; downstream levels are not significantly higher than upstream levels. All concentrations are estimated and below the quantitation limit.
Chromium	ND(0.0018)	ND(0.0018)-0.0022J*	0.0021J*-0.0024J*	No; all concentrations are estimated and below the quantitation limit.
Cobalt	ND(0.0014)-0.0014J*	ND(0.0014)	0.0014J*-0.0022J*	No; all concentrations are estimated and below the quantitation limit. Only one downstream sample is above upstream levels and not by much.
Copper	0.0025J*-0.0035J*	0.0036J-0.0092J*	0.0045J-0.0058J*	No; downstream concentrations are not significantly above upstream concentrations. All concentrations are estimated and below the quantitation limits.
Lead	0.0011J*-0.0015J*	0.0011J*-0.0023J*	0.0027J*-0.0036	No; downstream levels are only slightly higher than upstream levels.
Vanadium	ND(0.0015)	ND(0.0015)	0.0024J*-0.0026J*	No; only detected at estimated concentrations in downstream samples. Not likely attributable to the facility.
Zinc	0.0117J*-0.0118J*	0.013J*-0.0129J*	0.015J*-0.0155J*	No; downstream concentrations are only slightly higher than upstream concentrations; all concentrations are estimated and below the quantitation limits.
Tin	0.01J*-0.0114J*	ND(0.0089)-0.0119J*	ND(0.0089)-0.0098J*	No; downstream concentrations are lower than upstream concentrations. All detected concentrations are estimated and below the quantitation limit.

Notes:

1. ND(0.01) - Not detected. The number in parentheses is the detection limit for PCBs and inorganics and the quantitation limit for other constituents.
2. J = Indicates an estimated value less than the CLP required quantitation limit.
3. J* = Indicates an estimated value greater than instrument detection limit, but less than contract required quantitation limit.

TABLE 4-10

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

EVALUATION OF DETECTED SURFACE WATER CONSTITUENTS -
1995-LOW-FLOW (EXCLUDING PCBs)
(All Concentrations are in ppm)

Constituent	Concentration Range			Target Constituent?
	Upstream of GE Facility	Adjacent to GE Facility	Downstream of GE Facility	
Acetone	ND(0.01)-0.005BJ	ND(0.010)-0.002BJ	ND(0.010)-0.006BJ	No; compound was detected in method blank at similar concentrations and thus cannot be attributed to the Housatonic River water column.
Benzene	ND(0.005)	0.001J-0.004J	ND(0.005)-0.001J	No; downstream levels are less than the quantitation limit; not detected at farthest downstream location.
Chlorobenzene	ND(0.005)	0.006-0.015	0.004J-0.008	No; downstream levels are decreasing; level at farthest downstream location is less than quantitation limit.
Chloroform	0.001J-0.002J	ND(0.005)	ND(0.005)	No; downstream levels are non-detect.
cis-1,2-Dichloroethene	ND(0.005)	ND(0.005)-0.004J	0.004J-0.005	No; downstream levels are very low; level at farthest downstream location is less than quantitation limit.
Trichloroethene	ND(0.005)	ND(0.005)-0.001J	0.001J	No; downstream levels are very low and close to detection limit.
bis(2-ethylhexyl)phthalate	0.005BJ-0.006BJ	0.004BJ-0.007BJ	0.002BJ	No; compound was detected in method blank at similar concentrations and, thus, cannot be attributed to the Housatonic River water column.
Barium	0.0213J*-0.0254J*	0.0265J*-0.0339J*	0.0287J*-0.0329J*	No; downstream levels are less than the quantitation limit and are not significantly higher than upstream levels.
Chromium	ND(0.0018)	ND(0.0018)-0.0051J*	ND(0.0018)	No; downstream concentrations are non-detect.
Copper	ND(0.0032)	ND(0.0032)-0.0033J*	ND(0.0032)	No; downstream concentrations are non-detect.
Vanadium	ND(0.0017)	ND(0.0017)-0.0031J*	ND(0.0017)	No; downstream concentrations are non-detect.
Zinc	0.0099J*-0.0114J*	0.01J*-0.0144J*	0.0082J*-0.0107J*	No; downstream concentrations are less than the quantitation limit and are not greater than upstream concentrations.
Tin	ND(0.0221)-0.0228J*	ND(0.0221)-0.0282J*	ND(0.0221)	No; downstream concentrations are non-detect.
Sulfide	ND(1.0)-1.5	ND(1.0)-2.9	ND(1.0)	No; downstream concentrations are non-detect.

Notes:

1. ND(0.01) - Not detected. The number in parentheses is the detection limit for PCBs and inorganics and the quantitation limit for other constituents.
2. J = Indicates an estimated value less than the CLP required quantitation limit.
3. J* = Indicates an estimated value greater than instrument detection limit, but less than contract required quantitation limit.
4. B = Analyte was also detected in the associated method blank.

TABLE 5-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA
FOR HORIZONTAL DELINEATION AT EXISTING TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Between East/West Branch Confluence and Second Pomeroy Avenue Bridge	FP2-L6	0-6	ND(0.085)	0.27*	0.31*	0.58	245,000
	FP2-L7	0-6	[ND(0.023)] ND(0.024)	[ND(0.047)] ND(0.047)	[ND(0.047)] ND(0.047)	[ND(0.047)] ND(0.047)	29,000 [29,000]
Approximately 1,400 feet Downstream of Holmes Road	FP3-L5	0-6	ND(0.024)	ND(0.047)	ND(0.047)	0.047	38,000
	FP3-L6	0-6	ND(0.022)	ND(0.043)	ND(0.043)	ND(0.043)	31,000
	FP3-R7	0-6	ND(0.029)	ND(0.059)	0.099*	0.099	34,000
	FP3-R8	0-6	ND(0.030)	ND(0.060)	0.14*	0.14	40,000
	FP3-R9	0-6	ND(0.55)	ND(1.1)	2.2*	2.2	52,000
	FP3-R10	0-6	ND(0.12)	ND(0.24)	0.48	0.48	NA
	FP3-R11	0-6	ND(0.044)	ND(0.028)	0.10	0.10	NA
Near WWTF, Off Subdivision along E. New Lenox Road	FP4-L7	0-6	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	46,000
		6-12	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA
	FP4-L8	0-6	ND(0.25)	ND(0.5)	0.59*	0.59	265,000
		6-12	ND(0.2)	ND(0.39)	ND(0.39)	ND(0.39)	NA
	FP4-L9	0-6	ND(0.31)	ND(0.62)	ND(0.62)	ND(0.62)	898,000
		6-12	ND(0.25)	ND(0.50)	ND(0.50)	ND(0.50)	NA
	FP4-L10	0-6	ND(0.030)	ND(0.060)	ND(0.060)	ND(0.060)	49,000
		6-12	ND(0.028)	ND(0.056)	ND(0.056)	ND(0.056)	NA
Just Upstream of New Lenox Road Bridge	FP5-L7	0-6	ND(0.068)	ND(0.14)	ND(0.14)	ND(0.14)	260,000
	FP5-R7	0-6	ND(0.2)	ND(0.4)	1.6*	1.6	156,000
	FP5-R8	0-6	ND(0.055)	0.11	0.18	0.18	42,000
	FP5-R9	0-6**	ND(0.026)	ND(0.053)	ND(0.053)	ND(0.053)	NA
	FP5-R10	0-6**	ND(0.033)	ND(0.066)	ND(0.066)	ND(0.066)	NA
	FP5-R11	0-6**	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA
Approximate Midpoint Between New Lenox Road Bridge and Woods Pond	FP7-R6	0-6	ND(0.026)	ND(0.052)	0.087*	0.087	42,000
	FP7-R7	0-6	ND(0.025)	ND(0.05)	ND(0.05)	ND(0.05)	38,000
	FP8A-R6	0-6	ND(0.022)	ND(0.045)	ND(0.045)	ND(0.045)	13,000
	FP9C-R8	0-6	ND(0.041)	ND(0.054)	ND(0.06)	ND(0.06)	246,000

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB and/or TOC analyses.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ND(0.085) - Compound was analyzed for, but not detected. The number is parentheses is the detection limit.
4. [ ] - Duplicate sample results.
5. ** - Sample was initially archived and later analyzed in order to provide further horizontal delineation of PCB presence.

TABLE 5-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB DATA FOR VERTICAL DELINEATION AT EXISTING TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors
Between East/West Branch Confluence and Second Pomeroy Avenue Bridge	FP2-L2	12-18	ND(2.6)	46*	46*	92
		18-24	ND(1.4)	14*	23*	37
		24-30	ND(3)	16*	25*	41
		30-36**	ND(2.5)	ND(11)	14*	14
		36-42	ND(0.32)	ND(0.64)	0.78	0.78
		42-48	ND(0.066)	ND(0.13)	0.22	0.22
		48-54	ND(0.17)	ND(0.34)	0.35	0.35
	FP2-L4	12-18	ND(0.064)	ND(0.13)	ND(0.13)	ND(0.13)
		18-24	ND(0.12)	ND(0.25)	0.38	0.38
		24-30	ND(0.27)	ND(0.54)	2.1	2.1
		30-36	ND(0.062)	ND(0.12)	ND(0.12)	ND(0.12)
	FP2-R7	12-18	ND(0.28)	1.6*	1.9*	3.5
		18-24	ND(0.12)	0.46*	0.62*	1.1
		24-30	ND(0.13)	0.34*	0.46*	0.8
		30-36	[ND(0.063)] ND(0.063)	[0.13*] ND(0.11)	[0.22*] 0.13	[0.35] 0.13
Approximately 1,400 feet Downstream of Holmes Road	FP3-L1	12-18	ND(1.1)	ND(3.2)	12*	12
		18-24	ND(1.3)	ND(4.6)	9.7*	9.7
		24-30	ND(2.6)	ND(21)	33*	33
		30-36**	ND(2.4)	ND(4.9)	6.9*	6.9
		36-42	ND(0.24)	ND(0.48)	0.62	0.62
		42-48	ND(0.12)	ND(0.23)	0.33	0.33
		48-54	ND(0.24)	ND(0.48)	0.56	0.56
	FP3-L3	12-18	ND(0.26)	ND(0.51)	1.6	1.6
		18-24	ND(0.13) [ND(0.025)]	ND(0.26) [ND(0.076)]	0.44 [0.2]	0.44 [0.28]
		24-30	ND(0.026)	ND(0.052)	0.11	0.11
		30-36	ND(0.025)	ND(0.050)	0.062	0.062
	FP3-R1	12-18	ND(5.6)	ND(12)	35*	35
		18-24	ND(13.0)	ND(25)	110*	110
		24-30	ND(1.3)	ND(6.9)	31*	31
		30-36**	ND(2.7)	ND(28)	44*	44
		36-42	ND(2.6)	18*	26	44
		42-48	ND(5.4)	ND(11)	29	29
		48-54	ND(1.5)	3.1*	8.7	12
		54-60	ND(0.56)	ND(1.2)	2.1	2.1
		60-66	ND(0.29)	ND(0.57)	0.6	0.6
		66-72**	ND(0.54)	ND(1.1)	2.2	2.2
Near WWTF, Off Subdivision along E. New Lenox Road	FP4-L4	12-18	ND(0.072)	ND(0.14)	1.0*	1.0
		18-24	ND(0.033)	ND(0.066)	0.099*	0.099
		24-30**	ND(0.029)	ND(0.058)	ND(0.058)	ND(0.058)
		30-36**	ND(0.026)	ND(0.053)	ND(0.053)	ND(0.053)
	FP4-R2	12-18	ND(5.5) [ND(5.6)]	ND(21) [ND(40)]	120* [220*]	120 [220]
		18-24	ND(5.7)	ND(29)	160*	160

TABLE 5-2
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB DATA FOR VERTICAL DELINEATION AT EXISTING TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors
Near WWTF, Off Subdivision along E. New Lenox Road (cont'd)	FP4-R2 (cont'd)	24-30	ND(0.54)	ND(5.8)	25*	25
		30-36	ND(1.4)	ND(12)	51*	51
		36-42	[ND(2.8)] ND(5.5)	[ND(5.7)] ND(11)	[27] 54	[27] 54
		42-48	ND(5.9)	ND(12)	39	39
		48-54	ND(6.5)	ND(13)	48	48
		54-60	ND(6.3)	ND(13)	23	23
		60-66	ND(0.6)	ND(1.2)	4.6	4.6
		66-72**	ND(1.4)	ND(2.8)	12	12
		72-78**	ND(1.4)	ND(2.9)	5.8	5.8
	FP4-R6	12-18	ND(6.7)	ND(37)	170*	170
		18-24	ND(6.7)	70*	100*	170
		24-30	ND(0.34)	4.7*	4.7*	9.4
		30-36	ND(0.031)	ND(0.078)	0.31*	0.31
		36-42	ND(0.58)	ND(1.2)	1.8	1.8
		42-48**	ND(0.03)	ND(0.06)	ND(0.06)	ND(0.06)
		48-54**	ND(0.031)	ND(0.063)	0.09	0.09
		54-60**	ND(0.031)	ND(0.063)	0.082	0.082
Just Upstream of New Lenox Road Bridge	FP5-L2	12-18	ND(3.1)	ND(29)	78*	78
		18-24	ND(0.62)	ND(5.5)	15*	15
		24-30	ND(0.16)	ND(0.99)	3.2*	3.2
		30-36	ND(1.6)	ND(3.7)	13	13
		36-42	ND(0.15)	ND(0.29)	0.33	0.33
		42-48	[ND(0.56)] ND(0.06)	[ND(0.12)] ND(0.12)	[0.13] 0.13	[0.13] 0.13
	FP5-L4	12-18	ND(0.037)	ND(0.26)	0.63*	0.63
		18-24	ND(0.032)	ND(0.086)	0.18*	0.18
	FP5-R4	12-18	ND(3.1)	ND(15)	46	46
		18-24	ND(2.4)	47*	80*	130
		24-30	ND(2.0)	11*	19	30
		30-36	ND(2.8)	28*	55	83
		36-42	ND(5.8)	25*	46	71
		42-48	ND(1.0)	2.6*	3.8	6.4
		48-54	ND(0.5)	ND(1.0)	1.3	1.3
		54-60	ND(0.21)	ND(0.42)	0.81	0.81
		60-66	ND(0.55)	ND(1.1)	1.7	1.7
		66-72**	ND(0.077)	ND(0.15)	ND(0.15)	ND(0.15)
		72-78**	ND(0.045)	ND(0.09)	ND(0.09)	ND(0.09)
	FP6-L2	12-18	ND(1.4)	ND(2.8)	6.2*	6.2
		18-24	ND(0.025)	ND(0.070)	0.39*	0.39*
		24-30	ND(0.025)	ND(0.051)	0.22*	0.22*
		30-36**	ND(0.050)	ND(0.1)	0.28*	0.28

TABLE 5-2
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB DATA FOR VERTICAL DELINEATION AT EXISTING TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors
Just Downstream of New Lenox Road Bridge	FP6-L3	12-18	ND(1.4) [ND(1.5)]	ND(3.5) [ND(3.0)]	16.0* [11.0*]	16.0 [11.0]
		18-24	ND(1.5)	ND(3.1)	13*	13
		24-30	ND(1.5)	ND(3.2)	10.0*	10.0
		30-36**	ND(0.52)	ND(1.1)	6.6*	6.6
		36-42	ND(0.12)	ND(0.24)	0.3	0.3
		42-48	ND(0.026)	ND(0.051)	ND(0.051)	ND(0.051)
		48-54	ND(0.053)	ND(0.11)	0.12	0.12
	FP6R	12-18	ND(4.5)	ND(9.0)	21	21
		18-24	ND(1.3)	ND(2.6)	2.9	2.9
		24-30	ND(0.51)	ND(1.0)	1.7	1.7
		30-36	ND(1.2)	ND(2.6)	7.4	7.4
		36-42	ND(0.54)	ND(1.1)	1.4	1.4
		42-48	ND(0.23)	ND(0.45)	0.55	0.55
Approximate Midpoint Between New Lenox Road Bridge and Woods Pond	FP7-L1	12-18	ND(1.9)	ND(14)	73*	73
		18-24	ND(1.6)	ND(23)	58*	58
		24-30	ND(0.68)	ND(7.8)	21*	21
		30-36	ND(0.074)	ND(0.15)	0.3	0.3
		36-42	ND(0.037)	0.12*	0.17	0.29
		42-48	ND(0.061)	0.13*	0.27	0.40
		48-54	ND(0.13)	ND(0.25)	0.3	0.3
	FP7-R2	12-18	ND(2.2)	23*	44*	67
		18-24	ND(0.033)	ND(0.1)	0.22*	0.22
		24-30	ND(0.027)	ND(0.18)	0.37*	0.37
	FP7-R3	12-18	ND(0.43)	ND(4.5)	6.1*	6.1
		18-24	ND(0.033)	ND(0.07)	0.13*	0.13
		24-30	[ND(0.31)] ND(0.061)	[ND(0.61)] ND(0.12)	[0.65] 0.27	[0.65] 0.27
Between Lenox Dale and Lee	FP8-L1	12-18	ND(0.026)	ND(0.052)	0.48*	0.48
		18-24	ND(0.026)	ND(0.052)	0.23*	0.23
		24-30	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)
		30-36	ND(0.028)	ND(0.056)	ND(0.056)	ND(0.056)
Just South of Turnpike	FP9-L2	12-18	ND(0.25)	ND(0.51)	1.6*	1.6
		18-24	ND(0.22)	ND(0.44)	0.63	0.63
		24-30	ND(0.22)	ND(0.43)	0.5	0.5
Just Upstream of Division Street	FP10-R2	12-18	ND(0.25)	ND(0.84)	3.7*	3.7
		18-24	ND(0.021)	ND(0.042)	ND(0.042)	ND(0.042)
		24-30	ND(0.021)	ND(0.042)	ND(0.042)	ND(0.042)
		30-36	ND(0.022)	ND(0.044)	ND(0.044)	ND(0.044)
Sheffield Plain	FP11-L2	12-18	ND(0.048)	ND(0.096)	0.14*	0.14
		18-24	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)
		24-30	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)
		30-36	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)

 (See Notes on Page 4)

TABLE 5-2
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB DATA FOR VERTICAL DELINEATION AT EXISTING TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB analyses.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ND(2.6) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] - Indicates field duplicate analysis.
5. ** - Samples were initially archived and later analyzed in order to provide further vertical delineation of PCB presence.

TABLE 5-3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
GE Facility to New Lenox Road	FP4A-L1	0-6	ND(2.7)	ND(5.5)	20	20	42,000
		6-12	ND(1.3)	ND(2.6)	7.4	7.4	NA
	FP4A-L2	0-6	ND(4.5)	ND(8.9)	27	27	229,000
		6-12	ND(9.1)	ND(18)	47	47	NA
		12-18	ND(1.5)	ND(4.9)	12	12	NA
		18-24	ND(0.10)	ND(0.36)	0.75	0.75	NA
		24-30	ND(0.084)	ND(0.17)	0.52	0.52	NA
		30-36	ND(0.083)	ND(0.12)	0.34	0.34	NA
		36-42	ND(0.031)	ND(0.14)	0.41	0.41	NA
		42-48	ND(0.030)	ND(0.097)	0.31	0.31	NA
		48-54	ND(0.028) [ND(0.043)]	ND(0.056) [ND(0.087)]	0.12 [0.11]	0.12 [0.11]	NA
	FP4A-L3	0-6	ND(3.5)	ND(7.0)	7.7	7.7	119,000
		6-12	ND(0.55)	ND(1.1)	1.8	1.8	NA
	FP4A-L4	0-6	ND(0.28)	ND(0.56)	1.4	1.4	43,000
		6-12	ND(0.14)	ND(0.28)	0.43	0.43	NA
	FP4A-L5	0-6	ND(0.34)	ND(0.67)	1.3	1.3	31,000
		6-12	ND(1.6)	ND(3.3)	3.7	3.7	NA
	FP4A-L6	0-6	ND(0.12)	0.27	0.33	0.60	20,000
		6-12	ND(0.044)	0.11	0.16	0.27	NA
	FP4A-L7	0-6	ND(0.088) [ND(0.087)]	ND(0.18) [ND(0.17)]	0.29 [0.24]	0.29 [0.24]	NA
	FP4A-L8	0-6**	ND(0.037)	ND(0.18)	0.19	0.19	NA
	FP4A-R1	0-6	ND(2.8)	ND(5.7)	14	14	33,000
		6-12	ND(14)	ND(28)	69	69	NA
		12-18	ND(5.2)	ND(10)	38	38	NA
		18-24	ND(0.56)	ND(5.9)	24	24	NA
		24-30	ND(0.56)	ND(1.7)	7.2	7.2	NA
		30-36	ND(0.54)	ND(2.0)	9.0	9.0	NA
		36-42	ND(0.54)	ND(1.1)	3.1	3.1	NA
		42-48	ND(0.55)	ND(1.1)	3.2	3.2	NA
		48-54	ND(0.027)	ND(0.053)	0.13	0.13	NA
		54-60	ND(0.028)	ND(0.056)	ND(0.056)	ND(0.056)	NA
	FP4A-R2	0-6	ND(1.5)	ND(2.9)	7.6	7.6	26,000
		6-12	ND(0.55)	ND(1.1)	1.9	1.9	NA
	FP4A-R3	0-6	ND(0.023)	ND(0.046)	ND(0.046)	ND(0.046)	14,000
		6-12	ND(0.050)	ND(0.099)	0.15	0.15	NA
	FP4A-R4	0-6	ND(0.027)	ND(0.053)	ND(0.053)	ND(0.053)	27,000
		6-12	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	NA
New Lenox Road to Woods Pond Headwaters	FP6A-L1	0-6	ND(18)	ND(36)	71	71	69,000
		6-12	ND(34)	ND(69)	140	140	NA
		12-18	ND(1.5)	ND(3.9)	14	14	NA
		18-24	ND(0.06)	ND(0.12)	0.28	0.28	NA
		24-30	ND(0.058)	ND(0.12)	0.26	0.26	NA
	FP6A-L2	0-6	ND(2.6)	ND(9.0)	25	25	17,000
		6-12	ND(13)	ND(26)	94	94	NA
		12-18	ND(0.51)	ND(1.0)	2.4	2.4	NA
		18-24	ND(0.12)	ND(0.24)	0.58	0.58	NA
		24-30	ND(0.098)	ND(0.20)	0.27	0.27	NA

(See Notes on Page 7)

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
New Lenox Road for Woods Pond Headwaters (cont'd)	FP6A-L3	0-6	ND(2.6)	ND(5.1)	12	12	261,000
		6-12	ND(0.79)	ND(1.6)	4.1	4.1	NA
	FP6A-L4	0-6	ND(0.52)	ND(1.0)	1.8	1.8	136,000
		6-12	ND(0.089)	ND(0.18)	0.24	0.24	NA
	FP6A-L5	0-6	ND(0.087)	ND(0.17)	0.24	0.24	57,000
		6-12	ND(0.034)	ND(0.068)	0.077	0.077	NA
	FP6A-L6	0-6	ND(0.049) [ND(0.044)]	ND(0.097) [ND(0.087)]	ND(0.097) [ND(0.087)]	ND(0.097) [ND(0.087)]	71,000
		6-12	ND(0.034)	ND(0.068)	ND(0.068)	ND(0.068)	NA
	FP6A-R1	0-6	ND(20)	ND(40)	65	65	71,000
		6-12	ND(41)	ND(81)	150	150	NA
		12-18	ND(3.5)	ND(14)	75	75	NA
		18-24	ND(0.66)	ND(1.3)	2.6	2.6	NA
		24-30	ND(0.029) [ND(0.028)]	ND(0.09) [ND(0.056)]	0.2 [0.18]	0.2 [0.18]	NA
		30-36	ND(0.13)	ND(0.26)	0.41	0.41	NA
	FP6A-R2	0-6	ND(0.14)	ND(0.29)	0.68	0.68	33,000
		6-12	ND(0.055)	ND(0.11)	0.15	0.15	NA
	FP6A-R3	0-6	ND(0.029)	ND(0.057)	ND(0.057)	ND(0.057)	35,000
		6-12	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	NA
	FP6A-R4	0-6	ND(0.028) [ND(0.028)]	ND(0.057) [ND(0.057)]	0.059 [ND(0.057)]	0.059 [ND(0.057)]	40,000 [40,000]
		6-12	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	NA
	FP6A-BW-1	0-6	ND(0.097)	ND(0.19)	ND(0.19)	ND(0.19)	NA
		6-12	ND(0.014)	ND(0.28)	0.38	0.38	NA
	FP6A-BW2	0-6	ND(0.17)	ND(0.22)	0.38	0.38	NA
		6-12	ND(0.032)	ND(0.065)	ND(0.065)	ND(0.065)	NA
	FP7A-L1	0-6	ND(3.6)	ND(7.2)	16*	16	62,000
		6-12	ND(7.3)	ND(15)	51*	51	NA
		12-18	ND(3.6)	ND(7.1)	21	21	NA
		18-24	ND(0.72)	ND(1.5)	1.7	1.7	NA
		24-30	ND(4.1)	ND(8.2)	15	15	NA
		30-36	ND(1.4)	ND(2.8)	5.8	5.8	NA
		36-42	ND(0.27)	ND(0.55)	0.84	0.84	NA
		42-48**	ND(0.051)	ND(0.10)	0.25	0.25	NA
		48-54**	ND(0.029)	ND(0.059)	ND(0.059)	ND(0.059)	NA
	FP7A-L2	0-6	ND(3.2)	ND(6.4)	13*	13	51,000
		6-12	ND(3.2)	ND(6.4)	27*	27	NA
	FP7A-L3	0-6	ND(1.9)	ND(3.8)	7*	7	56,000
		6-12	ND(3.7) [ND(7.5)]	ND(7.5) [ND(15)]	20* [18*]	20 [18]	NA
		12-18	ND(24)	ND(48)	220	220	NA
		18-24	ND(11)	72*	210	280	NA
		24-30	ND(9.9)	100*	330	430	NA
		30-36	ND(25)	ND(51)	130	130	NA
		36-42	--	--	--	NS	NA
		42-48**	ND(0.96)	ND(2.3)	7.6	7.6	NA

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
New Lenox Road for Woods Pond Headwaters (cont'd)	FP7A-L4	0-6	ND(1.5)	ND(2.9)	3.5*	3.5	154,000
		6-12	ND(0.076)	ND(0.15)	0.58*	0.58	NA
	FP7A-L5	0-6	ND(0.44)	ND(1.2)	2.4*	2.4	362,000
		6-12	ND(0.036)	ND(0.072)	0.19*	0.19	NA
	FP7A-L6	0-6	ND(0.15)	ND(0.51)	0.46*	0.46	235,000
		6-12	ND(0.054)	ND(0.11)	ND(0.11)	ND(0.11)	NA
	FP7A-L7	0-6	ND(0.074)	ND(0.16)	0.17*	0.17	130,000
		6-12	ND(0.064)	ND(0.13)	ND(0.13)	ND(0.13)	NA
	FP7A-L8	0-6	ND(0.038) [ND(0.037)]	ND(0.076) [ND(0.074)]	ND(0.076) [ND(0.074)]	ND(0.076) [(ND(0.074)]	51,000
		6-12	ND(0.032)	ND(0.064)	ND(0.064)	ND(0.064)	NA
	FP7A-L9	0-6	ND(0.028)	ND(0.056)	ND(0.056)	ND(0.056)	33,000
	FP7A-R1	0-6	ND(0.027)	ND(0.055)	0.056*	0.056	31,000
		6-12	ND(0.025)	ND(0.050)	0.078*	0.078	NA
	FP7A-R2	0-6	ND(0.024)	ND(0.049)	ND(0.049)	ND(0.049)	24,000
		6-12	ND(0.023)	ND(0.046)	ND(0.046)	ND(0.046)	NA
Columbia Mill Dam Impoundment	FP8A-L1	0-6	ND(1.8)	ND(3.6)	6.4*	6.4	65,000
		6-12	ND(0.13)	ND(0.26)	2.8*	2.8	NA
	FP8A-L2	0-6	ND(1.4)	ND(2.8)	4.2*	4.2	68,000
		6-12	ND(0.021)	ND(0.042)	0.28*	0.28	NA
	FP8A-L3	0-6	ND(2.0)	ND(3.9)	13*	13	85,000
		6-12	ND(1.5)	ND(3.0)	5.6	5.6	NA
		12-18	ND(3.0)	ND(5.9)	10	10	NA
		18-24	ND(3.0)	8.3*	14	22	NA
		24-30	ND(0.47)	1.0*	1.3	2.3	NA
		30-36	ND(0.12)	ND(0.23)	0.37	0.37	NA
		36-42**	ND(0.11)	ND(0.37)	0.55	0.55	NA
	FP8A-L4	0-6	ND(0.066)	ND(0.132)	1.5*	1.5	63,000
		6-12	ND(0.030)	ND(0.059)	0.45*	0.45	NA
	FP8A-L5	0-6	ND(0.029)	ND(0.057)	ND(0.057)	ND(0.057)	61,000
		6-12	ND(0.026)	ND(0.052)	ND(0.052)	ND(0.052)	NA
	FP8A-R1	0-6	ND(0.14) [ND(0.142)]	ND(0.28) [0.28]	2.4* [2.1*]	2.4 [2.1]	29,000 [33,000]
		6-12	ND(0.27)	ND(0.54)	4.3*	4.3	NA
	FP8A-R2	0-6	ND(0.026)	ND(0.053)	0.142*	0.142	73,000
		6-12	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	NA
	FP8A-R3	0-6	ND(0.022)	ND(0.045)	0.089*	0.089*	27,000
		6-12	ND(0.022)	ND(0.043)	ND(0.043)	ND(0.043)	NA
	FP8A-R4	0-6	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	51,000
		6-12	ND(0.025)	ND(0.051)	ND(0.051)	ND(0.051)	NA
	FP8A-R5	0-6	ND(0.022)	ND(0.044)	0.15*	0.15	37,000
		6-12	ND(0.022)	ND(0.045)	0.058*	0.058	NA
	FP8A-R6	0-6	ND(0.022)	ND(0.045)	ND(0.045)	ND(0.045)	13,000
Willow Mill Dam Impoundment	FP9A-L1	0-6	ND(0.34)	ND(0.69)	1.0*	1.0	44,000
		6-12	ND(0.55)	ND(1.1)	1.5*	1.5	NA
	FP9A-L2	0-6	ND(0.36)	ND(0.73)	1.5*	1.5	43,000
		6-12	ND(0.58)	ND(1.2)	1.6*	1.6	NA

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Willow Mill Dam Impoundment (cont'd)	FP9A-L3	0-6	ND(0.062)	ND(0.12)	0.48*	0.48	45,000
		6-12	ND(0.057)	ND(0.12)	0.33*	0.33	NA
	FP9A-L4	0-6	ND(0.025)	ND(0.051)	ND(0.051)	ND(0.051)	28,000
		6-12	ND(0.026)	ND(0.053)	ND(0.053)	ND(0.053)	NA
	FP9A-L5	0-6	ND(0.027)	ND(0.053)	ND(0.053)	ND(0.053)	130,000
		6-12	ND(0.025)	ND(0.050)	0.085*	0.085	NA
	FP9A-R1	0-6	ND(0.6)	ND(1.2)	1.7*	1.7	32,000
		6-12	ND(0.51) [ND(0.25)]	ND(1.0) [ND(0.72)]	1.9* [2.0*]	1.9 [2.0]	NA
		12-18	ND(0.11)	ND(0.22)	1.1	1.1	NA
		18-24	ND(0.26)	ND(0.52)	2.8	2.8	NA
		24-30	[ND(0.25)] ND(0.25)	[ND(0.5)] ND(0.5)	[1.7] 2.3	[1.7] 2.3	NA
		30-36**	ND(0.26)	ND(0.51)	1.1	1.1	NA
		36-42**	ND(0.029)	ND(0.058)	0.11	0.11	NA
	FP9A-R2	0-6	ND(0.086)	ND(0.3)	0.51	0.51	37,000
		6-12	ND(0.064)	ND(0.13)	0.21*	0.21	NA
	FP9A-R3	0-6	ND(0.28)	ND(0.94)	1.5*	1.5	50,000
		6-12	ND(0.037)	ND(0.075)	ND(0.075)	ND(0.075)	NA
	FP9A-R4	0-6	ND(0.045)	ND(0.089)	0.18*	0.18	83,000
		6-12	ND(0.032)	ND(0.064)	0.13*	0.13	NA
	FP9A-R5	0-6	ND(0.027)	ND(0.055)	ND(0.055)	ND(0.055)	242,000
		6-12	ND(0.027)	ND(0.055)	0.085*	0.085	NA
Stockbridge Golf Course	FP9B-L1	0-6	ND(0.31)	ND(0.62)	2.1*	2.1	39,000
		6-12	ND(0.024)	ND(0.049)	0.21*	0.21	NA
	FP9B-L2	0-6	ND(0.85)	ND(1.9)	5.0*	5.0	78,000
		6-12	ND(0.4)	ND(1.4)	6.8*	6.8	NA
	FP9B-L3	0-6	ND(0.8)	ND(2.5)	6.1*	6.1	61,000
		6-12	ND(0.3)	ND(2.2)	4.3*	4.3	NA
	FP9B-L4	0-6	ND(0.29)	ND(0.58)	1.8*	1.8	29,000
		6-12	ND(0.026)	ND(0.078)	0.83*	0.83	NA
	FP9B-L5	0-6	ND(0.29)	ND(0.67)	2.5*	2.5	39,000
		6-12	ND(0.26)	ND(0.69)	2.9*	2.9	NA
	FP9B-L6	0-6	ND(0.7)	ND(1.4)	2.0*	2.0	40,000
		6-12	ND(0.31)	ND(2.3)	7.4*	7.4	NA
		12-18	ND(3.0)	ND(6.1)	12	12	NA
		18-24	ND(0.068)	ND(0.14)	0.39	0.39	NA
		24-30	ND(0.061)	ND(0.23)*	0.28	0.28	NA
		30-36	ND(0.03)	ND(0.06)	0.074	0.074	NA
		36-42	ND(0.042)	ND(0.084)	ND(0.084)	ND(0.084)	NA
	FP9B-L7	0-6	ND(0.068)	ND(0.44)	1.6*	1.6	34,000
		6-12	ND(0.054)	ND(0.11)	0.66*	0.66	NA
	FP9B-L8	0-6	ND(0.063)	ND(0.68)	1.8*	1.8	39,000
		6-12	ND(0.055)	ND(0.27)	1.4*	1.4	NA
	FP9B-L9	0-6	ND(0.034)	ND(0.069)	ND(0.069)	ND(0.069)	27,000
		6-12	ND(0.023) [ND(0.024)]	ND(0.047) [ND(0.048)]	ND(0.047) [ND(0.048)]	ND(0.047) [ND(0.048)]	NA
Glendale Dam Impoundment	FP9C-L1	0-6	ND(0.029)	ND(0.057)	0.069*	0.069	64,000
		6-12	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	NA

(See Notes on Page 7)

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Glendale Dam Impoundment (cont'd)	FP9C-L2	0-6	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	26,000
		6-12	ND(0.026)	ND(0.052)	ND(0.052)	ND(0.052)	NA
	FP9C-L3	0-6	ND(0.030)	ND(0.061)	ND(0.061)	ND(0.061)	27,000
		6-12	ND(0.027)	ND(0.055)	ND(0.055)	ND(0.055)	NA
	FP9C-L4	0-6	ND(0.13)	ND(0.25)	1.0*	1.0	87,000
		6-12	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	NA
	FP9C-L5	0-6	ND(0.028)	ND(0.056)	ND(0.056)	ND(0.056)	37,000
		6-12	ND(0.026)	ND(0.052)	ND(0.052)	ND(0.052)	NA
	FP9C-R1	0-6	ND(0.88)	ND(1.8)	2.7*	2.7	50,000
		6-12	ND(0.79)	ND(2.0)*	5.6*	5.6	NA
	FP9C-R2	0-6	ND(1.5) [(ND1.4)]	ND(3.3) [(ND)3.7)]	5.2* [5.1*]	5.2 [5.1]	65,000 [61,000]
		6-12	ND(2.0)	ND(8.0)	13*	13	NA
		12-18	ND(2.0)	ND(5.5)	16	16	NA
		18-24	ND(0.4)	ND(0.79)	1.9	1.9	NA
		24-30	ND(0.04)	ND(0.081)	ND(0.081)	ND(0.081)	NA
		30-36	ND(0.035)	ND(0.071)	ND(0.071)	ND(0.071)	NA
	FP9C-R3	0-6	ND(0.91)	ND(4.7)	7.6*	7.6	113,000
		6-12	ND(0.38)	ND(0.76)	1.1*	1.1	NA
	FP9C-R4	0-6	ND(0.031)	ND(0.062)	ND(0.062)	ND(0.062)	56,000
		6-12	ND(0.045)	ND(0.1)	0.61*	0.61	NA
	FP9C-R5	0-6	ND(0.036)	ND(0.072)	ND(0.072)	ND(0.072)	51,000
		6-12	ND(0.034)	ND(0.067)	ND(0.067)	ND(0.067)	NA
	FP9C-R6	0-6	ND(0.036)	ND(0.071)	ND(0.071)	ND(0.071)	78,000
		6-12	ND(0.031)	ND(0.062)	ND(0.062)	ND(0.062)	NA
	FP9C-R7	0-6	ND(0.050)	ND(0.1)	0.21*	0.21	181,000
		6-12	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA
	FP9C-R8	0-6	ND(0.041)	ND(0.054)	ND(0.06)	ND(0.06)	24,600
Rising Pond	FP9D-L1	0-6	ND(0.44)	ND(0.94)	4.2*	4.2	69,000
		6-12	ND(0.26)	ND(0.53)	1.4*	1.4	NA
		12-18	ND(0.043)	ND(0.086)	0.39	0.39	NA
		18-24	ND(0.043)	ND(0.086)	0.39	0.39	NA
		24-30	ND(0.11)	ND(0.22)	0.39	0.39	NA
	FP9D-L2	0-6	ND(0.13)	ND(0.25)	0.38*	0.38	63,000
		6-12	ND(0.046)	ND(0.092)	0.22*	0.22	NA
	FP9D-L3	0-6	ND(0.021)	ND(0.043)	ND(0.043)	ND(0.043)	33,000
		6-12	ND(0.022)	ND(0.043)	ND(0.043)	ND(0.043)	NA
	FP9D-L4	0-6	ND(0.026)	ND(0.052)	ND(0.052)	ND(0.052)	16,000
		6-12	ND(0.020)	ND(0.041)	ND(0.041)	ND(0.041)	NA
	FP9D-L5	0-6	ND(0.034)	ND(0.068)	0.073*	0.073	24,000
	FP9D-R1	0-6	ND(0.048) [ND(0.048)]	ND(0.11) [ND(0.097)]	0.15* [0.14*]	0.15 [0.14]	20,000 [21,000]
		6-12	ND(0.024)	ND(0.048)	0.1*	0.1	NA
	FP9D-R2	0-6	ND(0.028)	ND(0.056)	0.12*	0.12	26,000
		6-12	ND(0.023)	ND(0.047)	ND(0.047)	ND(0.047)	NA
	FP9D-R3	0-6	ND(0.060)	ND(0.12)	0.3*	0.3	24,000
		6-12	ND(0.048)	ND(0.097)	0.29*	0.29	NA
	FP9D-R4	0-6	ND(0.03)	ND(0.06)	0.082*	0.082	29,000
		6-12	ND(0.023)	ND(0.045)	ND(0.045)	ND(0.045)	NA

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Rising Pond (cont'd)	FP9D-R5	0-6	ND(0.022)	ND(0.045)	ND(0.045)	ND(0.045)	25,000
		6-12	ND(0.022)	ND(0.044)	ND(0.044)	ND(0.044)	NA
Searles Middle School	FP10A-L1	0-6	ND(0.29)	ND(0.58)	1.1*	1.1	14,000
		6-12	ND(0.14) [ND(0.13)]	ND(0.27) [ND(0.26)]	0.71* [0.66*]	0.71 [0.66]	NA
	FP10A-L2	0-6	ND(0.095)	ND(0.185)	0.44*	0.44	30,000
		6-12	ND(0.048)	ND(0.096)	0.17*	0.17	NA
	FP10A-L3	0-6	ND(0.028)	ND(0.057)	0.13*	0.13	42,000
		6-12	ND(0.023)	ND(0.045)	ND(0.045)	ND(0.045)	NA
	FP10A-L4	0-6	ND(0.027)	ND(0.066)	0.49*	0.49	23,000
		6-12	ND(0.026)	ND(0.11)	0.55*	0.55	NA
	FP10B-L1	0-6	ND(0.12)	ND(0.24)	0.5*	0.5	8,800
		6-12	ND(0.021)	ND(0.042)	0.094*	0.094	NA
	FP10B-L2	0-6	ND(0.13)	ND(0.27)	0.65*	0.65	29,000
		6-12	ND(0.12)	ND(0.23)	0.71*	0.71	NA
	FP10B-L3	0-6	ND(0.022)	ND(0.044)	ND(0.044)	ND(0.044)	12,000
		6-12	ND(0.023)	ND(0.046)	ND(0.046)	ND(0.046)	NA
	FP10B-L4	0-6	ND(0.027)	ND(0.054)	ND(0.054)	ND(0.054)	17,000
		6-12	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA
	FP10C-L1	0-6	ND(0.12)	ND(0.24)	0.63*	0.63	12,000
		6-12	ND(0.13)	ND(0.25)	0.85*	0.85	NA
	FP10C-L2	0-6	ND(0.052)	ND(0.1)	0.5*	0.5	20,000
		6-12	ND(0.046)	ND(0.092)	0.25*	0.25	NA
	FP10C-L3	0-6	ND(0.029)	ND(0.057)	0.058*	0.058	43,000
		6-12	ND(0.026)	ND(0.052)	0.053*	0.053	NA
	FP10C-L4	0-6	ND(0.028)	ND(0.055)	ND(0.055)	ND(0.055)	15,000
		6-12	ND(0.023)	ND(0.046)	ND(0.046)	ND(0.046)	NA
Sheffield Plain	FP10D-L1	0-6	ND(0.026)	ND(0.11)	0.33*	0.33	11,000
		6-12	ND(0.024)	ND(0.12)	0.48*	0.48	NA
	FP10D-L2	0-6	ND(0.027)	ND(0.074)	0.43*	0.43	13,000
		6-12	ND(0.025)	ND(0.086)	0.72*	0.72	NA
	FP10D-L3	0-6	ND(0.037)	ND(0.075)	0.53*	0.53	22,000
		6-12	ND(0.028)	ND(0.057)	0.46*	0.46	NA
	FP10D-L4	0-6	ND(0.031)	ND(0.062	0.080*	0.08	16,000
		6-12	ND(0.029)	ND(0.058)	0.059*	0.059	NA
	FP10D-L5	0-6	ND(0.029)	ND(0.057)	ND(0.057)	ND(0.057)	31,000
		6-12	ND(0.026)	ND(0.051)	ND(0.051)	ND(0.051)	NA
	FP10D-R1	0-6	ND(0.078)	ND(0.23)	0.73*	0.73	19,000
		6-12	ND(0.032)	ND(0.23)	0.84*	0.84	NA
	FP10D-R2	0-6	ND(0.068)	ND(0.25)	0.7*	0.7	16,000
		6-12	ND(0.029)	ND(0.24)	0.56*	0.56	NA
	FP10D-R3	0-6	ND(0.061)	ND(0.12)	0.72*	0.72	13,000
		6-12	ND(0.050)	ND(0.19)	1.2*	1.2	NA
	FP10D-R4	0-6	ND(0.066)	ND(0.45)	1.7*	1.7	24,000
		6-12	ND(0.14)	ND(0.46)	2.3*	2.3	NA
		12-18	ND(0.28)	ND(0.56)	2.6	2.6	NA
		18-24	ND(0.27)	ND(0.54)	0.77	0.77	NA
		24-30	ND(0.028)	ND(0.055)	ND(0.055)	ND(0.055)	NA
	FP10D-R5	0-6	ND(0.034)	ND(0.068)	0.34*	0.34	18,000
		6-12	ND(0.027)	ND(0.054)	0.47*	0.47	NA

(See Notes on Page 7)

TABLE 5-3
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- NEW TRANSECTS
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Sheffield Plain (cont'd)	FP10D-R6	0-6	ND(0.038)	ND(0.075)	0.52*	0.52	38,000
		6-12	ND(0.032)	ND(0.064)	0.67*	0.67	NA
	FP10D-R7	0-6	ND(0.036)	ND(0.072)	ND(0.072)	ND(0.072)	21,000
		6-12	ND(0.030)	ND(0.060)	ND(0.060)	ND(0.06)	NA
	FP10D-R8	0-6	ND(0.088)	ND(0.18)	ND(0.18)	ND(0.18)	152,000
		6-12	ND(0.055)	ND(0.11)	ND(0.11)	ND(0.11)	NA
	FP10D-R9	0-6	ND(0.031)	ND(0.062)	ND(0.062)	ND(0.062)	29,000 [27,000]
		6-12	ND(0.026) [ND(0.030)]	ND(0.052) [ND(0.061)]	ND(0.052) [ND(0.061)]	ND(0.052) [ND(0.061)]	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB and TOC analyses.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ND(1.8) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] - Field duplicate analysis.
5. NS - Not sampled due to obstruction.
6. ** - Sample was initially archived and later analyzed in order to provide further vertical delineation of PCB presence.

TABLE 5-4

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area	I7-21-3-1	0-6	ND(0.22)	ND(0.44)	1.1	1.1	NA
		6-12	ND(0.042)	ND(0.083)	0.27	0.27	NA
	I7-21-3-2	0-6	ND(0.12)	ND(0.23)	0.86	0.86	NA
		6-12	ND(0.023)	ND(0.047)	0.11	0.11	NA
	I7-21-3-3	0-6	ND(6.0) [ND (5.8)]	ND(12) [ND(12)]	35 [33]	35 [33]	NA
		6-12	ND(6.0)	ND(1.2)	34	34	NA
	I7-21-8-1	0-6	ND(0.054)	ND(0.14)	0.57	0.57	NA
		6-12	ND(0.026)	ND(0.053)	0.24	0.24	NA
	I7-21-8-2	0-6	ND(1.4) [ND(1.4)]	ND(3.7) [ND(3.2)]	11 [9.0]	11 [9.0]	NA
		6-12	ND(1.6)	ND(4.0)	13	13	NA
		12-18	-	-	-	1.88	NA
		18-24	-	-	-	0.544	NA
		24-30	-	-	-	1.94	NA
	I7-21-8-3	0-6	-	-	-	57.1	NA
		6-12	-	-	-	88.8	NA
		12-18	-	-	-	18.5	NA
		18-24	-	-	-	8.68	NA
		24-30	-	-	-	3.36	NA
		30-36	-	-	-	1.72	NA
	I7-21-8-4	0-6	-	-	-	295	NA
		6-12	-	-	-	55.0	NA
		12-18	-	-	-	18.2	NA
		18-24	-	-	-	3.04	NA
		24-30	-	-	-	17.8	NA
		30-36	-	-	-	1.98	NA
	I7-21-8-5	0-6	-	-	-	0.807	NA
		6-12	-	-	-	0.385	NA
		12-18	-	-	-	0.295	NA
		18-24	-	-	-	0.093	NA
	I7-21-8-6	0-6	-	-	-	3.98	NA
		6-12	-	-	-	3.08	NA
		12-18	-	-	-	0.519	NA
		18-24	-	-	-	0.861	NA
	I7-21-8-7	0-6	-	-	-	9.16	NA
		6-12	-	-	-	2.92	NA
		12-18	-	-	-	2.72	NA
		18-24	-	-	-	4.24	NA
		24-30	-	-	-	3.64	NA
		30-36	-	-	-	1.18	NA
		36-42	-	-	-	3.86	NA
		42-48	-	-	-	1.37	NA
	I7-21-8-8	0-6	-	-	-	0.121	NA
		6-12	-	-	-	ND (0.10)	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I7-21-8-9	0-6	-	-	-	5.81 [7.02]	NA
		6-12	-	-	-	12.5	NA
		12-18	-	-	-	0.222	NA
		18-24	-	-	-	0.811	NA
	I7-21-8-10	0-6	-	-	-	0.492	NA
		6-12	-	-	-	0.239	NA
	I7-21-8-11	0-6	-	-	-	0.171	NA
		6-12	-	-	-	0.434	NA
	I7-21-8-12	0-6	-	-	-	1.6 [1.46]	NA
		6-12	-	-	-	0.601	NA
	I7-21-8-13	0-6	-	-	-	0.103 [0.192]	NA
		6-12	-	-	-	0.125	NA
	I8-4-1-1	0-6	ND(0.13)	ND(0.27)	0.59*	0.59	NA
		6-12	ND(0.13)	ND(0.25)	0.31	0.31	NA
	I8-4-1-2	0-6	ND(14)	ND(36)	170	170	NA
		6-12	ND(15)	ND(38)	160	160	NA
		12-18	-	-	-	98.7	NA
		18-24	-	-	-	11.2	NA
		24-30	-	-	-	3.54	NA
		30-36	-	-	-	74.6	NA
		36-42	-	-	-	1.79	NA
		42-48	-	-	-	1.10	NA
		48-54	-	-	-	3.75	NA
		54-60	-	-	-	0.708	NA
	I8-4-1-3	0-6	ND(1.3)	ND(7.3)	41	41	NA
		6-12	ND(1.3)	ND(8.9)	48	48	NA
	I8-4-1-4	0-6	-	-	-	3.41 [0.13]	NA
		6-12	-	-	-	1.09	NA
		12-18	-	-	-	7.68	NA
		18-24	-	-	-	0.129	NA
		24-30	-	-	-	0.698	NA
	I8-4-1-5	0-6	-	-	-	5.68	NA
		6-12	-	-	-	2.22	NA
		12-18	-	-	-	1.27	NA
		18-24	-	-	-	0.289	NA
		24-30	-	-	-	0.251	NA
	I8-4-1-6	0-6	-	-	-	0.838	NA
		6-12	-	-	-	1.47	NA
		12-18	-	-	-	0.853	NA
		18-24	-	-	-	0.676	NA
	I8-4-1-7	0-6	-	-	-	220	NA
		6-12	-	-	-	214	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I8-4-1-7 (cont'd)	12-18	-	-	-	91.3	NA
		18-24	-	-	-	32.3	NA
		24-30	-	-	-	43.8	NA
		30-36	-	-	-	29.4	NA
		36-42	-	-	-	15.8	NA
		42-48	-	-	-	11.6	NA
		48-54	-	-	-	2.40	NA
		54-60	-	-	-	7.75	NA
	I8-4-1-8	0-6	-	-	-	146	NA
		6-12	-	-	-	204	NA
		12-18	-	-	-	24.3	NA
		18-24	-	-	-	3.34	NA
		24-30	-	-	-	39.3	NA
		30-36	-	-	-	11.8	NA
		36-42	-	-	-	4.57	NA
		42-48	-	-	-	0.677	NA
		48-54	-	-	-	0.224	NA
	I8-4-1-9	0-6	-	-	-	3.11	NA
		6-12	-	-	-	4.18	NA
		12-18	-	-	-	1.17	NA
		18-24	-	-	-	0.435	NA
		24-30	-	-	-	0.408	NA
		30-36	-	-	-	0.356	NA
	I8-4-1-10	0-6	-	-	-	3.37 [3.43]	NA
		6-12	-	-	-	0.878	NA
		12-18	-	-	-	1.03	NA
		18-24	-	-	-	0.148	NA
		24-30	-	-	-	ND (0.10)	NA
		30-36	-	-	-	0.223	NA
	I8-4-1-11	0-6	-	-	-	4.04	NA
		6-12	-	-	-	2.86	NA
		12-18	-	-	-	0.638	NA
		18-24	-	-	-	0.990 [0.576]	NA
		24-30	-	-	-	0.889	NA
		30-36	-	-	-	1.04	NA
	I8-4-1-12	0-6	-	-	-	1.29	NA
		6-12	-	-	-	0.947	NA
		12-18	-	-	-	0.186	NA
	I8-4-2,3,4-1	0-6	ND(1.3)	ND(12)	53	53	NA
		6-12	ND(12)	ND(31)	130	130	NA
		12-18	-	-	-	211	NA
		18-24	-	-	-	28.9	NA
		24-30	-	-	-	31.9	NA
		30-36	-	-	-	14.5	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I8-4-2,3,4-1 (cont'd)	36-42	-	-	-	12.4	NA
		42-48	-	-	-	1.84	NA
		48-54	-	-	-	3.12	NA
		54-60	-	-	-	0.829	NA
	I8-4-2,3,4-2	0-6	ND(14)	ND(28)	76	76	NA
		6-12	ND(1.4)	ND(3.9)	18	18	NA
		12-18	-	-	-	13.1	NA
		18-24	-	-	-	1.44	NA
		24-30	-	-	-	1.37	NA
		30-36	-	-	-	3.46	NA
	I8-4-2,3,4-3	0-6	ND(0.13)	ND(0.25)	0.64	0.64	NA
		6-12	ND(0.026)	ND(0.057)	0.25*	0.25	NA
	I8-4-2,3,4-4	0-6	-	-	-	0.128	NA
		6-12	-	-	-	ND(0.10)	NA
	I8-4-2,3,4-5	0-6	-	-	-	0.716	NA
		6-12	-	-	-	0.462	NA
		12-18	-	-	-	0.348	NA
		18-24	-	-	-	0.146	NA
	I8-4-2,3,4-6	0-6	-	-	-	4.77	NA
		6-12	-	-	-	2.26	NA
		12-18	-	-	-	1.06	NA
		18-24	-	-	-	46.1	NA
		24-30	-	-	-	10.4	NA
		30-36	-	-	-	4.64	NA
		36-42	-	-	-	8.20	NA
		42-48	-	-	-	1.30	NA
		48-54	-	-	-	0.129	NA
		54-60	-	-	-	0.594	NA
	I8-4-2,3,4-7	0-6	-	-	-	21.6	NA
		6-12	-	-	-	17.4	NA
		12-18	-	-	-	6.9	NA
		18-24	-	-	-	9.8	NA
		24-30	-	-	-	10.3	NA
		30-36	-	-	-	4.48	NA
	I8-4-2,3,4-8	0-6	-	-	-	3.31	NA
		6-12	-	-	-	3.28	NA
		12-18	-	-	-	0.724	NA
		18-24	-	-	-	ND(0.10)	NA
	I8-4-2,3,4-9	0-6	-	-	-	31.2	NA
		6-12	-	-	-	75.5	NA
		12-18	-	-	-	30.4	NA
		18-24	-	-	-	3.33	NA
		24-30	-	-	-	3.54	NA
		30-36	-	-	-	4.87	NA

(See Notes on Page 13)

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I8-4-2,3,4-9 (cont'd)	36-42	-	-	-	0.180	NA
		42-48	-	-	-	3.85	NA
		48-54	-	-	-	0.563	NA
		54-60	-	-	-	1.23	NA
	I8-4-2,3,4-10	0-6	-	-	-	1,430[1,440]	NA
		6-12	-	-	-	2,250[1,420]	NA
		12-18	-	-	-	798	NA
		18-24	-	-	-	195	NA
		24-30	-	-	-	24.8	NA
		30-36	-	-	-	78.7	NA
		36-42	-	-	-	4.31 [24.9]	NA
		42-48	-	-	-	28.5	NA
		48-54	-	-	-	1.19	NA
		54-60	-	-	-	4.91	NA
	I8-4-2,3,4-11	0-6	-	-	-	0.204 [0.192]	NA
		6-12	-	-	-	0.327	NA
	I8-4-2,3,4-12	0-6	-	-	-	15.3 [23.9]	NA
		6-12	-	-	-	1.32	NA
		12-18	-	-	-	0.408	NA
		18-24	-	-	-	0.116	NA
		24-30	-	-	-	1.17	NA
		30-36	-	-	-	0.500	NA
	I8-4-2,3,4-13	0-6	-	-	-	0.171	NA
		6-12	-	-	-	ND (0.10)	NA
		12-18	-	-	-	ND (0.10)	NA
		18-24	-	-	-	ND (0.10)	NA
	I8-4-2,3,4-14	0-6	-	-	-	1.96	NA
		6-12	-	-	-	0.708	NA
		12-18	-	-	-	ND (0.10)	NA
		18-24	-	-	-	ND (0.10)	NA
		24-30	-	-	-	0.112	NA
		30-36	-	-	-	ND (0.10)	NA
	I8-4-2,3,4-15	0-6	-	-	-	0.698 [0.792]	NA
		6-12	-	-	-	0.193	NA
		12-18	-	-	-	ND (0.10)	NA
		18-24	-	-	-	ND (0.10)	NA
	I8-4-2,3,4-16	0-6	-	-	-	3.27	NA
		6-12	-	-	-	2.37	NA
		12-18	-	-	-	0.173	NA
	I8-4-2,3,4-17	0-6	-	-	-	38	NA
		6-12	-	-	-	6.41	NA
		12-18	-	-	-	1.12	NA
	I8-4-2,3,4-18	0-6	-	-	-	1.61	NA
		6-12	-	-	-	0.65	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	18-4-2,3,4-18 (cont'd)	12-18	-	-	-	0.185	NA
	18-4-2,3,4-19	0-6	-	-	-	5.68	NA
		6-12	-	-	-	3.12	NA
		12-18	-	-	-	ND(0.10)	NA
	18-4,2,3,4-20	0-6	-	-	-	15.1	NA
		6-12	-	-	-	111	NA
		12-18	-	-	-	120	NA
		18-24	-	-	-	32.2	NA
		24-30	-	-	-	2.2	NA
		30-36	-	-	-	34.8	NA
		36-42	-	-	-	20.9	NA
		42-48	-	-	-	4.87	NA
	18-4-5-1	0-6	ND(0.12)	ND(0.24)	0.48	0.48	NA
		6-12	ND(0.0024)	ND(0.20)	0.63	0.63	NA
	18-4-5-2	0-6	ND(0.025)	ND(0.05)	0.13	0.13	NA
		6-12	ND(0.12)	ND(0.24)	0.61	0.61	NA
	18-4-5-3	0-6	ND(0.023)	ND(0.046)	0.19	0.19	NA
		6-12	ND(0.023)	ND(0.046)	0.28	0.28	NA
	18-4-5-4	0-6	-	-	-	11.4 [12.7]	NA
		6-12	-	-	-	10.7	NA
		12-18	-	-	-	0.281	NA
		18-24	-	-	-	22.1	NA
		24-30	-	-	-	1.34	NA
		30-36	-	-	-	ND(0.10)	NA
	18-4-5-5	0-6	-	-	-	0.343	NA
		6-12	-	-	-	0.266	NA
	18-4-5-6	0-6	-	-	-	6.62 [6.7]	NA
		6-12	-	-	-	0.909	NA
		12-18	-	-	-	0.292	NA
	18-4-5-7	0-6	-	-	-	3.08	
		6-12	-	-	-	7.5	
		12-18	-	-	-	6.26	
		18-24	-	-	-	0.787	
		24-30	-	-	-	5.04	
		30-36	-	-	-	ND(0.1)	
	18-4-5-8	0-6	-	-	-	11.3 [17.7]	
		6-12	-	-	-	1.37	
		12-18	-	-	-	0.148	
		18-24	-	-	-	0.258	
	18-4-5-9	0-6	-	-	-	1.59	
		6-12	-	-	-	5.28	

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I8-4-5-9 (cont'd)	12-18	-	-	-	0.773	
		18-24				0.512	
	I8-4-5-10	0-6	-	-	-	ND(0.1) [0.274]	
		6-12	-	-	-	ND(0.1)	
	I8-4-5-11	0-6	-	-	-	ND(0.1)	
		6-12	-	-	-	ND(0.1)	
	I8-4-7-1	0-6	ND(7.5)	ND(15)	43	43	NA
		6-12	ND(2.9)	22*	30	52	NA
		12-18	-	-	-	122	NA
		18-24	-	-	-	50.0	NA
		24-30	-	-	-	269	NA
		30-36	-	-	-	130	NA
		36-42	-	-	-	32.3	NA
		42-48	-	-	-	114	NA
		48-54	-	-	-	19.1	NA
		54-60	-	-	-	6.30	NA
		60-66	-	-	-	23.7	NA
		66-72	-	-	-	9.30	NA
	I8-4-7-2	0-6	ND(31)	ND(120)	360	360	NA
		6-12	ND(27)	ND(130)	260	260	NA
		12-18	-	-	-	179	NA
		18-24	-	-	-	1,110	NA
		24-30	-	-	-	214	NA
		30-36	-	-	-	229	NA
		36-42	-	-	-	12.8	NA
		42-48	-	-	-	71.5	NA
		48-54	-	-	-	12.2	NA
		54-60	-	-	-	1.26	NA
		60-66	-	-	-	140 [190]	NA
		66-72	-	-	-	80.2	NA
	I8-4-7-3	0-6	ND(1.4)	ND(29)	100	100	NA
		6-12	ND(13)	ND(52)	110	110	NA
		12-18	-	-	-	258	NA
		18-24	-	-	-	118	NA
		24-30	-	-	-	316	NA
		30-36	-	-	-	403	NA
		36-42	-	-	-	117	NA
		42-48	-	-	-	40.6	NA
		48-54	-	-	-	43.1	NA
		54-60	-	-	-	56.1	NA
		60-66	-	-	-	6.79	NA
		66-72	-	-	-	60.0	NA
	I8-4-7-4	0-6	-	-	-	65.9 [66.2]	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Deming Street Area (cont'd)	I8-4-7-4 (cont'd)	6-12	-	-	-	85.7	NA
		12-18	-	-	-	279	NA
		18-24	-	-	-	360	NA
		24-30	-	-	-	524	NA
		30-36	-	-	-	183	NA
		36-42	-	-	-	16.5	NA
		42-48	-	-	-	83.2	NA
		48-54	-	-	-	11.5	NA
		54-60	-	-	-	2.47	NA
		60-66	-	-	-	13.5	NA
		66-72	-	-	-	3.22	NA
	I8-4-7-5	0-6	-	-	-	14.1 [12.1]	NA
		6-12	-	-	-	667	NA
		12-18	-	-	-	354	NA
		18-24	-	-	-	1,110	NA
		24-30	-	-	-	704	NA
		30-36	-	-	-	241	NA
		36-42	-	-	-	4.50	NA
		42-48	-	-	-	42.5	NA
		48-54	-	-	-	19.2	NA
		54-60	-	-	-	25.8	NA
		60-66	-	-	-	60.8	NA
		66-72	-	-	-	11.9	NA
	I8-4-7-6	0-6	-	-	-	19.3	NA
		6-12	-	-	-	112	NA
		12-18	-	-	-	109	NA
		18-24	-	-	-	126	NA
		24-30	-	-	-	81.2	NA
		30-36	-	-	-	26.3	NA
		36-42	-	-	-	27.6 [27.0]	NA
		42-48	-	-	-	14.7	NA
		48-54	-	-	-	1.96	NA
		54-60	-	-	-	2.19	NA
		60-66	-	-	-	1.08 [1.04]	NA
		66-72	-	-	-	0.182	NA
Parcel I7-2-20 Off Lowden Street	I7-2-20-1	0-6	ND(2.9) [ND(2.8)]	ND(15) [ND(15)]	40* [39*]	40 [39]	42,000 [39,000]
		6-12	ND(1.3)	ND(11)	22*	22	NA
	I7-2-20-2	0-6	ND(1.3)	ND(4.2)	17*	17	79,000
		6-12	ND(0.23)	ND(0.46)	0.6*	0.6	NA
	I7-2-20-3	0-6	ND(0.28)	ND(1.9)	5.7*	5.7	17,000
		6-12	ND(0.24)	ND(4.3)	9.5*	9.5	NA
	I7-2-20-4	0-6	ND(0.3)	ND(1.9)	4.5*	4.5	24,000
		6-12	ND(0.51)	ND(8.1)	14*	14	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Parcel I7-2-20 Off Lowden Street (cont'd)	I7-2-20-5	0-6	ND(0.53)	ND(3.4)	14*	14	21,000
		6-12	ND(0.24)	ND(2.6)	6.4*	6.4	NA
		12-15	-	-	-	0.433	NA
		15-18	-	-	-	0.217	NA
	I7-2-20-6	0-6	ND(0.54)	ND(1.2)	4.0*	4.0	24,000
		6-12	ND(0.24)	ND(1.5)	3.7*	3.7	NA
	I7-2-20-7	0-6	ND(0.25)	ND(1.9)	5.0*	5.0	19,000
		6-12	ND(0.022)	ND(0.045)	0.11*	0.11	NA
	I7-2-20-8	0-6	ND(0.25)	ND(0.63)	2.1*	2.1	18,000
		6-12	ND(0.24)	ND(0.51)	1.3*	1.3	NA
	I7-2-20-9	0-6	ND(0.27)	ND(0.65)	2.2*	2.2	40,000
		6-12	ND(0.23)	ND(0.46)	0.55*	0.55	NA
	I7-2-20-10	0-6	-	-	-	1.46	NA
		6-9	-	-	-	9.16	NA
		9-12**	-	-	-	7.63	NA
		12-15**	-	-	-	1.75	NA
	I7-2-20-11	0-6	-	-	-	1.74	NA
		6-9	-	-	-	9.44	NA
		9-12**	-	-	-	5.04	NA
		12-15**	-	-	-	7.17	NA
	I7-2-20-12	0-6	-	-	-	1.67	NA
		6-9	-	-	-	1.43	NA
		9-12**	-	-	-	2.92	NA
		12-15**	-	-	-	0.587	NA
	I7-2-20-13	0-6	-	-	-	1.53	NA
		6-9	-	-	-	21.0	NA
		9-12**	-	-	-	5.16	NA
		12-15**	-	-	-	1.16	NA
	I7-2-20-15	0-6	-	-	-	2.20 [4.68]	NA
		6-9	-	-	-	2.19	NA
		9-12**	-	-	-	10.7	NA
		12-15**	-	-	-	1.59	NA
	I7-2-20-16	0-6	-	-	-	2.20	NA
		6-9	-	-	-	3.80	NA
		9-12**	-	-	-	3.03	NA
		12-15**	-	-	-	0.687	NA
	I7-2-20-17	0-6	-	-	-	10.2	NA
		6-9	-	-	-	5.62	NA
		9-12**	-	-	-	2.40	NA
		12-15**	-	-	-	2.53	NA
	I7-2-20-18	0-6	-	-	-	2.14	NA
		6-9	-	-	-	9.33	NA
		9-12**	-	-	-	0.277	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Parcel I7-2-20 Off Lowden Street (cont'd)	I7-2-20-18 (cont'd)	12-15**	-	-	-	0.376	NA
	I7-2-20-19	0-6	-	-	-	34.9 [11.4]	NA
		6-9	-	-	-	65.3	NA
		9-12**	-	-	-	33.7	NA
		12-15**	-	-	-	56.7	NA
	I7-2-20-20	0-6	-	-	-	5.97	NA
		6-9	-	-	-	4.74	NA
		9-12**	-	-	-	5.57	NA
		12-15**	-	-	-	1.20	NA
	I7-2-20-21	0-6	-	-	-	6.40	NA
		0-6**	-	-	-	6.34	NA
		6-9	-	-	-	3.88	NA
		9-12**	-	-	-	21.3	NA
		12-15**	-	-	-	1.53	NA
	I7-2-20-22	0-6	ND(1.1)	ND(6.3)	15	15	NA
		6-9	ND(1.1)	ND(9.5)	19	19	NA
		9-12	ND(2.2)	ND(6.9)	12	12	NA
		12-15	ND(0.47)	ND(1.8)	3.9	3.9	NA
		15-18	-	-	-	3.09	NA
		18-21	-	-	-	0.656	NA
		21-24	-	-	-	0.262	NA
	I7-2-20-23	0-6	ND(1.0) [ND(1.0)]	ND(5.9) [ND(4.6)]	10 [12]	10 [12]	NA
		6-9	ND(0.42)	ND(1.1)	2.6	2.6	NA
		9-12**	ND(0.42)	ND(0.84)	1.6	1.6	NA
		12-15**	ND(0.043)	ND(0.11)	0.29	0.29	NA
	I7-2-20-24	0-6	ND(1.2)	ND(6.1)	16	16	NA
		6-9	ND(1.1)	ND(11)	23	23	NA
		9-12	ND(2.4)	ND(6.4)	11	11	NA
		12-15	ND(0.49)	ND(2.2)	5.2	5.2	NA
		15-18	-	-	-	3.35	NA
		18-21	-	-	-	0.924	NA
		21-24	-	-	-	1.06	NA
	I7-2-20-25	0-6	ND(1.1)	ND(5.6)	14	14	NA
		6-9	ND(2.1)	ND(10)	24	24	NA
		9-12	ND(2.2)	ND(8.9)	15	15	NA
		12-15	ND(0.47)	ND(0.94)	1.9	1.9	NA
	I7-2-20-26	0-6	ND(0.21)	ND(0.57)	1.9	1.9	NA
		6-9	ND(0.08)	ND(0.16)	0.44	0.44	NA
		9-12**	ND(0.10)	ND(0.21)	0.38	0.38	NA
	I7-2-20-27	0-6	ND(1.1) [ND(0.43)]	ND(2.1) [ND(1.2)]	5.7 [4.9]	5.7 [4.9]	NA
		6-12	ND(0.10)	ND(0.20)	0.65	0.65	NA
	I7-2-20-28	0-6*	ND(1.2)	ND(2.4)	9.9	9.9	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (In.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Parcel 17-2-20 Off Lowden Street (cont'd)	17-2-20-28 (cont'd)	6-9*	ND(1.2)	ND(2.3)	11	11	NA
		9-12**	ND(0.46)	ND(3.0)	7.7	7.7	NA
		12-15**	ND(0.46)	ND(2.2)	5.9	5.9	NA
		15-18	-	-	-	10.5	NA
		18-21	-	-	-	4.0	NA
		21-24	-	-	-	1.44	NA
	17-2-20-29	0-6	ND(0.45)	ND(1.5)	4.6	4.6	NA
		6-9	ND(0.43)	ND(0.86)	1.2	1.2	NA
		9-12**	ND(0.041)	ND(0.084)	0.21	0.21	NA
		12-15**	ND(0.21)	ND(0.42)	0.73	0.73	NA
	17-2-20-30	0-6	-	-	-	8.96 [9.80]	NA
		6-9	-	-	-	5.88	NA
		9-12	-	-	-	0.578	NA
		12-15	-	-	-	ND(0.10)	NA
	17-2-20-31	0-6	-	-	-	7.52	NA
		6-9	-	-	-	0.476	NA
		9-12	-	-	-	ND(0.10)	NA
	17-2-20-32	0-6	-	-	-	7.10	NA
		6-9	-	-	-	0.460	NA
		9-12	-	-	-	0.154	NA
	17-2-20-33	0-6	-	-	-	3.09	NA
		6-9	-	-	-	0.247	NA
		9-12	-	-	-	0.124	NA
	17-2-20-34	0-6	-	-	-	3.98	NA
		6-9	-	-	-	2.27	NA
		9-12	-	-	-	0.498	NA
		12-15	-	-	-	0.598	NA
Parcels 17-2-2 and 17-2-3 Off Pomeroy Avenue	17-2-2-1	0-6	ND(0.32)	ND(0.76)	1.9*	1.9	16,000
		6-12	ND(0.5)	ND(0.99)	3.0*	3.0	NA
	17-2-2-2	0-6	ND(0.29)	ND(0.62)	1.6*	1.6	17,000
		6-12	ND(0.22)	ND(0.48)	1.2*	1.2	NA
	17-2-2-3	0-6	ND(0.29)	ND(0.64)	2.3*	2.3	17,000
		6-12	ND(0.22)	ND(0.48)	1.4*	1.4	NA
	17-2-2-4	0-6	ND(0.54)	ND(1.1)	2.1*	2.1	9,800
		6-12	ND(0.043)	ND(0.085)	0.18*	0.18	NA
	17-2-3-1	0-6	ND(2.5)	ND(5.8)	16	16	NA
		6-12	ND(1.2)	3.9	9.5	13	NA
		12-15	ND(0.47)	ND(2.0)	5.3	5.3	NA
		15-18**	ND(0.47)	ND(1.5)	3.6	3.6	NA
	17-2-3-2	0-6	ND(0.22)	ND(0.44)	1.2	1.2	NA
		6-12	ND(0.11)	ND(0.21)	0.42	0.42	NA
	17-2-3-3	0-6	ND(1.2)	3.6	9.6	13	NA
		6-12	ND(1.2)	2.9	6.7	9.6	NA

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Parcels I7-2-2 and I7-2-3 Off Pomeroy Avenue (cont'd)	I7-2-3-3 (cont'd)	12-15	ND(0.043) [ND(0.042)]	ND(0.12) [ND(0.13)]	0.31 [0.32]	0.31 [0.32]	NA
		15-18**	ND(0.021)	ND(0.042)	ND(0.042)	ND(0.042)	NA
	I7-2-3-4	0-6	[ND(0.96)] ND(0.48)	[ND(2.0)] 1.2	[5.1] 3.8	[5.1] 5.0	NA
		6-12	ND(0.21)	ND(0.43)	0.63	0.63	NA
	I7-2-3-5	0-6	ND(0.5)	ND(1.9)	6.2	6.2	NA
		6-9	ND(1.2)	ND(3.3)	8.8	8.8	NA
		9-12**	ND(1.2)	ND(2.3)	5.1	5.1	NA
		12-15**	ND(0.11)	ND(0.21)	0.43	0.43	NA
	I7-2-3-6	0-6	ND(1.2)	ND(2.4)	6.8	6.8	NA
		6-9	ND(0.5)	ND(2.6)	7.6	7.6	NA
		9-12**	ND(0.042)	ND(0.13)	0.32	0.32	NA
		12-15**	ND(0.042)	ND(0.086)	0.22	0.22	NA
	I7-2-3-7	0-6	ND(0.51)	ND(1.5)	5.1	5.1	NA
		6-9	ND(0.46)	ND(1.5)	4.1	4.1	NA
		9-12**	ND(0.043)	ND(0.086)	0.24	0.24	NA
		12-15**	ND(0.021)	ND(0.043)	0.11	0.11	NA
	I7-2-3-8	0-6	ND(0.48) [ND(1.2)]	ND(1.0) [ND(2.4)]	3.7 [4.1]	3.7 [4.1]	NA
		6-9	ND(0.46)	ND(1.1)	3.2	3.2	NA
		9-12**	ND(1.1)	ND(2.3)	5.0	5.0	NA
		12-15**	ND(1.1)	ND(2.2)	3.7	3.7	NA
	I7-2-3-9	0-6	ND(0.46)	ND(1.3)	4.0	4.0	NA
		6-9	ND(1.2)	ND(3.8)	9.9	9.9	NA
		9-12**	ND(1.1)	ND(2.2)	4.9	4.9	NA
		12-15**	ND(0.1)	ND(0.2)	0.23	0.23	NA
	I7-2-3-10	0-6	ND(0.45)	ND(1.7)	6.2	6.2	NA
		6-9	ND(0.43)	ND(1.9)	6.1	6.1	NA
		9-12**	ND(1.1)	ND(2.7)	7.0	7.0	NA
		12-15**	ND(1.1)	ND(2.7)	6.4	6.4	NA
	I7-2-3-11	0-6	ND(0.5)	ND(1.7)	5.9	5.9	NA
		6-9	ND(0.46)	ND(1.7)	4.9	4.9	NA
		9-12**	ND(1.2)	ND(2.3)	5.1	5.1	NA
		12-15**	ND(1.2)	ND(2.3)	5.1	5.1	NA
	I7-2-3-12	0-6	ND(0.5)	ND(1.8)	6.2	6.2	NA
		6-9	ND(0.47)	ND(2.0)	5.7	5.7	NA
		9-12**	ND(0.47)	ND(1.6)	3.4	3.4	NA
		12-15**	ND(1.2)	ND(2.9)	6.5	6.5	NA
	I7-2-3-13	0-6	ND(1.2) [ND(0.49)]	ND(0.26) [ND(2.3)]	8.7 [7.6]	8.7 [7.6]	NA
		6-9	ND(0.46)	ND(2.1)	6.0	6.0	NA
		9-12**	ND(0.47)	ND(1.6)	3.6	3.6	NA
		12-15**	ND(1.1)	ND(2.3)	5.2	5.2	NA
	I7-2-3-14	0-6	ND(0.49)	ND(2.4)	8.4	8.4	NA

(See Notes on Page 13)

TABLE 5-4
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FLOODPLAIN SOIL PCB AND TOC DATA -- RESIDENTIAL PROPERTIES UPSTREAM OF WOODS POND - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

General Location Description	Location ID	Depth (in.)	Aroclor 1016, 1232, 1242 and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
Parcel J5-2-11 Off Holmes Road	17-2-3-14 (cont'd)	6-9	ND(1.2)	ND(2.3)	6.4	6.4	NA
		9-12**	ND(1.2)	ND(2.3)	5.4	5.4	NA
		12-15**	ND(1.1)	ND(2.7)	6.1	6.1	NA
	J5-2-11-1	0-6	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	14,000
		6-12	ND(0.024)	ND(0.047)	ND(0.047)	ND(0.047)	NA
	J5-2-11-2	0-6	ND(0.026)	ND(0.052)	ND(0.052)	ND(0.052)	24,000
		6-12	ND(0.023)	ND(0.046)	ND(0.046)	ND(0.046)	NA
	J5-2-11-3	0-6	ND(0.025)	ND(0.050)	ND(0.050)	ND(0.050)	25,000
		6-12	ND(0.024)	ND(0.048)	ND(0.048)	ND(0.048)	NA
	J5-2-11-4	0-6	ND(0.026) [ND(0.026)]	ND(0.052) [ND(0.052)]	0.33* [0.42*]	0.33 [0.42]	19,000 [20,000]
		6-12	ND(0.024)	ND(0.048)	0.12*	0.12	NA
	J5-2-11-5	0-6	ND(0.024)	ND(0.072)	0.25*	0.25	28,000
		6-12	ND(0.023)	ND(0.046)	0.053*	0.053	NA
	J5-2-11-6	0-6	ND(0.028)	ND(0.21)	1.1*	1.1	25,000
		6-12	ND(0.024)	ND(0.048)	0.16*	0.16	NA
	J5-2-11-7	0-6	ND(0.28)	ND(0.77)	5.2*	5.2	19,000
		6-12	ND(0.046)	ND(0.093)	0.48*	0.48	NA
	J5-2-11-8	0-6	ND(0.023)	ND(0.046)	0.14*	0.14	6,200
		6-12	ND(0.021) [ND(0.021)]	ND(0.042) [ND(0.042)]	ND(0.042) [ND(0.042)]	ND(0.042) [ND(0.042)]	NA
	J5-2-11-9	0-6	ND(1.6)	ND(8.4)	28*	28	31,000
		6-12	ND(1.2)	ND(11)	31*	30	NA
Parcel 29-5 Near New Lenox Road Bridge	29-5-1	0-6	ND(0.025)	ND(0.05)	ND(0.05)	ND(0.05)	NA
		6-12	ND(0.025)	ND(0.05)	ND(0.05)	ND(0.05)	NA
	29-5-2	0-6	ND(0.054)	ND(0.11)	0.28	0.28	NA
		6-12	ND(0.05)	ND(0.1)	0.19	0.19	NA
	29-5-3	0-6	ND(0.13)	ND(0.25)	0.42	0.42	NA
		6-12	ND(0.13)	ND(0.25)	0.39	0.39	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Maxymillian Technologies, Inc. or Quanterra Environmental Services for PCB and/or TOC analysis.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ND(0.32) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
4. [ ] - Field duplicate analysis.
5. - = Data not reported by laboratory.
6. NA - Not analyzed.
7. ** - Sample was initially archived and later analyzed in order to provide further vertical delineation of PCB presence.

TABLE 5-5

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER FLOODPLAIN SOIL APPENDIX IX+3 - VOC, SVOC, PCB, PESTICIDE & HERBICIDE DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	Upstream of GE Facility and Related Sites				Downstream of GE Facility and Related Sites								
	BG-FP-1 (0-6")	BG-FP-2 (0-6")	BG-FP-3 (0-6")	BG-FP-3 Dup. (0-6")	I7-3-7A-2 (0 - 6")	I7-3-7A-2 Dup. (0 - 6")	I7-3-7D-10 (0 - 6")	I7-2-34B (0 - 6")	I7-2-32A (0 - 6")	I7-3-6C-15 (0 - 6")	I7-99-000B (0 - 6")	I7-2-1A (0 - 6")	I6-1-61C-18 (0 - 6")
VOLATILE ORGANIC COMPOUNDS													
Methylene Chloride	ND(0.008)	ND(0.006)	ND(0.006)	ND(0.007)	0.021B	0.037B	0.019B	0.019JB	0.007JB	0.011JB	0.007JB	0.018JB	0.008JB
Chloroform	ND(0.008)	ND(0.006)	ND(0.006)	ND(0.007)	0.025	ND(0.016)	0.019	ND(0.025)	ND(0.02)	ND(0.018)	ND(0.016)	ND(0.019)	ND(0.018)
Acetone	ND(0.008)	ND(0.006)	ND(0.006)	ND(0.007)	ND(0.093)	0.14	ND(0.10)	0.046J	ND(0.12)	ND(0.110)	ND(0.099)	ND(0.11)	0.039J
Trichloroethene	ND(0.008)	ND(0.006)	ND(0.006)	ND(0.007)	0.002JB	ND(0.021)	ND(0.022)	ND(0.034)	ND(0.027)	ND(0.024)	ND(0.022)	0.001JB	ND(0.024)
2-Butanone	0.010J	ND(0.013)	ND(0.013)	ND(0.014)	ND(0.036)	ND(0.037)	ND(0.039)	ND(0.059)	ND(0.047)	ND(0.042)	ND(0.038)	ND(0.044)	ND(0.042)
1,2-Dibromo-3-Chloropropane	0.005JB	ND(0.006)	ND(0.006)	ND(0.007)	ND(0.052)	ND(0.053)	ND(0.056)	ND(0.085)	ND(0.067)	ND(0.06)	ND(0.055)	ND(0.063)	ND(0.06)
SEMIVOLATILE ORGANIC COMPOUNDS													
Benzoic Acid	NA	NA	NA	NA	ND(1.9)	ND(2.0)	ND(2.1)	0.44JB	ND(1.9)	0.063JB	ND(2.1)	ND(4.8)	0.092JB
Naphthalene	0.064 J	0.070 J	0.062 J	0.099J	0.097J	0.051J	0.10J	0.051J	0.063J	0.072J	0.17J	0.22J	0.17J
1,2,3-Trichlorobenzene	NA	NA	NA	NA	ND(0.61)	ND(0.62)	ND(0.67)	ND(1.0)	ND(0.59)	0.044J	ND(0.65)	ND(1.5)	ND(0.72)
Acetophenone	0.090 JB	0.051 JB	0.081 JB	0.065JB	ND(0.670)	ND(0.690)	ND(0.730)	ND(1.1)	ND(0.650)	ND(0.790)	ND(0.710)	ND(1.7)	ND(0.790)
1-Methylnaphthalene	NA	NA	NA	NA	0.046J	0.026J	0.043J	0.039J	0.036J	0.41J	0.075J	0.16J	0.091J
1,2,3,4-Tetrachlorobenzene	NA	NA	NA	NA	0.52J	0.39J	0.089J	0.048J	ND(0.63)	0.088J	0.13J	ND(1.6)	0.13J
Acenaphthylene	0.063 J	0.099 J	0.072 J	0.100J	0.16J	0.069J	0.19J	0.086J	0.09J	0.13J	0.47J	1.3J	0.24J
Pentachlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND (0.450)	0.54J	0.35J	0.092J	0.33J	ND(0.65)	0.11J	0.15J	ND(1.7)	0.13J
Fluorene	0.110 J	0.150 J	0.140 J	0.240J	0.08J	0.033J	0.11J	0.034J	ND(0.68)	0.067J	0.25J	0.34J	0.19J
Phenanthrene	0.580	0.860	0.830	1.5	0.53J	0.30J	0.99	0.37J	0.16J	0.61J	1.7	2.9	1.3
Anthracene	0.180 J	0.260 J	0.220 J	0.390J	0.18J	0.10J	0.29J	0.083J	0.068J	0.17J	0.63J	0.66J	0.38J
Di-n-butyphthalate	0.660	0.260 J	0.200 J	0.320J	0.14JB	0.053JB	0.11JB	0.12JB	0.12JB	0.10JB	0.17JB	0.23JB	0.14JB
Diethylphthalate	0.060 JB	ND(0.420)	ND(0.420)	ND(0.450)	ND(0.730)	ND(0.750)	ND(0.80)	ND(1.2)	ND(0.710)	ND(0.860)	ND(0.780)	ND(1.8)	ND(0.860)
Fluoranthene	0.730	1.2	0.970	1.7	1.2	0.66J	2.3	0.73J	0.51J	1.2	4.4	5.7	2.1
Pyrene	0.910	1.6	1.2	2.2	1.0	0.59J	1.7	0.78J	0.43J	0.97	3.0	5.1	1.8
Butylbenzylphthalate	ND(0.490)	0.410 J	ND(0.420)	ND(0.450)	ND(0.690)	ND(0.710)	ND(0.760)	ND(1.1)	ND(0.670)	ND(0.810)	ND(0.740)	ND(1.7)	ND(0.810)
Benzo(a)anthracene	0.460 J	0.740	0.560	1.1	0.87	0.43J	1.3	0.39J	0.41J	0.79	2.6	3.6	1.4
Chrysene	0.570	0.910	0.700	1.2	0.73	0.35J	1.3	0.48J	0.42J	0.63J	2.0	4.1	1.1
Benzo(b)fluoranthene	0.410 JX	0.790 X	0.550 X	1.1	1.4X	0.7JX	2.4X	0.84JX	0.98X	1.1X	3.8X	6.6X	2.0X
Benzo(k)fluoranthene	0.660 X	0.850 X	0.780	0.870	2.5X	1.1X	4.3X	1.3X	1.8X	2.1X	6.8XE	13X	3.5X
Benzo(a)pyrene	0.470 J	0.760	0.580	0.980	0.85	0.42J	1.4	0.46J	0.58J	0.76J	2.4	4.6	1.3
Indeno(1,2,3-cd)pyrene	0.270 J	0.320 J	0.260 J	0.410J	0.28J	0.19J	0.42J	0.25J	0.21J	0.27J	0.63	1.5	0.50J
Dibenzo (a,h)anthracene	0.120 J	0.200 J	0.180 JX	0.210J	0.072J	0.043J	0.072J	0.076J	0.062J	0.072J	0.14J	0.40J	0.11J
Benzo(g,h,i)perylene	0.260 J	0.220 J	0.210 J	0.300J	0.28J	0.20J	0.44J	0.31J	0.20J	0.24J	0.66J	1.6	0.49J
1,2,4-Trichlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	0.043J	0.034J	0.045J	0.043J	0.044J	ND(0.66)	0.043J	ND(1.4)	0.075J
1,2,4,5-Tetrachlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	0.043J	0.032J	ND(1.4)	ND(2.2)	ND(1.3)	ND(1.6)	ND(1.4)	ND(3.3)	ND(1.6)
1,2,3,5-Tetrachlorobenzene	NA	NA	NA	NA	0.043J	0.032J	ND(1.4)	ND(2.2)	ND(1.3)	ND(1.6)	ND(1.4)	ND(3.3)	ND(1.6)
Hexachlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	ND(0.79)	0.019J	ND(0.86)	ND(1.3)	ND(0.76)	ND(0.92)	ND(0.83)	ND(1.9)	ND(0.92)
Bis(2-ethylhexyl) phthalate	0.093 J	0.077 J	0.060 J	0.058J	ND(0.77)	0.018J	0.052J	0.42J	0.035J	ND(0.90)	0.051J	ND(1.9)	0.053J
1,2-Dichlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	ND(0.60)	ND(0.61)	0.037J	ND(0.99)	ND(0.58)	ND(0.71)	ND(0.64)	ND(1.5)	ND(0.71)
Acenaphthene	0.069 J	0.120 J	0.089 J	0.180J	ND(0.67)	ND(0.69)	0.048J	ND(1.1)	ND(0.65)	ND(0.79)	0.093J	0.10J	0.076J
Aniline	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	ND(0.57)	ND(0.58)	ND(0.62)	0.038J	ND(0.55)	ND(0.67)	0.51J	0.097 J	ND(0.67)

(See Notes on Page 2)

TABLE 5-5
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER FLOODPLAIN SOIL APPENDIX IX+3 - VOC, SVOC, PCB, PESTICIDE & HERBICIDE DATA
(Concentrations are presented in dry-weight parts per million, ppm)

	Upstream of GE Facility and Related Sites				Downstream of GE Facility and Related Sites								
Parameter	BG-FP-1 (0-6")	BG-FP-2 (0-6")	BG-FP-3 (0-6")	BG-FP-3 Dup. (0-6")	I7-3-7A-2 (0 - 6")	I7-3-7A-2 Dup. (0 - 6")	I7-3-7D-10 (0 - 6")	I7-2-34B (0 - 6")	I7-2-32A (0 - 6")	I7-3-6C-15 (0 - 6")	I7-99-000B (0 - 6")	I7-2-1A (0 - 6")	I6-1-61C-18 (0 - 6")
2-Methylnaphthalene	ND(0.490)	ND(0.420)	ND(0.420)	0.059J	ND(0.86)	ND(0.87)	ND(0.93)	ND(1.4)	ND(0.83)	ND(1.0)	0.051J	0.11J	0.053J
1,4-Dichlorobenzene	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.450)	ND(0.53)	ND(0.54)	ND(0.58)	ND(0.87)	0.04J	ND(0.62)	ND(0.56)	ND(1.3)	0.076J
Phenol	ND(0.490)	0.056 J	ND(0.420)	ND(0.450)	ND(0.58)	ND(0.59)	ND(0.63)	ND(0.96)	ND(0.56)	ND(0.68)	0.53J	ND(1.4)	ND(0.66)
Dibenzofuran	0.055 J	0.071 J	0.078 J	0.130J	ND(0.70)	ND(0.72)	ND(0.77)	ND(1.2)	ND(0.68)	ND(0.83)	0.066J	ND(1.7)	0.081J
POLYCHLORINATED BIPHENYLS (PCBs)													
Aroclor 1260	ND(0.060)	0.063	ND(0.052)	ND(0.053)	87	87	50	49	50	79	49	21	56
ORGANOCHLORINE PESTICIDES													
4,4'-DDD	0.0053	ND(0.0041)	ND(0.004)	ND(0.0043)	ND(0.81)	ND(1.6)	ND(1.8)	ND(1.5)	ND(2.1)	ND(0.9)	ND(1.8)	ND(9.8)	ND(1.9)
4,4'-DDE	0.015	0.0075	0.0051	0.0044	ND(0.065)	ND(0.41)	ND(0.45)	ND(0.67)	ND(1.0)	ND(0.49)	ND(0.44)	ND(0.25)	ND(0.47)
4,4'-DDT	0.018	ND(0.0041)	ND(0.004)	ND(0.0043)	ND(1.6)	ND(1.6)	ND(1.8)	ND(1.5)	ND(2.1)	ND(0.9)	ND(1.8)	ND(9.8)	ND(1.9)
ORGANOPHOSPHORUS PESTICIDES													
Dimethoate	ND(0.049)	ND(0.043)	ND(0.042)	ND(0.045)	ND(0.01)	0.018BP	0.0076JB	0.012JB	ND(0.013)	0.016BP	0.0062JB	ND(0.013)	ND(0.012)
Ethyl-Parathion	ND(0.025)	ND(0.022)	ND(0.21)	ND(0.023)	ND(0.01)	ND(0.011)	ND(0.011)	0.0088J	ND(0.013)	ND(0.012)	ND(0.011)	0.0061J	ND(0.012)
Methyl-Parathion	ND(0.025)	ND(0.022)	ND(0.021)	ND(0.023)	ND(0.01)	ND(0.01)	0.0052J	ND(0.017)	ND(0.013)	ND(0.012)	ND(0.011)	ND(0.013)	ND(0.012)
HERBICIDES													
2,4,-D	ND(45)	ND(39)	ND(38)	ND(40)	0.20JP	0.18JP	ND(1.1)	ND(1.7)	ND(1.3)	ND(1.2)	ND(1.1)	ND(2.5)	ND(1.8)
Dinoseb	ND(0.490)	ND(0.420)	ND(0.420)	ND(0.45)	0.017JB	ND(0.084)	ND(0.09)	ND(0.14)	ND(0.11)	ND(0.096)	ND(0.088)	ND(0.20)	ND(0.15)
2,4,5-TP (Silvex)	ND(45)	ND(39)	ND(38)	ND(40)	ND(0.26)	ND(0.26)	0.084JP	ND(0.42)	ND(0.33)	ND(0.30)	ND(0.27)	ND(0.63)	ND(0.46)
2,4,5-T	ND(45)	ND(39)	ND(38)	ND(40)	ND(0.26)	ND(0.26)	ND(0.28)	0.015JP	0.46P	ND(0.30)	ND(0.27)	ND(0.63)	ND(0.46)

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc. (1994-1995) and submitted to Quanterra Environmental Services or CompuChem Laboratories for analysis of Appendix IX+3 VOCs, SVOCs, PCBs, Pesticides, and Herbicides.
2. Only those parameters which were detected in at least one sample are presented.
3. ND (1.9) = Not detected. The number in parentheses is the detection limit.
4. NA = Not analyzed.
5. J = Indicates an estimated value less than the CLP required quantitation limit.
6. X = Coeluting isomers were noted by the laboratory.
7. B = Analyte was also detected in the associated method blank.
8. E = Concentration exceeded calibration range.
9. P = A 25 percent difference in column concentrations was noted by the analytical laboratory.
10. Dup = Indicates duplicate analyses.

TABLE 5-6

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER FLOODPLAIN SOIL APPENDIX IX+3 DATA – PCDDs/PCDFs – JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	Upstream of GE Facility and Related Sites				Downstream of GE Facility and Related Sites								
	BG-FP-1 (0-6")	BG-FP-2 (0-6")	BG-FP-3 (0-6")	BG-FP-3 Dup. (0-6")	I7-3-7A-2 (0 - 6")	I7-3-7A-2 Dup. (0 - 6")	I7-3-7D-10 (0 - 6")	I7-2-34B (0 - 6")	I7-2-32A (0 - 6")	I7-3-6C-15 (0 - 6")	I7-99-000B (0 - 6")	I7-2-1A (0 - 6")	I6-1-61C-18 (0 - 6")
POLYCHLORINATED DIBENZODIOXINS/FURANS													
2,3,7,8-TCDD	0.00000093J**	0.00000086J**	0.00000067	0.0000007	ND(0.0000706)	ND(0.0000712)	ND(0.0000786)	ND(0.000122)	ND(0.0000924)	ND(0.0000798)	ND(0.0000735)	ND(0.0000861)	ND(0.0000813)
TCDD (Total)	0.0000088	0.0000071	0.0000043	0.0000044	ND(0.0000706)	ND(0.0000712)	ND(0.0000786)	ND(0.000122)	ND(0.0000924)	ND(0.0000798)	ND(0.0000735)	ND(0.0000861)	ND(0.0000813)
1,2,3,6,7,8-HxCDD	0.0000053J**	0.0000061J**	0.00001	0.0000098	ND(0.000101)	ND(0.000102)	ND(0.000113)	ND(0.000175)	ND(0.000133)	ND(0.000114)	ND(0.000105)	ND(0.000124)	ND(0.000117)
1,2,3,7,8,9-HxCDD	0.0000038J**	0.0000045J**	0.0000043J**	0.0000041J**	ND(0.000171)	ND(0.000172)	ND(0.00019)	ND(0.000295)	ND(0.000224)	ND(0.000193)	ND(0.000178)	ND(0.000208)	ND(0.000197)
HxCDD (Total)	0.000031	0.000043	0.000059	0.000046	ND(0.000158)	ND(0.000159)	ND(0.000175)	ND(0.000272)	ND(0.000206)	ND(0.000178)	ND(0.000164)	ND(0.000192)	ND(0.000182)
1,2,3,4,6,7,8-HpCDD	0.00012	0.00014	0.00018	0.00016	ND(0.000205)	ND(0.000206)	ND(0.000228)	0.0009	ND(0.000268)	ND(0.000231)	ND(0.000213)	ND(0.00025)	ND(0.000236)
HpCDD (Total)	0.00022	0.00025	0.00031	0.00028	ND(0.000205)	ND(0.000206)	ND(0.000228)	0.00176	ND(0.000268)	ND(0.000231)	ND(0.000213)	ND(0.00025)	ND(0.000236)
OCDD (Total)	0.0014	0.0018	0.0021	0.0019	ND(0.00027)	ND(0.000272)	0.00104	0.00618	0.00225	0.000912	0.00101	0.000849	0.00148
Total PCDDs	0.00166	0.0021	0.002473	0.00223	ND	ND	0.00104	0.00794	0.00225	0.000912	0.00101	0.000849	0.00148
2,3,7,8-TCDF	0.0000029J**	0.0000036	0.000009	0.0000078	ND(0.0000614)	ND(0.0000619)	0.0000952	0.000189	0.000297	0.000226	ND(0.0000639)	ND(0.0000749)	0.000209
TCDF (Total)	0.000027	0.000028	0.000044	0.000042	ND(0.0000614)	ND(0.0000619)	0.000228	0.000189	0.000742	0.000226	ND(0.0000639)	ND(0.0000749)	0.000363
2,3,4,7,8-PeCDF	ND(0.0000014)	ND(0.000002)	0.0000053J**	0.0000055J**	ND(0.0001)	ND(0.000101)	ND(0.000112)	ND(0.000173)	ND(0.000131)	ND(0.000113)	ND(0.000104)	ND(0.000122)	ND(0.000116)
PeCDF (Total)	0.000013	0.000016	0.000034	0.000037	ND(0.0000982)	ND(0.0000991)	0.000619	0.00111	0.00168	0.000664	0.000465	ND(0.00012)	0.000632
1,2,3,4,7,8-HxCDF	ND(0.0000027)	0.0000035J**	0.0000089	0.0000090	ND(0.000113)	0.000137	0.000181	0.000353	0.000363	ND(0.000127)	ND(0.000117)	ND(0.000137)	0.000233
2,3,4,6,7,8-HxCDF	ND(0.0000014)	ND(0.000002)	0.0000034J**	0.0000049J**	ND(0.000163)	ND(0.000164)	ND(0.000181)	ND(0.000281)	ND(0.000213)	ND(0.000184)	ND(0.000169)	ND(0.000198)	ND(0.000187)
HxCDF (Total)	0.000036	0.000061	0.0004	0.00035	ND(0.000143)	0.000137	0.000506	0.00155	0.00175	0.000266	0.000223	0.000249	0.000589
1,2,3,4,6,7,8-HpCDF	0.0001	0.00011	0.00097	0.00093	ND(0.000168)	ND(0.000169)	0.0000252	0.000959	0.00048	0.00023	ND(0.000175)	0.000471	0.000299
1,2,3,4,7,8,9-HpCDF	ND(0.0000022)	ND(0.0000032)	0.0000067	0.0000066J**	ND(0.00018)	ND(0.000182)	ND(0.0002)	ND(0.000311)	ND(0.000236)	ND(0.000203)	ND(0.000188)	ND(0.00022)	ND(0.000207)
HpCDF (Total)	0.0002	0.00023	0.0017	0.0017	ND(0.000174)	ND(0.000175)	0.000482	0.00185	0.00048	0.000467	ND(0.000181)	0.000471	0.000299
OCDF (Total)	0.00012	0.00017	0.00053	0.00053	ND(0.000336)	ND(0.000339)	ND(0.000373)	ND(0.00058)	ND(0.000439)	ND(0.000379)	ND(0.00035)	ND(0.000409)	ND(0.000387)
Total PCDFs	0.000396	0.000505	0.002708	0.002659	ND	0.000137	0.001835	0.0047	0.004652	0.001623	0.000688	0.00072	0.001883
Total TEQs (EPA TEFs)	0.0000059	0.0000071	0.000021	0.000020	0	0.000014	0.000029	0.000079	0.000071	0.000026	0.0000010	0.0000056	0.000049
Total TEQs (DEP TEFs)	0.000031	0.000037	0.00014	0.00014	0	0.000014	0.000071	0.00033	0.00022	0.000085	0.000026	0.000050	0.00011

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc. (1994-1995) and submitted to Quanterra Environmental Services or CompuChem Laboratories for analysis of PCDDs/PCDFs.
2. Only those parameters which were detected in at least one sample are presented.
3. ND (0.0001) = Not detected. The number in parentheses is the detection limit.
4. J** = Result is an estimated value that is below the lower calibration limit, but above the target detection limit.
5. Dup = Indicates duplicate analyses.
6. Total PCDDs/PCDFs determined as sum of total homolog concentrations; non-detect values considered to be zero.
7. Total TEQs were calculated using both USEPA's TEFs and MDEP's TEFs for all PCDD/PCDF congeners, although GE does not accept the validity of these TEFs.

TABLE 5-7

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SUMMARY OF HOUSATONIC RIVER FLOODPLAIN SOIL APPENDIX IX+3 INORGANICS DATA - JUNE THROUGH DECEMBER 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	Upstream of GE Facility and Related Sites							
	FPL1-1M (0 - 6")	FPL1-2M (0 - 6")	FPL1-4M (0 - 6")	FPL1-5M (0 - 6")	BG-FP-1 (0 - 6")	BG-FP-2 (0 - 6")	BG-FP-3 (0 - 6")	BG-FP-3 Dup. (0 - 6")
Aluminum	7,510	7,430	5,850	8,670	NA	NA	NA	NA
Antimony	ND(6.8)	ND(7.2)	ND(6.7)	ND(7.0)	ND(1.7)	1.7J*	ND(1.4)	ND(1.5)
Arsenic	3.4	5.1	2.7	2.2	2.8	3.7	3.7	3.6
Barium	51.5	49.8	36.6	56.7	43.7	52.2	40.5	42.8
Beryllium	0.44J*	0.43J	0.32J	0.43J*	0.29J*	0.33J*	0.27J*	0.29J*
Cadmium	0.69	0.78	ND(0.60)	ND(0.65)	ND(0.24)	0.78	0.61J*	0.69
Calcium	27,600	13,500	13,400	7,310	NA	NA	NA	NA
Chromium	17.8	20.1	11.2	14	11.1	15.6	14	14.4
Cobalt	8.1	7.8	6.0J*	8.9	7.8	9.2	7.2	8.0
Copper	29.5	24.7	15.4	16.1	18.6	22.7	24.4	34.7
Cyanide	NA	NA	NA	NA	ND(3.7)	ND (3.2)	ND(3.2)	ND(3.4)
Iron	17,100	16,100	13,100	17,800	NA	NA	NA	NA
Lead	58.1	58.4	44.4	25.1	38.4	47.2	47.8	112
Magnesium	19,300	10,800	10,100	7,540	NA	NA	NA	NA
Manganese	420	434	407	663	NA	NA	NA	NA
Mercury	0.31	0.30	ND(0.16)	0.17	0.15	0.20	0.17	0.20
Nickel	15.3	13.7	11.6	14.3	12.7	14.6	11.4	12.9
Potassium	710	840	506J*	663	NA	NA	NA	NA
Selenium	0.71	ND(0.40)	ND(0.46)	ND(0.39)	1.0	1.2	0.85	1.3
Silver	ND(1.3)	ND(1.3)	ND(1.6)	ND(1.3)	ND(0.30)	ND(0.26)	ND(0.25)	ND(0.27)
Sodium	115J*	116J*	347J*	ND(43.2)	NA	NA	NA	NA
Sulfide	NA	NA	NA	NA	ND(296)	ND(256)	ND(253)	264
Tin	19.9	22	17.4	15.4	8.3J*	ND(1.1)	ND(1.1)	ND(1.2)
Vanadium	19.9	15.2	13.2	14.8	13	16.7	10.5	11.4
Zinc	96.9	91.9	69.6	71.1	81.1	93.3	81.5	88.9

Parameter	Downstream of GE Facility and Related Sites								
	I7-3-7A-2 (0 - 6")	I7-3-7A-2 Dup. (0 - 6")	I7-3-7D-10 (0 - 6")	I7-2-34B (0 - 6")	I7-2-32A (0 - 6")	I7-3-6C-15 (0 - 6")	I7-99-000B (0 - 6")	I7-2-1A (0 - 6")	I8-1-61C-18 (0 - 6")
Aluminum	4,600	4,910	7,100	11,800	9,940	6,070	6,250	9450	6,950
Antimony	0.17 J*N	0.13 J*N	0.48 J*N	0.93 J*N	0.48 J*N	0.27J*N	0.26 J*N	0.4 J*N	0.32 J*N
Arsenic	1.6	1.3	4	10.1	4.9	2.1	2.4	6.9	2.7
Barium	17.5 J*	18.1 J*	41.9	144	65.4	35.7	29.2	59.2	36.6
Beryllium	0.17	0.18	0.27	0.54	0.39	0.24	0.23	0.37	0.26
Cadmium	ND(0.031)	ND(0.031)	ND(0.034)	1.2	0.256 J*	ND(0.04)	ND(0.3)	0.16 J*	ND(0.04)
Calcium	6,200	6,240	6,840	9,950	16,500	9,200	9.460	10,600	11,100
Chromium	8.8	9.5	15.4	37.9	23.9	13.1	13.2	20.7	16.5
Cobalt	5.4	6	7.7	13.8	10.3	6.8	7.3	8.3	7.6
Copper	20.7	18.8	48.1	146	57.9	27.9	30.1	72.9	40.8
Cyanide	ND(0.52)	ND(0.52)	ND(0.52)	1.3	ND(0.67)	ND(0.60)	ND(0.55)	ND(0.63)	ND(0.60)
Iron	12,000	12,300	17,400	56,600	21,700	14,500	14,600	20,500	16,200
Lead	30.9	29.4	81.7	437	107	54.8	41.9	124	67.5
Magnesium	5,400	5,630	6,020	8,440	12,100	7,390	7,900	7,260	8,510
Manganese	163	186	280	824	449	230	230	494	304
Mercury	ND(0.1) N	ND(0.1)N	0.19N	0.58 N	0.27 N	0.15N	0.13 N	0.27 N	0.15 N
Nickel	10	10.5	15.6	29.2	19.4	11.9	12.7	17.5	14.1
Potassium	721	550	699	1,550	1,420	678	740	754	695
Selenium	0.35 J*	0.36 J*	0.77	1.9	0.58 J*	ND(0.34)	0.37 J*	0.84	0.54 J*
Silver	0.1 J*	0.07 J*	0.19 J*	1.3 J*	0.53 J*	0.16 J*	0.23 J*	0.27 J*	0.3 J*
Sodium	ND(14)	ND(14.3)	ND(15.3)	23.3 J*	ND(23.1)	ND(16.4)	ND(15)	44.9 J*	ND(16.3)
Sulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tin	15.1	8.2	18.1	135	18	14.1	16.9	19.4	13.9
Vanadium	7.4	7.9	13.3	31.5	20.2	10.5	10.6	13.3	13.6
Zinc	70	60	106	765	159	79.5	81.4	152	104

Notes:
1. Samples FPL1-1M through FPL1-5M were collected by Blasland, Bouck & Lee, Inc. in 1992 and submitted to CompuChem Laboratories for Appendix metals analysis.
2. All other samples were collected by Blasland, Bouck & Lee, Inc. in 1994-1995 and submitted to Quanterra Environmental Services for Appendix IX+3 analysis.
3. Only those parameters which were detected in at least one sample are presented.
4. ND(1.9) = Not detected. The number in parenthesis is the detection limit.
5. J* - Indicates an estimated value between the CLP required detection limit and the instrument detection limit.
6. N = Indicates sample matrix spike analysis was outside control limits.
7. NA = Not Analyzed.

TABLE 5-8

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL PCB AND TOC DATA - MAY 1994
(Concentrations are reported in parts per million, ppm)

Sample Location and Description	PCB Concentration		Total Organic Carbon Concentration (0-6 in.)
	0-6 in.	6-12 in.	
SLB-2			
Top Bank	0.64	1.28	22,600
Middle Bank	0.09	0.15	19,100
Bottom Bank	0.42	0.96	13,200
SLB-3			
Top Bank	0.18	0.53	9,150
Middle Bank	13.0 [17.1]	6.72	20,100
Bottom Bank	250	52	24,500
SLB-4			
Top Bank	0.21	0.10	28,100
Middle Bank	7.60	13.4	28,300
Bottom Bank	75	20	98,600
SLB-5			
Top Bank	0.05	0.07	51,500
Middle Bank	0.13	0.13	44,100
Bottom Bank	0.07	0.11	57,300
SLB-6			
Top Bank	0.07	1.56	45,200
Middle Bank	1.17	2.79	61,300
Bottom Bank	0.19 [0.2]	0.76	56,200
SLB-7			
Top Bank	2.40	3.90	131,000
Middle Bank	1.30	11.0	50,500

Notes:

1. Sampling was performed by Blasland, Bouck & Lee, Inc. on May 24, 1994. Samples were analyzed for PCBs by IT Analytical Services of Knoxville, TN.

2. Duplicate results are presented in brackets.

TABLE 5-9

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSAOTNIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL PCB AND TOC DATA - JUNE 1994 THROUGH DECEMBER 1995
(Concentrations are reported in parts per million, ppm)

Location ID	Depth (feet)	Aroclor 1016, 1232, 1242, and/or 1248	Aroclor 1254	Aroclor 1260	Total Aroclors	TOC
SLB-1-BB	0-0.5	ND(1.1)	22*	30*	52	447,000
	0.5-1.0	ND(25)	120*	94*	210	NA
	1-1.5	ND(62)	180	ND(120)	180	NA
	1.5-2	ND(1.4)	72	ND(3.4)	72	NA
	2-2.5	ND(3.1)	4.7	ND(2.7)	4.7	NA
	2.5-3	ND(30)	45	ND(24)	45	NA
SLB-3BB	1-1.5	ND(17)	57	ND(34)	57	NA
	1.5-2	ND(20)	81	ND(40)	81	NA
	2-2.5	ND(5.9)	ND(17)	23	23	NA
	2.5-3	ND(13)	50	52	100	NA
SLB-4BB	1-1.5	ND(0.47)	ND(0.94)	1.2	1.2	NA
	1.5-2	ND(0.46)	ND(0.93)	1.3	1.3	NA
	2-2.5	ND(0.046)	ND(0.14)	0.26	0.26	NA
	2.5-3	ND(0.046)	ND(0.092)	0.13	0.13	NA
SLB-1MB	0-0.5	ND(0.71)	ND(6.4)	9.0*	9.0	81,000
	0.5-1.0	ND(6.4)	29*	18*	47	NA
SLB-1TB	0-0.5	ND(0.70) [ND(0.17)]	2.9* [ND(4.1)]	2.6* [4.2*]	5.5 [4.2]	100,000 [920,000]
	0.5-1.0	0.16	ND(3.6)	2.8*	3.0	NA
SLB-1TB-10'	0-0.5	ND(0.053)	0.28	0.20	0.48	NA
SLB-1TB-50'	0-0.5**	ND(0.052)	0.26	ND(0.22)	0.26	NA
SLB-7TB-10'	0-0.5	ND(0.52) [ND(0.49)]	ND(1.0) [ND(0.98)]	3.2 [3.1]	3.2 [3.1]	NA
SLB-8TB	0-0.5	ND(0.022)	ND(0.044)	ND(0.044)	ND(0.044)	NA
SLB-9TB	0-0.5	ND(2.4)	9.7	ND(4.7)	9.7	NA
SLB-9TB-12'	0-0.5	ND(0.45)	ND(0.91)	0.92	0.92	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to Quanterra Environmental Services for PCB and/or TOC analyses.
2. * - Samples exhibited alteration of standard Aroclor pattern.
3. ** - Sample was initially archived and later analyzed to provide further horizontal delineation of PCB presence.
4. ND(0.053) - Compound was analyzed for, but not detected. The number in parentheses is the detection limit.
5. NA - Not analyzed.
6. [ ] = duplicate results.

TABLE 5-10

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOCs, PCDDs/PCDFs, AND INORGANICS - JANUARY 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	SLB-1-BB (0-6")	SLB-2-BB (0-6")	SLB-2-BB (0-6") Dup.	SLB-4-BB (0-6")	SLB-5-BB (0-6")	SLB-BB-8 (0-6")	SLB-BB-9 (0-6")
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)							
Phenol	ND(95)	ND(4.3)	ND(4.3)	9.6	ND(0.38)	0.25J	5.9
2-Methylphenol	ND(95)	ND(4.3)	ND(4.3)	3.2J	ND(0.38)	ND(0.8)	1.5J
4-Methylphenol	ND(95)	ND(4.3)	ND(4.3)	1.5J	ND(0.38)	ND(0.8)	ND(4.2)
Naphthalene	ND(95)	ND(4.3)	ND(4.3)	1.8J	ND(0.38)	0.094J	4.5
Acenaphthylene	ND(95)	ND(4.3)	ND(4.3)	0.79J	ND(0.38)	0.26J	ND(4.2)
Phenanthrene	ND(95)	1.9J	1.5J	1.9J	ND(0.38)	0.88	11.0
Anthracene	ND(95)	0.78J	0.50J	0.80J	ND(0.38)	0.27J	3.9J
Di-n-Butylphthalate	ND(95)	ND(4.3)	ND(4.3)	0.80BJ	0.087BJ	0.31J	1.5J
Fluoranthene	ND(95)	3.6J	2.6J	3.4J	ND(0.38)	1.1	12.0
Pyrene	ND(95)	2.8J	2.2J	3.0J	ND(0.38)	1.4	14.0
Benzo(a)Anthracene	ND(95)	1.4J	ND(4.3)	1.9J	ND(0.38)	0.71J	8.0
Chrysene	12J	1.5J	1.3J	2.1J	ND(0.38)	0.85	8.7
Bis(2-ethylhexyl) Phthalate	ND(95)	0.84J	2.0J	ND(4.1)	ND(0.38)	0.15J	ND(4.2)
Benzo(b)Fluoranthene	ND(95)	1.1J	0.83J	1.6J	ND(0.38)	0.91	9.3
Benzo(k)Fluoranthene	ND(95)	1.1J	0.84J	1.7J	ND(0.38)	1.1	6.9
Benzo(a)Pyrene	ND(95)	1.2J	0.93J	1.8J	ND(0.38)	0.93	7.2
Indeno(1,2,3-cd)Pyrene	ND(95)	ND(4.3)	ND(4.3)	1.3J	ND(0.38)	0.46J	3.2J
Benzo(g,h,i)Perylene	ND(95)	0.89J	0.86J	1.6J	ND(0.38)	0.3J	1.1J
3-Methylphenol	ND(95)	ND(4.4)	ND(4.3)	2.5J	ND(0.38)	ND(0.8)	ND(4.2)
o-Toluidine	ND(95)	ND(4.4)	ND(4.3)	1.6J	ND(0.38)	ND(0.8)	ND(4.2)

TABLE 5-10
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOCs, PCDDs/PCDFs AND INORGANICS - JANUARY 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	SLB-1-BB (0-6")	SLB-2-BB (0-6")	SLB-2-BB (0-6") Dup.	SLB-4-BB (0-6")	SLB-5-BB (0-6")	SLB-BB-8 (0-6")	SLB-BB-9 (0-6")
SEMIVOLATILE ORGANIC COMPOUNDS (CONT'D)							
Benzidine	ND(480)	22	ND(21)	ND(20)	ND(1.9)	ND(0.8)	ND(4.2)
Acetophenone	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	0.14JB	1.7JB
Aniline	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	ND(0.8)	12.0
2-Methylnapthalene	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	ND(0.8)	0.72J
Dibenz (a,h) Anthracene	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	0.27J	2.1J
Fluorene	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	0.13J	2.6J
Acenaphthene	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	ND(0.8)	3.0J
Dibenzofuran	ND(95)	ND(4.3)	ND(4.3)	ND(4.1)	ND(0.38)	ND(0.8)	1.4J
POLYCHLORINATED BIPHENYLS (PCBs)							
Aroclor 1254	22	ND(0.26)	NA	24	ND(0.045)	0.97*	43*
Aroclor 1260	30	0.42	NA	51	0.07	2.2	26
Total PCBs	52	0.42	NA	75	0.07	3.2	69
POLYCHLORINATED DIBENZODIOXINS/FURANS (PCDDs/PCDFs)							
2,3,7,8-TCDF	0.00014	0.0000022J**	0.0000024J**	0.00051	0.0000012J**	0.000037	0.00027
TCDF (Total)	0.0011	0.000043	0.000041	0.0016	0.000011	0.00031	0.0045
1,2,3,7,8-PeCDF	ND(0.000064)	ND(0.0000014)	ND(0.0000012)	0.00026	ND(0.00000077)	0.000011	0.000073
2,3,4,7,8-PeCDF	0.00014J**	ND(0.0000028)	ND(0.0000027)	0.00021	ND(0.0000012)	0.000013	0.00017
PeCDF (Total)	0.0024	0.000057	0.000051	0.0050	0.000012	0.00026	0.004

TABLE 5-10
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOCs, PCDDs/PCDFs AND INORGANICS - JANUARY 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	SLB-1-BB (0-6")	SLB-2-BB (0-6")	SLB-2-BB (0-6") Dup.	SLB-4-BB (0-6")	SLB-5-BB (0-6")	SLB-BB-8 (0-6")	SLB-BB-9 (0-6")
POLYCHLORINATED DIBENZODIOXINS/FURANS (PCDDs/PCDFs) (CONT'D)							
1,2,3,4,7,8-HxCDF	0.00022	ND(0.0000032)	ND(0.0000032)	0.00041	ND(0.0000014)	0.000012	0.00021
1,2,3,6,7,8-HxCDF	ND(0.000076)	ND(0.0000022)	ND(0.0000019)	0.00024	ND(0.00000084)	ND(0.00002)	ND(0.0004)
2,3,4,6,7,8-HxCDF	ND(0.000088)	ND(0.0000020)	ND(0.0000019)	0.00012	ND(0.00000077)	0.0000092	0.00024
1,2,3,7,8,9-HxCDF	ND(0.000024)	ND(0.0000005)	ND(0.00000021)	ND(0.0000028)	ND(0.00000036)	ND(0.00000047)	0.000087
HxCDF (Total)	0.00095	0.000047	0.000038	0.0042	0.000010	0.0002	0.0048
1,2,3,4,6,7,8-HpCDF	0.00047	0.000013	0.000012	0.00048	0.0000062J**	0.000048	0.00055
1,2,3,4,7,8,9-HpCDF	ND(0.000059)	ND(0.0000011)	ND(0.0000010)	0.000094	ND(0.00000050)	0.000006J**	0.000087
HpCDF (Total)	0.0010	0.000034	0.000030	0.0012	0.000015	0.00011	0.0014
OCDF	0.00060	0.000026	0.000022	0.00044	0.000013	0.000076	0.00036
Total PCDFs	0.00505	0.000207	0.000182	0.01244	0.000061	0.000956	0.0151
2,3,7,8-TCDD	ND(0.0000084)	ND(0.00000015)	ND(0.00000016)	0.0000022J**	ND(0.00000015)	ND(0.00000042)	0.0000068
TCDD (Total)	ND(0.000065)	ND(0.00000063)	0.00000066J**	0.000027	ND(0.00000043)	0.0000095	0.000093
1,2,3,7,8-PeCDD	ND(0.000017)	ND(0.00000055)	ND(0.00000047)	ND(0.0000069)	ND(0.00000022)	ND(0.0000016)	0.000024
PeCDD (Total)	ND(0.00017)	ND(0.0000013)	ND(0.0000013)	ND(0.000018)	ND(0.00000072)	ND(0.0000059)	0.000088
1,2,3,4,7,8-HxCDD	ND(0.000036)	ND(0.0000012)	ND(0.0000011)	0.000018	ND(0.00000038)	ND(0.0000023)	0.000027
1,2,3,6,7,8-HxCDD	ND(0.000063)	0.0000037J**	0.0000037J**	0.000040	ND(0.0000011)	0.0000057J**	0.000069
1,2,3,7,8,9-HxCDD	ND(0.000070)	ND(0.0000025)	ND(0.0000025)	0.000036	ND(0.00000076)	0.0000063J**	0.000074
HxCDD (Total)	0.00027	0.000018	0.000017	0.00034	ND(0.0000027)	0.000041	0.00052
1,2,3,4,6,7,8-HpCDD	0.0011	0.000069	0.000065	0.00068	0.000019	0.000097	0.00076
HpCDD (Total)	0.0020	0.00012	0.00011	0.0012	0.000033	0.00016	0.0014

TABLE 5-10
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOCs, PCDDs/PCDFs AND INORGANICS - JANUARY 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	SLB-1-BB (0-6")	SLB-2-BB (0-6")	SLB-2-BB (0-6") Dup.	SLB-4-BB (0-6")	SLB-5-BB (0-6")	SLB-BB-8 (0-6")	SLB-BB-9 (0-6")
POLYCHLORINATED DIBENZODIOXINS/FURANS (PCDDs/PCDFs) (CONT'D)							
OCDD	0.0073	0.00053	0.00048	0.0037E	0.00017	0.00076	0.0041
Total PCDDs	0.00957	0.000737	0.0006727	0.005947	0.000222	0.000971	0.00628
INORGANICS							
Aluminum	3,430	2,810	2,250	7,290	8,300	NA	NA
Antimony	ND(14.6)	ND(6.6)	ND(6.2)	ND(6.2)	ND(5.9)	3.8J*	6.5J*
Arsenic	4.3	1.6	1.5	6.2	2.6	9.0	5.3
Barium	126	15.7J*	20.8J*	32.8	18.2J*	243	47.8J*
Beryllium	0.29J*	0.22J*	ND(0.12)	0.22J*	ND(0.12)	0.35J*	0.23J*
Cadmium	20.8	ND(0.66)	ND(0.62)	0.87	0.64	3.7	2.0
Calcium	6,480	14,500	25,300	22,400	5,780	NA	NA
Chromium	94.7	4.4	5.3	17	6.7	18.5	24.1
Cobalt	ND(5.8)	5.0J*	4.1J*	7.3	7.0	8.2J*	7.2J*
Copper	1,050	16.4	14	141	22.5	120	218
Iron	21,100	14,000	11,300	28,600	20,100	NA	NA
Lead	396	39.1	33.9	357	41.7	500	294
Magnesium	1,580	7,380	11,100	12,600	4,480	NA	NA
Manganese	266	249	304	437	493	NA	NA
Mercury	1.8	ND(0.13)	ND(0.13)	0.79	ND(0.12)	1.1	1.3
Nickel	63.9	10.1	7.9	26.4	17.5	26.1	38.1
Potassium	528J*	216J*	193J*	535J*	369J*	NA	NA

280

TABLE 5-10
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOCs, PCDDs/PCDFs AND INORGANICS - JANUARY 1995
(Concentrations are presented in dry-weight parts per million, ppm)

Parameter	SLB-1-BB (0-6")	SLB-2-BB (0-6")	SLB-2-BB (0-6") Dup.	SLB-4-BB (0-6")	SLB-5-BB (0-6")	SLB-BB-8 (0-6")	SLB-BB-9 (0-6")
INORGANICS (CONT'D)							
Selenium	1.7	ND(0.26)	ND(0.26)	0.29J*	0.31J*	3.7	2.0
Silver	24.9	ND(0.66)	ND(0.62)	1.2	ND(0.59)	0.89J*	1.2J*
Sodium	153J*	113J*	112J*	92.4J*	38.5J*	NA	NA
Sulfide	NA	NA	NA	NA	NA	805	1,360
Tin	NA	NA	NA	NA	NA	17.6J*	27.3
Vanadium	121	9.6	8.0	26.4	10.6	32.5	81.8
Zinc	958	60.3	57.9	221	80.5	569	385

Notes:

1. Samples were collected by Blasland, Bouck & Lee and submitted to Quanterra Environmental Services for the analysis of Appendix IX+3 SVOCs, PCDDs/PCDFs, and Inorganics.
2. Only those parameters which were detected in at least one sample are presented.
3. ND(0.013) = Not detected. The number in parentheses is the detection limit.
4. J = Indicates an estimated value less than the CLP required quantitation limit.
5. J* = Indicates an estimated value greater than instrument detection limit, but less than contract required quantitation limit.
6. J** = Result is an estimated value that is below the lower calibration limit, but above the target detection limit.
7. B = Analyte was also detected in the associated method blank.
8. E = Concentration exceeds calibration range.
9. Dup - Indicates duplicate analyses.
10. NA = Not Analyzed.
11. Total PCDDs/PCDFs determined as sum of total homolog concentrations; non detect values considered to be zero.

281

TABLE 5-11

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

ADDITIONAL SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOC DATA - OCTOBER 1995
(Concentrations are presented in dry weight parts per million, ppm)

Parameter	Sample ID:			
	SLB-1-TB	SLB-2-TB	SLB-4-TB	SLB-9-TB
Phenol	ND(2.7)	ND(1.8)	ND(0.4) [ND(0.4)]	2.0J
Aniline	20	ND(1.8)	ND(0.4) [ND(0.4)]	6.7
2-Methylphenol	ND(2.7)	ND(1.8)	ND(0.4) [ND(0.4)]	0.41J
2,4-Dimethylphenol	ND(2.7)	ND(1.8)	ND(0.4) [ND(0.4)]	0.7J
Naphthalene	0.89J	ND(1.8)	0.047J [0.07J]	0.92J
2-Methylnaphthalene	ND(2.7)	ND(1.8)	ND(0.4) [0.043J]	0.46J
Acenaphthylene	1.1J	0.24J	0.22J [0.31J]	1.9J
Acenaphthene	ND(2.7)	ND(1.8)	ND(0.4) [0.056J]	2.0J
Dibenzofuran	ND(2.7)	ND(1.8)	ND(0.4) [ND(0.4)]	0.84J
Fluorene	ND(2.7)	ND(1.8)	ND(0.4) [0.044J]	1.8J
Phenanthrene	3.6	1.4J	0.46 [0.8]	18
Anthracene	0.63J	0.28J	0.13J [0.24J]	5.0
Di-n-butylphthalate	0.29JB	0.2JB	0.14JB [0.12JB]	2.9JB
Fluoranthene	8.9	3.0	1.2 [1.8]	31
Pyrene	7.6	2.1	0.89 [1.4]	21
Butylbenzylphthalate	ND(2.7)	0.33J	ND(0.4) [ND(0.4)]	ND(3.9)
Benzo(a)Anthracene	3.6	1.3J	0.65 [1.1]	14
Chrysene	5.0	1.7J	0.86 [1.3]	17
bis(2-Ethylhexyl)Phthalate	0.28J	0.27J	0.12J [0.11J]	ND(3.9)
Benzo(b)Fluoranthene	5.8	1.6J	0.99 [1.5]	17
Benzo(k)Fluoranthene	6.3	1.9	0.92 [1.3]	11
Benzo(a)Pyrene	5.1	1.7J	0.96 [1.4]	16
Indeno(1,2,3-cd)Pyrene	1.3J	0.48J	0.31J [0.4]	4.7
Dibenz(a,h)Anthracene	0.36J	ND(1.8)	ND(0.4) [ND(0.41)]	ND(3.9)
Benzo(g,h,i)Perylene	1.1J	0.41J	0.26J [0.33J]	3.6J
3-&4-Methylphenol (total)	ND(2.7)	ND(1.8)	ND(0.4) [ND(0.4)]	0.52J

(See Notes on Page 2)

TABLE 5-11
(cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION
OF HOUSATONIC RIVER AND SILVER LAKE

ADDITIONAL SILVER LAKE FLOODPLAIN SOIL APPENDIX IX+3 SVOC DATA - OCTOBER 1995
(Concentrations are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., on October 11, 1995 and submitted to Quanterra Environmental Services for analysis of Appendix IX+3 semivolatiles.
2. Only those constituents detected in at least one sample are presented.
3. ND(2.7) - Compound was analyzed for, but not detected. The number in parentheses is the quantitation limit.
4. J - Indicates an estimated value below the CLP-required quantitation limit.
5. B - Analyte was also detected in the associated method blank.
6. [ ] = duplicate result.
7. The results shown for sample SLB-2-TB were obtained based on a secondary dilution since a laboratory standard was found to be low for the primary dilution.

TABLE 6-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/ RCRA
FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER YOUNG-OF-THE-YEAR FISH MONITORING DATA - OCTOBER 1994
WOODS POND LOCATION

Sample	Number	Weight (g)	Lipids (%)	PCB (mg/kg)	PCB/Lipids (mg/kg lipid)
Bluegill					
WP-BG-1	25	14.3	3.4	20	5.8
WP-BG-2	25	13.5	3.5	22	6.3
WP-BG-3	25	16.7	3.1	20	6.6
WP-BG-4 *	25	19.9	0.6	3.3	5.4
WP-BG-5	25	14	3.1	19	6.1
WP-BG-6	25	16.1	3.4	20	5.8
WP-BG-7	25	17.5	2.5	15	6.0
Mean			2.8	17	6.0
Largemouth Bass					
WP-LB-1	10	52.9	2.3	32	14
WP-LB-2	10	51.1	2.5	19	7.6
WP-LB-3	10	51.5	2.4	17	7.2
WP-LB-4	10	58.8	1.7	19	11
WP-LB-5	10	55.4	1.0	18	19
WP-LB-6	10	54.2	2.2	18	8.2
WP-LB-7	10	41.9	2.4	37	16
Mean			2.1	23	12
Yellow Perch					
WP-YP-1	5	28.8	3.2	36	11
WP-YP-2	5	31.9	3.1	32	11
WP-YP-3	5	33	2.3	38	17
WP-YP-4 *	5	29.3	1.1	58	54
WP-YP-5	5	31.7	2.8	32	11
WP-YP-6	5	28.1	2.8	32	11
WP-YP-7	5	24.8	2.5	35	14
Mean			2.5	38	18

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., on October 12, 1994 and analyzed by Hazleton Environmental Services.
2. PCB concentrations are presented in wet weight parts per million (ppm).
3. *= Denotes surrogate recovery values outside of QC limits (60-146)

TABLE 6-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/ RCRA
FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER YOUNG-OF-THE-YEAR FISH MONITORING DATA - OCTOBER 1994
LOCATION HR6

Sample	Number	Weight (g)	Lipids (%)	PCB (mg/kg)	PCB/Lipids (mg/kg lipid)
Bluegill					
HR6-BG-1	15	18	4.3	4.2	0.98
HR6-BG-2	15	16.8	4.1	3.6	0.87
HR6-BG-3	15	15.5	3.3	2.8	0.84
HR6-BG-4	15	14.3	4.2	2.8	0.66
HR6-BG-5	15	15.7	4.6	3.9	0.85
HR6-BG-6	15	13.8	4.5	3.5	0.78
HR6-BG-7	15	16.2	4.2	3.5	0.83
Mean			4.2	3.5	0.83
Largemouth Bass					
HR6-LB-1	10	36.2	3.1	4.8	1.6
HR6-LB-2	10	40.5	3.2	4.2	1.3
HR6-LB-3	10	35.4	3.3	4.8	1.4
HR6-LB-4	10	38	2.7	4.2	1.5
HR6-LB-5	10	31.1	3.3	3.3	1.0
HR6-LB-6	10	38.1	3.2	4.3	1.3
HR6-LB-7	10	32.7	3.4	4.6	1.4
Mean			3.2	4.3	1.4
Yellow Perch					
HR6-YP-1	10	35.9	2.5	4.6	1.9
HR6-YP-2	10	37.7	2.9	4.6	1.6
HR6-YP-3	10	38	2.8	4.3	1.6
HR6-YP-4	10	36.6	3.1	4.5	1.4
HR6-YP-5	10	32.8	2.9	4.6	1.6
HR6-YP-6	10	37.4	2.8	4.2	1.5
HR6-YP-7	10	38	3.0	4.6	1.5
Mean			2.8	4.5	1.6

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc., on October 13, 1994 and analyzed by Hazleton Environmental Services.
2. PCB concentrations are presented in wet weight parts per million (ppm).

TABLE 6-3

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/ RCRA
FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER YOUNG-OF-THE-YEAR FISH MONITORING DATA - OCTOBER 1994
LOCATION HR2

Sample	Number	Weight (g)	Lipids (%)	PCB (mg/kg)	PCB/Lipids (mg/kg lipid)
Pumpkinseed					
HR2-PK-1	10	20.2	4.3	26	6.1
HR2-PK-2	10	17.9	4.1	26	6.4
HR2-PK-3	10	17.6	3.9	26	6.7
HR2-PK-4	10	15.5	2.8	23	8.2
HR2-PK-5	10	17.7	3.5	25	7.1
HR2-PK-6	10	15.9	4.1	26	6.4
HR2-PK-7	9	5.7	4.0	23	5.8
Mean			3.8	25	6.6
Largemouth Bass					
HR2-LB-1	10	28.5	2.6	32	12
HR2-LB-2	10	26.7	2.9	34	12
HR2-LB-3	9	15.7	2.6	25	9.7
HR2-LB-4	10	27.3	2.9	35	12
HR2-LB-5 *	10	27.1	3.2	29	9.0
HR2-LB-6	10	26.9	2.7	30	11
HR2-LB-7	10	24.8	2.6	33	13
Mean			2.8	31	11
Yellow Perch					
HR2-YP-4	7	38.9	2.4	25	11
HR2-YP-5	5	22.4	2.6	22	8.5
HR2-YP-6	5	24.9	2.7	24	9.0
HR2-YP-7	5	25.9	2.5	26	10
HR2-YP-8	5	20.4	2.4	25	10
HR2-YP-9	5	19.3	2.3	24	11
HR2-YP-10	5	21.8	2.5	27	11
Mean			2.5	25	10

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc., on October 11-13, 1994 and analyzed by Hazleton Environmental Services.
2. PCB concentrations are presented in wet weight parts per million (ppm).
3. * = Denotes surrogate recovery values outside of QC limits (60-146)

TABLE 6-4

GENERAL ELECTRIC CORPORATION
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

FISH PCB DATA ASSOCIATED WITH GREEN RIVER, WILLIAMS RIVER AND LAUREL LAKE - SEPTEMBER 1995

Sample ID	Species	Length (cm)	Weight (grams)	PCBs (ppm)	Lipids (%)	PCB/Lipids (ppm)
GREEN RIVER						
GR-RB-1	Rock Bass	22	205	2.30	1.63	1.41
GR-RB-2	Rock Bass	21	215	0.16	1.86	0.09
GR-BT-1	Brown Trout	34	400	14	2.69	5.20
GR-BT-2	Brown Trout	36	440	21	4.24	4.95
WILLIAMS RIVER						
WR-SB-1	Smallmouth Bass	29	310	1.10	1.15	0.96
WR-SB-2	Smallmouth Bass	27	220	2.50	1.70	1.47
WR-BT-1	Brown Trout	29	210	0.81	3.09	0.26
WR-BT-2	Brown Trout	27	155	1.00	4.59	0.22
LAUREL LAKE						
LL-LB-1	Largemouth Bass	33	335	ND	0.59	ND
LL-LB-2	Largemouth Bass	33	415	ND	0.68	ND
LL-LB-3	Largemouth Bass	30	300	ND	0.67	ND
LL-LB-4	Largemouth Bass	30	300	ND	0.67	ND
LL-LB-5	Largemouth Bass	26	200	0.065	0.75	0.09

Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc., and analyzed by Hazleton Environmental Services.
2. PCB concentrations are presented in wet weight parts per million (ppm).
3. ND = Not detected at a detection limit of 50 ug/kg.
4. All samples were analyzed as skin-on/scales-off fillets.

287

TABLE 6-5

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

HOUSATONIC RIVER FISH MONITORING DATA - CONNECTICUT - AUGUST/OCTOBER 1994

Species	Station	# of Fish	TOTAL LENGTH		% LIPID	CTPCB (Congener-quantitation, mg/kg)				TPCB (Aroclor quantitation, mg/kg)			
			MIN	MAX	MEAN	% <2	MIN	MAX	MEAN	% <2	MIN	MAX	MEAN
Brown Trout	C	36	17.2	39.9	2.47	92	0.39	6.00	1.31	86	0.42	9.37	1.53
Smallmouth Bass	C	13	25.5	34.5	2.31	77	0.59	2.29	1.41	77	0.67	2.57	1.56
Smallmouth Bass	B	8	26.1	36.8	2.21	100	0.71	1.61	1.23	100	0.77	1.81	1.38
Smallmouth Bass	L	9	25.9	38.5	1.04	100	0.16	1.32	0.51	100	0.16	1.55	0.56
Smallmouth Bass	Z	10	26.9	39.5	1.30	100	0.09	0.99	0.43	100	0.10	1.05	0.45
Smallmouth Bass	H	18	26.1	48.7	1.68	94	0.18	2.14	0.51	94	0.18	2.43	0.54
American Eel	H	18	43.1	73.0	18.55	89	0.40	2.70	1.23	89	0.38	2.70	1.25
White Perch	H	18	14.5	26.5	5.76	100	0.31	1.78	0.81	100	0.31	1.66	0.83
Yellow Perch	H	18	18.1	29.6	1.43	100	0.08	0.42	0.21	100	0.08	0.46	0.22
Redbreast Sunfish	H	6	16.0	19.6	0.90	100	0.11	0.38	0.20	100	0.11	0.39	0.20
Pumpkinseed	H	6	15.7	18.6	0.96	100	0.12	0.28	0.18	100	0.11	0.31	0.18
Bluegill	H	6	15.9	20.4	1.36	100	0.06	0.16	0.11	100	0.05	0.15	0.10
All Sunfish (3 preceding rows)	H	18	15.7	20.4	1.07	100	0.06	0.38	0.16	100	0.05	0.39	0.16

Notes:

1. Information provided by the Academy of Natural Sciences of Philadelphia.
2. Results of 1994 PCB analyses of fish from five stations on the Housatonic River, CT: Cornwall (C), Bulls Bridge (B), Lake Lillinonah (L), Lake Zoar (Z), and Lake Housatonic (H).
3. Variables are arithmetic means of total PCB (CTPCB, congener quantitation; TPCB, Aroclor quantitation; both in mg/kg wet weight), mean percentage lipid in the specimen, and total length (TL, in cm).

TABLE 7-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

GROUNDWATER/SURFACE WATER ELEVATION MONITORING DATA - OCTOBER 1994 THROUGH DECEMBER 1995

	Silver Lake Staff Gage	Well RF-2	Well RF-3	Well RF-16	Well E-7
October 21, 1994					
Water Elevation (Ft. above mean sea level):	975.88	975.83	975.90	978.15	Not Installed
November 22, 1994					
Water Elevation (Ft. above mean sea level):	976.15	975.67	976.14	977.94	Not Installed
December 24, 1994					
Water Elevation (Ft. above mean sea level):	975.83	976.10	975.90	978.14	Not Installed
January 23, 1995					
Water Elevation (Ft. above mean sea level):	976.13	977.03	976.19	978.69	Not Installed
February 22, 1995					
Water Elevation (Ft. above mean sea level):	976.03*	976.17	975.98	978.57	Not Installed
March 31, 1995					
Water Elevation (Ft. above mean sea level):	976.23	976.72	976.2	978.82	Not Installed
April 28, 1995					
Water Elevation (Ft. above mean sea level):	976.00	976.46	975.98	978.67	Not Installed
May 31, 1995					
Water Elevation (Ft. above mean sea level):	<976.00**	976.04	975.69	978.49	Not Installed
June 30, 1995					
Water Elevation (Ft. above mean sea level):	<976.00**	975.71	975.66	978.26	Not Installed
August 17, 1995					
Water Elevation (Ft. above mean sea level):	975.64	973.55	975.63	978.07	974.37
August 31, 1995					
Water Elevation (Ft. above mean sea level):	975.5	975.33	975.56	979.21	974.09
October 2, 1995					
Water Elevation (Ft. above mean sea level):	976.66	975.40	975.64	977.62	973.89

TABLE 7-1
(Cont'd)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

GROUNDWATER/SURFACE WATER ELEVATION MONITORING DATA - OCTOBER 1994 THROUGH DECEMBER 1995

	Silver Lake Staff Gage	Well RF-2	Well RF-3	Well RF-16	Well E-7
October 31, 1995					
Water Elevation (Ft. above mean sea level):	975.93	976.82	975.97	975.58	975.65
December 4, 1995					
Water Elevation (Ft. above mean sea level):	976.06	976.64	976.08	978.79	975.48

Notes:
1. * Approximately 5 inches of ice on lake caused slight deformation of staff gage.
2. ** Staff gage above water line.

TABLE 7-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

GROUNDWATER APPENDIX IX+3 DATA FOR WELL E-7 LYMAN STREET
PARKING LOT/USEPA AREA 5B SITE - DECEMBER 1995
(Concentrations are presented in parts per million, ppm)

Parameter	Filtered	Unfiltered
Polychlorinated Biphenyls (PCBs)		
Aroclor 1254	0.00042	0.00033
Total PCBs	0.00042	0.00033
Inorganics		
Arsenic	ND(0.0019)	0.041
Barium	0.0201J*	0.321
Beryllium	ND(0.0003)	0.0042J*
Cadmium	ND(0.0013)	0.0042J*
Chromium	ND(0.0018)	0.0893
Cobalt	ND(0.0031)	0.0955
Copper	0.004J*	0.150
Lead	ND(0.0014)	0.0831
Nickel	ND(0.0029)	0.149
Selenium	0.0035J*	0.0024
Sulfide	0.001	NA
Tin	0.0256	0.231
Vanadium	0.0017	0.116
Zinc	0.0038	0.474

Notes:

1. Samples were collected by Blasland, BoucK & Lee, Inc., and submitted to Quanterra Environmental Services for analysis of Appendix IX+3 constituents (excluding herbicides and organophosphate pesticides). PCB and inorganic analyses were performed for both filtered and unfiltered samples. Only those constituents detected are summarized.
2. J* - Indicates an estimated value between the CLP required detection limit and the instrument detection limit.
3. ND(0.32) - Compound was analyzed for, but not detected. The number is the detection limit.
4. NA - Not analyzed.

TABLE 8-1

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

24-HOUR HIGH-VOLUME AMBIENT PCB CONCENTRATIONS[1] IN ug/m3
METHOD 608 (HIGH RESOLUTION)[2] - MAY THROUGH AUGUST 1993

Date	F.W. Webb	191 Newell Rear	Lyman	BCC	Silver Lake	191 Newell Front	191 Newell Front Co-Locator
May 4, 1993	ND[3](0.000038)	0.0056	0.0035	0.0014	0.014[4]	0.0021	0.0016
May 20, 1993	0.0027(0.00084)	ND	0.0027	NA[5]	0.0027	0.0024	0.0019
June 3, 1995	0.0030[6]	0.0075[7]	0.0054[6]	0.0035[6]	0.0054[6]	ND	0.0035[6]
June 18, 1993	0.0090(0.0054)	0.012[7](0.013)	0.0051[7](0.0026)	0.0021[7]	0.014[7](0.015)	0.0078[7]	0.0084[7]
July 3, 1993	0.0057(0.0026)	0.0089	0.0087(0.0023)	ND	0.023[7]	0.0097[7](0.0033)	0.0075[7]
July 18, 1993	0.0084(0.0054)	0.023	0.0052(0.0026)	ND	0.011	NA[8]	0.010(0.0062)
August 2, 1993	0.0068(0.0036)	0.028	0.011(0.0056)	0.0016	0.0040	ND	0.010
August 17, 1993	0.0038(0.0022)	0.035	0.0072(0.0048)	0.0011	0.012	0.0065	0.0024
Mean Concentration	0.0053(0.0029)	0.015(0.015)	0.0061(0.0037)	0.0015	0.011(0.011)	0.0041(0.0032)	0.0057(0.0052)
Max 24-Hour Occurrence	0.0090	0.035	0.011	0.0035[7]	0.023[7]	0.0097[7]	0.010
Date of Occurrence	6/18/93	8/17/93	8/2/93	6/3/93	7/3/93	7/3/93	7/18/93 & 8/2/93
Min 24-Hour Occurrence	0.0027[9]	ND	0.0027	ND	0.0027	ND	0.0016
Date of Occurrence	5/20/93	5/20/93	5/20/93	7/3/93 & 7/18/93	5/20/93	6/3/93 & 8/2/93	5/4/93

Notes:

ND Non-Detect (ND) samples had a detection limit of 0.0005 ug/m^3 unless otherwise noted. For averaging purpose, one-half of the detection limit was used for Non-Detect (ND).
1 Quantified as Aroclor 1254 unless otherwise noted.
2 Results of the Method 608 analyses are presented without parentheses; results of the high resolution GC/MS analyses (where preformed) are presented in parentheses.
3 Sample detection limit raised to 0.005 ug/m^3 due to interference. Samples were submitted for high resolution GC/MS analysis.
4 A power failure occurred on 5/4/93 at Silver Lake Boulevard. Samples were collected 5/6 - 5/7/93.
5 A power failure occurred on 5/19/93 at BCC. There is no background sample for 5/19 - 5/20/93.
6 Quantified as Aroclor 1242.
7 Quantified as Aroclor 1248.
8 A power failure occurred at the Newell Street front sampler; however, a co-located sample was taken.
9 A non-detect was found on 5/4/93; however, the laboratory detection limit was raised to 2.0 ug/PUF due to matrix interferences. The detection limit for that samples was 0.0054 ug/m^3.

Reference:
Zorex, November 1993 - Table 4

TABLE 8-2

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

MCP SUPPLEMENTAL PHASE II INVESTIGATION/RCRA FACILITY
INVESTIGATION OF HOUSATONIC RIVER AND SILVER LAKE

24-HOUR LOW-VOLUME AMBIENT PCB CONCENTRATIONS[1] IN ug/m³
METHOD 608 (HIGH RESOLUTION)[2] - MAY THROUGH AUGUST 1993

Date	191 Newell Rear	191 Newell Rear Co-Located	Lyman	Silver Lake
May 4, 1993	0.029	0.034	0.057	0.073[3]
May 20, 1993	ND	ND	0.071[4]	0.072
June 3, 1993	ND[5]	ND	ND	0.073[6]
June 18, 1993	0.073[6]	0.087[6](0.025)	0.058[6](0.028)	0.14[6](0.11)
July 3, 1993	ND	ND	ND	ND
July 18, 1993	0.058	NA[7]	ND	0.15
August 2, 1993	0.14	0.13	0.10	0.35
August 17, 1993	0.092	0.10	0.071	0.25
Mean Concentration	0.055	0.056(0.048)	0.050(0.046)	0.14(0.14)
Max 24-Hour Occurrence Date of Occurrence	0.14 8/2/93	0.13 8/2/93	0.10 8/2/93	0.35 8/2/93
Min 24-Hour Occurrence Date of Occurrence[8]	ND —	ND —	ND —	ND 7/3/93

Notes:

ND Non-Detect (ND) samples had a detection limit (DL) of 0.029 ug/m³ unless otherwise noted.
1 Quantified as Aroclor 1254 unless otherwise noted.
2 Results of the Method 608 analyses are presented without parentheses; results of the high resolution GC/MS analyses (where performed) are presented in parentheses.
3 A power failure occurred on 5/4/93 at silver Lake Boulevard. Samples were collected on 5/6 - 5/7/93
4 Quantified as Aroclor 1260
5 Samples had a DL of 0.032 ug/m³.
6 Quantified as Aroclor 1248.
7 Samples invalidated due to sampling system problems.
8 '__' Indicates a Non-Detect (ND) was found on more than one date.

Reference:

Zorex, November 1993 - Table 5