

October 17, 2003

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

**Re: GE-Pittsfield/Housatonic River Site  
East Street Area 1-North (GEC130)  
Conceptual Removal Design/Removal Action Work Plan**

Dear Mr. Olson:

In accordance with GE's approved *Pre-Design Investigation Report for the East Street Area 1-North Removal Action* (April 2003) and *Proposal for Supplemental VOC Sampling* (July 7, 2003), enclosed is GE's *Conceptual Removal Design/Removal Action Work Plan for the East Street Area 1-North Removal Action*. This work plan summarizes the results obtained during the supplemental investigation for East Street Area 1-North and presents the Removal Design/Removal Action evaluations for this Removal Action Area.

Please call John Novotny or me if you have any questions about this report.

Sincerely,

Andrew T. Silfer, P.E.  
GE Project Coordinator

Enclosure

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*Conceptual RD/RA Work Plan for  
East Street Area 1-North*

**General Electric Company  
Pittsfield, Massachusetts**

**October 2003**

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# 1. Introduction

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## 1.1 General

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD requires (among other things) the performance of Removal Actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents present in soils, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts. These RAAs are part of the GE-Pittsfield/Housatonic River Site (the Site). For each Removal Action, the CD and accompanying *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD) establish Performance Standards that must be achieved, as well as specific work plans and other documents that must be prepared to support the response actions for each RAA. Related to soils, these work plans/documents typically include the following: Pre-Design Investigation Work Plan, Pre-Design Investigation Report, Conceptual Removal Design/Removal Action (RD/RA) Work Plan, and Final RD/RA Work Plan.

To date, GE has completed several evaluation and investigatory activities related to soils within the East Street Area 1-North RAA, and has submitted to EPA a *Pre-Design Investigation Work Plan for the East Street Area 1-North Removal Action* (PDI Work Plan) dated May 2002 and an *Addendum to Pre-Design Investigation Work Plan for the East Street Area 1-North Removal Action* (PDI Work Plan Addendum) dated September 2002 (collectively, the PDI Work Plans). Following EPA approval of the PDI Work Plans, GE performed soil investigations between January 2 and January 15, 2003 and provided the results of these activities in the *Pre-Design Investigation Report for East Street Area 1-North Removal Action* (Pre-Design Report) dated April 2003. In the Pre-Design Report, GE proposed -- based on the results of some preliminary RD/RA evaluations -- additional soil sampling to further assess the extent of lead detected in surface soil within one of the parcels within this RAA. In a letter dated June 20, 2003, EPA: 1) approved GE's proposal to collect additional samples, 2) required that GE include sample collection and analysis for antimony at each of the proposed additional samples, and 3) submit an evaluation concerning the need for additional pre-design sampling related to elevated volatile organic compound (VOC) detection limits for certain pre-design samples. Regarding the last of these requirements, in a letter dated July 7, 2003, GE proposed supplemental VOC soil sampling at certain locations to address the elevated analytical detection limits, and EPA approved GE's proposal in a letter dated July 16, 2003. These supplemental investigations were subsequently conducted in August 2003 and the results

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are reported in this document. With completion of these investigations, GE has obtained the data necessary to conduct RD/RA evaluations for East Street Area 1-North.

This Conceptual RD/RA Work Plan evaluates the need for and (if necessary) scope of response actions to achieve the soil-related Performance Standards set forth in the CD and SOW. Specifically, this document considers the results of the recent (as well as prior) soil investigations, as well as the type of properties located within East Street Area 1-North, to determine whether response actions are necessary to address PCBs and/or the other 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).

Groundwater at East Street Area 1-North is being addressed separately as part of GE's groundwater-related activities for the Plant Site 1 Groundwater Management Area (GMA 1), pursuant to the CD and the SOW. At the present time, GE has completed the first two years of a baseline monitoring program in accordance with GE's Baseline Monitoring Program Proposal for GMA 1, as conditionally approved by EPA, and is entering into an interim phase of baseline groundwater monitoring.

## **1.2 Description of East Street Area 1-North**

East Street Area 1-North occupies an area of approximately 5 acres and is located immediately south of the East Street Area 2-North RAA and east of the 20s Complex within the GE facility (Figure 1-1). This area is generally bounded by railway property and the associated right-of-way to the north, Merrill Road to the west, East Street to the south, and a non-GE-owned commercial area to the east. East Street Area 1-North is located outside of the 100-year floodplain of the Housatonic River.

As shown on Figure 1-2, there are eight separate parcels (based on City of Pittsfield tax maps), as well as certain adjacent City-owned road easements and/or rights-of-way, located within East Street Area 1-North. The separate parcels consist of the following:

- Parcel J10-8-1;
- Parcel J10-8-2;
- Parcel J10-8-3;
- Parcel J10-8-4;

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- Parcel J10-8-5;
  - Parcel J10-8-6;
  - Parcel K10-14-1; and
  - Parcel K11-1-15 (portion).

Pursuant to the CD and SOW, all of East Street Area 1-North is considered a “commercial/industrial” area. Of the parcels identified above, the first six are owned by GE and are considered for the purpose of RD/RA evaluations to be a single averaging area. The remaining two parcels consist of: (a) a property owned by another private party (Parcel K10-14-1); and (b) a narrow strip of land extending across the northern portion of this RAA, which comprises part of Parcel K11-1-15, owned by a railroad company, respectively (see Figure 1-2).

Occupying portions of Parcel K10-14-1 and Parcel J10-8-6 is an existing structure; the portion of the structure located on GE-owned Parcel J10-8-6 is referred to as Building 69 and is subject to future demolition by GE. The area of East Street Area 1-North to the west of this structure (owned by GE) is mostly unpaved, while the area to the east of the structure (non-GE-owned) is mostly paved, as shown on Figure 1-2.

### **1.3 Scope and Format of Conceptual RD/RA Work Plan**

The remainder of this Conceptual RD/RA Work Plan is presented in four sections. An overview of each section is presented below:

**Section 2 – Summary of Pre-Design Soil Investigation Activities.** This section describes the most recent soil investigation activities conducted by GE at East Street Area 1-North and also presents the complete soil data set obtained from the recent pre-design investigation, as well as other usable data collected by GE (prior to the pre-design efforts) and by EPA. This data set has been used to support RD/RA evaluations concerning the need for response actions to address PCBs and Appendix IX+3 constituents in soils.

**Section 3 – PCB Soil Evaluations.** This section provides an overview of the applicable PCB Performance Standards contained in the SOW and CD for commercial/industrial properties, and describes the procedures used to evaluate PCBs in soil. The results of the PCB evaluations for each area subject to evaluation within East Street Area 1-North are presented in this section. As described in this section, existing conditions throughout this RAA already meet the applicable PCB-related Performance Standards established in the CD

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and SOW for industrial/commercial properties, so that no soil remediation is necessary to address PCBs within East Street Area 1-North.

**Section 4 – Non-PCB Soil Evaluations.** This section provides an overview of the applicable Appendix IX+3 Performance Standards contained in the SOW and CD for commercial/industrial properties, and describes the procedures used to evaluate Appendix IX+3 constituents in soil. The results of the Appendix IX+3 evaluations for each area subject to evaluation within East Street Area 1-North are presented in this section. As described in this section, existing conditions at this RAA already meet the Appendix IX+3 Performance Standards established in the CD and SOW for commercial/industrial properties, so that no soil remediation is necessary to address Appendix IX+3 constituents within East Street Area 1-North.

**Section 5 – Summary of Future Activities.** This section describes the fact that, based on the above evaluations, no remediation actions are necessary at East Street Area 1-North to meet the applicable Performance Standards for commercial/industrial areas of the Site. Accordingly, as also discussed in this section, no Final RD/RA Work Plan for this RAA is necessary, and following EPA's approval of this Conceptual RD/RA Work Plan, GE will proceed with a pre-certification inspection and preparation of a Final Completion Report and request for a Certification of Completion in accordance with the CD.

In addition, the information presented in the above sections is supplemented by various tables, figures, and appendices, as described in subsequent sections of this Conceptual RD/RA Work Plan.



## **2. Summary of Pre-Design Soil Investigation Activities**

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### **2.1 General**

To support evaluations concerning the need for and scope of remedial actions to achieve the applicable soil-related Performance Standards, the CD and SOW include specific pre-design requirements concerning the characterization of soils within the RAA. The results of these pre-design activities, as well as other site-related information, serve as the basis for the subsequent technical RD/RA evaluations and submittals. This section provides a summary of the pre-design activities that have been performed by GE and others at East Street Area 1-North. These activities have primarily involved the performance of soil sampling and analyses in accordance with the investigation requirements contained in the CD and SOW; such activities have been previously summarized in documents provided to the EPA. In addition, GE has also conducted other pre-design activities to supplement the soil characterization program and to support the evaluations presented herein. A summary is provided below.

### **2.2 Pre-Design Soil Investigations**

The information available to support RD/RA evaluations are derived from several sources, including:

- Pre-design soil investigations conducted by GE in January 2003 and August 2003 pursuant to the PDI Work Plans and subsequent correspondence with EPA, which have produced the majority of the PCB and other Appendix IX+3 data used for the RD/RA evaluations;
- Results of EPA analyses of pre-design samples collected at the same time as GE's pre-design activities in January 2003, which data were provided to GE and (except for the sample results rejected in EPA's data validation process) have been considered in the RD/RA evaluations for this RAA; and
- Historical soil investigations conducted prior to January 2003, where the sampling results were determined to be usable for RD/RA evaluations, as previously reported in the PDI Work Plan.

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The soil data set available from the sources described above to support RD/RA evaluations is summarized below for each relevant group of constituents:

Analytical Parameter	GE Pre-Design Analyses	GE Historical Analyses	EPA Pre-Design and Historical Analyses	Total Analyses
PCBs	81	30	2	113
VOCs	28	4	2	34
SVOCs	26	4	3	33
PCDDs/PCDFs	26	4	0	30
Inorganics	26	4	3	33

The locations of the soil samples used in the RD/RA evaluations summarized in this report are shown on Figure 1-2. The analytical results from GE's pre-design investigations are presented in Table 2-1 for PCBs and Table 2-2 for other Appendix IX+3 constituents; the analytical results from EPA's sampling are presented in Table 2-3 for PCBs and Table 2-4 for other Appendix IX constituents; and the usable analytical results from prior (historical) investigations at this RAA are presented in Table 2-5 for PCBs and Table 2-6 for other Appendix IX+3 constituents.

### 2.3 Supplemental Soil Investigations

In the April 2003 Pre-Design Report, GE provided an evaluation of the sufficiency of the available data set to satisfy the pre-design investigation requirements contained in the CD and SOW, and thus to support RD/RA activities. While no specific, pre-design-related data needs were identified in that report, GE did include a proposal for additional sampling to further assess the extent of lead detected in surface soils within a portion of Parcel K10-14-1. This supplemental sampling was identified by GE based on preliminary RD/RA evaluation conducted at that time and specifically to delineate the extent of lead in this portion of the parcel. In a letter dated June 20, 2003, EPA provided conditional approval of GE's proposal to collect additional samples for lead, and required that GE also analyze the samples for antimony. In addition, that letter required GE to submit an evaluation concerning the need for additional pre-design sampling related to elevated VOC detection limits encountered at certain sampling locations. In response, and based on its evaluations, GE proposed to conduct supplemental VOC soil sampling in a letter to EPA dated July 7, 2003. EPA approved GE's proposal in a letter dated July 16, 2003.

The supplemental sampling activities discussed above were performed in August 2003 and consisted of the collection of three surface samples for lead and antimony analysis, and the collection of two samples from a

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previous sample location (from the 0- to 1-foot and 6- to 8-foot depth intervals) for VOC analysis. The data for the soil samples collected by GE as part of these supplemental investigation activities have been reviewed in accordance with the data validation protocols in GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP). The results of this review are summarized in the Data Validation Report provided in Appendix A. As described in that report, the supplemental sampling data collected by GE are within acceptable data validation parameters; 100% of these sampling results have been determined to be usable. This evaluation thus indicates that these data can be used in the evaluations presented in this Conceptual RD/RA Work Plan.

The data for lead and antimony collected as part of this supplemental investigation adequately delineate concentrations of these inorganic constituents. The data for the samples collected for VOC analyses indicate that only ethylbenzene, toluene, and xylenes (total) had detected concentrations. These data further demonstrate that the laboratory was able to achieve lower detection limits for the analyzed constituents than those achieved for the original samples at these locations. These supplemental sampling data have been included in the Appendix IX+3 evaluations presented in Section 4 of this Conceptual RD/RA Work Plan as follows: (a) For detected constituents, either the average of both samples (if the constituent was detected during both sampling events) or the value of the detected constituent (if the constituent was only detected during one of the sampling events); and (b) for non-detected constituents, half the value of the detection limit achieved during the supplemental sampling conducted in August 2003. Table 2-7 presents the results of supplemental soil samples collected in East Street Area 1-North during the month of August 2003.

## **2.4 Site Survey and Mapping**

At the time when the Pre-Design Report was submitted to EPA, the current mapping available for East Street Area 1-North was not sufficient to support the detailed remedial evaluations needed as part of the Conceptual RD/RA Work Plan. As a result, GE developed detailed site mapping to include the following information:

- existing buildings;
- paved and unpaved areas;
- surface elevations and topography;
- property boundaries and easements;
- certain utilities (e.g., manholes, catch basins);
- soil sample locations; and

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- other site features.

The site mapping resulting from this effort has been used to update the figures illustrating the soil sample locations and site features, and serves as the basis for the PCB and Appendix IX+3 evaluations presented in Sections 3 and 4 of this Conceptual RD/RA Work Plan.

## 3. Summary of PCB Soil Evaluations

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### 3.1 General

This section of the Conceptual RD/RA Work Plan presents the results of preliminary evaluations regarding PCBs in soils within East Street Area 1-North and, based on the applicable PCB Performance Standards established in the CD and SOW, an assessment regarding the need for response actions. Included in this section is an overview of the applicable PCB-related Performance Standards, an evaluation of the existing PCB soil data, and a summary of findings related to the need for response actions.

### 3.2 Overview of Applicable Performance Standards

The soil-related Performance Standards for the GE Plant Area, within which East Street Area 1-North is located, are set forth in Paragraph 25 of the CD and Section 2.2.2 of the SOW. Those that are applicable to East Street Area 1-North are summarized below.

In general, the PCB-related Performance Standards applicable to East Street Area 1-North are based on spatial average PCB soil concentrations. Attachment E to the SOW identifies the averaging areas within each RAA, the methods to be used to determine existing spatial average PCB concentrations, and the procedures to be used to assess whether the anticipated response actions will achieve the PCB Performance Standards. For PCBs, there are three averaging/evaluation areas at East Street Area 1-North – one consisting of the GE-owned portion of the RAA and the other two consisting of the non-GE-owned properties. (For purposes of this Conceptual RD/RA Work Plan, the above averaging/evaluation areas include the adjacent City-owned road easements/rights-of-way.)

For the GE-owned portion of East Street Area 1-North, GE is required to conduct the following PCB-related response actions:

- For the unpaved portion of this area, if the spatial average PCB concentration in the top foot exceeds 25 parts per million (ppm), GE shall either remove and replace soils or install a soil cover in accordance with the specifications for soil covers described in Attachment G of the SOW as necessary to achieve a spatial average PCB concentration of 25 ppm or less. In addition, since this entire area will constitute a single

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averaging area in excess of 1 acre in size, GE shall remove any soils containing PCB concentrations greater than a not-to-exceed (NTE) level of 125 ppm from the top foot in this unpaved portion. [Note: A portion of the GE-owned area is currently covered with either asphalt or concrete pavement; however, these pavements are generally degraded and for conservative purposes related to these evaluations, have been considered to be unpaved areas.]

- For the entire area – including both the unpaved portion and the grade-level slab that will remain following GE’s demolition of Building 69 (which will be considered a paved area) – if the spatial average PCB concentration in the top foot exceeds 25 ppm, GE shall recalculate the spatial average PCB concentration for the top foot after incorporating the anticipated actions (if any) described above for the unpaved portion (including the portion with degraded pavement described above that will be considered unpaved). If that recalculated spatial average PCB concentration still exceeds 25 ppm, GE shall maintain and enhance the existing concrete slab surface in those areas of the slab determined to cause the exceedance of the 25 ppm spatial average concentration for the top foot in the entire area, in accordance with the specifications described for pavement enhancement in Attachment G of the SOW.
- If the spatial average PCB concentration in the 1- to 6-foot depth increment in the entire area exceeds 200 ppm, GE shall undertake a combination of removal and replacement of soils in the unpaved portion and/or enhancement of the existing concrete slab surface in the paved area (in accordance with the specifications for pavement enhancement in Attachment G of the SOW) as necessary to ensure that the PCB concentrations causing the spatial average to exceed 200 ppm are removed or covered by enhanced pavement.
- If, after incorporating the anticipated performance of response actions in accordance with the foregoing Performance Standards, the spatial average PCB concentration for the 0- to 15-foot depth increment exceeds 100 ppm, GE shall install an engineered barrier either over the soil (in the unpaved portion) or over the concrete slab (in the Building 69 area) in accordance with the specifications for engineered barriers in Attachment G of the SOW.
- Where utilities potentially subject to emergency repair requirements are present and the spatial average PCB concentration for the soils in the utility corridor that may need to be removed during an emergency repair exceeds 200 ppm in the 1- to 6-foot depth increment, GE shall evaluate whether additional response actions are necessary for that corridor and submit that evaluation, and a proposal for such response actions if

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needed, to EPA. In addition, if a new subgrade utility is installed or an existing subgrade utility is repaired or replaced in the future, GE shall ensure that the spatial average PCB concentration of the backfill material does not exceed 25 ppm.

For the non-GE-owned properties within East Street Area 1-North (Parcels K10-14-1 and K11-1-15), GE is required to make “best efforts” (as defined in the CD) to obtain a Grant of Environmental Restriction and Easement (ERE). For properties where such an ERE cannot be obtained, GE must implement a Conditional Solution in accordance with the CD. As documented in a letter to EPA and MDEP dated August 15, 2003, the owner of Parcel K10-14-1 has declined to execute and record an ERE on that property, and EPA and GE have agreed that, for the narrow portion of Parcel K11-1-15 within East Street Area 1-North, if that portion does not meet residential use standards, GE would implement a Conditional Solution at that portion of the parcel. The applicable Performance Standards for a Conditional Solution for PCBs at these non-GE-owned properties are as follows:

- If the spatial average PCB concentration in the top foot (considering the paved and unpaved portions together) of this property exceeds 25 ppm, GE shall remove and replace soils as necessary to achieve that spatial average PCB concentration. In addition, GE shall remove any soils containing PCB concentrations greater than an NTE level of 125 ppm in the top foot of any unpaved portions of these parcels.
- If the spatial average PCB concentration in the 0- to 3-foot depth increment at this property (considering the paved and unpaved portions together) exceeds 25 ppm, GE shall remove and replace soils as necessary to achieve that spatial average PCB concentration.
- If the spatial average PCB concentration in the 1- to 6-foot depth increment at this property (considering the paved and unpaved portions together) exceeds 200 ppm, GE shall remove and replace soils as necessary to achieve that spatial average PCB concentration.
- If the remaining spatial average PCB concentration in the top 15 feet of soil exceeds 100 ppm (after incorporating the anticipated performance of any response actions for the top foot and 1- to 6-foot depth increment), GE shall install an engineered barrier in those areas determined to cause the exceedance of the 100 ppm spatial average concentration.

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- Where utilities potentially subject to emergency repair requirements are present and the spatial average PCB concentration in the soils adjacent to these utilities exceeds 200 ppm, GE shall evaluate whether additional response actions are necessary for that corridor and submit that evaluation, and a proposal for such response actions if needed, to EPA. In addition, if a new subgrade utility is installed or an existing subgrade utility is repaired or replaced in the future, GE shall ensure that the spatial average PCB concentration of the backfill material does not exceed 25 ppm.
  - GE must also meet the other conditions for a Conditional Solution specified in the CD.

### 3.3 Summary of Evaluation Procedures

The procedures used to calculate PCB spatial average concentrations are established in Technical Attachment E to the SOW (Protocols for PCB Spatial Averaging) and are summarized below, while the evaluation results specific to East Street Area 1-North are presented in Section 3.4. To perform the evaluations summarized in this section, GE has prepared several detailed maps and computer spreadsheets. This information is included in Appendix B.

For each area and depth subject to PCB spatial average calculations, a detailed site plan was first developed to illustrate the following:

- property/area boundaries;
- surface topography;
- soil sampling locations within and adjacent to area;
- presence of roadways, utilities, easements, etc.;
- presence of buildings, pavement, and other permanent structures; and
- other significant site features.

The next step in the evaluation process was the development of Thiessen polygon maps for each averaging area and depth interval. Thiessen polygon mapping involves the use of computer software to draw perpendicular bisector lines between adjacent sample locations to create two-dimensional, sample-specific polygon areas. Certain boundary conditions impact the generation of Thiessen polygons, such as the boundaries of the area subject to averaging, presence of paved and unpaved areas, easement boundaries, building footprints, property



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lines, etc. As appropriate, the computer-generated Thiessen polygons were modified to reflect actual site conditions, presence/absence of soil at a given depth, locations of property ownership lines, or other specific or unique site considerations. Once the Thiessen polygon mapping was complete, all of the soil areas and depths potentially subject to response actions were adequately characterized for use in subsequent evaluations. After generation of the Thiessen polygons, polygon identification numbers were assigned to each polygon and the surface area of each polygon was calculated.

The next step in the calculation of spatial average PCB concentrations was the development of computer spreadsheets to combine information obtained from the Thiessen polygon mapping (i.e., polygon ID and area for each polygon) with the analytical results of soil sampling to provide a three-dimensional characterization of the soils associated with each polygon. The volume of soil associated with each polygon was based on the surface area of the polygon multiplied by the corresponding depth of soil for which samples were collected. Using the information described above, a spatial average PCB concentration was derived by multiplying the volume of each polygon by its assigned PCB concentration, summing the results of this calculation for each polygon involved in the evaluation, and then dividing that sum by the cumulative soil volume associated with all of the polygons. This procedure yields a spatial average PCB concentration that incorporates both volume- and area-weighted considerations.

The spatial average PCB concentrations under existing conditions were compared to the applicable PCB Performance Standards established in the CD and SOW to determine whether response actions are necessary and, if so, the type of response action required (e.g., soil removal, installation of a surface cover, etc.), as described in the CD and SOW and summarized in Section 3.2.

### **3.4 Summary of PCB Evaluations for East Street Area 1-North**

Using the available PCB soil data from East Street Area 1-North and the detailed site mapping, the existing spatial average PCB concentrations have been calculated for each of the relevant areas (e.g., GE vs. non-GE-owned, paved vs. unpaved, etc.) and depth increments. In addition, the maximum concentration in the surface soil (i.e., top one foot) of unpaved areas was compared to the applicable NTE criterion for each averaging area. Finally, an evaluation has been conducted concerning the spatial average PCB concentration for subgrade utilities that may be subject to emergency repair activities in the future.

For each averaging area, the following evaluation materials have been prepared and are summarized in Appendix B:

- Site mapping identifying specific Thiessen polygons for several depth increments;
- Computer spreadsheets for several depth increments to incorporate the site plan information (i.e., Thiessen polygon size) and the corresponding PCB analytical data; and
- Calculations (summarized on the individual spreadsheets and then combined as appropriate) of the spatial average PCB concentrations for several depth increments.

From the various materials identified above and provided in Appendix B, the existing spatial average PCB concentration for each averaging area and applicable depth increment has been calculated. The following chart summarizes the information presented in the attachment.

Depth Increment	Spatial Average PCB Concentration (ppm)			
	Performance Standard	GE-Owned Parcels <sup>1</sup>	Parcel K10-14-1	Parcel K11-1-15
0 to 1 foot - Unpaved Areas	25	0.98	NA <sup>2</sup>	NA <sup>2</sup>
0 to 1 foot - Overall Area	25	0.86	0.35	0.66
0 to 3 feet	25	NA <sup>2</sup>	0.30	0.95
1 to 6 feet	200	1.54	0.22	1.16
0 to 15 feet	100	0.95	0.44	0.62

Notes:

1. The GE-owned Parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5 and J10-8-6.

2. NA = not applicable. As described in Section 3.2 and in accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for the 0- to 3-foot depth increment at GE-owned properties and there are no separate spatial average Performance Standards for the unpaved portion of the 0- to 1-foot depth increment at non-GE-owned properties.

Based on the information summarized above, it can be seen that the existing PCB spatial average concentrations are well below the corresponding Performance Standards. As such, no response actions are necessary to achieve these standards.

As previously indicated, it is also necessary to compare the maximum PCB concentration (discrete sample basis) for unpaved surface soils within each averaging area to the NTE concentration of 125 ppm (for commercial/industrial areas). The maximum PCB sample results for unpaved surface soils within the GE-

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owned parcels (2.2 ppm), Parcel K10-14-1 (1.8 ppm), and Parcel K11-1-15 (2.2 ppm) are all below the 125 ppm NTE concentration established in the SOW. Accordingly, no response actions are necessary within the uppermost 1 foot of unpaved soils to address elevated PCB levels.

Finally, where utilities potentially subject to emergency repair requirements are present and the spatial average PCB concentration for the soils in the corresponding utility corridor exceeds 200 ppm, GE is required to evaluate the need for additional response actions. As shown on Figure 2-1, several overlapping utility corridors are located within East Street Area 1-North. As shown on those figures, Parcels J10-8-6 and K10-14-1 have dedicated subsurface utility connections running from the main utility lines along East Street to the structures on those parcels. A table summarizing the PCB data collected from within these utility corridors is included in Appendix B. As summarized, the maximum PCB sample result for such soils within the utility corridors is 1.62 ppm; therefore, there can be no average concentration greater than 200 ppm for soils located within the utility corridors. Based on this assessment, it is not necessary to conduct a further evaluation of the need for separate response actions for these utility corridors.

In summary, as described above, the applicable Performance Standards for PCBs in soil at East Street Area 1-North are already achieved under existing site conditions. Specifically, at GE-owned properties, where EREs will be executed, the existing soil conditions already achieve the Performance Standards for industrial/commercial areas that will be subject to EREs. Similarly, for the non-GE-owned properties, at which Conditional Solutions will be implemented, existing soil conditions already achieve the applicable Performance Standards for such properties subject to Conditional Solutions. Indeed, the average PCB concentrations for each averaging area and depth are below the MCP Method 1 soil standard for PCBs (2 ppm). Hence, there is no need for any PCB-related remediation actions at this RAA.

## **4. Summary of Non-PCB Soil Evaluations**

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### **4.1 General**

The Performance Standards established in the CD and SOW for non-PCB Appendix IX+3 constituents in soil sets forth a prescribed process that includes and considers (as needed) several evaluation components. Similar to the PCB soil evaluations, the assessment of non-PCB constituents relies on the data set resulting from the pre-design (and earlier) soil investigations. It also incorporates the anticipated performance of response actions (if any) that have been identified for PCBs. Beyond these initial evaluation components, the activities involved in the assessment of non-PCB constituents vary depending on the specific analytes under consideration, the possible elimination of certain constituents from further evaluation based on numerical screening and/or comparison to background conditions, and the specific risk-based evaluation method.

This section of the Conceptual RD/RA Work Plan summarizes the Performance Standards and evaluation process established in the CD and SOW concerning non-PCB constituents in soil, and provides an evaluation of such constituents within East Street Area 1-North.

### **4.2 Overview of Applicable Performance Standards**

As indicated above, the Performance Standards for non-PCB Appendix IX+3 constituents in soil consist of several prescribed evaluation steps, as well as numerical standards that are to be applied within the evaluation process. The applicable Performance Standards for Appendix IX+3 constituents in soil at the GE Plant Area, including East Street Area 1-North, are set forth in Section 2.2 and Attachment F of the SOW. Those Performance Standards apply to the same averaging areas as the PCB Performance Standards, which, in this case, means that the GE-owned parcels and the two non-GE-owned parcels are considered as separate averaging areas. The Performance Standards applicable to these averaging areas are summarized below. Because no response actions are necessary to address PCBs in soil at these areas, the discussion below omits those components of the evaluation process related to the consideration of response actions for PCBs.

1. Any data qualifiers for the Appendix IX+3 soil data shall be reviewed to eliminate analytical results that indicate constituent occurrence as a result of laboratory interference or contamination (as indicated by the laboratory blank data).

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2. The remaining data shall then be screened by making the following comparisons for the sample results that were not eliminated in the prior steps:
- a. For constituents other than dioxins/furans, the maximum concentration of each detected constituent shall be compared to the EPA Region 9 Preliminary Remediation Goals (PRGs) (set forth in Exhibit F-1 to Attachment F of the SOW) using the industrial PRGs for commercial/industrial areas, such as East Street Area 1-North. For polycyclic aromatic hydrocarbons (PAHs) for which EPA Region 9 PRGs do not exist, the EPA Region 9 PRG for benzo(a)pyrene shall be used for carcinogenic PAHs and the Region 9 PRG for naphthalene shall be used for non-carcinogenic PAHs. For other constituents for which EPA Region 9 PRGs do not exist, GE may propose screening concentrations based on either the EPA Region 9 PRGs for chemicals with similar characteristics or on other appropriate risk-based calculations, and upon EPA approval, may use such screening concentrations in this step. (The EPA Region 9 PRGs, together with the PRGs specified above for carcinogenic and non-carcinogenic PAHs for which there are no EPA Region 9 PRGs and any additional screening concentrations proposed by GE and approved by EPA, are hereinafter referred to jointly as “Screening PRGs.”) Any constituent whose maximum concentration is at or below the applicable Screening PRGs will be eliminated from further consideration. Any constituents remaining after this step will be subject to further evaluation.
  - b. For each dioxin/furan sample, a total toxicity equivalency quotient (TEQ) concentration shall be calculated using the toxicity equivalency factors (TEFs) published by the World Health Organization (WHO) (Van den Berg et al., *Environ. Health Perspectives*, Vol. 106, No. 12, Dec. 1998). Then, for the relevant averaging area and depth increment, either the maximum TEQ concentration or the 95% upper confidence limit on the mean (95% Upper Concentration Limit [UCL]) of TEQ concentrations, whichever is lower, shall be compared to the applicable PRG established by EPA for dioxin TEQs. For commercial/industrial areas, these PRGs are 5 ppb in the top foot and 20 ppb in subsurface soil. If the maximum detected concentration or 95% UCL TEQ concentration is less than the applicable PRG, no further response actions will be necessary to address dioxins/furans. If the maximum detected concentration or 95% UCL TEQ concentration (whichever is used) exceeds the applicable PRG, GE shall develop response actions (as described below) for EPA review and approval to achieve the dioxin PRG(s).

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3. For each constituent (other than dioxins/furans) with a maximum concentration that exceeds its Screening PRGs, the data set for that constituent within the particular RAA shall be compared with the background data set for that constituent, using either an appropriate statistical method or summary statistics (as described in the MDEP's *Guidance for Disposal Site Risk Characterization*, 1995). At this time, given that there is no EPA-approved site-specific background data set, GE has not sought to eliminate any constituents based on a comparison to background concentrations.
  
  4. For each constituent (other than dioxins/furans) that is not eliminated in the prior steps, an average concentration for the soils within the RAA shall be calculated and compared to the applicable MCP Method 1 soil standard (S-1, S-2, or S-3). If there is no existing Method 1 soil standard for such a constituent, a Method 2 standard may be derived using the MCP procedures for doing so, and compared to the average concentration. In making these comparisons, separate average concentrations for surface soil and subsurface soil (using depth increments consistent with those evaluated for PCBs) shall be calculated and compared to applicable Method 1 (or 2) standards. Further, the determination of the applicable set of Method 1 (or 2) standards (i.e., S-1, S-2, or S-3) shall follow the MCP criteria for categorizing soil, and may take into account the EREs that will be imposed on the area in question. If all constituents evaluated in this step have average concentrations at or below the applicable Method 1 (or 2) standards, no further response actions will be necessary to address such constituents. If any such constituent(s) have average concentrations exceeding the applicable Method 1 (or 2) standards, then GE shall either:
    - a. Develop response actions sufficient to reduce the average concentrations of such constituent(s) to the Method 1 (or 2) standards (or to achieve the Screening PRGs or background levels); or
    - b. Conduct an area-specific risk evaluation, as described below.
  
  5. If an area-specific risk evaluation will be conducted, that evaluation shall be performed for all constituents that were retained for evaluation prior to Step 4. In such an evaluation, the cumulative Excess Lifetime Cancer Risk (ELCR) and non-cancer risk for such constituents (excluding PCBs and dioxins/furans) shall be calculated based on the average concentrations of such constituents and the same uses for the area and depth increment in question (e.g., commercial/industrial worker, utility worker) that were assumed in developing the applicable PCB Performance Standards for such area and depth increment. In such an evaluation, the same exposure assumptions used in Attachment A to EPA's Action Memorandum for Removal Actions Outside the River (Appendix D to the CD) to support the PCB Performance Standards for

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such area and depth increment shall be used, unless GE proposes and provides an adequate area-specific justification for alternate exposure assumptions for certain specified parameters and EPA approves such alternate assumptions. The toxicity values to be used for cancer and non-cancer risks in such an evaluation shall be derived from standard EPA sources, and other dose-response information, such as toxicity weighting factors and absorption factors for non-PCB constituents, shall be obtained from EPA and MDEP policies and guidance, except that GE may propose alternate dermal and oral absorption factors and use them if approved by EPA.

If the resulting cumulative ELCR for the area (excluding PCBs and dioxins/furans) does not exceed  $1 \times 10^{-5}$  and the non-cancer Hazard Index (excluding PCBs and dioxins/furans) does not exceed 1, no further response actions will be necessary to address these residual Appendix IX+3 constituents. Otherwise, further response actions will be necessary.

6. If the evaluations described above indicate the need for further response actions to address non-PCB constituents, GE shall develop, for EPA review and approval, specific Performance Standards for such response actions. Such Performance Standards shall be based on achieving the following:
  - a. For dioxin/furan TEQs, either maximum or 95% UCL TEQ concentrations that do not exceed the EPA dioxin PRGs; and
  - b. For other constituents, any combination of the following: (i) maximum concentrations of individual constituents that do not exceed the applicable Screening PRGs; (ii) concentrations of individual constituents that are consistent with background levels (using an appropriate statistical technique or summary statistics); or (iii) for the remaining constituents (if any), either (A) average concentrations that do not exceed the applicable MCP Method 1 (or 2) soil standards, or (B) cumulative risk levels that do not exceed (after rounding) an ELCR of  $1 \times 10^{-5}$  and a non-cancer Hazard Index of 1.

Where further response actions are necessary to achieve those Performance Standards, GE must propose to EPA the specific response actions to be taken, which are to be the same as the response actions established by the Performance Standards for PCBs at the area in question, subject to potential modification if necessary based on the nature and concentration of any volatile constituents detected.

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### 4.3 Summary of Preliminary Evaluations

This section applies the Performance Standards and evaluation process summarized in the preceding section to the Appendix IX+3 constituents present in soils within East Street Area 1-North. As previously demonstrated in Section 3, no response actions are necessary for PCBs within East Street Area 1-North, so the evaluation of Appendix IX+3 constituents considered the entire soil data set without alteration to reflect any PCB-based response actions. Appendix IX+3 herbicides and pesticides were not included in these evaluations since they were not considered to be constituents of concern within East Street Area 1-North and were therefore excluded from the pre-design investigations, with EPA approval. The evaluations summarized below follow the evaluation process outlined in the SOW (and summarized in Section 4.2) and utilize several tables to supplement the discussions presented herein.

#### 4.3.1 Review of Data Qualifiers

As previously mentioned, all of the soil data available to support RD/RA evaluations for East Street Area 1-North have been subject to a data quality assessment. For most of the pre-design sampling data, the results of this assessment were provided in the Pre-Design Report, while the remaining soil data were evaluated as described in Appendix A of this report. In several cases, the sampling results have been qualified to reflect the outcome of the quality assurance/quality control procedures performed. For the affected sample results, these qualifiers have been added to the Appendix IX+3 data summary tables provided in this Conceptual RD/RA Work Plan and are further described in the notes provided with those tables. However, no sample results were rejected due to laboratory interference or laboratory contamination.

#### 4.3.2 Comparison to “Screening PRGs”

Consistent with the protocols established in the SOW, the next step for Appendix IX+3 constituents other than PCBs and dioxins/furans consisted of comparison of the maximum concentrations of the detected constituents to the “Screening PRGs.” With the five exceptions discussed below, all of the detected Appendix IX+3 constituents in soil have corresponding EPA Region 9 industrial PRGs (or, for non-carcinogenic PAHs without such PRGs, surrogate PRGs equivalent to the PRG for naphthalene, as specified in the SOW). For these constituents, the available data set for each area was reviewed and the maximum detected concentration of each detected constituent within each area was compared to EPA Region 9 (or surrogate) PRGs for soil in industrial



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areas. For three of the detected constituents for which there are no such PRGs (3&4-methylphenol, total cyanide, and sulfide), the following surrogate PRGs were used for initial screening:

- 4-Methylphenol for 3&4-methylphenol;
- Hydrogen cyanide for total cyanide (per EPA's May 24, 2002 conditional approval letter for the Newell Street Area I Conceptual RD/RA Work Plan); and
- Carbon disulfide for sulfide (per EPA's March 19, 2002 conditional approval letter for the 20s, 30s, 40s Complexes Conceptual RD/RA Work Plan).

For the remaining two constituents without EPA Region 9 PRGs (2-hexanone and N-nitrosopiperidine), GE proposes to eliminate these constituents from further evaluation due to their low frequency of detection and their detected concentrations. 2-Hexanone was detected in one sample out of 32 (RAA6-E6) at a depth of 8 to 10 feet and at a concentration of 6.1 ppm. N-Nitrosopiperidine was detected in one sample out of 33 (RAA6-A11) at a depth of 1 to 3 feet and at a concentration of 3.6 ppm.

Tables 4-1 through 4-3 present the results of the comparisons of the maximum detected concentrations with the Screening PRGs for the three evaluation areas within East Street Area 1-North. Based on these comparisons, the following constituents were retained for further evaluation in subsequent steps:

- For the GE-owned parcels – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and arsenic;
- For Parcel K10-14-1 – benzo(a)pyrene, arsenic, antimony, and lead; and
- For Parcel K11-1-15 – benzo(a)pyrene, arsenic, antimony, and lead.

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### 4.3.3 Comparison to MCP Method 1 Soil Standards

Next, GE evaluated all retained constituents identified in Section 4.3.2 against MCP Method 1 soil standards. As part of this assessment, it is first necessary to determine the appropriate Method 1 soil category(ies) (i.e., S-1, S-2, or S-3), so that corresponding soil standards can be compared to the constituents of interest. In general, under the MCP, the determination of the appropriate Method 1 soil standard(s) considers the physical accessibility of the soils (relative to their depth and the presence of pavement and buildings), as well as the current use of the area by adults and children and the relative frequency and intensity of such use (see 310 CMR 40.0933).

Several general considerations were involved in the selection of appropriate soil categories, including the industrial/commercial nature of East Street Area 1-North, the relative inaccessibility to the soils (due to existing buildings and paved areas), the absence of any children or related types of use within the RAA, and the limited adult activity within these areas. Specifically, it was assumed that: (1) children would not be present in this RAA; (2) adults workers in commercial operations would have a high frequency of use (based on the potential for such individuals to be present for 8 hours or more on a continuing basis), but a low intensity of use, since such individuals would typically not be engaged in activities that would disturb the soils; and (3) if groundskeepers are present, they could have a high intensity of use, but would have a low frequency, since they would not be expected to engage in groundskeeping activities for full days on a continuing basis. Based on these considerations (and consistent with the soil categories used and approved by EPA for commercial/industrial properties at Newell Street Area I), the following MCP Method 1 soil categories have been selected: The category S-2 soil standards have been applied to soils present in the upper 3 feet of the area – i.e., the 0- to 1-foot depth increment and, for parcels subject to Conditional Solutions (i.e., no EREs), the 0- to 3-foot depth increment. In addition, the Method 1 S-2 soil standards have been applied to the 1- to 6-foot depth increment at the GE-owned commercial/industrial parcels where an EREs will be executed. The Method 1 S-3 soil standards were determined to apply to subsurface soils, including the 1- to 6-foot depth increment at properties that will not have EREs and the 0- to 15-foot depth increment at all areas.

It should also be noted that the numerical values of the Method 1 soil standards can vary depending on the applicable groundwater classification. For East Street Area 1-North, the applicable MCP groundwater categories are GW-2 and GW-3. However, for the constituents retained for evaluation at this RAA, the Method 1 S-2 and S-3 soil standards are the same regardless of which of these groundwater categories is used.

To allow the comparison to MCP Method 1 soil standards, arithmetic average concentrations have been calculated for each of the retained constituents, using the available data for specific depth intervals within each evaluation area. In calculating these arithmetic averages, all available sample results for a given evaluation area and depth increment were used, including both results with detectable concentrations and results with non-detect concentrations. Consistent with the protocols in Attachment F to the SOW, non-detect results were represented in the calculations as one-half the analytical detection limit. With regard to the additional VOC sampling performed as part of the supplemental soil investigations described in Section 2.3, the methods for inclusion of the VOC sample results in those areas subject to that additional sampling are described in Section 2.3.

Due to the limited amount of Appendix IX+3 sampling data for Parcel K11-1-15, GE used the following approach for comparison to MCP Method 1 soil standards: GE evaluated Parcel K11-1-15 using the data obtained from this parcel as well as the data collected along the property boundaries on the parcels adjacent to K11-1-15. That is, for the purposes of this evaluation, GE assumed that the Appendix IX+3 data collected from sample locations located on the adjacent parcels but near Parcel K11-1-15 was representative of soils within Parcel K11-1-15. For this approach, data obtained from the following sampling locations were projected onto Parcel K11-1-15: RAA6-A15, RAA6-A16, RAA6-A17, RAA6-B14, RAA6-B15, RAA6-C2, RAA6-C4, ES1-7, and ES1-9. Using these data, the evaluations described above were performed for the specific depth intervals within this evaluation area.

The arithmetic average concentrations in each averaging area were then compared to the applicable Method 1 S-2 or S-3 soil standards. The results of those comparisons are presented in the following tables:

Evaluation Area	Soil Depth Increment			
	0 to 1 foot	0 to 3 feet	1 to 6 feet	0 to 15 feet
GE-Owned Parcels <sup>1</sup>	Table 4-4	NA <sup>2</sup>	Table 4-5	Table 4-6
Parcel K10-14-1	Table 4-7	Table 4-8	Table 4-9	Table 4-10
Parcel K11-1-15	Table 4-11	Table 4-12	Table 4-13	Table 4-14

Notes:

1. The GE-owned Parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5 and J10-8-6.
2. NA = not applicable. As described in Section 3.2 and in accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for this depth increment.

Based on the information presented in Tables 4-4 through 4-14, there are several constituents within each evaluation area for which the arithmetic average concentration exceeds its corresponding Method 1 soil standard. These constituents are as follows:

Evaluation Area	Soil Depth Increment			
	0 to 1 foot	0 to 3 feet	1 to 6 feet	0 to 15 feet
GE-Owned Parcels <sup>1</sup>	No exceedances	NA <sup>2</sup>	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene	Benzo(a)pyrene
Parcel K10-14-1	Antimony Lead	Antimony Lead	No exceedances	Antimony
Parcel K11-1-15	Antimony Lead	Antimony Lead	No exceedances	Antimony

Notes:

1. The GE-owned Parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5 and J10-8-6.
2. NA = not applicable. As described in Section 3.2 and in accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for this depth increment.

No other constituents subject to evaluation exceeded their corresponding Method 1 standards.

#### 4.3.4 Dioxin/Furan Data Assessment

To assess the need for response actions for dioxins/furans present in soils within East Street Area 1-North, total TEQ concentrations were calculated for each dioxin/furan soil sample result using the TEFs published by the WHO. In making these calculations, the concentrations of the individual dioxin/furan compounds that were not detected in a given sample were represented as ½ the analytical detection limit for such compounds. Based on this available data set, the maximum TEQ concentration was determined for the appropriate depth increments for each evaluation area. The results of those calculations are presented in the following tables:

Evaluation Area	Soil Depth Increment		
	0 to 1 foot	0 to 3 feet	1 to 15-feet
GE-Owned Parcels <sup>1</sup>	Table 4-4	NA <sup>2</sup>	Table 4-6
Parcel K10-14-1	Tables 4-7	Tables 4-8	Tables 4-10
Parcel K11-1-15	Table 4-11	Table 4-12	Table 4-14

Notes:

1. The GE-owned Parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5 and J10-8-6.
2. NA = not applicable. As described in Section 3.2 and in accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for this depth increment.

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As shown in these tables, the maximum TEQ concentrations for each evaluation area (in each depth increment) are below the applicable PRGs established in the Performance Standards for commercial/industrial areas (i.e., 5 ppb in the top foot and 20 ppb in subsurface soils). As a result, there was no need to calculate the 95% UCLs for the TEQ concentrations. Based on this analysis, no response actions to address dioxins/furans are necessary.

#### **4.3.5 Area-Specific Risk Evaluations**

As described in Section 4.2 of this Conceptual RD/RA Work Plan, if the average concentration of a particular Appendix IX+3 constituent exceeds its corresponding MCP Method 1 soil standard, GE has two options for addressing the exceedance. Specifically, GE can either develop response actions that will be sufficient to reduce the average concentration of the subject exceedance to the Method 1 soil standards, or perform an area-specific risk evaluation to determine if unacceptable risks may exist and to develop appropriate response actions as needed.

Based on the Appendix IX+3 evaluations performed for East Street Area 1-North as summarized in Section 4.3.3 above, GE has elected to address the Appendix IX+3 exceedances of the Method 1 soil standards using an area-specific risk assessment conducted separately for each of the three evaluation areas within the RAA (i.e., the GE-owned property, Parcel K10-14-1, and the portion of Parcel K11-1-15 within this RAA).

In accordance with the protocols specified in the SOW, the risk evaluations have been performed for those constituents that were retained for comparison to MCP Method 1 standards and considered the same exposure scenarios used by EPA to develop the applicable PCB Performance Standards for these areas – i.e., the commercial/industrial groundskeeper scenario for the 0- to 1-foot depth increment (and, for parcels subject to Conditional Solutions, the 0- to 3-foot depth increment) and the utility worker scenario for the 1- to 6-foot depth increment. In addition, for chemical-specific exposure parameters (i.e., oral and dermal absorption factors), the evaluations used default values recommended by EPA or MDEP. The evaluations also used standard EPA cancer and non-cancer toxicity values – i.e., Cancer Slope Factors (CSFs) and non-cancer Reference Doses (RfDs) – as set forth on EPA’s Integrated Risk Information System (IRIS), together with EPA’s recommended relative potency factors (RPFs) for the carcinogenic polycyclic aromatic hydrocarbons (PAHs) that do not have specific CSFs.

These risk evaluations are described and the results are presented in Appendix C to this Conceptual RD/RA Work Plan, which was prepared by GE's risk assessment consultants at AMEC Earth and Environmental. As shown there, a cumulative ELCR was calculated for the carcinogenic constituents retained for each evaluation area (i.e., benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and arsenic, as applicable). In addition, a cumulative Hazard Index (HI) was calculated for each evaluation area for the retained constituents with non-cancer RfDs – arsenic and antimony. The resulting ELCR and HI for each evaluation area are well below the benchmarks set forth in the SOW of  $1 \times 10^{-5}$  for cancer risks and an HI of 1.0 for non-cancer impacts, as shown below:

Evaluation Area	Cumulative ELCR			Hazard Index		
	0 to 1 Foot (Groundskeeper)	0 to 3 Feet (Groundskeeper)	1 to 6 Feet (Utility Worker)	0 to 1 Foot (Groundskeeper)	0 to 3 Feet (Groundskeeper)	1 to 6 Feet (Utility Worker)
GE-Owned Parcels <sup>1</sup>	$1.2 \times 10^{-6}$	NA	$7.0 \times 10^{-7}$	0.0041	NA	0.00083
Parcel K10-14-1	$1.3 \times 10^{-6}$	$1.2 \times 10^{-6}$	$1.7 \times 10^{-7}$	0.17	0.15	0.0011
Parcel K11-1-15	$1.6 \times 10^{-6}$	$1.4 \times 10^{-6}$	$2.8 \times 10^{-7}$	0.25	0.18	0.0051

Notes:

1. The GE-owned Parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5 and J10-8-6.
2. NA = not applicable. As described in Section 3.2 and in accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for this depth increment.

For evaluation areas where lead was retained (Parcels K10-14-1 and K11-1-15), a different procedure had to be used since there are no EPA-prescribed toxicity values for lead. In accordance with EPA guidance, lead was evaluated through the use of EPA's conservative Adult Lead Methodology (ALM) model for the groundskeeper scenario at commercial/industrial parcels. This model was used to back-calculate a risk-based concentration (RBC) for lead in soil for use in the adult groundskeeper scenario. That RBC is 2,008 ppm. Since highly intermittent exposures are not well represented by the ALM model, that model could not be applied to back-calculate an RBC for the utility worker scenario applicable to the 1- to 6-foot depth increment at commercial/industrial properties. Instead, based on agreement between EPA and GE, the average lead concentration for that depth interval at such properties was evaluated by comparison to a default level equivalent to the MCP UCL for lead of 6,000 ppm. These procedures are consistent with those presented for commercial/industrial properties in the EPA-approved Conceptual RD/RA Work Plan Addendum for Newell Street Area I, dated April 17, 2003.

Review of the average lead concentrations for the relevant depth increments at Parcels K10-14-1 and K11-1-15 (as set forth in Tables 4-7, 4-8, 4-9, 4-11, 4-12, and 4-13) indicates that, for both parcels, the average lead concentrations for the 0- to 1-foot and 0- to 3-foot depth increments are well below the RBC of 2,008 ppm and that the average lead concentrations for the 1- to 6-foot depth increment are far below the UCL of 6,000 ppm.

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Finally, it should be noted that EPA's PCB-related risk evaluations presented in Attachment A to Appendix D to the CD do not include exposure scenarios or calculations for the 0- to 15-foot depth increment. Accordingly, there is no applicable risk evaluation scenario for that depth increment. Instead, since the applicable PCB Performance Standard for that depth increment (100 ppm) is the MCP UCL for PCBs in soil, the average concentration of each of the retained non-PCB constituents for the 0- to 15-foot depth increment at each evaluation area has been compared to the UCL for such constituent. This approach is consistent with April 2003 Newell Street Area I Conceptual RD/RA Work Plan Addendum approved by EPA. These comparisons are shown in Tables 4-15 through 4-17. As indicated in these tables, all average concentrations of the retained constituents for the 0- to 15-foot depth increment at these evaluation areas are far below the applicable UCLs.

In summary, based on the results of the risk evaluations described above, existing concentrations of the non-PCB Appendix IX+3 constituents in soil at East Street Area 1-North already satisfy the applicable Performance Standards both at the GE-owned parcels (which will be subject to EREs) and at the non-GE-owned parcels (which will be subject to Conditional Solutions). As a result, no remediation actions are necessary to address the non-PCB Appendix IX+3 constituents within East Street Area 1-North.

## ***5. Summary of Future Activities***

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Based on the results of the PCB and Appendix IX+3 soil evaluations presented in this Conceptual RD/RA Work Plan, existing soil conditions both at the GE-owned parcels and at the non-GE-owned parcels at East Street Area 1-North already meet the applicable Performance Standards for commercial/industrial areas. As a result, no further response actions are necessary for soils in East Street Area 1-North. Therefore, there is no need for a Final RD/RA Work Plan for this RAA. Rather, following EPA approval of this Conceptual RD/RA Work Plan and assuming that GE and EPA concur that no further response actions are necessary, GE will proceed to schedule a pre-certification inspection under Paragraph 88 of the CD and will commence preparation of a Final Completion Report and request for a Certification of Completion for the East Street Area 1-North Removal Action in accordance with the CD. In addition, GE will proceed with preparation of EREs for the GE-owned parcels at this RAA and with the non-remediation steps necessary to implement Conditional Solutions at the non-GE-owned parcels in accordance with the CD.



# *Tables*

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**TABLE 2-1  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR PCBs**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA6-A11	0-1	1/8/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	0.41	0.36	0.77
	1-3	1/8/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	0.12	0.12	0.12
	3-6	1/8/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	6-15	1/8/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA6-A13	0-1	1/8/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.048	ND(0.036)	0.048
	1-3	1/8/03	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	0.60	0.43	0.43	1.03
	3-6	1/8/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
	6-15	1/8/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA6-A14	0-1	1/2/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.021 J	ND(0.036)	0.021 J
RAA6-A15	0-1	1/8/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.051	0.051	0.102
	1-3	1/8/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.13	0.13	0.13
	3-6	1/8/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	6-15	1/8/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
RAA6-A16	0-1	1/2/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.14	0.11	0.25
RAA6-A17	0-1	1/8/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.018 J	0.031 J	0.049 J
	1-3	1/8/03	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.022 J	0.022 J
	3-6	1/8/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	6-15	1/8/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
RAA6-B7	0-1	1/10/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	0.080	0.057	0.137
	1-6	1/10/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	6-15	1/10/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
RAA6-B14	0-1	1/3/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.064	0.064	0.128
RAA6-B15	0-1	1/7/03	ND(0.039) J	ND(0.039) J	ND(0.039) J	ND(0.039) J	ND(0.039) J	0.14 J	0.069 J	0.209 J
RAA6-B16	0-1	1/2/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.070	0.062	0.132
RAA6-B17	0-1	1/3/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.12	0.14	0.26
RAA6-B18	0-1	1/9/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.44	0.25	0.69
RAA6-C2	0-1	1/9/03	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	2.0	2.0
	1-6	1/9/03	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.19)	2.7	2.7
	6-15	1/9/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
RAA6-C3	6-15	1/15/03	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	0.64	0.64	0.64
RAA6-C4	0-1	1/10/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.70	0.70
	1-6	1/10/03	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]	ND(0.20) [ND(0.20)]	2.8 [3.6]	2.8 [3.6]
	6-15	1/10/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	1.3	1.3
RAA6-C5	0-1	1/9/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.49	0.49
	1-6	1/9/03	ND(0.19) [ND(0.038)]	ND(0.19) [ND(0.038)]	ND(0.19) [ND(0.038)]	ND(0.19) [ND(0.038)]	ND(0.19) [ND(0.038)]	ND(0.19) [ND(0.038)]	2.1 [1.7]	2.1 [1.7]
	6-15	1/9/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	0.59	0.59
RAA6-C6	0-1	1/10/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	1-6	1/10/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.35	0.35
	6-15	1/10/03	ND(0.040) [ND(0.039)]	ND(0.040) [ND(0.039)]	ND(0.040) [ND(0.039)]	ND(0.040) [ND(0.039)]	ND(0.040) [ND(0.039)]	ND(0.040) [0.084]	0.083 [0.15]	0.083 [0.234]
RAA6-C14	0-1	1/3/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.12	0.052	0.172
RAA6-C15	0-1	1/7/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.060	ND(0.037)	0.060
	1-3	1/7/03	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]	ND(0.040) J [ND(0.040) J]
	3-6	1/7/03	ND(0.037) J	ND(0.037) J	ND(0.037) J	ND(0.037) J	ND(0.037) J	ND(0.037) J	ND(0.037) J	ND(0.037) J
	6-15	1/7/03	ND(0.040) J	ND(0.040) J	ND(0.040) J	ND(0.040) J	ND(0.040) J	ND(0.040) J	ND(0.040) J	ND(0.040) J
RAA6-C16	0-1	1/2/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.080	0.12	0.20
RAA6-C17	0-1	1/2/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.067	0.11	0.177
	1-3	1/7/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.14	0.10	0.24
	3-6	1/7/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.22	ND(0.037)	0.22
	6-12	1/7/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.078	ND(0.037)	0.078

**TABLE 2-1  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR PCBs**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA6-C18	0-1	1/9/03	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	0.34	0.34
RAA6-D7	0-1	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.84	0.78	1.62
	1-3	1/13/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.13	0.11	0.24
	3-6	1/13/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.32	0.37	0.69
	6-15	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.38	0.38	0.38
RAA6-D8	0-1	1/9/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.55	0.62	1.17
RAA6-D9	0-1	1/9/03	ND(0.036) J	ND(0.036) J	ND(0.036) J	ND(0.036) J	ND(0.036) J	0.38 J	0.72 J	1.1 J
RAA6-D10	0-1	1/13/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.052	0.061	0.113
	1-3	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	3-6	1/13/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	0.86	0.86
	6-15	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.83 J	0.83 J
RAA6-D11	0-1	1/9/03	ND(0.039) J	ND(0.039) J	ND(0.039) J	ND(0.039) J	ND(0.039) J	ND(0.039) J	0.38 J	0.38 J
RAA6-D12	0-1	1/9/03	ND(0.041) J	ND(0.041) J	ND(0.041) J	ND(0.041) J	ND(0.041) J	ND(0.041) J	0.33 J	0.33 J
RAA6-D13	0-1	1/9/03	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	0.14 J	0.14 J
RAA6-D14	0-1	1/7/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.039	ND(0.036)	0.039
RAA6-D16	0-1	1/9/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.23	0.49	0.72
RAA6-D17	0-1	1/7/03	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.24	0.24
RAA6-D18	0-1	1/9/03	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	0.52	0.52
RAA6-E1	6-15	1/9/03	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	ND(0.038) J	0.14 J	0.14 J
RAA6-E2	0-1	1/15/03	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	0.14	0.14
	1-6	1/15/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.065	ND(0.039)	0.065
	6-15	1/15/03	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.039	0.039
RAA6-E3	0-1	1/14/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.15	0.39	0.54
	1-6	1/14/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.18	0.53	0.71
	6-15	1/14/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.19	0.47	0.66
RAA6-E4	6-15	1/15/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.36	0.57	0.93
RAA6-E5	0-1	1/14/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.24	0.59	0.83
	1-6	1/14/03	ND(0.039) [ND(0.038)]	ND(0.039) [ND(0.038)]	ND(0.039) [ND(0.038)]	ND(0.039) [ND(0.038)]	ND(0.039) [ND(0.038)]	ND(0.039) [0.38]	1.3 [0.92]	1.3 [1.3]
	6-15	1/14/03	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	1.6	1.6
RAA6-E6	0-1	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.44	0.94	1.38
	1-6	1/13/03	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.20	0.47	0.67
	6-15	1/13/03	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	0.17	0.17

**Notes:**

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 2002).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. Field duplicate sample results are presented in brackets.

**Data Qualifiers:**

**Organics**

J - Indicates that the associated numerical value is an estimated concentration.

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A11 0-1 01/08/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-5 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A16 0-1 01/02/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,1,1-Trichloroethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,1,2,2-Tetrachloroethane	ND(0.0060) J	R	ND(0.0057) J	NA	ND(0.0057) J
1,1,2-Trichloroethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,1-Dichloroethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,1-Dichloroethene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,2,3-Trichloropropane	ND(0.0060) J	R	ND(0.0057) J	NA	ND(0.0057) J
1,2-Dibromo-3-chloropropane	ND(0.0060) J	R	ND(0.0057) J	NA	ND(0.0057) J
1,2-Dibromoethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,2-Dichloroethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,2-Dichloropropane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
1,4-Dioxane	ND(0.12) J	ND(0.12) J	ND(0.11) J	NA	ND(0.11) J
2-Butanone	ND(0.012) J	ND(0.012) J	ND(0.011) J	NA	ND(0.011) J
2-Chloro-1,3-butadiene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
2-Chloroethylvinylether	ND(0.0060) J	ND(0.0059) J	ND(0.0057) J	NA	ND(0.0057)
2-Hexanone	ND(0.012) J	ND(0.012) J	ND(0.011) J	NA	ND(0.011)
3-Chloropropene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
4-Methyl-2-pentanone	ND(0.012) J	ND(0.012) J	ND(0.011) J	NA	ND(0.011)
Acetone	ND(0.024) J	ND(0.024) J	ND(0.023) J	NA	ND(0.023) J
Acetonitrile	ND(0.12) J	ND(0.12) J	ND(0.11) J	NA	ND(0.11) J
Acrolein	ND(0.12) J	ND(0.12) J	ND(0.11) J	NA	ND(0.11) J
Acrylonitrile	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Benzene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Bromodichloromethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Bromoform	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Bromomethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057) J
Carbon Disulfide	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Carbon Tetrachloride	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Chlorobenzene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Chloroethane	ND(0.0060) J	ND(0.0059) J	ND(0.0057) J	NA	ND(0.0057) J
Chloroform	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Chloromethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
cis-1,3-Dichloropropene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Dibromochloromethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Dibromomethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Dichlorodifluoromethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Ethyl Methacrylate	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Ethylbenzene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Iodomethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Isobutanol	ND(0.12) J	ND(0.12) J	ND(0.11) J	NA	ND(0.11) J
Methacrylonitrile	ND(0.0060) J	ND(0.0059) J	ND(0.0057) J	NA	ND(0.0057) J
Methyl Methacrylate	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Methylene Chloride	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Propionitrile	ND(0.012) J	ND(0.012) J	ND(0.011) J	NA	ND(0.011) J
Styrene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Tetrachloroethene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Toluene	0.0058 J	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
trans-1,2-Dichloroethene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
trans-1,3-Dichloropropene	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
trans-1,4-Dichloro-2-butene	ND(0.0060) J	R	ND(0.0057) J	NA	ND(0.0057) J
Trichloroethene	0.0080	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Trichlorofluoromethane	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Vinyl Acetate	ND(0.0060) J	ND(0.0059) J	ND(0.0057) J	NA	ND(0.0057) J
Vinyl Chloride	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)
Xylenes (total)	ND(0.0060)	ND(0.0059) J	ND(0.0057)	NA	ND(0.0057)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A11 0-1 01/08/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-5 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A16 0-1 01/02/03
<b>Semivolatle Organics</b>						
1,2,4,5-Tetrachlorobenzene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,2,4-Trichlorobenzene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,2-Dichlorobenzene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,2-Diphenylhydrazine		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,3,5-Trinitrobenzene		ND(0.40) J	ND(0.40) J	NA	ND(0.38) J	ND(0.42)
1,3-Dichlorobenzene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,3-Dinitrobenzene		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
1,4-Dichlorobenzene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
1,4-Naphthoquinone		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
1-Naphthylamine		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
2,3,4,6-Tetrachlorophenol		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
2,4,5-Trichlorophenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2,4,6-Trichlorophenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2,4-Dichlorophenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2,4-Dimethylphenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2,4-Dinitrophenol		ND(2.0) J	ND(2.0) J	NA	ND(1.9) J	ND(2.1) J
2,4-Dinitrotoluene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42) J
2,6-Dichlorophenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2,6-Dinitrotoluene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
2-Acetylaminofluorene		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
2-Chloronaphthalene		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
2-Chlorophenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
2-Methylnaphthalene		2.2	1.3 J	NA	ND(0.38)	ND(0.42)
2-Methylphenol		0.16 J	ND(0.40)	NA	ND(0.38)	ND(0.42)
2-Naphthylamine		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
2-Nitroaniline		ND(2.0)	ND(2.0) J	NA	ND(1.9)	ND(2.1) J
2-Nitrophenol		ND(0.80)	ND(0.80)	NA	ND(0.76)	ND(0.76)
2-Picoline		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
3&4-Methylphenol		0.56 J	ND(0.80)	NA	ND(0.76)	ND(0.76)
3,3'-Dichlorobenzidine		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.83)
3,3'-Dimethylbenzidine		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
3-Methylcholanthrene		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
3-Nitroaniline		ND(2.0)	ND(2.0) J	NA	ND(1.9)	ND(2.1) J
4,6-Dinitro-2-methylphenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
4-Aminobiphenyl		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
4-Bromophenyl-phenylether		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
4-Chloro-3-Methylphenol		ND(0.40)	ND(0.40)	NA	ND(0.38)	ND(0.42)
4-Chloroaniline		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
4-Chlorobenzilate		ND(0.80)	ND(0.80)	NA	ND(0.76)	ND(0.76)
4-Chlorophenyl-phenylether		ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
4-Nitroaniline		ND(2.0)	ND(2.0) J	NA	ND(1.9)	ND(1.9)
4-Nitrophenol		ND(2.0)	ND(2.0)	NA	ND(1.9)	ND(2.1) J
4-Nitroquinoline-1-oxide		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
4-Phenylenediamine		ND(0.80) J	ND(0.80) J	NA	ND(0.76) J	ND(0.76) J
5-Nitro-o-toluidine		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
7,12-Dimethylbenz(a)anthracene		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
a,a'-Dimethylphenethylamine		ND(0.80)	ND(0.80)	NA	ND(0.76)	ND(0.76)
Acenaphthene		1.2	0.42 J	NA	ND(0.38)	ND(0.42)
Acenaphthylene		1.1	0.29 J	NA	ND(0.38)	ND(0.42)
Acetophenone		0.19 J	0.15 J	NA	ND(0.38)	ND(0.42)
Aniline		0.11 J	ND(0.40) J	NA	ND(0.38)	ND(0.42) J
Anthracene		1.0	0.21 J	NA	ND(0.38)	0.16 J
Aramite		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
Benzidine		ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.83)
Benzo(a)anthracene		3.3	0.72 J	NA	ND(0.38)	0.50
Benzo(a)pyrene		1.6	0.22 J	NA	ND(0.38)	0.50
Benzo(b)fluoranthene		3.5	0.86 J	NA	ND(0.38)	0.71

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A11 0-1 01/08/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-5 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A16 0-1 01/02/03
<b>Semivolatle Organics (continued)</b>					
Benzo(g,h,i)perylene	1.8	0.40 J	NA	ND(0.38)	0.33 J
Benzo(k)fluoranthene	1.4	ND(0.40) J	NA	ND(0.38)	0.26 J
Benzyl Alcohol	ND(0.80)	ND(0.80)	NA	ND(0.76)	ND(0.83)
bis(2-Chloroethoxy)methane	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
bis(2-Chloroethyl)ether	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
bis(2-Chloroisopropyl)ether	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
bis(2-Ethylhexyl)phthalate	ND(0.39)	ND(0.39) J	NA	ND(0.38)	ND(0.37)
Butylbenzylphthalate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Chrysene	3.8	0.77 J	NA	ND(0.38)	0.50
Diallate	ND(0.80)	ND(0.40) J	NA	ND(0.76)	ND(0.76)
Dibenzo(a,h)anthracene	0.36 J	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Dibenzofuran	1.4	ND(0.80) J	NA	ND(0.38)	ND(0.42)
Diethylphthalate	ND(0.40)	0.088 J	NA	ND(0.38)	ND(0.42)
Dimethylphthalate	ND(0.40)	1.0 J	NA	ND(0.38)	ND(0.42)
Di-n-Butylphthalate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Di-n-Octylphthalate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Diphenylamine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Ethyl Methanesulfonate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Fluoranthene	10	3.4 J	NA	ND(0.38)	1.0
Fluorene	0.69	0.24 J	NA	ND(0.38)	ND(0.42)
Hexachlorobenzene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Hexachlorobutadiene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Hexachlorocyclopentadiene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42) J
Hexachloroethane	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Hexachlorophene	ND(0.80) J	ND(0.80) J	NA	ND(0.76) J	ND(0.83) J
Hexachloropropene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Indeno(1,2,3-cd)pyrene	1.5	0.34 J	NA	ND(0.38)	0.29 J
Isodrin	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Isophorone	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Isosafrole	ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
Methapyrilene	ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
Methyl Methanesulfonate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Naphthalene	5.4	ND(0.80) J	NA	ND(0.38)	ND(0.42)
Nitrobenzene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
N-Nitrosodiethylamine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
N-Nitrosodimethylamine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
N-Nitroso-di-n-butylamine	ND(0.80)	ND(0.40) J	NA	ND(0.76)	ND(0.76)
N-Nitroso-di-n-propylamine	ND(0.40)	ND(0.80) J	NA	ND(0.38)	ND(0.42)
N-Nitrosodiphenylamine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
N-Nitrosomethylethylamine	ND(0.80)	ND(0.40) J	NA	ND(0.76)	ND(0.76)
N-Nitrosomorpholine	ND(0.40)	ND(0.80) J	NA	ND(0.38)	ND(0.42)
N-Nitrosopiperidine	ND(0.40)	3.6 J	NA	ND(0.38)	ND(0.42)
N-Nitrosopyrrolidine	ND(0.80)	ND(0.40) J	NA	ND(0.76)	ND(0.76)
o,o,o-Triethylphosphorothioate	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
o-Toluidine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
p-Dimethylaminoazobenzene	ND(0.80)	ND(0.80)	NA	ND(0.76)	ND(0.76)
Pentachlorobenzene	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Pentachloroethane	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Pentachloronitrobenzene	ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
Pentachlorophenol	ND(2.0)	ND(2.0)	NA	ND(1.9)	ND(2.1)
Phenacetin	ND(0.80)	ND(0.80) J	NA	ND(0.76)	ND(0.76)
Phenanthrene	5.7	2.5 J	NA	ND(0.38)	0.69
Phenol	0.61	0.25 J	NA	ND(0.38)	ND(0.42)
Pronamide	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Pyrene	8.7	2.4 J	NA	ND(0.38)	0.96
Pyridine	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Safrole	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)
Thionazin	ND(0.40)	ND(0.40) J	NA	ND(0.38)	ND(0.42)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A11 0-1 01/08/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-5 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A16 0-1 01/02/03
<b>Furans</b>						
2,3,7,8-TCDF		0.000019 Y	0.000023 Y	NA	0.00000020 J	0.000012 Y
TCDFs (total)		0.00014	0.00015	NA	0.00000020	0.00016
1,2,3,7,8-PeCDF		0.000011 J	0.0000076 J	NA	0.00000027 J	0.0000060 J
2,3,4,7,8-PeCDF		0.000016 J	0.000013 J	NA	ND(0.00000030)	0.000032
PeCDFs (total)		0.00018 Q	0.00015 Q	NA	ND(0.00000081)	0.00036 Q
1,2,3,4,7,8-HxCDF		0.000010 J	0.0000084 J	NA	ND(0.00000024)	0.0000094 J
1,2,3,6,7,8-HxCDF		0.0000084 J	0.0000071 J	NA	ND(0.00000039)	0.000010 J
1,2,3,7,8,9-HxCDF		0.0000021 J	0.0000013 J	NA	ND(0.00000018)	0.0000029 J
2,3,4,6,7,8-HxCDF		0.000015 J	0.000011 J	NA	ND(0.00000021)	0.000021 J
HxCDFs (total)		0.00022 Q	0.00015 Q	NA	ND(0.00000073)	0.00027
1,2,3,4,6,7,8-HpCDF		0.000050	0.000029	NA	ND(0.00000028)	0.000021 J
1,2,3,4,7,8,9-HpCDF		0.0000045 J	0.0000029 J	NA	ND(0.00000054)	0.0000028 J
HpCDFs (total)		0.00014	0.000073	NA	ND(0.00000028)	0.000043
OCDF		0.00014	0.000044 J	NA	ND(0.0000011)	0.000010 J
<b>Dioxins</b>						
2,3,7,8-TCDD		ND(0.00000021)	0.0000033 J	NA	ND(0.00000022)	ND(0.0000011) X
TCDDs (total)		0.0000014	0.000021	NA	ND(0.00000062)	0.00000096
1,2,3,7,8-PeCDD		0.0000027 J	0.0000056 J	NA	0.00000019 J	0.0000027 J
PeCDDs (total)		0.0000062 Q	0.00012 Q	NA	0.00000019	0.0000072 Q
1,2,3,4,7,8-HxCDD		ND(0.0000019)	ND(0.0000021)	NA	ND(0.00000054)	ND(0.0000024)
1,2,3,6,7,8-HxCDD		0.0000075 J	0.0000068 J	NA	ND(0.00000054)	ND(0.0000031) X
1,2,3,7,8,9-HxCDD		0.0000049 J	0.0000038 J	NA	ND(0.00000054)	0.0000025 J
HxCDDs (total)		0.000054	0.00018 Q	NA	ND(0.00000054)	0.000013
1,2,3,4,6,7,8-HpCDD		0.00018	0.00011	NA	ND(0.00000089)	0.000016 J
HpCDDs (total)		0.00034	0.00022	NA	ND(0.0000014)	0.000031
OCDD		0.0017	0.0011	NA	ND(0.0000033)	0.000059
Total TEQs (WHO TEFs)		0.000022	0.000024	NA	0.00000055	0.000026
<b>Inorganics</b>						
Antimony		3.80 J	100	NA	1.60 J	1600
Arsenic		9.30	13.0	NA	5.80	19.0
Barium		38.0	61.0	NA	26.0	77.0
Beryllium		0.370 B	0.340 B	NA	0.300 B	0.200 B
Cadmium		0.860	0.750	NA	0.400 B	1.00
Chromium		19.0	8.40	NA	7.60	15.0
Cobalt		5.80	5.80	NA	8.40	8.10
Copper		120	160	NA	15.0	4100
Cyanide		0.270	0.340	NA	ND(0.230)	ND(0.570)
Lead		120	470	NA	13.0	3200
Mercury		0.0980 B	0.140	NA	0.0530 B	0.820
Nickel		11.0	10.0	NA	13.0	34.0
Selenium		0.980 B	1.30	NA	0.800 B	1.20
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00)	ND(1.00)
Sulfide		53.0	74.0	NA	13.0	54.0
Thallium		ND(1.20) J	ND(1.20) J	NA	ND(1.10) J	ND(1.10)
Tin		ND(10.0)	320	NA	ND(10.0)	6600
Vanadium		10.0	12.0	NA	9.00	8.80
Zinc		150	130	NA	56.0	160

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A17 1-3 01/08/03	RAA6-B14 0-1 01/03/03	RAA6-B15 6-8 01/07/03
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,1,1-Trichloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,1,2,2-Tetrachloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,1,2-Trichloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,1-Dichloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,1-Dichloroethene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,2,3-Trichloropropane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,2-Dibromo-3-chloropropane		ND(0.0053) J	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,2-Dibromoethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,2-Dichloroethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,2-Dichloropropane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
1,4-Dioxane		ND(0.10) J	ND(0.11) J	ND(0.12) J [ND(0.12) J]
2-Butanone		ND(0.010) J	ND(0.011) J	ND(0.012) J [ND(0.012) J]
2-Chloro-1,3-butadiene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
2-Chloroethylvinylether		ND(0.0053) J	ND(0.0055) J	ND(0.0059) J [ND(0.0060) J]
2-Hexanone		ND(0.010) J	ND(0.011) J	ND(0.012) J [ND(0.012) J]
3-Chloropropene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
4-Methyl-2-pentanone		ND(0.010) J	ND(0.011) J	ND(0.012) J [ND(0.012) J]
Acetone		ND(0.021) J	ND(0.022) J	ND(0.024) J [ND(0.024) J]
Acetonitrile		ND(0.10) J	ND(0.11) J	ND(0.12) J [ND(0.12) J]
Acrolein		ND(0.10) J	ND(0.11) J	ND(0.12) J [ND(0.12) J]
Acrylonitrile		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Benzene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Bromodichloromethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Bromoform		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Bromomethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Carbon Disulfide		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Carbon Tetrachloride		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Chlorobenzene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Chloroethane		ND(0.0053) J	ND(0.0055)	ND(0.0059) J [ND(0.0060)]
Chloroform		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Chloromethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
cis-1,3-Dichloropropene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Dibromochloromethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Dibromomethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Dichlorodifluoromethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Ethyl Methacrylate		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Ethylbenzene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Iodomethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Isobutanol		ND(0.10) J	ND(0.11) J	ND(0.12) J [ND(0.12) J]
Methacrylonitrile		ND(0.0053) J	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Methyl Methacrylate		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Methylene Chloride		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Propionitrile		ND(0.010) J	ND(0.011) J	ND(0.012) J [ND(0.012) J]
Styrene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Tetrachloroethene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Toluene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
trans-1,2-Dichloroethene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
trans-1,3-Dichloropropene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
trans-1,4-Dichloro-2-butene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Trichloroethene		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Trichlorofluoromethane		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Vinyl Acetate		ND(0.0053) J	ND(0.0055)	ND(0.0059) J [ND(0.0060)]
Vinyl Chloride		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]
Xylenes (total)		ND(0.0053)	ND(0.0055)	ND(0.0059) [ND(0.0060)]



**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A17 1-3 01/08/03	RAA6-B14 0-1 01/03/03	RAA6-B15 6-8 01/07/03
<b>Semivolatile Organics</b>				
1,2,4,5-Tetrachlorobenzene		ND(0.35)	ND(1.0)	NA
1,2,4-Trichlorobenzene		ND(0.35)	ND(1.0)	NA
1,2-Dichlorobenzene		ND(0.35)	ND(1.0)	NA
1,2-Diphenylhydrazine		ND(0.35)	ND(1.0)	NA
1,3,5-Trinitrobenzene		ND(0.35) J	ND(1.0) J	NA
1,3-Dichlorobenzene		ND(0.35)	ND(1.0)	NA
1,3-Dinitrobenzene		ND(0.71)	ND(1.0)	NA
1,4-Dichlorobenzene		ND(0.35)	ND(1.0)	NA
1,4-Naphthoquinone		ND(0.71)	ND(1.0)	NA
1-Naphthylamine		ND(0.71)	ND(1.0)	NA
2,3,4,6-Tetrachlorophenol		ND(0.35)	ND(1.0)	NA
2,4,5-Trichlorophenol		ND(0.35)	ND(1.0)	NA
2,4,6-Trichlorophenol		ND(0.35)	ND(1.0)	NA
2,4-Dichlorophenol		ND(0.35)	ND(1.0)	NA
2,4-Dimethylphenol		ND(0.35)	ND(1.0)	NA
2,4-Dinitrophenol		ND(1.8) J	ND(5.3)	NA
2,4-Dinitrotoluene		ND(0.35)	ND(1.0)	NA
2,6-Dichlorophenol		ND(0.35)	ND(1.0)	NA
2,6-Dinitrotoluene		ND(0.35)	ND(1.0)	NA
2-Acetylaminofluorene		ND(0.71)	ND(1.0)	NA
2-Chloronaphthalene		ND(0.35)	ND(1.0)	NA
2-Chlorophenol		ND(0.35)	ND(1.0)	NA
2-Methylnaphthalene		ND(0.35)	ND(1.0)	NA
2-Methylphenol		ND(0.35)	ND(1.0)	NA
2-Naphthylamine		ND(0.71)	ND(1.0)	NA
2-Nitroaniline		ND(1.8)	ND(5.3)	NA
2-Nitrophenol		ND(0.71)	ND(1.0)	NA
2-Picoline		ND(0.35)	ND(1.0)	NA
3&4-Methylphenol		ND(0.71)	ND(1.0)	NA
3,3'-Dichlorobenzidine		ND(0.71)	ND(2.1)	NA
3,3'-Dimethylbenzidine		ND(0.35)	ND(1.0)	NA
3-Methylcholanthrene		ND(0.71)	ND(1.0)	NA
3-Nitroaniline		ND(1.8)	ND(5.3)	NA
4,6-Dinitro-2-methylphenol		ND(0.35)	ND(1.0)	NA
4-Aminobiphenyl		ND(0.71)	ND(1.0)	NA
4-Bromophenyl-phenylether		ND(0.35)	ND(1.0)	NA
4-Chloro-3-Methylphenol		ND(0.35)	ND(1.0)	NA
4-Chloroaniline		ND(0.35)	ND(1.0)	NA
4-Chlorobenzilate		ND(0.71)	ND(1.0)	NA
4-Chlorophenyl-phenylether		ND(0.35)	ND(1.0)	NA
4-Nitroaniline		ND(1.8)	ND(1.9)	NA
4-Nitrophenol		ND(1.8)	ND(5.3)	NA
4-Nitroquinoline-1-oxide		ND(0.71)	ND(1.0) J	NA
4-Phenylenediamine		ND(0.71) J	ND(1.0) J	NA
5-Nitro-o-toluidine		ND(0.71)	ND(1.0)	NA
7,12-Dimethylbenz(a)anthracene		ND(0.71)	ND(1.0)	NA
a,a'-Dimethylphenethylamine		ND(0.71)	ND(1.0)	NA
Acenaphthene		ND(0.35)	ND(1.0)	NA
Acenaphthylene		ND(0.35)	ND(1.0)	NA
Acetophenone		ND(0.35)	ND(1.0)	NA
Aniline		ND(0.35)	ND(1.0)	NA
Anthracene		ND(0.35)	ND(1.0)	NA
Aramite		ND(0.71)	ND(1.0)	NA
Benzidine		ND(0.71)	ND(2.1) J	NA
Benzo(a)anthracene		ND(0.35)	0.23 J	NA
Benzo(a)pyrene		ND(0.35)	ND(1.0)	NA
Benzo(b)fluoranthene		ND(0.35)	0.46 J	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A17 1-3 01/08/03	RAA6-B14 0-1 01/03/03	RAA6-B15 6-8 01/07/03
<b>Semivolatle Organics (continued)</b>				
Benzo(g,h,i)perylene		ND(0.35)	0.26 J	NA
Benzo(k)fluoranthene		ND(0.35)	ND(1.0)	NA
Benzyl Alcohol		ND(0.71)	ND(2.1)	NA
bis(2-Chloroethoxy)methane		ND(0.35)	ND(1.0)	NA
bis(2-Chloroethyl)ether		ND(0.35)	ND(1.0)	NA
bis(2-Chloroisopropyl)ether		ND(0.35)	ND(1.0)	NA
bis(2-Ethylhexyl)phthalate		ND(0.35)	ND(0.53)	NA
Butylbenzylphthalate		ND(0.35)	ND(1.0)	NA
Chrysene		ND(0.35)	0.22 J	NA
Diallate		ND(0.71)	ND(1.0)	NA
Dibenzo(a,h)anthracene		ND(0.35)	ND(1.0)	NA
Dibenzofuran		ND(0.35)	ND(1.0)	NA
Diethylphthalate		ND(0.35)	ND(1.0)	NA
Dimethylphthalate		ND(0.35)	ND(1.0)	NA
Di-n-Butylphthalate		ND(0.35)	ND(1.0)	NA
Di-n-Octylphthalate		ND(0.35)	ND(1.0)	NA
Diphenylamine		ND(0.35)	ND(1.0)	NA
Ethyl Methanesulfonate		ND(0.35)	ND(1.0)	NA
Fluoranthene		0.089 J	0.39 J	NA
Fluorene		ND(0.35)	ND(1.0)	NA
Hexachlorobenzene		ND(0.35)	ND(1.0)	NA
Hexachlorobutadiene		ND(0.35)	ND(1.0)	NA
Hexachlorocyclopentadiene		ND(0.35)	ND(1.0) J	NA
Hexachloroethane		ND(0.35)	ND(1.0)	NA
Hexachlorophene		ND(0.71) J	ND(2.1) J	NA
Hexachloropropene		ND(0.35)	ND(1.0)	NA
Indeno(1,2,3-cd)pyrene		ND(0.35)	0.22 J	NA
Isodrin		ND(0.35)	ND(1.0)	NA
Isophorone		ND(0.35)	ND(1.0)	NA
Isosafrole		ND(0.71)	ND(1.0)	NA
Methapyrilene		ND(0.71)	ND(1.0)	NA
Methyl Methanesulfonate		ND(0.35)	ND(1.0)	NA
Naphthalene		ND(0.35)	0.23 J	NA
Nitrobenzene		ND(0.35)	ND(1.0)	NA
N-Nitrosodiethylamine		ND(0.35)	ND(1.0)	NA
N-Nitrosodimethylamine		ND(0.35)	ND(1.0)	NA
N-Nitroso-di-n-butylamine		ND(0.71)	ND(1.0)	NA
N-Nitroso-di-n-propylamine		ND(0.35)	ND(1.0)	NA
N-Nitrosodiphenylamine		ND(0.35)	ND(1.0)	NA
N-Nitrosomethylethylamine		ND(0.71)	ND(1.0)	NA
N-Nitrosomorpholine		ND(0.35)	ND(1.0)	NA
N-Nitrosopiperidine		ND(0.35)	ND(1.0)	NA
N-Nitrosopyrrolidine		ND(0.71)	ND(1.0)	NA
o,o,o-Triethylphosphorothioate		ND(0.35)	ND(1.0)	NA
o-Toluidine		ND(0.35)	ND(1.0)	NA
p-Dimethylaminoazobenzene		ND(0.71)	ND(1.0)	NA
Pentachlorobenzene		ND(0.35)	ND(1.0)	NA
Pentachloroethane		ND(0.35)	ND(1.0)	NA
Pentachloronitrobenzene		ND(0.71)	ND(1.0) J	NA
Pentachlorophenol		ND(1.8)	ND(5.3)	NA
Phenacetin		ND(0.71)	ND(1.0)	NA
Phenanthrene		ND(0.35)	0.30 J	NA
Phenol		ND(0.35)	ND(1.0)	NA
Pronamide		ND(0.35)	ND(1.0)	NA
Pyrene		0.088 J	0.82 J	NA
Pyridine		ND(0.35)	ND(1.0)	NA
Safrole		ND(0.35)	ND(1.0)	NA
Thionazin		ND(0.35)	ND(1.0)	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A17 1-3 01/08/03	RAA6-B14 0-1 01/03/03	RAA6-B15 6-8 01/07/03
<b>Furans</b>				
2,3,7,8-TCDF		0.0000025 Y	0.0000068 J	NA
TCDFs (total)		0.000021	0.000066	NA
1,2,3,7,8-PeCDF		0.0000010 J	0.0000037 J	NA
2,3,4,7,8-PeCDF		0.0000045 J	0.000028	NA
PeCDFs (total)		0.000041	0.00018 Q	NA
1,2,3,4,7,8-HxCDF		0.0000012 J	0.0000077 J	NA
1,2,3,6,7,8-HxCDF		0.0000013 J	0.0000068 J	NA
1,2,3,7,8,9-HxCDF		0.0000044 J	0.0000015 J	NA
2,3,4,6,7,8-HxCDF		0.0000025 J	0.000013 J	NA
HxCDFs (total)		0.000032	0.00017 Q	NA
1,2,3,4,6,7,8-HpCDF		0.0000029 J	0.000013 J	NA
1,2,3,4,7,8,9-HpCDF		ND(0.00000033)	0.0000020 J	NA
HpCDFs (total)		0.0000062	0.000030	NA
OCDF		0.0000024 J	0.000011 J	NA
<b>Dioxins</b>				
2,3,7,8-TCDD		ND(0.00000019)	ND(0.0000010)	NA
TCDDs (total)		ND(0.00000019)	ND(0.0000024)	NA
1,2,3,7,8-PeCDD		0.00000037 J	ND(0.0000016)	NA
PeCDDs (total)		0.00000084	0.0000080 Q	NA
1,2,3,4,7,8-HxCDD		ND(0.00000025)	ND(0.0000013)	NA
1,2,3,6,7,8-HxCDD		0.00000063 J	0.0000024 J	NA
1,2,3,7,8,9-HxCDD		ND(0.00000042)	0.0000022 J	NA
HxCDDs (total)		0.0000013	0.000018	NA
1,2,3,4,6,7,8-HpCDD		0.0000042 J	0.000020 J	NA
HpCDDs (total)		0.0000078	0.000038	NA
OCDD		0.000025	0.00011	NA
Total TEQs (WHO TEFs)		0.0000037	0.000020	NA
<b>Inorganics</b>				
Antimony		2.10 J	7.70 J	NA
Arsenic		4.80	10.0	NA
Barium		26.0	46.0	NA
Beryllium		0.150 B	1.80 J	NA
Cadmium		0.470 B	2.20	NA
Chromium		8.00	13.0	NA
Cobalt		7.20	8.00	NA
Copper		26.0	59.0	NA
Cyanide		ND(0.210)	ND(0.550)	NA
Lead		21.0	150	NA
Mercury		0.0610 B	0.460	NA
Nickel		12.0	11.0	NA
Selenium		0.760 B	2.00 J	NA
Silver		ND(1.00)	ND(1.50) J	NA
Sulfide		8.50	41.0	NA
Thallium		ND(1.00) J	2.00 J	NA
Tin		ND(10.0)	24.0	NA
Vanadium		4.20 B	8.20	NA
Zinc		46.0	67.0	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-B15 6-15 01/07/03	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-C2 6-15 01/09/03
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane	NA	NA	ND(0.0058)	NA
1,1,1-Trichloroethane	NA	NA	ND(0.0058)	NA
1,1,2,2-Tetrachloroethane	NA	NA	ND(0.0058)	NA
1,1,2-Trichloroethane	NA	NA	ND(0.0058)	NA
1,1-Dichloroethane	NA	NA	ND(0.0058)	NA
1,1-Dichloroethene	NA	NA	ND(0.0058)	NA
1,2,3-Trichloropropane	NA	NA	ND(0.0058)	NA
1,2-Dibromo-3-chloropropane	NA	NA	ND(0.0058) J	NA
1,2-Dibromoethane	NA	NA	ND(0.0058)	NA
1,2-Dichloroethane	NA	NA	ND(0.0058)	NA
1,2-Dichloropropane	NA	NA	ND(0.0058)	NA
1,4-Dioxane	NA	NA	ND(0.12) J	NA
2-Butanone	NA	NA	ND(0.012) J	NA
2-Chloro-1,3-butadiene	NA	NA	ND(0.0058)	NA
2-Chloroethylvinylether	NA	NA	ND(0.0058) J	NA
2-Hexanone	NA	NA	ND(0.012) J	NA
3-Chloropropene	NA	NA	ND(0.0058)	NA
4-Methyl-2-pentanone	NA	NA	ND(0.012) J	NA
Acetone	NA	NA	ND(0.023) J	NA
Acetonitrile	NA	NA	ND(0.12) J	NA
Acrolein	NA	NA	ND(0.12) J	NA
Acrylonitrile	NA	NA	ND(0.0058)	NA
Benzene	NA	NA	ND(0.0058)	NA
Bromodichloromethane	NA	NA	ND(0.0058)	NA
Bromoform	NA	NA	ND(0.0058)	NA
Bromomethane	NA	NA	ND(0.0058) J	NA
Carbon Disulfide	NA	NA	ND(0.0058)	NA
Carbon Tetrachloride	NA	NA	ND(0.0058)	NA
Chlorobenzene	NA	NA	ND(0.0058)	NA
Chloroethane	NA	NA	ND(0.0058) J	NA
Chloroform	NA	NA	ND(0.0058)	NA
Chloromethane	NA	NA	ND(0.0058)	NA
cis-1,3-Dichloropropene	NA	NA	ND(0.0058)	NA
Dibromochloromethane	NA	NA	ND(0.0058)	NA
Dibromomethane	NA	NA	ND(0.0058)	NA
Dichlorodifluoromethane	NA	NA	ND(0.0058)	NA
Ethyl Methacrylate	NA	NA	ND(0.0058)	NA
Ethylbenzene	NA	NA	ND(0.0058)	NA
Iodomethane	NA	NA	ND(0.0058)	NA
Isobutanol	NA	NA	ND(0.12) J	NA
Methacrylonitrile	NA	NA	ND(0.0058)	NA
Methyl Methacrylate	NA	NA	ND(0.0058) J	NA
Methylene Chloride	NA	NA	ND(0.0058)	NA
Propionitrile	NA	NA	ND(0.012) J	NA
Styrene	NA	NA	ND(0.0058)	NA
Tetrachloroethene	NA	NA	ND(0.0058)	NA
Toluene	NA	NA	ND(0.0058)	NA
trans-1,2-Dichloroethene	NA	NA	ND(0.0058)	NA
trans-1,3-Dichloropropene	NA	NA	ND(0.0058)	NA
trans-1,4-Dichloro-2-butene	NA	NA	ND(0.0058)	NA
Trichloroethene	NA	NA	ND(0.0058)	NA
Trichlorofluoromethane	NA	NA	ND(0.0058)	NA
Vinyl Acetate	NA	NA	ND(0.0058) J	NA
Vinyl Chloride	NA	NA	ND(0.0058)	NA
Xylenes (total)	NA	NA	ND(0.0058)	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-B15 6-15 01/07/03	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-C2 6-15 01/09/03
<b>Semivolatile Organics</b>				
1,2,4,5-Tetrachlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
1,2,4-Trichlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38) J
1,2-Dichlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
1,2-Diphenylhydrazine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
1,3,5-Trinitrobenzene	ND(0.39) J [ND(0.40) J]	ND(0.38)	NA	ND(0.38)
1,3-Dichlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
1,3-Dinitrobenzene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
1,4-Dichlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38) J
1,4-Naphthoquinone	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
1-Naphthylamine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
2,3,4,6-Tetrachlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,4,5-Trichlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,4,6-Trichlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,4-Dichlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,4-Dimethylphenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,4-Dinitrophenol	ND(2.0) J [ND(2.0) J]	ND(2.0) J	NA	ND(2.0) J
2,4-Dinitrotoluene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,6-Dichlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2,6-Dinitrotoluene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2-Acetylaminofluorene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
2-Chloronaphthalene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2-Chlorophenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2-Methylnaphthalene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2-Methylphenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
2-Naphthylamine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
2-Nitroaniline	ND(2.0) [ND(2.0)]	ND(2.0)	NA	ND(2.0)
2-Nitrophenol	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
2-Picoline	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
3&4-Methylphenol	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
3,3'-Dichlorobenzidine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
3,3'-Dimethylbenzidine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
3-Methylcholanthrene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
3-Nitroaniline	ND(2.0) [ND(2.0)]	ND(2.0)	NA	ND(2.0)
4,6-Dinitro-2-methylphenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
4-Aminobiphenyl	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
4-Bromophenyl-phenylether	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
4-Chloro-3-Methylphenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
4-Chloroaniline	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
4-Chlorobenzilate	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
4-Chlorophenyl-phenylether	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
4-Nitroaniline	ND(2.0) [ND(2.0)]	ND(2.0)	NA	ND(2.0)
4-Nitrophenol	ND(2.0) [ND(2.0)]	ND(2.0)	NA	ND(2.0)
4-Nitroquinoline-1-oxide	ND(0.79) [ND(0.80)]	ND(0.78) J	NA	ND(0.77) J
4-Phenylenediamine	ND(0.79) J [ND(0.80) J]	ND(0.78)	NA	ND(0.77)
5-Nitro-o-toluidine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
7,12-Dimethylbenz(a)anthracene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
a,a'-Dimethylphenethylamine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Acenaphthene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38) J
Acenaphthylene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Acetophenone	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Aniline	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Anthracene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Aramite	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Benzidine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Benzo(a)anthracene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Benzo(a)pyrene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Benzo(b)fluoranthene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-B15 6-15 01/07/03	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-C2 6-15 01/09/03
<b>Semivolatile Organics (continued)</b>				
Benzo(g,h,i)perylene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Benzo(k)fluoranthene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Benzyl Alcohol	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
bis(2-Chloroethoxy)methane	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
bis(2-Chloroethyl)ether	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
bis(2-Chloroisopropyl)ether	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
bis(2-Ethylhexyl)phthalate	ND(0.39) [ND(0.39)]	ND(0.38)	NA	ND(0.38)
Butylbenzylphthalate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Chrysene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Diallate	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Dibenzo(a,h)anthracene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Dibenzofuran	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Diethylphthalate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Dimethylphthalate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Di-n-Butylphthalate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Di-n-Octylphthalate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Diphenylamine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Ethyl Methanesulfonate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Fluoranthene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Fluorene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Hexachlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Hexachlorobutadiene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Hexachlorocyclopentadiene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Hexachloroethane	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Hexachlorophene	ND(0.79) J [ND(0.80) J]	ND(0.78) J	NA	ND(0.77) J
Hexachloropropene	ND(0.39) [ND(0.40)]	ND(0.38) J	NA	ND(0.38) J
Indeno(1,2,3-cd)pyrene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Isodrin	ND(0.39) J [ND(0.40) J]	ND(0.38)	NA	ND(0.38)
Isophorone	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Isosafrole	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Methapyrene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Methyl Methanesulfonate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Naphthalene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Nitrobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosodiethylamine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosodimethylamine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitroso-di-n-butylamine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
N-Nitroso-di-n-propylamine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosodiphenylamine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosomethylethylamine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
N-Nitrosomorpholine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosopiperidine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
N-Nitrosopyrrolidine	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
o,o,o-Triethylphosphorothioate	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
o-Toluidine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
p-Dimethylaminoazobenzene	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Pentachlorobenzene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Pentachloroethane	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Pentachloronitrobenzene	ND(0.79) [ND(0.80)]	ND(0.78) J	NA	ND(0.77) J
Pentachlorophenol	ND(2.0) [ND(2.0)]	ND(2.0)	NA	ND(2.0)
Phenacetin	ND(0.79) [ND(0.80)]	ND(0.78)	NA	ND(0.77)
Phenanthrene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Phenol	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Pronamide	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Pyrene	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38) J
Pyridine	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Safrole	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)
Thionazin	ND(0.39) [ND(0.40)]	ND(0.38)	NA	ND(0.38)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-B15 6-15 01/07/03	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-C2 6-15 01/09/03
<b>Furans</b>				
2,3,7,8-TCDF	ND(0.0000013) [ND(0.0000012) X]	0.000084 Y	NA	ND(0.0000030)
TCDFs (total)	ND(0.0000012) [ND(0.0000012)]	0.000092	NA	ND(0.0000030)
1,2,3,7,8-PeCDF	ND(0.00000070) X [ND(0.00000032)]	0.000030 J	NA	0.0000023 J
2,3,4,7,8-PeCDF	ND(0.0000010) [ND(0.00000042)]	0.000020	NA	ND(0.0000019)
PeCDFs (total)	ND(0.0000010) [ND(0.00000083)]	0.00020	NA	ND(0.0000042)
1,2,3,4,7,8-HxCDF	ND(0.0000029) [0.00000041 J]	0.000090 J	NA	ND(0.0000056)
1,2,3,6,7,8-HxCDF	ND(0.0000010) [0.00000040 J]	0.000069 J	NA	ND(0.0000025)
1,2,3,7,8,9-HxCDF	ND(0.0000029) [0.00000042 J]	ND(0.0000024)	NA	ND(0.0000056)
2,3,4,6,7,8-HxCDF	ND(0.0000029) [ND(0.00000037) X]	0.000020 J	NA	ND(0.0000056)
HxCDFs (total)	ND(0.0000029) [0.0000012]	0.00030	NA	ND(0.0000025)
1,2,3,4,6,7,8-HpCDF	ND(0.0000029) [0.00000037 J]	0.000026	NA	ND(0.0000026) X
1,2,3,4,7,8,9-HpCDF	ND(0.0000029) [ND(0.00000036)]	0.000045 J	NA	ND(0.0000056)
HpCDFs (total)	ND(0.0000029) [ND(0.00000074)]	0.000066	NA	ND(0.0000056)
OCDF	ND(0.0000058) [ND(0.00000074)]	0.000017 J	NA	ND(0.0000011)
<b>Dioxins</b>				
2,3,7,8-TCDD	ND(0.0000020) [ND(0.00000012)]	ND(0.0000010) X	NA	ND(0.0000032)
TCDDs (total)	ND(0.0000022) [ND(0.00000027)]	ND(0.0000079)	NA	ND(0.0000066)
1,2,3,7,8-PeCDD	ND(0.0000029) [ND(0.00000031) X]	ND(0.0000017) X	NA	ND(0.0000056)
PeCDDs (total)	ND(0.0000029) [ND(0.00000012)]	0.0000066	NA	ND(0.0000095)
1,2,3,4,7,8-HxCDD	ND(0.0000029) [ND(0.00000042)]	ND(0.0000076) X	NA	ND(0.0000072)
1,2,3,6,7,8-HxCDD	ND(0.0000029) [ND(0.00000044)]	ND(0.0000017) X	NA	ND(0.0000067)
1,2,3,7,8,9-HxCDD	ND(0.0000029) [ND(0.00000042)]	ND(0.0000014) X	NA	ND(0.0000068)
HxCDDs (total)	ND(0.0000037) [0.0000013]	ND(0.0000015)	NA	ND(0.0000099)
1,2,3,4,6,7,8-HpCDD	ND(0.0000040) X [ND(0.00000064)]	ND(0.000011)	NA	ND(0.0000056)
HpCDDs (total)	ND(0.0000029) [ND(0.00000083)]	0.000019	NA	ND(0.0000056)
OCDD	ND(0.0000024) [ND(0.00000023)]	ND(0.000056)	NA	ND(0.0000032)
Total TEQs (WHO TEFs)	0.0000038 [0.00000055]	0.000017	NA	0.0000072
<b>Inorganics</b>				
Antimony	2.00 B [1.90 B]	ND(6.00) J	NA	ND(6.00) J
Arsenic	4.30 [4.10]	5.40	NA	5.80
Barium	18.0 B [18.0 B]	26.0	NA	30.0
Beryllium	0.160 B [0.140 B]	0.210 B	NA	0.230 B
Cadmium	0.490 B [0.390 B]	0.260 B	NA	0.280 B
Chromium	4.30 [3.60]	6.80	NA	8.60
Cobalt	5.60 [5.10]	8.40	NA	10.0
Copper	11.0 [10.0]	22.0	NA	18.0
Cyanide	ND(0.590) [ND(0.600)]	ND(0.580)	NA	ND(0.570)
Lead	4.80 [4.50]	17.0	NA	7.00
Mercury	ND(0.120) [ND(0.120)]	0.0420 B	NA	ND(0.110)
Nickel	9.60 [8.40]	16.0	NA	18.0
Selenium	ND(1.00) [ND(1.00)]	0.830 B	NA	0.960 B
Silver	ND(1.00) [ND(1.00)]	ND(1.00)	NA	ND(1.00)
Sulfide	21.0 [13.0]	18.0	NA	9.20
Thallium	ND(1.20) J [ND(1.20) J]	ND(1.20) J	NA	ND(1.10) J
Tin	ND(10.0) [ND(10.0)]	ND(10.0)	NA	ND(10.0)
Vanadium	4.20 B [3.60 B]	6.60	NA	7.80
Zinc	35.0 [26.0]	47.0	NA	50.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C2 8-10 01/09/03	RAA6-C4 0-1 01/10/03	RAA6-C6 0-1 01/10/03	RAA6-C6 6-8 01/10/03
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,1,1-Trichloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,1,2,2-Tetrachloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,1,2-Trichloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,1-Dichloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,1-Dichloroethene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,2,3-Trichloropropane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,2-Dibromo-3-chloropropane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,2-Dibromoethane	ND(0.0059)	ND(0.0055)	ND(3.5) J	ND(3.9) J [ND(3.6) J]
1,2-Dichloroethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,2-Dichloropropane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
1,4-Dioxane	ND(0.12) J	ND(0.11) J	ND(140) J	ND(150) J [ND(150) J]
2-Butanone	ND(0.012) J	ND(0.011)	ND(70)	ND(77) [ND(73)]
2-Chloro-1,3-butadiene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
2-Chloroethylvinylether	ND(0.0059) J	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
2-Hexanone	ND(0.012) J	ND(0.011)	ND(7.0)	ND(7.7) [ND(7.3)]
3-Chloropropene	ND(0.0059)	ND(0.0055)	ND(7.0) J	ND(7.7) J [ND(7.3) J]
4-Methyl-2-pentanone	ND(0.012)	ND(0.011)	ND(7.0)	ND(7.7) [ND(7.3)]
Acetone	ND(0.024) J	ND(0.022)	ND(70)	ND(77) [ND(73)]
Acetonitrile	ND(0.12) J	ND(0.11)	ND(70)	ND(77) [ND(73)]
Acrolein	ND(0.12) J	ND(0.11) J	ND(70) J	ND(77) J [ND(73) J]
Acrylonitrile	ND(0.0059)	ND(0.0055)	ND(7.0) J	ND(7.7) J [ND(7.3) J]
Benzene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Bromodichloromethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Bromoform	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Bromomethane	ND(0.0059) J	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Carbon Disulfide	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Carbon Tetrachloride	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Chlorobenzene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Chloroethane	ND(0.0059) J	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Chloroform	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Chloromethane	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
cis-1,3-Dichloropropene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Dibromochloromethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Dibromomethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Dichlorodifluoromethane	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Ethyl Methacrylate	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Ethylbenzene	ND(0.0059)	ND(0.0055)	19	ND(3.9) [ND(3.6)]
Iodomethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Isobutanol	ND(0.12) J	ND(0.11) J	ND(140) J	ND(150) J [ND(150) J]
Methacrylonitrile	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Methyl Methacrylate	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Methylene Chloride	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Propionitrile	ND(0.012) J	ND(0.011) J	ND(35) J	ND(39) J [ND(36) J]
Styrene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Tetrachloroethene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Toluene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
trans-1,2-Dichloroethene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
trans-1,3-Dichloropropene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
trans-1,4-Dichloro-2-butene	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Trichloroethene	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Trichlorofluoromethane	ND(0.0059)	ND(0.0055)	ND(3.5)	ND(3.9) [ND(3.6)]
Vinyl Acetate	ND(0.0059) J	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Vinyl Chloride	ND(0.0059)	ND(0.0055)	ND(7.0)	ND(7.7) [ND(7.3)]
Xylenes (total)	ND(0.0059)	ND(0.0055)	160	35 [24]



**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C2 8-10 01/09/03	RAA6-C4 0-1 01/10/03	RAA6-C6 0-1 01/10/03	RAA6-C6 6-8 01/10/03
<b>Semivolatile Organics</b>				
1,2,4,5-Tetrachlorobenzene	NA	ND(0.37)	ND(0.38)	NA
1,2,4-Trichlorobenzene	NA	ND(0.37)	ND(0.38)	NA
1,2-Dichlorobenzene	NA	ND(0.37)	ND(0.38)	NA
1,2-Diphenylhydrazine	NA	ND(0.37)	ND(0.38)	NA
1,3,5-Trinitrobenzene	NA	ND(0.37)	ND(0.38)	NA
1,3-Dichlorobenzene	NA	ND(0.37)	ND(0.38)	NA
1,3-Dinitrobenzene	NA	ND(0.74)	ND(0.75)	NA
1,4-Dichlorobenzene	NA	ND(0.37)	ND(0.38)	NA
1,4-Naphthoquinone	NA	ND(0.74)	ND(0.75)	NA
1-Naphthylamine	NA	ND(0.74)	ND(0.75)	NA
2,3,4,6-Tetrachlorophenol	NA	ND(0.37)	ND(0.38)	NA
2,4,5-Trichlorophenol	NA	ND(0.37)	ND(0.38)	NA
2,4,6-Trichlorophenol	NA	ND(0.37)	ND(0.38)	NA
2,4-Dichlorophenol	NA	ND(0.37)	ND(0.38)	NA
2,4-Dimethylphenol	NA	ND(0.37)	ND(0.38)	NA
2,4-Dinitrophenol	NA	ND(1.9) J	ND(1.9) J	NA
2,4-Dinitrotoluene	NA	ND(0.37)	ND(0.38)	NA
2,6-Dichlorophenol	NA	ND(0.37)	ND(0.38)	NA
2,6-Dinitrotoluene	NA	ND(0.37)	ND(0.38)	NA
2-Acetylaminofluorene	NA	ND(0.74)	ND(0.75)	NA
2-Chloronaphthalene	NA	ND(0.37)	ND(0.38)	NA
2-Chlorophenol	NA	ND(0.37)	ND(0.38)	NA
2-Methylnaphthalene	NA	ND(0.37)	7.2	NA
2-Methylphenol	NA	ND(0.37)	ND(0.38)	NA
2-Naphthylamine	NA	ND(0.74)	ND(0.75)	NA
2-Nitroaniline	NA	ND(1.9)	ND(1.9)	NA
2-Nitrophenol	NA	ND(0.74)	ND(0.75)	NA
2-Picoline	NA	ND(0.37)	ND(0.38)	NA
3&4-Methylphenol	NA	ND(0.74)	ND(0.75)	NA
3,3'-Dichlorobenzidine	NA	ND(0.74)	ND(0.75)	NA
3,3'-Dimethylbenzidine	NA	ND(0.37)	ND(0.38)	NA
3-Methylcholanthrene	NA	ND(0.74)	ND(0.75)	NA
3-Nitroaniline	NA	ND(1.9)	ND(1.9)	NA
4,6-Dinitro-2-methylphenol	NA	ND(0.37)	ND(0.38)	NA
4-Aminobiphenyl	NA	ND(0.74)	ND(0.75)	NA
4-Bromophenyl-phenylether	NA	ND(0.37)	ND(0.38)	NA
4-Chloro-3-Methylphenol	NA	ND(0.37)	ND(0.38)	NA
4-Chloroaniline	NA	ND(0.37)	ND(0.38)	NA
4-Chlorobenzilate	NA	ND(0.74)	ND(0.75)	NA
4-Chlorophenyl-phenylether	NA	ND(0.37)	ND(0.38)	NA
4-Nitroaniline	NA	ND(1.9)	ND(1.9)	NA
4-Nitrophenol	NA	ND(1.9)	ND(1.9)	NA
4-Nitroquinoline-1-oxide	NA	ND(0.74)	ND(0.75)	NA
4-Phenylenediamine	NA	ND(0.74)	ND(0.75)	NA
5-Nitro-o-toluidine	NA	ND(0.74)	ND(0.75)	NA
7,12-Dimethylbenz(a)anthracene	NA	ND(0.74)	ND(0.75)	NA
a,a'-Dimethylphenethylamine	NA	ND(0.74)	ND(0.75)	NA
Acenaphthene	NA	ND(0.37)	0.18 J	NA
Acenaphthylene	NA	0.095 J	ND(0.38)	NA
Acetophenone	NA	ND(0.37)	ND(0.38)	NA
Aniline	NA	ND(0.37)	ND(0.38)	NA
Anthracene	NA	0.079 J	0.45	NA
Aramite	NA	ND(0.74)	ND(0.75)	NA
Benzidine	NA	ND(0.74)	ND(0.75)	NA
Benzo(a)anthracene	NA	0.14 J	0.70	NA
Benzo(a)pyrene	NA	0.14 J	0.55	NA
Benzo(b)fluoranthene	NA	0.20 J	0.63	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C2 8-10 01/09/03	RAA6-C4 0-1 01/10/03	RAA6-C6 0-1 01/10/03	RAA6-C6 6-8 01/10/03
<b>Semivolatile Organics (continued)</b>				
Benzo(g,h,i)perylene	NA	0.14 J	0.29 J	NA
Benzo(k)fluoranthene	NA	0.096 J	0.30 J	NA
Benzyl Alcohol	NA	ND(0.74)	ND(0.75)	NA
bis(2-Chloroethoxy)methane	NA	ND(0.37)	ND(0.38)	NA
bis(2-Chloroethyl)ether	NA	ND(0.37)	ND(0.38)	NA
bis(2-Chloroisopropyl)ether	NA	ND(0.37)	ND(0.38)	NA
bis(2-Ethylhexyl)phthalate	NA	ND(0.36)	ND(0.37)	NA
Butylbenzylphthalate	NA	ND(0.37)	ND(0.38)	NA
Chrysene	NA	0.15 J	0.60	NA
Diallate	NA	ND(0.74)	ND(0.75)	NA
Dibenzo(a,h)anthracene	NA	ND(0.37)	ND(0.38)	NA
Dibenzofuran	NA	ND(0.37)	0.14 J	NA
Diethylphthalate	NA	ND(0.37)	ND(0.38)	NA
Dimethylphthalate	NA	ND(0.37)	ND(0.38)	NA
Di-n-Butylphthalate	NA	ND(0.37)	ND(0.38)	NA
Di-n-Octylphthalate	NA	ND(0.37)	ND(0.38)	NA
Diphenylamine	NA	ND(0.37)	ND(0.38)	NA
Ethyl Methanesulfonate	NA	ND(0.37)	ND(0.38)	NA
Fluoranthene	NA	0.33 J	1.6	NA
Fluorene	NA	ND(0.37)	0.24 J	NA
Hexachlorobenzene	NA	ND(0.37)	ND(0.38)	NA
Hexachlorobutadiene	NA	ND(0.37)	ND(0.38)	NA
Hexachlorocyclopentadiene	NA	ND(0.37)	ND(0.38)	NA
Hexachloroethane	NA	ND(0.37)	ND(0.38)	NA
Hexachlorophene	NA	ND(0.74) J	ND(0.75) J	NA
Hexachloropropene	NA	ND(0.37) J	ND(0.38) J	NA
Indeno(1,2,3-cd)pyrene	NA	0.12 J	0.27 J	NA
Isodrin	NA	ND(0.37)	ND(0.38)	NA
Isophorone	NA	ND(0.37)	ND(0.38)	NA
Isosafrole	NA	ND(0.74)	ND(0.75)	NA
Methapyrene	NA	ND(0.74)	ND(0.75)	NA
Methyl Methanesulfonate	NA	ND(0.37)	ND(0.38)	NA
Naphthalene	NA	ND(0.37)	10	NA
Nitrobenzene	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosodiethylamine	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosodimethylamine	NA	ND(0.37)	ND(0.38)	NA
N-Nitroso-di-n-butylamine	NA	ND(0.74)	ND(0.75)	NA
N-Nitroso-di-n-propylamine	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosodiphenylamine	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosomethylethylamine	NA	ND(0.74)	ND(0.75)	NA
N-Nitrosomorpholine	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosopiperidine	NA	ND(0.37)	ND(0.38)	NA
N-Nitrosopyrrolidine	NA	ND(0.74)	ND(0.75)	NA
o,o,o-Triethylphosphorothioate	NA	ND(0.37)	ND(0.38)	NA
o-Toluidine	NA	ND(0.37)	ND(0.38)	NA
p-Dimethylaminoazobenzene	NA	ND(0.74)	ND(0.75)	NA
Pentachlorobenzene	NA	ND(0.37)	ND(0.38)	NA
Pentachloroethane	NA	ND(0.37)	ND(0.38)	NA
Pentachloronitrobenzene	NA	ND(0.74) J	ND(0.75) J	NA
Pentachlorophenol	NA	ND(1.9)	ND(1.9)	NA
Phenacetin	NA	ND(0.74)	ND(0.75)	NA
Phenanthrene	NA	0.18 J	1.4	NA
Phenol	NA	ND(0.37)	ND(0.38)	NA
Pronamide	NA	ND(0.37)	ND(0.38)	NA
Pyrene	NA	0.27 J	1.3	NA
Pyridine	NA	ND(0.37)	ND(0.38)	NA
Safrole	NA	ND(0.37)	ND(0.38)	NA
Thionazin	NA	ND(0.37)	ND(0.38)	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C2 8-10 01/09/03	RAA6-C4 0-1 01/10/03	RAA6-C6 0-1 01/10/03	RAA6-C6 6-8 01/10/03
<b>Furans</b>				
2,3,7,8-TCDF	NA	0.000013 Y	ND(0.0000020) X	NA
TCDFs (total)	NA	0.00013	0.000012	NA
1,2,3,7,8-PeCDF	NA	0.0000065	0.0000016 J	NA
2,3,4,7,8-PeCDF	NA	0.000016	ND(0.0000029) X	NA
PeCDFs (total)	NA	0.00021 QI	0.000017	NA
1,2,3,4,7,8-HxCDF	NA	0.0000075	ND(0.0000023) X	NA
1,2,3,6,7,8-HxCDF	NA	0.0000064	ND(0.0000021) X	NA
1,2,3,7,8,9-HxCDF	NA	0.0000016 JQ	ND(0.0000011) X	NA
2,3,4,6,7,8-HxCDF	NA	0.000018	ND(0.0000018) X	NA
HxCDFs (total)	NA	0.00025	ND(0.000013)	NA
1,2,3,4,6,7,8-HpCDF	NA	0.000026	ND(0.0000031)	NA
1,2,3,4,7,8,9-HpCDF	NA	0.0000026 J	ND(0.0000010)	NA
HpCDFs (total)	NA	0.000063	ND(0.0000056)	NA
OCDF	NA	0.000030	ND(0.0000036) X	NA
<b>Dioxins</b>				
2,3,7,8-TCDD	NA	0.00000066 J	ND(0.0000014)	NA
TCDDs (total)	NA	0.0000019	ND(0.0000029)	NA
1,2,3,7,8-PeCDD	NA	0.0000012 J	ND(0.0000027)	NA
PeCDDs (total)	NA	0.0000048 Q	ND(0.0000077)	NA
1,2,3,4,7,8-HxCDD	NA	0.0000013 J	ND(0.0000028)	NA
1,2,3,6,7,8-HxCDD	NA	0.0000020 J	ND(0.0000027)	NA
1,2,3,7,8,9-HxCDD	NA	0.0000015 J	ND(0.0000027)	NA
HxCDDs (total)	NA	0.000019	ND(0.0000027)	NA
1,2,3,4,6,7,8-HpCDD	NA	0.000030	ND(0.0000033)	NA
HpCDDs (total)	NA	0.000060	ND(0.0000051)	NA
OCDD	NA	0.00021	ND(0.000015)	NA
Total TEQs (WHO TEFs)	NA	0.000016	0.0000038	NA
<b>Inorganics</b>				
Antimony	NA	ND(6.00)	0.950 B	NA
Arsenic	NA	3.40	9.00	NA
Barium	NA	21.0	42.0	NA
Beryllium	NA	0.120 B	0.230 B	NA
Cadmium	NA	0.250 B	0.360 B	NA
Chromium	NA	5.60	10.0	NA
Cobalt	NA	4.90 B	16.0	NA
Copper	NA	15.0	44.0	NA
Cyanide	NA	ND(0.220)	ND(0.220)	NA
Lead	NA	24.0	210	NA
Mercury	NA	0.0470 B	0.0330 B	NA
Nickel	NA	10.0	19.0	NA
Selenium	NA	0.690 B	1.80	NA
Silver	NA	ND(1.00)	1.40	NA
Sulfide	NA	14.0	90.0	NA
Thallium	NA	ND(1.10) J	ND(1.10) J	NA
Tin	NA	ND(10.0)	ND(11.0)	NA
Vanadium	NA	6.10	9.90	NA
Zinc	NA	47.0	61.0	NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C6 6-15 01/10/03	RAA6-C15 3-6 01/07/03	RAA6-C15 4-6 01/07/03	RAA6-C17 0-1 01/02/03
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane	NA	NA	ND(0.0056)	ND(0.0058)
1,1,1-Trichloroethane	NA	NA	ND(0.0056)	ND(0.0058)
1,1,2,2-Tetrachloroethane	NA	NA	ND(0.0056)	ND(0.0058) J
1,1,2-Trichloroethane	NA	NA	ND(0.0056)	ND(0.0058)
1,1-Dichloroethane	NA	NA	ND(0.0056)	ND(0.0058)
1,1-Dichloroethene	NA	NA	ND(0.0056)	ND(0.0058)
1,2,3-Trichloropropane	NA	NA	ND(0.0056)	ND(0.0058) J
1,2-Dibromo-3-chloropropane	NA	NA	ND(0.0056)	ND(0.0058) J
1,2-Dibromoethane	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dichloroethane	NA	NA	ND(0.0056)	ND(0.0058)
1,2-Dichloropropane	NA	NA	ND(0.0056)	ND(0.0058)
1,4-Dioxane	NA	NA	ND(0.11) J	ND(0.12) J
2-Butanone	NA	NA	ND(0.011) J	ND(0.012) J
2-Chloro-1,3-butadiene	NA	NA	ND(0.0056)	ND(0.0058)
2-Chloroethylvinylether	NA	NA	ND(0.0056) J	ND(0.0058)
2-Hexanone	NA	NA	ND(0.011) J	ND(0.012)
3-Chloropropene	NA	NA	ND(0.0056)	ND(0.0058)
4-Methyl-2-pentanone	NA	NA	ND(0.011) J	ND(0.012)
Acetone	NA	NA	ND(0.022) J	ND(0.023) J
Acetonitrile	NA	NA	ND(0.11) J	ND(0.12) J
Acrolein	NA	NA	ND(0.11) J	ND(0.12) J
Acrylonitrile	NA	NA	ND(0.0056)	ND(0.0058)
Benzene	NA	NA	ND(0.0056)	ND(0.0058)
Bromodichloromethane	NA	NA	ND(0.0056)	ND(0.0058)
Bromoform	NA	NA	ND(0.0056)	ND(0.0058)
Bromomethane	NA	NA	ND(0.0056)	ND(0.0058) J
Carbon Disulfide	NA	NA	ND(0.0056)	ND(0.0058)
Carbon Tetrachloride	NA	NA	ND(0.0056)	ND(0.0058)
Chlorobenzene	NA	NA	ND(0.0056)	ND(0.0058)
Chloroethane	NA	NA	ND(0.0056)	ND(0.0058) J
Chloroform	NA	NA	ND(0.0056)	ND(0.0058)
Chloromethane	NA	NA	ND(0.0056)	ND(0.0058)
cis-1,3-Dichloropropene	NA	NA	ND(0.0056)	ND(0.0058)
Dibromochloromethane	NA	NA	ND(0.0056)	ND(0.0058)
Dibromomethane	NA	NA	ND(0.0056)	ND(0.0058)
Dichlorodifluoromethane	NA	NA	ND(0.0056)	ND(0.0058)
Ethyl Methacrylate	NA	NA	ND(0.0056)	ND(0.0058)
Ethylbenzene	NA	NA	ND(0.0056)	ND(0.0058)
Iodomethane	NA	NA	ND(0.0056)	ND(0.0058)
Isobutanol	NA	NA	ND(0.11) J	ND(0.12) J
Methacrylonitrile	NA	NA	ND(0.0056)	ND(0.0058) J
Methyl Methacrylate	NA	NA	ND(0.0056)	ND(0.0058)
Methylene Chloride	NA	NA	ND(0.0056)	ND(0.0058)
Propionitrile	NA	NA	ND(0.011) J	ND(0.012) J
Styrene	NA	NA	ND(0.0056)	ND(0.0058)
Tetrachloroethene	NA	NA	ND(0.0056)	ND(0.0058)
Toluene	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,2-Dichloroethene	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,3-Dichloropropene	NA	NA	ND(0.0056)	ND(0.0058)
trans-1,4-Dichloro-2-butene	NA	NA	ND(0.0056)	ND(0.0058) J
Trichloroethene	NA	NA	ND(0.0056)	ND(0.0058)
Trichlorofluoromethane	NA	NA	ND(0.0056)	ND(0.0058)
Vinyl Acetate	NA	NA	ND(0.0056)	ND(0.0058) J
Vinyl Chloride	NA	NA	ND(0.0056)	ND(0.0058)
Xylenes (total)	NA	NA	ND(0.0056)	ND(0.0058)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C6 6-15 01/10/03	RAA6-C15 3-6 01/07/03	RAA6-C15 4-6 01/07/03	RAA6-C17 0-1 01/02/03
<b>Semivolatile Organics</b>				
1,2,4,5-Tetrachlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,2,4-Trichlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,2-Dichlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,2-Diphenylhydrazine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,3,5-Trinitrobenzene	ND(0.40) J [ND(0.39) J]	ND(0.37) J	NA	ND(0.39)
1,3-Dichlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,3-Dinitrobenzene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
1,4-Dichlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
1,4-Naphthoquinone	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
1-Naphthylamine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
2,3,4,6-Tetrachlorophenol	ND(0.40) J [ND(0.39) J]	ND(0.37)	NA	ND(0.39)
2,4,5-Trichlorophenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2,4,6-Trichlorophenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2,4-Dichlorophenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2,4-Dimethylphenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2,4-Dinitrophenol	ND(2.0) J [ND(2.0) J]	ND(1.9) J	NA	ND(2.0) J
2,4-Dinitrotoluene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39) J
2,6-Dichlorophenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2,6-Dinitrotoluene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2-Acetylaminofluorene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
2-Chloronaphthalene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2-Chlorophenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2-Methylnaphthalene	0.15 J [0.26 J]	ND(0.37)	NA	ND(0.39)
2-Methylphenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
2-Naphthylamine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
2-Nitroaniline	ND(2.0) [ND(2.0)]	ND(1.9)	NA	ND(2.0) J
2-Nitrophenol	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
2-Picoline	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
3&4-Methylphenol	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
3,3'-Dichlorobenzidine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
3,3'-Dimethylbenzidine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
3-Methylcholanthrene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
3-Nitroaniline	ND(2.0) [ND(2.0)]	ND(1.9)	NA	ND(2.0) J
4,6-Dinitro-2-methylphenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
4-Aminobiphenyl	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
4-Bromophenyl-phenylether	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
4-Chloro-3-Methylphenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
4-Chloroaniline	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
4-Chlorobenzilate	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
4-Chlorophenyl-phenylether	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
4-Nitroaniline	ND(2.0) [ND(2.0)]	ND(1.9)	NA	ND(2.0)
4-Nitrophenol	ND(2.0) [ND(2.0)]	ND(1.9)	NA	ND(2.0) J
4-Nitroquinoline-1-oxide	ND(0.80) J [ND(0.78) J]	ND(0.74)	NA	ND(0.78)
4-Phenylenediamine	ND(0.80) [ND(0.78)]	ND(0.74) J	NA	ND(0.78) J
5-Nitro-o-toluidine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
7,12-Dimethylbenz(a)anthracene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
a,a'-Dimethylphenethylamine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Acenaphthene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Acenaphthylene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Acetophenone	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Aniline	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39) J
Anthracene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Aramite	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Benzidine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Benzo(a)anthracene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.20 J
Benzo(a)pyrene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.22 J
Benzo(b)fluoranthene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.29 J

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C6 6-15 01/10/03	RAA6-C15 3-6 01/07/03	RAA6-C15 4-6 01/07/03	RAA6-C17 0-1 01/02/03
<b>Semivolatile Organics (continued)</b>				
Benzo(g,h,i)perylene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.15 J
Benzo(k)fluoranthene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.15 J
Benzyl Alcohol	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
bis(2-Chloroethoxy)methane	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
bis(2-Chloroethyl)ether	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
bis(2-Chloroisopropyl)ether	ND(0.40) J [ND(0.39) J]	ND(0.37)	NA	ND(0.39)
bis(2-Ethylhexyl)phthalate	ND(0.39) [ND(0.39)]	ND(0.37)	NA	ND(0.38)
Butylbenzylphthalate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Chrysene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.22 J
Diallylate	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Dibenzo(a,h)anthracene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Dibenzofuran	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Diethylphthalate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Dimethylphthalate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Di-n-Butylphthalate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Di-n-Octylphthalate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Diphenylamine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Ethyl Methanesulfonate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Fluoranthene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.39
Fluorene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Hexachlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Hexachlorobutadiene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Hexachlorocyclopentadiene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39) J
Hexachloroethane	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Hexachlorophene	ND(0.80) J [ND(0.78) J]	ND(0.74) J	NA	ND(0.78) J
Hexachloropropene	ND(0.40) J [ND(0.39) J]	ND(0.37)	NA	ND(0.39)
Indeno(1,2,3-cd)pyrene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.12 J
Isodrin	ND(0.40) [ND(0.39)]	ND(0.37) J	NA	ND(0.39)
Isophorone	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Isosafrole	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Methapyrilene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Methyl Methanesulfonate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Naphthalene	0.27 J [0.27 J]	ND(0.37)	NA	ND(0.39)
Nitrobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosodiethylamine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosodimethylamine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitroso-di-n-butylamine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
N-Nitroso-di-n-propylamine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosodiphenylamine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosomethylethylamine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
N-Nitrosomorpholine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosopiperidine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
N-Nitrosopyrrolidine	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
o,o,o-Triethylphosphorothioate	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
o-Toluidine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
p-Dimethylaminoazobenzene	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Pentachlorobenzene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Pentachloroethane	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Pentachloronitrobenzene	ND(0.80) J [ND(0.78) J]	ND(0.74)	NA	ND(0.78)
Pentachlorophenol	ND(2.0) [ND(2.0)]	ND(1.9)	NA	ND(2.0)
Phenacetin	ND(0.80) [ND(0.78)]	ND(0.74)	NA	ND(0.78)
Phenanthrene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.17 J
Phenol	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Pronamide	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Pyrene	ND(0.40) [ND(0.39)]	ND(0.37)	NA	0.34 J
Pyridine	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Safrole	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)
Thionazin	ND(0.40) [ND(0.39)]	ND(0.37)	NA	ND(0.39)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C6 6-15 01/10/03	RAA6-C15 3-6 01/07/03	RAA6-C15 4-6 01/07/03	RAA6-C17 0-1 01/02/03
<b>Furans</b>				
2,3,7,8-TCDF	ND(0.00000075) [ND(0.0000013)]	ND(0.00000011)	NA	0.000015 Y
TCDFs (total)	ND(0.00000075) [ND(0.0000013)]	ND(0.00000011)	NA	0.00020
1,2,3,7,8-PeCDF	ND(0.0000017) [ND(0.00000061)]	ND(0.00000027)	NA	0.0000070 J
2,3,4,7,8-PeCDF	ND(0.00000036) X [ND(0.00000092)]	ND(0.00000073)	NA	0.000036
PeCDFs (total)	ND(0.0000014) [ND(0.0000015)]	ND(0.00000073)	NA	0.00034
1,2,3,4,7,8-HxCDF	ND(0.00000055) X [0.00000094 J]	ND(0.00000027)	NA	0.0000090 J
1,2,3,6,7,8-HxCDF	ND(0.0000017) [ND(0.00000057)]	ND(0.00000027)	NA	ND(0.0000087) X
1,2,3,7,8,9-HxCDF	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	0.0000023 J
2,3,4,6,7,8-HxCDF	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	0.000019 J
HxCDFs (total)	ND(0.0000017) [ND(0.0000015)]	ND(0.00000027)	NA	0.00022
1,2,3,4,6,7,8-HpCDF	0.0000010 J [ND(0.0000018)]	ND(0.00000027)	NA	0.000019 J
1,2,3,4,7,8,9-HpCDF	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	ND(0.0000024) X
HpCDFs (total)	ND(0.0000010) [ND(0.0000018)]	ND(0.00000027)	NA	0.000037
OCDF	ND(0.0000016) [ND(0.0000025) X]	ND(0.00000054)	NA	0.000011 J
<b>Dioxins</b>				
2,3,7,8-TCDD	ND(0.00000081) [ND(0.0000012)]	ND(0.00000013)	NA	ND(0.0000010) X
TCDDs (total)	ND(0.0000024) [ND(0.0000029)]	ND(0.00000020)	NA	0.0000046
1,2,3,7,8-PeCDD	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	ND(0.0000017) X
PeCDDs (total)	ND(0.0000031) [ND(0.0000042)]	ND(0.00000027)	NA	0.000014
1,2,3,4,7,8-HxCDD	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	ND(0.0000013) X
1,2,3,6,7,8-HxCDD	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	0.0000034 J
1,2,3,7,8,9-HxCDD	ND(0.0000017) [ND(0.0000025)]	ND(0.00000027)	NA	0.0000024 J
HxCDDs (total)	ND(0.0000033) [ND(0.0000051)]	ND(0.00000030)	NA	0.000032
1,2,3,4,6,7,8-HpCDD	ND(0.0000018) [ND(0.0000036)]	ND(0.00000024) X	NA	0.000019 J
HpCDDs (total)	ND(0.0000027) [ND(0.0000053)]	ND(0.00000027)	NA	0.000037
OCDD	0.000014 J [ND(0.000019)]	ND(0.0000012)	NA	0.000085
Total TEQs (WHO TEFs)	0.0000020 [0.0000029]	0.00000033	NA	0.000026
<b>Inorganics</b>				
Antimony	ND(6.00) [ND(6.00)]	1.50 B	NA	33.0
Arsenic	8.40 [7.20]	5.60	NA	5.90
Barium	22.0 [17.0 B]	19.0 B	NA	52.0
Beryllium	0.120 B [0.170 B]	0.240 B	NA	0.200 B
Cadmium	0.280 B [0.270 B]	0.490 B	NA	0.370 B
Chromium	8.20 [7.80]	5.00	NA	5.90
Cobalt	12.0 [10.0]	6.60	NA	6.40
Copper	27.0 [20.0]	11.0	NA	88.0
Cyanide	ND(0.240) [ND(0.230)]	ND(0.560)	NA	ND(0.580)
Lead	9.40 [7.30]	9.00	NA	140
Mercury	ND(0.120) [ND(0.120)]	ND(0.110)	NA	0.480
Nickel	19.0 [19.0]	10.0	NA	10.0
Selenium	1.60 [1.00 B]	ND(1.00)	NA	ND(1.00)
Silver	ND(1.00) [ND(1.00)]	ND(1.00)	NA	ND(1.00)
Sulfide	37.0 [32.0]	28.0	NA	47.0
Thallium	ND(1.20) J [ND(1.20) J]	ND(1.10) J	NA	ND(1.20)
Tin	ND(10.0) [ND(10.0)]	ND(10.0)	NA	110
Vanadium	6.70 [6.60]	5.20	NA	6.60
Zinc	58.0 [51.0]	34.0	NA	81.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D5 0-1 01/14/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-D7 1-3 01/13/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,1,1-Trichloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,1,2,2-Tetrachloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,1,2-Trichloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,1-Dichloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,1-Dichloroethene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,2,3-Trichloropropane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,2-Dibromo-3-chloropropane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,2-Dibromoethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,2-Dichloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,2-Dichloropropane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
1,4-Dioxane	ND(0.11) J	NA	ND(0.10) J	ND(0.12) J	ND(0.11) J
2-Butanone	ND(0.011)	NA	ND(0.010)	ND(0.012)	ND(0.011)
2-Chloro-1,3-butadiene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
2-Chloroethylvinylether	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
2-Hexanone	ND(0.011)	NA	ND(0.010)	ND(0.012)	ND(0.011)
3-Chloropropene	ND(0.0056) J	NA	ND(0.0053) J	ND(0.0058)	ND(0.0057) J
4-Methyl-2-pentanone	ND(0.011)	NA	ND(0.010)	ND(0.012)	ND(0.011)
Acetone	0.015 J	NA	0.021 J	ND(0.023)	ND(0.023)
Acetonitrile	ND(0.11) J	NA	ND(0.10) J	ND(0.12)	ND(0.11)
Acrolein	ND(0.11) J	NA	ND(0.10) J	ND(0.12) J	ND(0.11) J
Acrylonitrile	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Benzene	ND(0.0056)	NA	0.020	ND(0.0058)	ND(0.0057)
Bromodichloromethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Bromoform	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Bromomethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057) J
Carbon Disulfide	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Carbon Tetrachloride	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Chlorobenzene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Chloroethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Chloroform	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Chloromethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
cis-1,3-Dichloropropene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Dibromochloromethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Dibromomethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Dichlorodifluoromethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Ethyl Methacrylate	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Ethylbenzene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Iodomethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Isobutanol	ND(0.11) J	NA	ND(0.10) J	ND(0.12) J	ND(0.11) J
Methacrylonitrile	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Methyl Methacrylate	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Methylene Chloride	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Propionitrile	ND(0.011) J	NA	ND(0.010) J	ND(0.012) J	ND(0.011) J
Styrene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Tetrachloroethene	0.0044 J	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Toluene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
trans-1,2-Dichloroethene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
trans-1,3-Dichloropropene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
trans-1,4-Dichloro-2-butene	ND(0.0056) J	NA	ND(0.0053) J	ND(0.0058)	ND(0.0057)
Trichloroethene	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Trichlorofluoromethane	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Vinyl Acetate	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Vinyl Chloride	ND(0.0056)	NA	ND(0.0053)	ND(0.0058)	ND(0.0057)
Xylenes (total)	ND(0.0056)	NA	0.061	ND(0.0058)	ND(0.0057)



**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D5 0-1 01/14/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-D7 1-3 01/13/03
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,2,4-Trichlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,2-Dichlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,2-Diphenylhydrazine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,3,5-Trinitrobenzene	ND(0.37) J	ND(0.37) J	NA	ND(0.39) J	ND(0.38) J
1,3-Dichlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,3-Dinitrobenzene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
1,4-Dichlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
1,4-Naphthoquinone	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
1-Naphthylamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
2,3,4,6-Tetrachlorophenol	ND(0.37) J	ND(0.37) J	NA	ND(0.39) J	ND(0.38) J
2,4,5-Trichlorophenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,4,6-Trichlorophenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,4-Dichlorophenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,4-Dimethylphenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,4-Dinitrophenol	ND(1.9) J	ND(1.9) J	NA	ND(2.0) J	ND(1.9) J
2,4-Dinitrotoluene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,6-Dichlorophenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2,6-Dinitrotoluene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2-Acetylaminofluorene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
2-Chloronaphthalene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2-Chlorophenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2-Methylnaphthalene	ND(0.37)	0.47	NA	ND(0.39)	0.17 J
2-Methylphenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
2-Naphthylamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
2-Nitroaniline	ND(1.9)	ND(1.9)	NA	ND(2.0)	ND(1.9)
2-Nitrophenol	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
2-Picoline	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
3&4-Methylphenol	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
3,3'-Dichlorobenzidine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
3,3'-Dimethylbenzidine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
3-Methylcholanthrene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
3-Nitroaniline	ND(1.9)	ND(1.9)	NA	ND(2.0)	ND(1.9)
4,6-Dinitro-2-methylphenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
4-Aminobiphenyl	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
4-Bromophenyl-phenylether	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
4-Chloro-3-Methylphenol	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
4-Chloroaniline	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
4-Chlorobenzilate	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
4-Chlorophenyl-phenylether	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
4-Nitroaniline	ND(1.9)	ND(1.9)	NA	ND(2.0)	ND(1.9)
4-Nitrophenol	ND(1.9)	ND(1.9)	NA	ND(2.0)	ND(1.9)
4-Nitroquinoline-1-oxide	ND(0.75) J	ND(0.75) J	NA	ND(0.78) J	ND(0.76) J
4-Phenylenediamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
5-Nitro-o-toluidine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
7,12-Dimethylbenz(a)anthracene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
a,a'-Dimethylphenethylamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Acenaphthene	ND(0.37)	ND(0.37)	NA	0.14 J	0.91
Acenaphthylene	0.24 J	ND(0.37)	NA	ND(0.39)	0.077 J
Acetophenone	ND(0.37)	0.60	NA	ND(0.39)	ND(0.38)
Aniline	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Anthracene	0.26 J	ND(0.37)	NA	0.33 J	3.2
Aramite	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Benzidine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Benzo(a)anthracene	0.43	ND(0.37)	NA	0.65	5.3
Benzo(a)pyrene	0.56	ND(0.37)	NA	0.56	3.8
Benzo(b)fluoranthene	0.70	ND(0.37)	NA	0.64	4.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D5 0-1 01/14/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-D7 1-3 01/13/03
<b>Semivolatile Organics (continued)</b>					
Benzo(g,h,i)perylene	0.40	ND(0.37)	NA	0.32 J	1.8
Benzo(k)fluoranthene	0.27 J	ND(0.37)	NA	0.26 J	1.7
Benzyl Alcohol	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
bis(2-Chloroethoxy)methane	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
bis(2-Chloroethyl)ether	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
bis(2-Chloroisopropyl)ether	ND(0.37) J	ND(0.37) J	NA	ND(0.39) J	ND(0.38) J
bis(2-Ethylhexyl)phthalate	ND(0.37)	ND(0.37)	NA	ND(0.38)	ND(0.37)
Butylbenzylphthalate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Chrysene	0.36 J	ND(0.37)	NA	0.59	4.3
Diallate	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Dibenzo(a,h)anthracene	0.14 J	ND(0.37)	NA	ND(0.39)	0.57
Dibenzofuran	ND(0.37)	ND(0.37)	NA	ND(0.39)	0.57
Diethylphthalate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Dimethylphthalate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Di-n-Butylphthalate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Di-n-Octylphthalate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Diphenylamine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Ethyl Methanesulfonate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Fluoranthene	0.60	ND(0.37)	NA	1.5	11
Fluorene	ND(0.37)	ND(0.37)	NA	0.11 J	1.0
Hexachlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Hexachlorobutadiene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Hexachlorocyclopentadiene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Hexachloroethane	ND(0.37)	ND(0.37)	NA	0.099 J	ND(0.38)
Hexachlorophene	ND(0.75) J	ND(0.75) J	NA	ND(0.78) J	ND(0.76) J
Hexachloropropene	ND(0.37) J	ND(0.37) J	NA	ND(0.39) J	ND(0.38) J
Indeno(1,2,3-cd)pyrene	0.38	ND(0.37)	NA	0.30 J	1.7
Isodrin	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Isophorone	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Isosafrole	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Methapyrene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Methyl Methanesulfonate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Naphthalene	ND(0.37)	0.75	NA	ND(0.39)	0.16 J
Nitrobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosodiethylamine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosodimethylamine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitroso-di-n-butylamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
N-Nitroso-di-n-propylamine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosodiphenylamine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosomethylethylamine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
N-Nitrosomorpholine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosopiperidine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
N-Nitrosopyrrolidine	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
o,o,o-Triethylphosphorothioate	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
o-Toluidine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
p-Dimethylaminoazobenzene	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Pentachlorobenzene	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Pentachloroethane	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Pentachloronitrobenzene	ND(0.75) J	ND(0.75) J	NA	ND(0.78) J	ND(0.76) J
Pentachlorophenol	ND(1.9)	ND(1.9)	NA	ND(2.0)	ND(1.9)
Phenacetin	ND(0.75)	ND(0.75)	NA	ND(0.78)	ND(0.76)
Phenanthrene	0.24 J	ND(0.37)	NA	1.1	9.5
Phenol	ND(0.37)	ND(0.37)	NA	8.2	ND(0.38)
Pronamide	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Pyrene	0.48	ND(0.37)	NA	ND(0.39)	8.5
Pyridine	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Safrole	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)
Thionazin	ND(0.37)	ND(0.37)	NA	ND(0.39)	ND(0.38)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-D5 0-1 01/14/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-D7 1-3 01/13/03
<b>Furans</b>						
2,3,7,8-TCDF		ND(0.0000020) X	0.0000016 J	NA	0.0000092 Y	0.0000094 Y
TCDFs (total)		0.0000078	0.0000016	NA	0.00023 Q	0.00015 Q
1,2,3,7,8-PeCDF		ND(0.0000015) X	ND(0.00000084) X	NA	ND(0.0000049) X	0.0000038 JQ
2,3,4,7,8-PeCDF		0.0000043 J	0.0000014 J	NA	0.000024	0.000013 Q
PeCDFs (total)		0.000039	ND(0.0000014)	NA	0.00021 Q	0.00013 QI
1,2,3,4,7,8-HxCDF		ND(0.0000024) X	ND(0.0000029)	NA	0.000010	0.0000072
1,2,3,6,7,8-HxCDF		ND(0.0000019)	ND(0.00000082) X	NA	0.0000086	0.0000059
1,2,3,7,8,9-HxCDF		ND(0.0000012) X	0.00000086 J	NA	0.0000021 JQ	0.0000012 JQ
2,3,4,6,7,8-HxCDF		ND(0.0000033) X	ND(0.00000084) X	NA	0.000017	0.000012
HxCDFs (total)		0.000028	ND(0.0000077)	NA	0.00026 Q	0.00016 Q
1,2,3,4,6,7,8-HpCDF		0.0000053 J	0.0000032 J	NA	0.000045	0.000017
1,2,3,4,7,8,9-HpCDF		ND(0.0000012) X	ND(0.0000018) X	NA	0.0000059	0.0000029 J
HpCDFs (total)		0.000010	0.0000072	NA	0.00013	0.000046
OCDF		0.0000085 J	0.0000077 J	NA	0.00011	0.000046
<b>Dioxins</b>						
2,3,7,8-TCDD		ND(0.0000011)	ND(0.00000097) X	NA	ND(0.00000056) X	ND(0.00000028)
TCDDs (total)		0.0000047	ND(0.0000020)	NA	0.00000021 Q	0.0000014 Q
1,2,3,7,8-PeCDD		ND(0.0000027)	ND(0.0000025)	NA	0.0000018 J	0.00000081 J
PeCDDs (total)		ND(0.0000028)	ND(0.0000026)	NA	0.0000051 Q	0.0000022 Q
1,2,3,4,7,8-HxCDD		ND(0.0000027)	ND(0.0000025)	NA	0.0000028 J	0.00000051 J
1,2,3,6,7,8-HxCDD		ND(0.0000014) X	ND(0.0000025)	NA	0.0000062	0.0000011 J
1,2,3,7,8,9-HxCDD		0.0000015 J	0.00000097 J	NA	0.0000054 J	0.00000083 JQ
HxCDDs (total)		0.0000042	0.0000020	NA	0.000041	0.0000055 Q
1,2,3,4,6,7,8-HpCDD		ND(0.000011)	ND(0.0000052)	NA	0.00011	0.000036
HpCDDs (total)		ND(0.000020)	ND(0.0000097)	NA	0.00018	0.000068
OCDD		ND(0.000060)	ND(0.000032)	NA	0.00071	0.00061
Total TEQs (WHO TEFs)		0.0000051	0.0000033	NA	0.000022	0.000012
<b>Inorganics</b>						
Antimony		ND(6.00)	ND(6.00)	NA	1.30 B	ND(6.00)
Arsenic		7.10	8.60	NA	5.90	6.80
Barium		30.0	26.0	NA	26.0 J	31.0 J
Beryllium		ND(0.50)	ND(0.50)	NA	0.240 B	0.280 B
Cadmium		0.430 B	0.460 B	NA	0.830	0.660
Chromium		6.30	7.40	NA	9.20	7.90
Cobalt		11.0	9.10	NA	6.60 J	9.50 J
Copper		30.0	33.0	NA	46.0	41.0
Cyanide		ND(0.220)	ND(0.220)	NA	0.200 J	ND(0.110)
Lead		36.0	36.0	NA	91.0	44.0
Mercury		0.0750 B	0.190	NA	0.0520 B	0.0510 B
Nickel		13.0	15.0	NA	13.0	16.0
Selenium		1.00 B	1.70	NA	0.890 B	0.810 B
Silver		ND(1.00)	ND(1.00)	NA	ND(1.00)	ND(1.00)
Sulfide		38.0	210	NA	22.0 J	24.0 J
Thallium		ND(1.10) J	ND(1.10) J	NA	ND(1.20) J	ND(1.10) J
Tin		ND(10.0)	ND(10.0)	NA	ND(10.0)	ND(10.0)
Vanadium		8.60	6.70	NA	8.00	7.50
Zinc		50.0	110	NA	75.0	53.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D10 0-1 01/13/03	RAA6-D10 6-8 01/13/03	RAA6-D10 6-15 01/13/03	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,1,1-Trichloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,1,2,2-Tetrachloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,1,2-Trichloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,1-Dichloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,1-Dichloroethene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,2,3-Trichloropropane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,2-Dibromo-3-chloropropane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,2-Dibromoethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,2-Dichloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,2-Dichloropropane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
1,4-Dioxane	ND(0.11) J	ND(0.12) J	NA	ND(0.12)	ND(0.11) J
2-Butanone	ND(0.011)	ND(0.012)	NA	ND(0.012)	ND(0.011) J
2-Chloro-1,3-butadiene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
2-Chloroethylvinylether	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054) J
2-Hexanone	ND(0.011)	ND(0.012)	NA	ND(0.012)	ND(0.011) J
3-Chloropropene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
4-Methyl-2-pentanone	ND(0.011)	ND(0.012)	NA	ND(0.012)	ND(0.011) J
Acetone	ND(0.022)	ND(0.023)	NA	ND(0.025)	ND(0.021) J
Acetonitrile	ND(0.11)	ND(0.12)	NA	ND(0.12)	ND(0.11) J
Acrolein	ND(0.11) J	ND(0.12) J	NA	ND(0.12)	ND(0.11) J
Acrylonitrile	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Benzene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Bromodichloromethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Bromoform	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Bromomethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Carbon Disulfide	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Carbon Tetrachloride	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Chlorobenzene	ND(0.0055)	ND(0.0058) J	NA	ND(0.0062)	ND(0.0054)
Chloroethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Chloroform	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Chloromethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
cis-1,3-Dichloropropene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Dibromochloromethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Dibromomethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Dichlorodifluoromethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Ethyl Methacrylate	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Ethylbenzene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Iodomethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Isobutanol	ND(0.11) J	ND(0.12) J	NA	ND(0.12)	ND(0.11) J
Methacrylonitrile	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Methyl Methacrylate	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Methylene Chloride	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Propionitrile	ND(0.011) J	ND(0.012) J	NA	ND(0.012)	ND(0.011) J
Styrene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Tetrachloroethene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Toluene	ND(0.0055)	ND(0.0058) J	NA	ND(0.0062)	ND(0.0054)
trans-1,2-Dichloroethene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
trans-1,3-Dichloropropene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
trans-1,4-Dichloro-2-butene	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Trichloroethene	ND(0.0055)	ND(0.0058) J	NA	ND(0.0062)	ND(0.0054)
Trichlorofluoromethane	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Vinyl Acetate	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Vinyl Chloride	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)
Xylenes (total)	ND(0.0055)	ND(0.0058)	NA	ND(0.0062)	ND(0.0054)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-D10 0-1 01/13/03	RAA6-D10 6-8 01/13/03	RAA6-D10 6-15 01/13/03	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
1,2,4-Trichlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
1,2-Dichlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
1,2-Diphenylhydrazine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
1,3,5-Trinitrobenzene	ND(0.37) J	NA	ND(0.39)	ND(0.41)	ND(0.36) J
1,3-Dichlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
1,3-Dinitrobenzene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
1,4-Dichlorobenzene	ND(0.37)	NA	0.36 J	ND(0.41)	ND(0.36)
1,4-Naphthoquinone	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
1-Naphthylamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
2,3,4,6-Tetrachlorophenol	ND(0.37) J	NA	ND(0.39) J	ND(0.41)	ND(0.36)
2,4,5-Trichlorophenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,4,6-Trichlorophenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,4-Dichlorophenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,4-Dimethylphenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,4-Dinitrophenol	ND(1.9) J	NA	ND(2.0) J	ND(2.1) J	ND(1.8) J
2,4-Dinitrotoluene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,6-Dichlorophenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2,6-Dinitrotoluene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2-Acetylaminofluorene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
2-Chloronaphthalene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2-Chlorophenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2-Methylnaphthalene	ND(0.37)	NA	0.50	ND(0.41)	ND(0.36)
2-Methylphenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
2-Naphthylamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
2-Nitroaniline	ND(1.9)	NA	ND(2.0)	ND(2.1)	ND(1.8)
2-Nitrophenol	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
2-Picoline	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
3&4-Methylphenol	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
3,3'-Dichlorobenzidine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
3,3'-Dimethylbenzidine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
3-Methylcholanthrene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
3-Nitroaniline	ND(1.9)	NA	ND(2.0)	ND(2.1)	ND(1.8)
4,6-Dinitro-2-methylphenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
4-Aminobiphenyl	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
4-Bromophenyl-phenylether	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
4-Chloro-3-Methylphenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
4-Chloroaniline	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
4-Chlorobenzilate	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
4-Chlorophenyl-phenylether	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
4-Nitroaniline	ND(1.9)	NA	ND(2.0)	ND(2.1)	ND(1.8)
4-Nitrophenol	ND(1.9)	NA	R	ND(2.1)	ND(1.8)
4-Nitroquinoline-1-oxide	ND(0.74) J	NA	ND(0.78) J	ND(0.82) J	ND(0.72)
4-Phenylenediamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72) J
5-Nitro-o-toluidine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
7,12-Dimethylbenz(a)anthracene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
a,a'-Dimethylphenethylamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Acenaphthene	ND(0.37)	NA	ND(0.39) J	ND(0.41)	ND(0.36)
Acenaphthylene	0.12 J	NA	ND(0.39)	0.22 J	ND(0.36)
Acetophenone	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Aniline	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Anthracene	0.076 J	NA	ND(0.39)	0.22 J	ND(0.36)
Aramite	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Benzidine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Benzo(a)anthracene	0.37	NA	ND(0.39)	0.80	ND(0.36)
Benzo(a)pyrene	0.36 J	NA	ND(0.39)	0.80	ND(0.36)
Benzo(b)fluoranthene	0.59	NA	ND(0.39)	1.1	ND(0.36)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-D10 0-1 01/13/03	RAA6-D10 6-8 01/13/03	RAA6-D10 6-15 01/13/03	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03
<b>Semivolatle Organics (continued)</b>					
Benzo(g,h,i)perylene	0.30 J	NA	ND(0.39)	0.53	ND(0.36)
Benzo(k)fluoranthene	0.23 J	NA	ND(0.39)	0.45	ND(0.36)
Benzyl Alcohol	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
bis(2-Chloroethoxy)methane	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
bis(2-Chloroethyl)ether	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
bis(2-Chloroisopropyl)ether	ND(0.37) J	NA	ND(0.39)	ND(0.41)	ND(0.36)
bis(2-Ethylhexyl)phthalate	ND(0.36)	NA	ND(0.39)	ND(0.41)	ND(0.35)
Butylbenzylphthalate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Chrysene	0.38	NA	ND(0.39)	0.80	ND(0.36)
Diallate	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Dibenzo(a,h)anthracene	0.096 J	NA	ND(0.39)	0.14 J	ND(0.36)
Dibenzofuran	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Diethylphthalate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Dimethylphthalate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Di-n-Butylphthalate	ND(0.37)	NA	ND(0.39)	0.11 J	ND(0.36)
Di-n-Octylphthalate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Diphenylamine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Ethyl Methanesulfonate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Fluoranthene	0.98	NA	ND(0.39)	2.0	ND(0.36)
Fluorene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Hexachlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Hexachlorobutadiene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Hexachlorocyclopentadiene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Hexachloroethane	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Hexachlorophene	ND(0.74) J	NA	ND(0.78) J	ND(0.82) J	ND(0.72) J
Hexachloropropene	ND(0.37) J	NA	ND(0.39)	ND(0.41) J	ND(0.36)
Indeno(1,2,3-cd)pyrene	0.28 J	NA	ND(0.39)	0.49	ND(0.36)
Isodrin	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36) J
Isophorone	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Isosafrole	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Methapyrilene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Methyl Methanesulfonate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Naphthalene	ND(0.37)	NA	0.81	ND(0.41)	ND(0.36)
Nitrobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosodiethylamine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosodimethylamine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitroso-di-n-butylamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
N-Nitroso-di-n-propylamine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosodiphenylamine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosomethylethylamine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
N-Nitrosomorpholine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosopiperidine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
N-Nitrosopyrrolidine	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
o,o,o-Triethylphosphorothioate	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
o-Toluidine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
p-Dimethylaminoazobenzene	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Pentachlorobenzene	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Pentachloroethane	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Pentachloronitrobenzene	ND(0.74) J	NA	ND(0.78) J	ND(0.82) J	ND(0.72)
Pentachlorophenol	ND(1.9)	NA	ND(2.0)	ND(2.1)	ND(1.8)
Phenacetin	ND(0.74)	NA	ND(0.78)	ND(0.82)	ND(0.72)
Phenanthrene	0.43	NA	ND(0.39)	0.97	ND(0.36)
Phenol	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Pronamide	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Pyrene	0.66	NA	ND(0.39)	1.4	ND(0.36)
Pyridine	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Safrole	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)
Thionazin	ND(0.37)	NA	ND(0.39)	ND(0.41)	ND(0.36)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-D10 0-1 01/13/03	RAA6-D10 6-8 01/13/03	RAA6-D10 6-15 01/13/03	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03
<b>Furans</b>					
2,3,7,8-TCDF	0.000044 Y	NA	0.0000061 J	0.0000076 Y	0.000013 J
TCDFs (total)	0.000047 Q	NA	0.0000018	0.000090	0.000014
1,2,3,7,8-PeCDF	0.0000020 JQ	NA	0.0000010 J	0.0000030 J	0.0000011 J
2,3,4,7,8-PeCDF	0.0000065	NA	0.0000014 J	0.000013	0.0000044 J
PeCDFs (total)	0.000077 Q	NA	0.0000068 Q	0.00017 Q	0.000035
1,2,3,4,7,8-HxCDF	0.0000032 J	NA	0.0000028 J	0.000014	0.0000018 J
1,2,3,6,7,8-HxCDF	0.0000028 J	NA	0.0000012 J	0.0000081	0.0000016 J
1,2,3,7,8,9-HxCDF	0.0000015 JQ	NA	0.0000013 J	0.0000018 JQ	0.00000088 J
2,3,4,6,7,8-HxCDF	0.0000060	NA	0.0000014 J	0.000018	0.0000040 J
HxCDFs (total)	0.000081	NA	0.000011	0.00028 Q	0.000043
1,2,3,4,6,7,8-HpCDF	0.000019	NA	0.0000055 J	0.000089	0.0000033 J
1,2,3,4,7,8,9-HpCDF	0.0000030 J	NA	0.0000024 J	0.000010	0.00000084 J
HpCDFs (total)	0.000064	NA	0.000016	0.00028	0.0000085
OCDF	0.000076	NA	0.000019	0.00032	0.0000035 J
<b>Dioxins</b>					
2,3,7,8-TCDD	ND(0.00000033) X	NA	ND(0.00000023)	0.0000058 J	ND(0.00000026)
TCDDs (total)	0.00000035 Q	NA	ND(0.00000023)	0.0000022	ND(0.00000026)
1,2,3,7,8-PeCDD	ND(0.0000012) XQ	NA	ND(0.00000077) X	0.0000022 J	0.00000067 J
PeCDDs (total)	0.0000016 Q	NA	0.00000038	0.0000086 Q	ND(0.00000067)
1,2,3,4,7,8-HxCDD	0.0000013 J	NA	0.00000077 J	0.0000033 J	ND(0.00000076) X
1,2,3,6,7,8-HxCDD	0.0000025 J	NA	0.0000012 J	0.000010	ND(0.0000011)
1,2,3,7,8,9-HxCDD	0.0000022 J	NA	0.0000012 J	0.0000064	ND(0.0000010)
HxCDDs (total)	0.000016	NA	0.0000042	0.000063	0.0000040
1,2,3,4,6,7,8-HpCDD	0.000047	NA	0.000011	0.00025	0.0000027 J
HpCDDs (total)	0.000080	NA	0.000020	0.00042	0.0000046
OCDD	0.00036	NA	0.000073	0.0018	ND(0.000014)
Total TEQs (WHO TEFs)	0.0000072	NA	0.0000025	0.000020	0.0000042
<b>Inorganics</b>					
Antimony	0.960 B	NA	1.90 B	1.50 J	2.50 B
Arsenic	6.80	NA	5.20	7.90	6.80
Barium	23.0 J	NA	15.0 J	37.0	24.0
Beryllium	0.190 B	NA	0.190 B	0.660	0.200 B
Cadmium	0.690	NA	0.570	1.00	1.90
Chromium	10.0	NA	5.60	14.0	5.30
Cobalt	10.0 J	NA	6.60 J	8.90	5.70
Copper	40.0	NA	16.0	41.0	19.0
Cyanide	ND(0.220)	NA	ND(0.580)	0.220 B	ND(0.110)
Lead	29.0	NA	6.80	140	18.0
Mercury	0.0280 B	NA	ND(0.120)	0.100 B	ND(0.110)
Nickel	18.0	NA	10.0	18.0	8.10
Selenium	1.10	NA	0.530 B	1.60	0.860 B
Silver	ND(1.00)	NA	ND(1.00)	0.550 B	ND(1.00)
Sulfide	26.0 J	NA	37.0 J	16.0	19.0
Thallium	ND(1.10) J	NA	ND(1.20) J	ND(1.20) J	ND(1.10) J
Tin	ND(10.0)	NA	ND(10.0)	5.90 B	ND(10.0)
Vanadium	8.00	NA	4.40 B	12.0	3.40 B
Zinc	63.0	NA	31.0	100	34.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-E1 0-1 01/09/03	RAA6-E1 6-15 01/09/03	RAA6-E1 12-15 01/09/03	RAA6-E3 0-1 01/14/03	RAA6-E3 1-6 01/14/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,1,1-Trichloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,1,2,2-Tetrachloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,1,2-Trichloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,1-Dichloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,1-Dichloroethene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,2,3-Trichloropropane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,2-Dibromo-3-chloropropane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,2-Dibromoethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,2-Dichloroethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,2-Dichloropropane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
1,4-Dioxane	ND(0.12) J	NA	ND(0.12) J	ND(0.12) J	NA
2-Butanone	ND(0.012) J	NA	ND(0.012) J	ND(0.012)	NA
2-Chloro-1,3-butadiene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
2-Chloroethylvinylether	ND(0.0061) J	NA	ND(0.0058) J	ND(0.0059)	NA
2-Hexanone	ND(0.012) J	NA	ND(0.012) J	ND(0.012)	NA
3-Chloropropene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059) J	NA
4-Methyl-2-pentanone	ND(0.012)	NA	ND(0.012)	ND(0.012)	NA
Acetone	ND(0.024) J	NA	ND(0.023) J	ND(0.023)	NA
Acetonitrile	ND(0.12) J	NA	ND(0.12) J	ND(0.12) J	NA
Acrolein	ND(0.12) J	NA	ND(0.12) J	ND(0.12) J	NA
Acrylonitrile	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Benzene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Bromodichloromethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Bromoform	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Bromomethane	ND(0.0061) J	NA	ND(0.0058) J	ND(0.0059)	NA
Carbon Disulfide	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Carbon Tetrachloride	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Chlorobenzene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Chloroethane	ND(0.0061) J	NA	ND(0.0058)	ND(0.0059)	NA
Chloroform	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Chloromethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
cis-1,3-Dichloropropene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Dibromochloromethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Dibromomethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Dichlorodifluoromethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Ethyl Methacrylate	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Ethylbenzene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Iodomethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Isobutanol	ND(0.12) J	NA	ND(0.12) J	ND(0.12) J	NA
Methacrylonitrile	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Methyl Methacrylate	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Methylene Chloride	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Propionitrile	ND(0.012) J	NA	ND(0.012) J	ND(0.012) J	NA
Styrene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Tetrachloroethene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Toluene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
trans-1,2-Dichloroethene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
trans-1,3-Dichloropropene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
trans-1,4-Dichloro-2-butene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059) J	NA
Trichloroethene	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Trichlorofluoromethane	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Vinyl Acetate	ND(0.0061) J	NA	ND(0.0058) J	ND(0.0059)	NA
Vinyl Chloride	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA
Xylenes (total)	ND(0.0061)	NA	ND(0.0058)	ND(0.0059)	NA



**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-E1 0-1 01/09/03	RAA6-E1 6-15 01/09/03	RAA6-E1 12-15 01/09/03	RAA6-E3 0-1 01/14/03	RAA6-E3 1-6 01/14/03
<b>Semivolatile Organics</b>					
1,2,4,5-Tetrachlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,2,4-Trichlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,2-Dichlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,2-Diphenylhydrazine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,3,5-Trinitrobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39) J	ND(0.37) J
1,3-Dichlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,3-Dinitrobenzene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
1,4-Dichlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
1,4-Naphthoquinone	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
1-Naphthylamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
2,3,4,6-Tetrachlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39) J	ND(0.37) J
2,4,5-Trichlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,4,6-Trichlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,4-Dichlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,4-Dimethylphenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,4-Dinitrophenol	ND(3.3) J	ND(2.0) J	NA	ND(2.0) J	ND(1.9) J
2,4-Dinitrotoluene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,6-Dichlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2,6-Dinitrotoluene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2-Acetylaminofluorene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
2-Chloronaphthalene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2-Chlorophenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2-Methylnaphthalene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2-Methylphenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
2-Naphthylamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
2-Nitroaniline	ND(3.3)	ND(2.0)	NA	ND(2.0)	ND(1.9)
2-Nitrophenol	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
2-Picoline	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
3&4-Methylphenol	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
3,3'-Dichlorobenzidine	ND(1.3)	ND(0.77)	NA	ND(0.78)	ND(0.74)
3,3'-Dimethylbenzidine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
3-Methylcholanthrene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
3-Nitroaniline	ND(3.3)	ND(2.0)	NA	ND(2.0)	ND(1.9)
4,6-Dinitro-2-methylphenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
4-Aminobiphenyl	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
4-Bromophenyl-phenylether	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
4-Chloro-3-Methylphenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
4-Chloroaniline	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
4-Chlorobenzilate	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
4-Chlorophenyl-phenylether	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
4-Nitroaniline	ND(2.1)	ND(2.0)	NA	ND(2.0)	ND(1.9)
4-Nitrophenol	ND(3.3)	ND(2.0)	NA	ND(2.0)	ND(1.9)
4-Nitroquinoline-1-oxide	ND(0.82) J	ND(0.77) J	NA	ND(0.78) J	ND(0.74) J
4-Phenylenediamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
5-Nitro-o-toluidine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
7,12-Dimethylbenz(a)anthracene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
a,a'-Dimethylphenethylamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Acenaphthene	ND(0.65)	ND(0.38)	NA	0.12 J	ND(0.37)
Acenaphthylene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Acetophenone	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Aniline	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Anthracene	ND(0.65)	ND(0.38)	NA	0.20 J	0.13 J
Aramite	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Benzidine	ND(1.3)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Benzo(a)anthracene	0.27 J	ND(0.38)	NA	0.45	0.17 J
Benzo(a)pyrene	0.30 J	ND(0.38)	NA	0.39	0.16 J
Benzo(b)fluoranthene	0.33 J	ND(0.38)	NA	0.48	0.14 J

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-E1 0-1 01/09/03	RAA6-E1 6-15 01/09/03	RAA6-E1 12-15 01/09/03	RAA6-E3 0-1 01/14/03	RAA6-E3 1-6 01/14/03
<b>Semivolatile Organics (continued)</b>					
Benzo(g,h,i)perylene	0.18 J	ND(0.38)	NA	0.27 J	0.085 J
Benzo(k)fluoranthene	ND(0.65)	ND(0.38)	NA	0.18 J	0.079 J
Benzyl Alcohol	ND(1.3)	ND(0.77)	NA	ND(0.78)	ND(0.74)
bis(2-Chloroethoxy)methane	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
bis(2-Chloroethyl)ether	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
bis(2-Chloroisopropyl)ether	ND(0.65)	ND(0.38)	NA	ND(0.39) J	ND(0.37) J
bis(2-Ethylhexyl)phthalate	ND(0.40)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Butylbenzylphthalate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Chrysene	0.27 J	ND(0.38)	NA	0.39	0.15 J
Diallylate	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Dibenzo(a,h)anthracene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Dibenzofuran	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Diethylphthalate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Dimethylphthalate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Di-n-Butylphthalate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Di-n-Octylphthalate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Diphenylamine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Ethyl Methanesulfonate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Fluoranthene	0.53 J	ND(0.38)	NA	1.2	0.46
Fluorene	ND(0.65)	ND(0.38)	NA	0.11 J	ND(0.37)
Hexachlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Hexachlorobutadiene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Hexachlorocyclopentadiene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Hexachloroethane	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Hexachlorophene	ND(1.3) J	ND(0.77) J	NA	ND(0.78) J	ND(0.74) J
Hexachloropropene	ND(0.65) J	ND(0.38) J	NA	ND(0.39) J	ND(0.37) J
Indeno(1,2,3-cd)pyrene	0.16 J	ND(0.38)	NA	0.23 J	ND(0.37)
Isodrin	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Isophorone	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Isosafrole	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Methapyrene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Methyl Methanesulfonate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Naphthalene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Nitrobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosodiethylamine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosodimethylamine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitroso-di-n-butylamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
N-Nitroso-di-n-propylamine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosodiphenylamine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosomethylethylamine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
N-Nitrosomorpholine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosopiperidine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
N-Nitrosopyrrolidine	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
o,o,o-Triethylphosphorothioate	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
o-Toluidine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
p-Dimethylaminoazobenzene	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Pentachlorobenzene	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Pentachloroethane	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Pentachloronitrobenzene	ND(0.82) J	ND(0.77) J	NA	ND(0.78) J	ND(0.74) J
Pentachlorophenol	ND(3.3)	ND(2.0)	NA	ND(2.0)	ND(1.9)
Phenacetin	ND(0.82)	ND(0.77)	NA	ND(0.78)	ND(0.74)
Phenanthrene	0.24 J	ND(0.38)	NA	0.88	0.43
Phenol	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Pronamide	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Pyrene	0.46 J	ND(0.38)	NA	0.97	0.35 J
Pyridine	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Safrole	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)
Thionazin	ND(0.65)	ND(0.38)	NA	ND(0.39)	ND(0.37)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-E1 0-1 01/09/03	RAA6-E1 6-15 01/09/03	RAA6-E1 12-15 01/09/03	RAA6-E3 0-1 01/14/03	RAA6-E3 1-6 01/14/03
<b>Furans</b>					
2,3,7,8-TCDF	0.000037 Y	0.0000024 J	NA	0.000086 Y	0.000067 Y
TCDFs (total)	0.000048	0.0000024	NA	0.000069	0.000042
1,2,3,7,8-PeCDF	0.000013 J	0.0000020 J	NA	ND(0.000039) X	0.000035 J
2,3,4,7,8-PeCDF	0.000010	ND(0.0000024)	NA	0.000012	0.000050 J
PeCDFs (total)	0.00011 Q	ND(0.000013)	NA	0.00013 Q	0.000065
1,2,3,4,7,8-HxCDF	0.000031 J	ND(0.0000026)	NA	0.000074	0.000035 J
1,2,3,6,7,8-HxCDF	0.000030 J	ND(0.0000024) X	NA	0.000057 J	0.000023 J
1,2,3,7,8,9-HxCDF	ND(0.0000069)	ND(0.0000054)	NA	0.000039 JQ	0.0000083 J
2,3,4,6,7,8-HxCDF	0.000066	ND(0.0000016)	NA	0.000011	0.000056
HxCDFs (total)	0.00010 Q	ND(0.0000011)	NA	0.00017 Q	0.000071
1,2,3,4,6,7,8-HpCDF	0.000024	ND(0.0000037)	NA	0.000060	0.000092
1,2,3,4,7,8,9-HpCDF	0.000014 J	ND(0.0000054)	NA	0.000092	0.000012 J
HpCDFs (total)	0.000065	ND(0.0000078)	NA	0.00019	0.000022
OCDF	0.000057	0.0000067 J	NA	0.00023	0.000013
<b>Dioxins</b>					
2,3,7,8-TCDD	ND(0.0000042) X	ND(0.0000022)	NA	ND(0.0000074) X	ND(0.0000039) X
TCDDs (total)	0.0000068	ND(0.0000070)	NA	0.000012	ND(0.0000040)
1,2,3,7,8-PeCDD	0.000010 J	ND(0.0000054)	NA	0.000031 J	ND(0.0000052) X
PeCDDs (total)	0.000060 Q	ND(0.0000086)	NA	0.00010 Q	ND(0.0000083)
1,2,3,4,7,8-HxCDD	ND(0.0000089) X	ND(0.0000054)	NA	0.000067	0.0000076 J
1,2,3,6,7,8-HxCDD	0.000031 J	ND(0.0000054)	NA	0.000010	0.0000079 J
1,2,3,7,8,9-HxCDD	0.000021 J	ND(0.0000054)	NA	0.000090	ND(0.0000077) X
HxCDDs (total)	0.000020	ND(0.0000054)	NA	0.000072	0.000071
1,2,3,4,6,7,8-HpCDD	0.000069	ND(0.0000072)	NA	0.00019	0.000011
HpCDDs (total)	0.00013	ND(0.000012)	NA	0.00039	0.000024
OCDD	0.00064	ND(0.0000053)	NA	0.0016	0.000084
Total TEQs (WHO TEFs)	0.000095	0.0000062	NA	0.00019	0.000054
<b>Inorganics</b>					
Antimony	ND(6.00) J	ND(6.00) J	NA	ND(6.00)	ND(6.00)
Arsenic	5.60	5.60	NA	6.20	6.80
Barium	35.0	22.0	NA	58.0	36.0
Beryllium	0.240 B	0.140 B	NA	ND(0.50)	ND(0.50)
Cadmium	0.380 B	0.250 B	NA	0.960	0.580
Chromium	8.80	6.80	NA	12.0	8.10
Cobalt	8.50	8.70	NA	10.0	9.30
Copper	20.0	16.0	NA	33.0	23.0
Cyanide	ND(0.240)	ND(0.580)	NA	ND(0.230)	ND(0.220)
Lead	32.0	7.30	NA	72.0	41.0
Mercury	0.0860 B	ND(0.120)	NA	0.0720 B	0.0520 B
Nickel	16.0	16.0	NA	16.0	16.0
Selenium	1.20	1.00	NA	1.80	1.60
Silver	ND(1.00)	ND(1.00)	NA	ND(1.00)	ND(1.00)
Sulfide	ND(6.10)	ND(5.80)	NA	11.0	12.0
Thallium	ND(1.20) J	ND(1.20) J	NA	ND(1.20) J	ND(1.10) J
Tin	ND(10.0)	ND(10.0) J	NA	ND(10.0)	ND(10.0)
Vanadium	9.60	6.20	NA	12.0	7.20
Zinc	64.0	45.0	NA	110	76.0

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

<b>Parameter</b>	<b>Sample ID: Sample Depth(Feet): Date Collected:</b>	<b>RAA6-E3 4-6 01/14/03</b>
<b>Volatile Organics</b>		
1,1,1,2-Tetrachloroethane		ND(0.0057)
1,1,1-Trichloroethane		ND(0.0057)
1,1,2,2-Tetrachloroethane		ND(0.0057)
1,1,2-Trichloroethane		ND(0.0057)
1,1-Dichloroethane		ND(0.0057)
1,1-Dichloroethene		ND(0.0057)
1,2,3-Trichloropropane		ND(0.0057)
1,2-Dibromo-3-chloropropane		ND(0.0057)
1,2-Dibromoethane		ND(0.0057)
1,2-Dichloroethane		ND(0.0057)
1,2-Dichloropropane		ND(0.0057)
1,4-Dioxane		ND(0.11) J
2-Butanone		ND(0.011)
2-Chloro-1,3-butadiene		ND(0.0057)
2-Chloroethylvinylether		ND(0.0057)
2-Hexanone		ND(0.011)
3-Chloropropene		ND(0.0057) J
4-Methyl-2-pentanone		ND(0.011)
Acetone		ND(0.023)
Acetonitrile		ND(0.11) J
Acrolein		ND(0.11) J
Acrylonitrile		ND(0.0057)
Benzene		ND(0.0057)
Bromodichloromethane		ND(0.0057)
Bromoform		ND(0.0057)
Bromomethane		ND(0.0057)
Carbon Disulfide		ND(0.0057)
Carbon Tetrachloride		ND(0.0057)
Chlorobenzene		ND(0.0057)
Chloroethane		ND(0.0057)
Chloroform		ND(0.0057)
Chloromethane		ND(0.0057)
cis-1,3-Dichloropropene		ND(0.0057)
Dibromochloromethane		ND(0.0057)
Dibromomethane		ND(0.0057)
Dichlorodifluoromethane		ND(0.0057)
Ethyl Methacrylate		ND(0.0057)
Ethylbenzene		ND(0.0057)
Iodomethane		ND(0.0057)
Isobutanol		ND(0.11) J
Methacrylonitrile		ND(0.0057)
Methyl Methacrylate		ND(0.0057)
Methylene Chloride		ND(0.0057)
Propionitrile		ND(0.011) J
Styrene		ND(0.0057)
Tetrachloroethene		0.0034 J
Toluene		ND(0.0057)
trans-1,2-Dichloroethene		ND(0.0057)
trans-1,3-Dichloropropene		ND(0.0057)
trans-1,4-Dichloro-2-butene		ND(0.0057) J
Trichloroethene		ND(0.0057)
Trichlorofluoromethane		ND(0.0057)
Vinyl Acetate		ND(0.0057)
Vinyl Chloride		ND(0.0057)
Xylenes (total)		ND(0.0057)

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

<b>Parameter</b>	<b>Sample ID: Sample Depth(Feet): Date Collected:</b>	<b>RAA6-E3 4-6 01/14/03</b>
<b>Semivolatile Organics</b>		
1,2,4,5-Tetrachlorobenzene		NA
1,2,4-Trichlorobenzene		NA
1,2-Dichlorobenzene		NA
1,2-Diphenylhydrazine		NA
1,3,5-Trinitrobenzene		NA
1,3-Dichlorobenzene		NA
1,3-Dinitrobenzene		NA
1,4-Dichlorobenzene		NA
1,4-Naphthoquinone		NA
1-Naphthylamine		NA
2,3,4,6-Tetrachlorophenol		NA
2,4,5-Trichlorophenol		NA
2,4,6-Trichlorophenol		NA
2,4-Dichlorophenol		NA
2,4-Dimethylphenol		NA
2,4-Dinitrophenol		NA
2,4-Dinitrotoluene		NA
2,6-Dichlorophenol		NA
2,6-Dinitrotoluene		NA
2-Acetylaminofluorene		NA
2-Chloronaphthalene		NA
2-Chlorophenol		NA
2-Methylnaphthalene		NA
2-Methylphenol		NA
2-Naphthylamine		NA
2-Nitroaniline		NA
2-Nitrophenol		NA
2-Picoline		NA
3&4-Methylphenol		NA
3,3'-Dichlorobenzidine		NA
3,3'-Dimethylbenzidine		NA
3-Methylcholanthrene		NA
3-Nitroaniline		NA
4,6-Dinitro-2-methylphenol		NA
4-Aminobiphenyl		NA
4-Bromophenyl-phenylether		NA
4-Chloro-3-Methylphenol		NA
4-Chloroaniline		NA
4-Chlorobenzilate		NA
4-Chlorophenyl-phenylether		NA
4-Nitroaniline		NA
4-Nitrophenol		NA
4-Nitroquinoline-1-oxide		NA
4-Phenylenediamine		NA
5-Nitro-o-toluidine		NA
7,12-Dimethylbenz(a)anthracene		NA
a,a'-Dimethylphenethylamine		NA
Acenaphthene		NA
Acenaphthylene		NA
Acetophenone		NA
Aniline		NA
Anthracene		NA
Aramite		NA
Benzidine		NA
Benzo(a)anthracene		NA
Benzo(a)pyrene		NA
Benzo(b)fluoranthene		NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-E3 4-6 01/14/03
<b>Semivolatile Organics (continued)</b>		
Benzo(g,h,i)perylene		NA
Benzo(k)fluoranthene		NA
Benzyl Alcohol		NA
bis(2-Chloroethoxy)methane		NA
bis(2-Chloroethyl)ether		NA
bis(2-Chloroisopropyl)ether		NA
bis(2-Ethylhexyl)phthalate		NA
Butylbenzylphthalate		NA
Chrysene		NA
Diallate		NA
Dibenzo(a,h)anthracene		NA
Dibenzofuran		NA
Diethylphthalate		NA
Dimethylphthalate		NA
Di-n-Butylphthalate		NA
Di-n-Octylphthalate		NA
Diphenylamine		NA
Ethyl Methanesulfonate		NA
Fluoranthene		NA
Fluorene		NA
Hexachlorobenzene		NA
Hexachlorobutadiene		NA
Hexachlorocyclopentadiene		NA
Hexachloroethane		NA
Hexachlorophene		NA
Hexachloropropene		NA
Indeno(1,2,3-cd)pyrene		NA
Isodrin		NA
Isophorone		NA
Isosafrole		NA
Methapyrilene		NA
Methyl Methanesulfonate		NA
Naphthalene		NA
Nitrobenzene		NA
N-Nitrosodiethylamine		NA
N-Nitrosodimethylamine		NA
N-Nitroso-di-n-butylamine		NA
N-Nitroso-di-n-propylamine		NA
N-Nitrosodiphenylamine		NA
N-Nitrosomethylethylamine		NA
N-Nitrosomorpholine		NA
N-Nitrosopiperidine		NA
N-Nitrosopyrrolidine		NA
o,o,o-Triethylphosphorothioate		NA
o-Toluidine		NA
p-Dimethylaminoazobenzene		NA
Pentachlorobenzene		NA
Pentachloroethane		NA
Pentachloronitrobenzene		NA
Pentachlorophenol		NA
Phenacetin		NA
Phenanthrene		NA
Phenol		NA
Pronamide		NA
Pyrene		NA
Pyridine		NA
Safrole		NA
Thionazin		NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

<b>Parameter</b>	<b>Sample ID: Sample Depth(Feet): Date Collected:</b>	<b>RAA6-E3 4-6 01/14/03</b>
<b>Furans</b>		
2,3,7,8-TCDF		NA
TCDFs (total)		NA
1,2,3,7,8-PeCDF		NA
2,3,4,7,8-PeCDF		NA
PeCDFs (total)		NA
1,2,3,4,7,8-HxCDF		NA
1,2,3,6,7,8-HxCDF		NA
1,2,3,7,8,9-HxCDF		NA
2,3,4,6,7,8-HxCDF		NA
HxCDFs (total)		NA
1,2,3,4,6,7,8-HpCDF		NA
1,2,3,4,7,8,9-HpCDF		NA
HpCDFs (total)		NA
OCDF		NA
<b>Dioxins</b>		
2,3,7,8-TCDD		NA
TCDDs (total)		NA
1,2,3,7,8-PeCDD		NA
PeCDDs (total)		NA
1,2,3,4,7,8-HxCDD		NA
1,2,3,6,7,8-HxCDD		NA
1,2,3,7,8,9-HxCDD		NA
HxCDDs (total)		NA
1,2,3,4,6,7,8-HpCDD		NA
HpCDDs (total)		NA
OCDD		NA
Total TEQs (WHO TEFs)		NA
<b>Inorganics</b>		
Antimony		NA
Arsenic		NA
Barium		NA
Beryllium		NA
Cadmium		NA
Chromium		NA
Cobalt		NA
Copper		NA
Cyanide		NA
Lead		NA
Mercury		NA
Nickel		NA
Selenium		NA
Silver		NA
Sulfide		NA
Thallium		NA
Tin		NA
Vanadium		NA
Zinc		NA

**TABLE 2-2  
PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX + 3 constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, semivolatiles, dioxin/furans)

- I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
- J - Indicates that the associated numerical value is an estimated concentration.
- Q - Indicates the presence of quantitative interferences.
- X - Estimated maximum possible concentration.
- Y- 2,3,7,8-TCDF results have been confirmed on a DB-225 column.
- R - Data was rejected due to a deficiency in the data generation process.

Inorganics

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



**TABLE 2-3  
EPA SOIL SAMPLING DATA FOR PCBs**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID	Sample ID	Depth(Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA6-C5	1N-BH000887-0-0060	6-15	1/9/2003	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	ND(0.17)	2.0	2.0
RAA6-C3	1N-BH000896-0-0100	10-12	1/15/2003	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	ND(0.21)	2.1	2.1

**Notes:**

1. Sample collection and analysis performed by United States Environmental Protection Agency (EPA) Subcontractors. Results provided to GE under a Data Exchange Agreement between GE and EPA.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.

TABLE 2-4  
EPA APPENDIX IX+3 SOIL ANALYTICAL RESULTS

CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C5 1N-BH000887-0-0060 6-15 01/09/03	RAA6-E6 1N-BH000891-0-0060 6-15 01/13/03	RAA6-E6 1N-BH000891-0-0080 8-10 01/13/03	RAA6-C3 1N-BH000896-0-0100 10-12 01/15/03
<b>Parameter</b>				
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane	ND(0.46)	NA	ND(0.49)	NA
1,1,1-Trichloroethane	ND(0.46)	NA	ND(0.49)	NA
1,1,2,2-Tetrachloroethane	ND(0.46)	NA	ND(0.49)	NA
1,1,2-Trichloroethane	ND(0.46)	NA	ND(0.49)	NA
1,1-Dichloroethane	ND(0.46)	NA	ND(0.49)	NA
1,1-Dichloroethene	ND(0.46)	NA	ND(0.49)	NA
1,2,3-Trichloropropane	ND(0.46)	NA	ND(0.49)	NA
1,2,4-Trichlorobenzene	ND(0.46)	NA	ND(0.49)	NA
1,2-Dibromo-3-chloropropane	ND(0.46)	NA	ND(0.49)	NA
1,2-Dibromoethane	ND(0.46)	NA	ND(0.49)	NA
1,2-Dichlorobenzene	ND(0.46)	NA	ND(0.49)	NA
1,2-Dichloroethane	ND(0.46)	NA	ND(0.49)	NA
1,2-Dichloropropane	ND(0.46)	NA	ND(0.49)	NA
1,3-Dichlorobenzene	0.32 J	NA	ND(0.49)	NA
1,4-Dichlorobenzene	2.3	NA	0.27 J	NA
1,4-Dioxane	R	NA	R	NA
2-Butanone	R	NA	0.22 J	NA
2-Chloro-1,3-butadiene	ND(0.46)	NA	ND(0.49)	NA
2-Chloroethylvinylether	ND(0.46)	NA	ND(0.49)	NA
2-Hexanone	ND(0.46)	NA	6.1	NA
3-Chloropropene	ND(0.46)	NA	ND(0.49)	NA
4-Methyl-2-pentanone	ND(0.46)	NA	ND(0.49)	NA
Acetone	R	NA	R	NA
Acrolein	R	NA	R	NA
Acrylonitrile	ND(0.46)	NA	ND(0.49)	NA
Benzene	ND(0.46)	NA	ND(0.49)	NA
Bromodichloromethane	ND(0.46)	NA	ND(0.49)	NA
Bromoform	0.095 J	NA	0.14 J	NA
Bromomethane	ND(0.46) J	NA	ND(0.49)	NA
Carbon Disulfide	ND(0.46)	NA	ND(0.49)	NA
Carbon Tetrachloride	ND(0.46)	NA	ND(0.49)	NA
Chlorobenzene	ND(0.46)	NA	ND(0.49)	NA
Chloroethane	ND(0.46)	NA	ND(0.49)	NA
Chloroform	ND(0.46)	NA	ND(0.49)	NA
Chloromethane	ND(0.46)	NA	ND(0.49)	NA
cis-1,2-Dichloroethene	ND(0.46)	NA	ND(0.49)	NA
cis-1,3-Dichloropropene	ND(0.46)	NA	ND(0.49)	NA
Dibromochloromethane	ND(0.46)	NA	ND(0.49)	NA
Dibromomethane	ND(0.46)	NA	ND(0.49)	NA
Ethyl Methacrylate	ND(0.46)	NA	ND(0.49)	NA
Ethylbenzene	ND(0.46)	NA	ND(0.49)	NA
Freon 12	ND(0.46)	NA	ND(0.49)	NA
Iodomethane	ND(0.46)	NA	ND(0.49)	NA
Isobutanol	R	NA	R	NA
m&p-Xylene	ND(0.46)	NA	0.20 J	NA
Methacrylonitrile	ND(0.46)	NA	ND(0.49)	NA
Methyl Methacrylate	ND(0.46)	NA	0.73	NA
Methyl tert-butyl ether	ND(0.46)	NA	ND(0.49)	NA
Methylene Chloride	ND(0.46)	NA	ND(0.49)	NA
Naphthalene	ND(0.46)	NA	ND(0.49)	NA
o-Xylene	ND(0.46)	NA	ND(0.49)	NA
Propionitrile	R	NA	R	NA
Styrene	ND(0.46)	NA	ND(0.49)	NA
Tetrachloroethene	ND(0.46)	NA	ND(0.49)	NA
Toluene	ND(0.46)	NA	ND(0.49)	NA
trans-1,2-Dichloroethene	ND(0.46)	NA	ND(0.49)	NA
trans-1,3-Dichloropropene	ND(0.46)	NA	ND(0.49)	NA
trans-1,4-Dichloro-2-butene	ND(0.46)	NA	ND(0.49)	NA
Trichloroethene	ND(0.46)	NA	ND(0.49)	NA
Trichlorofluoromethane	ND(0.46) J	NA	ND(0.49) J	NA
Vinyl Acetate	ND(0.46)	NA	ND(0.49)	NA
Vinyl Chloride	ND(0.46)	NA	ND(0.49)	NA
Xylenes (total)	ND(0.46)	NA	0.21 J	NA

**TABLE 2-4  
EPA APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C5 1N-BH000887-0-0060 6-15 01/09/03	RAA6-E6 1N-BH000891-0-0060 6-15 01/13/03	RAA6-E6 1N-BH000891-0-0080 8-10 01/13/03	RAA6-C3 1N-BH000896-0-0100 10-12 01/15/03
<b>Semivolatile Organics</b>				
1,2,4,5-Tetrachlorobenzene	ND(0.34)	ND(0.39)	NA	ND(4.2)
1,2,4-Trichlorobenzene	ND(0.34)	ND(0.39)	NA	0.086 J
1,2-Dichlorobenzene	ND(0.34)	ND(0.39)	NA	ND(0.42)
1,3,5-Trinitrobenzene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
1,3-Dichlorobenzene	0.022 J	ND(0.39)	NA	0.18 J
1,3-Dinitrobenzene	ND(0.34)	ND(0.39)	NA	ND(4.2)
1,4-Dichlorobenzene	0.13 J	ND(0.39)	NA	1.4 J
1,4-Naphthoquinone	ND(0.34)	ND(0.39)	NA	ND(4.2)
1-Naphthylamine	ND(0.34) J	ND(0.39) J	NA	ND(4.2) J
2,3,4,6-Tetrachlorophenol	ND(0.34)	ND(0.39)	NA	ND(4.2)
2,4,5-Trichlorophenol	ND(0.85)	ND(0.98)	NA	ND(10)
2,4,6-Trichlorophenol	ND(0.34)	ND(0.39)	NA	ND(4.2)
2,4-Dichlorophenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
2,4-Dimethylphenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
2,4-Dinitrophenol	ND(0.85)	ND(0.98)	NA	ND(10)
2,4-Dinitrotoluene	ND(0.34)	ND(0.39)	NA	ND(4.2)
2,6-Dichlorophenol	ND(0.34)	ND(0.39)	NA	ND(0.42) J
2,6-Dinitrotoluene	ND(0.34)	ND(0.39)	NA	ND(4.2)
2-Acetylaminofluorene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
2-Chloronaphthalene	ND(0.34)	ND(0.39)	NA	ND(4.2)
2-Chlorophenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
2-Methylnaphthalene	ND(0.34)	ND(0.39)	NA	ND(0.42) J
2-Methylphenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
2-Naphthylamine	ND(0.34) J	ND(0.39) J	NA	ND(4.2) J
2-Nitroaniline	ND(0.85)	ND(0.98)	NA	ND(10)
2-Nitrophenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
2-Picoline	ND(0.34)	ND(0.39)	NA	ND(0.42)
3,3'-Dichlorobenzidine	ND(0.34) J	ND(0.39)	NA	ND(4.2)
3,3'-Dimethylbenzidine	ND(0.34) J	ND(0.39)	NA	ND(4.2)
3-Methylcholanthrene	ND(0.34)	ND(0.39)	NA	ND(4.2)
3-Nitroaniline	ND(0.85)	ND(0.98) J	NA	ND(10)
4,6-Dinitro-2-methylphenol	ND(0.85) J	ND(0.98)	NA	ND(10)
4-Aminobiphenyl	ND(0.34) J	ND(0.39) J	NA	ND(4.2) J
4-Bromophenyl-phenylether	ND(0.34) J	ND(0.39)	NA	ND(4.2)
4-Chloro-3-Methylphenol	ND(0.34)	ND(0.39)	NA	ND(0.42) J
4-Chloroaniline	ND(0.34)	ND(0.39)	NA	ND(0.42) J
4-Chlorobenzilate	ND(0.34) J	ND(0.39)	NA	ND(4.2)
4-Chlorophenyl-phenylether	ND(0.34)	ND(0.39)	NA	ND(4.2)
4-Methylphenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
4-Nitroaniline	ND(0.85)	ND(0.98)	NA	ND(10)
4-Nitrophenol	ND(0.85)	ND(0.98)	NA	ND(10)
4-Nitroquinoline-1-oxide	R	ND(0.39)	NA	ND(4.2)
4-Phenylenediamine	ND(0.34)	ND(0.39) J	NA	ND(0.42) J
5-Nitro-o-toluidine	ND(0.34)	ND(0.39)	NA	ND(4.2)
7,12-Dimethylbenz(a)anthracene	ND(0.34)	ND(0.39)	NA	ND(4.2)
a,a'-Dimethylphenethylamine	ND(0.34)	ND(0.39)	NA	ND(0.42) J
Acenaphthene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Acenaphthylene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Acetophenone	ND(0.34)	ND(0.39)	NA	ND(0.42)
Aniline	ND(0.85)	ND(0.98)	NA	ND(1.0)
Anthracene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Aramite	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Azobenzene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Benzo(a)anthracene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Benzo(a)pyrene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Benzo(b)fluoranthene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Benzo(g,h,i)perylene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Benzo(k)fluoranthene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Benzyl Alcohol	ND(0.34)	ND(0.39)	NA	ND(0.42)
bis(2-Chloroethoxy)methane	ND(0.34)	ND(0.39)	NA	ND(0.42)
bis(2-Chloroethyl)ether	ND(0.34)	ND(0.39)	NA	ND(0.42)
bis(2-Chloroisopropyl)ether	ND(0.34)	ND(0.39)	NA	ND(0.42)
bis(2-Ethylhexyl)phthalate	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Butylbenzylphthalate	ND(0.34) J	ND(0.39)	NA	ND(4.2)

**TABLE 2-4  
EPA APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C5 1N-BH000887-0-0060 6-15 01/09/03	RAA6-E6 1N-BH000891-0-0060 6-15 01/13/03	RAA6-E6 1N-BH000891-0-0080 8-10 01/13/03	RAA6-C3 1N-BH000896-0-0100 10-12 01/15/03
<b>Semivolatle Organics (continued)</b>				
Chrysene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Diallate	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Dibenzo(a,h)anthracene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Dibenzofuran	ND(0.34)	ND(0.39)	NA	ND(4.2)
Diethylphthalate	ND(0.34)	ND(0.39)	NA	ND(4.2)
Dimethylphthalate	ND(0.34)	ND(0.39)	NA	ND(4.2)
Di-n-Butylphthalate	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Di-n-Octylphthalate	ND(0.34)	ND(0.39)	NA	ND(4.2)
Ethyl Methanesulfonate	ND(0.34)	ND(0.39)	NA	ND(0.42)
Fluoranthene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Fluorene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Hexachlorobenzene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Hexachlorobutadiene	ND(0.34)	ND(0.39)	NA	ND(0.42) J
Hexachlorocyclopentadiene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Hexachloroethane	ND(0.34)	ND(0.39)	NA	ND(0.42)
Hexachloropropene	ND(0.34) J	ND(0.39) J	NA	ND(0.42) J
Indeno(1,2,3-cd)pyrene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Isophorone	ND(0.34)	ND(0.39)	NA	ND(0.42)
Isosafrole	ND(0.34)	ND(0.39)	NA	ND(0.42) J
Methapyrilene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Methyl Methanesulfonate	ND(0.34)	ND(0.39)	NA	ND(0.42)
Naphthalene	ND(0.34)	ND(0.39)	NA	ND(0.42) J
Nitrobenzene	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosodiethylamine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosodimethylamine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitroso-di-n-butylamine	ND(0.34)	ND(0.39)	NA	ND(0.42) J
N-Nitroso-di-n-propylamine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosodiphenylamine	ND(0.34) J	ND(0.39)	NA	ND(4.2)
N-Nitrosomethylethylamine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosomorpholine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosopiperidine	ND(0.34)	ND(0.39)	NA	ND(0.42)
N-Nitrosopyrrolidine	ND(0.34)	ND(0.39)	NA	ND(0.42)
o-Toluidine	ND(0.34)	ND(0.39)	NA	ND(0.42)
p-Dimethylaminoazobenzene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Pentachlorobenzene	ND(0.34)	ND(0.39)	NA	ND(4.2)
Pentachloroethane	ND(0.34)	ND(0.39)	NA	ND(0.42)
Pentachloronitrobenzene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Pentachlorophenol	ND(0.85) J	ND(0.98)	NA	ND(10)
Phenacetin	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Phenanthrene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Phenol	ND(0.34)	ND(0.39)	NA	ND(0.42)
Pronamide	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Pyrene	ND(0.34) J	ND(0.39)	NA	ND(4.2)
Pyridine	ND(0.34)	ND(0.39) J	NA	ND(0.42) J
Safrole	ND(0.34)	ND(0.39)	NA	ND(4.2)
<b>Herbicides</b>				
Dinoseb	ND(0.34) J	ND(0.39)	NA	ND(4.2)
<b>Inorganics</b>				
Antimony	ND(0.270)	R	NA	ND(0.330)
Arsenic	5.00	11.8	NA	8.90 J
Barium	20.8	22.7	NA	34.9
Beryllium	0.170 J	0.220 J	NA	0.290 J
Cadmium	ND(0.0770)	ND(0.0880)	NA	ND(0.0480) J
Chromium	6.90	11.9 J	NA	14.2
Cobalt	8.50	16.6	NA	14.1
Copper	15.0	31.2	NA	41.3
Lead	7.20	11.0 J	NA	10.4 J
Mercury	ND(0.0170)	ND(0.0190)	NA	ND(0.0200)
Nickel	13.9	26.0	NA	26.7
Selenium	ND(0.270)	ND(0.310)	NA	R
Silver	0.170 J	0.290 J	NA	ND(0.190)
Thallium	ND(0.280)	ND(0.320)	NA	ND(0.350) J
Tin	ND(0.490)	ND(0.870)	NA	0.550 J
Vanadium	8.50	13.8 J	NA	13.4
Zinc	49.0	80.4	NA	92.7

TABLE 2-4  
EPA APPENDIX IX+3 SOIL ANALYTICAL RESULTS

CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Sample collection and analysis performed by United States Environmental Protection Agency (EPA) Subcontractors. Results provided to GE under a Data Exchange Agreement between GE and EPA.
2. NA - Not Analyzed.

Data Qualifiers: (volatiles, semivolatiles, herbicides, dioxin/furans)

J - Estimated Value.

R - Rejected.

**TABLE 2-5**  
**HISTORICAL SOIL SAMPLING DATA FOR PCBs**  
**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results are presented in dry weight parts per million, ppm)**

Location ID	Sample ID	Depth(Feet)	Date Collected	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
ES1-7	ES107.502	0.5-2	10/9/1996	ND(0.038)	ND(0.077)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	1.4	1.4
	ES10700.5	0-0.5	5/16/1996	ND(0.044)	ND(0.090)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	0.45	0.45
	ES1070204	2-4	5/16/1996	ND(0.035)	ND(0.072)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	1.7	1.7
	ES1070406	4-6	5/16/1996	ND(0.039)	ND(0.080)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	6.4	6.4
	ES1070608	6-8	5/16/1996	ND(0.039) [ND(2.1)]	ND(0.080) [ND(4.3)]	ND(0.039) [ND(2.1)]	ND(0.039) [ND(2.1)]	ND(0.039) [ND(2.1)]	ND(0.039) [ND(2.1)]	1.8 P [2.7 P]	1.8 [2.7]
	ES1071416	14-16	5/16/1996	ND(1.8)	ND(3.8)	ND(1.8)	ND(1.8)	ND(1.8)	ND(1.8)	ND(1.8)	ND(3.8)
ES1-8	ES108.502	0.5-2	10/9/1996	ND(0.036)	ND(0.074)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.34	0.34
	ES10800.5	0-0.5	5/16/1996	ND(0.040)	ND(0.081)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	1.1	1.1
	ES1080204	2-4	5/16/1996	ND(0.036)	ND(0.073)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	1.4	1.4
	ES1080406	4-6	5/16/1996	ND(3.9)	ND(7.9)	ND(3.9)	ND(3.9)	ND(3.9)	ND(3.9)	7.7	7.7
	ES1081416	14-16	5/16/1996	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.075)
ES1-9	ES109.502	0.5-2	10/9/1996	ND(0.040)	ND(0.080)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	2.2	2.2
	ES10900.5	0-0.5	5/16/1996	ND(0.041)	ND(0.083)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	1.9	1.9
	ES1090204	2-4	5/16/1996	ND(0.038)	ND(0.077)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	0.73	0.73
	ES1090406	4-6	5/16/1996	ND(0.038)	ND(0.078)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.078)
	ES1090608	6-8	5/16/1996	ND(0.038)	ND(0.078)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.078)
ES1-14	ES1140002	0-2	7/29/1996	ND(0.34)	ND(0.70)	ND(0.34)	ND(0.34)	ND(0.34)	ND(0.34)	1.8 P	1.8
	ES1140204	2-4	7/29/1996	ND(0.18)	ND(0.36)	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)	0.23	0.23
	ES1140406	4-6	7/29/1996	ND(0.038)	ND(0.078)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.078)
	ES1140608	6-8	7/29/1996	ND(0.038)	ND(0.078)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.078)
	ES1140810	8-10	7/29/1996	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	5.0	5.0
	ES1141012	10-12	7/29/1996	ND(0.035)	ND(0.070)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.060 P	0.060
	ES1141214	12-14	7/29/1996	ND(0.040)	ND(0.081)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.081)
ES1141416	14-16	7/29/1996	ND(0.037)	ND(0.075)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.30	0.30	
GEI106-SB3	GEI106-SB3	5-7	6/8/1994	NR	NR	NR	NR	NR	NR	NR	ND(1.0)
130	SL-56	2-2.5	3/3/1980	NR	NR	NR	NR	NR	NR	NR	1.3
	SL-57	4-5	3/3/1980	NR	NR	NR	NR	NR	NR	NR	ND(1.0)
	SL-59	6-7	3/3/1980	NR	NR	NR	NR	NR	NR	NR	2.6
	SL-60	8-9	3/3/1980	NR	NR	NR	NR	NR	NR	NR	3.1
	SL-61	9-10	3/3/1980	NR	NR	NR	NR	NR	NR	NR	0.10

**Notes:**

1. Samples were collected and analyzed by General Electric Company subcontractors for PCBs.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. NR - Not Reported. Total PCB data was entered from summary data tables and not the laboratory report form.
4. Field duplicate sample results are presented in brackets.

**Data Qualifiers:**

P - The analyte is detected in the sample. The percent difference in the concentrations calculated from two dissimilar GC columns is greater than 25%. The value should be considered estimated.

**TABLE 2-6  
HISTORICAL APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	ES1-7 ES1070608 6-8 05/16/96	ES1-8 ES1080406 4-6 05/16/96	ES1-9 ES1090406 4-6 05/16/96	ES1-14 ES1141416 14-16 07/29/96
<b>Volatile Organics</b>				
1,1,1,2-Tetrachloroethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,1,1-trichloro-2,2,2-trifluoroethane	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	NA
1,1,1-Trichloroethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,1,2,2-Tetrachloroethane	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
1,1,2-trichloro-1,2,2-trifluoroethane	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	NA
1,1,2-Trichloroethane	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
1,1-Dichloroethane	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
1,1-Dichloroethene	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,2,3-Trichloropropane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,2-Dibromo-3-chloropropane	ND(0.060) [ND(0.065)]	ND(0.060)	ND(0.059)	ND(0.056)
1,2-Dibromoethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,2-Dichloroethane	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
1,2-Dichloropropane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
1,4-Dioxane	ND(61) [ND(66)]	ND(61)	ND(60)	ND(57)
2-Butanone	ND(0.042) [ND(0.045)]	ND(0.042)	ND(0.041)	ND(0.039)
2-Chloroethylvinylether	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
2-Hexanone	ND(0.042) [ND(0.045)]	ND(0.042)	ND(0.041)	ND(0.039)
3-Chloropropene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
4-Methyl-2-pentanone	ND(0.030) [ND(0.032)]	ND(0.030)	ND(0.029)	ND(0.028)
Acetone	0.032 JB [0.033 JB]	0.050 JB	0.023 JB	0.023 JB
Acetonitrile	ND(0.24) [ND(0.26)]	ND(0.24)	ND(0.24)	ND(0.22)
Acrolein	ND(0.28) [ND(0.30)]	ND(0.27)	ND(0.27)	ND(0.26)
Acrylonitrile	ND(0.25) [ND(0.27)]	ND(0.25)	ND(0.25)	ND(0.24)
Benzene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Bromodichloromethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Bromoform	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Bromomethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Carbon Disulfide	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
Carbon Tetrachloride	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Chlorobenzene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Chloroethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Chloroform	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Chloromethane	ND(0.042) [ND(0.045)]	ND(0.042)	ND(0.041)	ND(0.039)
cis-1,3-Dichloropropene	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
cis-1,4-Dichloro-2-butene	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	NA
Crotonaldehyde	ND(0.66) [ND(0.71)]	ND(0.65)	ND(0.65)	NA
Dibromochloromethane	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Dibromomethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Dichlorodifluoromethane	NA	NA	NA	ND(0.011)
Ethyl Methacrylate	ND(0.030) [ND(0.032)]	ND(0.030)	ND(0.029)	ND(0.028)
Ethylbenzene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Iodomethane	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
Isobutanol	ND(16) [ND(17)]	ND(15)	ND(15)	ND(15)
Methacrylonitrile	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Methyl Methacrylate	ND(0.060) [ND(0.065)]	ND(0.060)	ND(0.059)	ND(0.056)
Methylene Chloride	0.013 JB [0.011 JB]	0.010 JB	0.013 JB	0.014 JB
Propionitrile	ND(0.71) [ND(0.77)]	ND(0.70)	ND(0.69)	ND(0.66)
Styrene	ND(0.012) [ND(0.013)]	ND(0.012)	ND(0.012)	ND(0.011)
Tetrachloroethene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
Toluene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
trans-1,2-Dichloroethene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
trans-1,3-Dichloropropene	ND(0.018) [ND(0.019)]	ND(0.018)	ND(0.018)	ND(0.017)
trans-1,4-Dichloro-2-butene	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Trichloroethene	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Trichlorofluoromethane	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Vinyl Acetate	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Vinyl Chloride	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)
Xylenes (total)	ND(0.024) [ND(0.026)]	ND(0.024)	ND(0.024)	ND(0.022)

**TABLE 2-6  
HISTORICAL APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	ES1-7 ES1070608 6-8 05/16/96	ES1-8 ES1080406 4-6 05/16/96	ES1-9 ES1090406 4-6 05/16/96	ES1-14 ES1141416 14-16 07/29/96
<b>Semivolatile Organics</b>				
1,2,3,4-Tetrachlorobenzene	NA	NA	NA	ND(0.72)
1,2,3,5-Tetrachlorobenzene	NA	NA	NA	ND(1.5)
1,2,3-Trichlorobenzene	NA	NA	NA	ND(0.67)
1,2,4,5-Tetrachlorobenzene	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
1,2,4-Trichlorobenzene	ND(0.66) [ND(3.6)]	ND(3.3)	ND(3.2)	ND(0.62)
1,2-Dichlorobenzene	ND(0.71) [ND(3.8)]	ND(3.5)	ND(3.5)	ND(0.66)
1,2-Dinitrobenzene	NA	NA	NA	ND(0.74)
1,2-Diphenylhydrazine	ND(0.83) [ND(4.5)]	ND(4.1)	ND(4.1)	ND(0.78)
1,3,5-Trichlorobenzene	NA	NA	NA	ND(0.69)
1,3,5-Trinitrobenzene	ND(1.1) [ND(5.9)]	ND(5.4)	ND(5.4)	ND(1.0)
1,3-Dichlorobenzene	0.064 J [ND(3.3)]	ND(3.0)	ND(3.0)	ND(0.57)
1,3-Dinitrobenzene	ND(0.67) [ND(3.6)]	ND(3.3)	ND(3.3)	ND(0.63)
1,4-Benzenediamine	NA	NA	NA	ND(0.74)
1,4-Dichlorobenzene	0.46 J [ND(3.4)]	ND(3.1)	ND(3.1)	ND(0.58)
1,4-Naphthoquinone	ND(1.9) [ND(10)]	ND(9.5)	ND(9.4)	ND(1.8)
1-Chloronaphthalene	NA	NA	NA	ND(1.3)
1-Methylnaphthalene	NA	NA	NA	ND(1.2)
1-Naphthylamine	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)
2,3,4,6-Tetrachlorophenol	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)
2,4,5-Trichlorophenol	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
2,4,6-Trichlorophenol	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
2,4-Dichlorophenol	ND(0.66) [ND(3.6)]	ND(3.3)	ND(3.2)	ND(0.62)
2,4-Dimethylphenol	ND(0.73) [ND(3.9)]	0.34 J	ND(3.6)	ND(0.69)
2,4-Dinitrophenol	ND(2.0) [ND(11)]	ND(10)	ND(10)	ND(1.9)
2,4-Dinitrotoluene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
2,6-Dichlorophenol	ND(1.4) [ND(7.8)]	ND(7.1)	ND(7.1)	ND(1.3)
2,6-Dinitrotoluene	ND(0.90) [ND(4.9)]	ND(4.5)	ND(4.4)	ND(0.84)
2-Acetylaminofluorene	ND(0.85) [ND(4.6)]	ND(4.2)	ND(4.2)	ND(0.80)
2-Chloronaphthalene	ND(1.2) [ND(6.3)]	ND(5.8)	ND(5.7)	ND(1.1)
2-Chlorophenol	ND(0.76) [ND(4.1)]	ND(3.8)	ND(3.7)	ND(0.71)
2-Methylnaphthalene	ND(1.0) [ND(5.4)]	ND(5.0)	ND(4.9)	ND(0.94)
2-Methylphenol	ND(0.78) [ND(4.2)]	ND(3.9)	ND(3.8)	ND(0.73)
2-Naphthylamine	ND(1.0) [ND(5.6)]	ND(5.1)	ND(5.1)	ND(0.97)
2-Nitroaniline	ND(1.3) [ND(7.1)]	ND(6.5)	ND(6.5)	ND(1.2)
2-Nitrophenol	ND(0.74) [ND(4.0)]	ND(3.7)	ND(3.6)	ND(0.70)
2-Picoline	ND(1.4) [ND(7.8)]	ND(7.1)	ND(7.1)	ND(1.3)
3,3'-Dichlorobenzidine	ND(0.60) [ND(3.2)]	ND(3.0)	ND(2.9)	ND(0.56)
3,3'-Dimethoxybenzidine	NA	NA	NA	ND(1.1)
3,3'-Dimethylbenzidine	ND(1.2) [ND(6.3)]	ND(5.8)	ND(5.7)	ND(1.1)
3-Methylcholanthrene	ND(0.73) [ND(3.9)]	ND(3.6)	ND(3.6)	ND(0.69)
3-Methylphenol	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
3-Nitroaniline	ND(0.83) [ND(4.5)]	ND(4.1)	ND(4.1)	ND(0.78)
3-Phenylenediamine	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
4,4'-Methylene-bis(2-chloroaniline)	NA	NA	NA	ND(0.51)
4,6-Dinitro-2-methylphenol	ND(2.2) [ND(12)]	ND(11)	ND(11)	ND(2.0)
4-Aminobiphenyl	ND(0.49) [ND(2.7)]	ND(2.4)	ND(2.4)	ND(0.46)
4-Bromophenyl-phenylether	ND(0.90) [ND(4.9)]	ND(4.5)	ND(4.4)	ND(0.84)
4-Chloro-3-Methylphenol	ND(0.90) [ND(4.9)]	ND(4.5)	ND(4.4)	ND(0.84)
4-Chloroaniline	ND(0.83) [ND(4.5)]	ND(4.1)	ND(4.1)	ND(0.78)
4-Chlorobenzilate	ND(0.85) [ND(4.6)]	ND(4.2)	ND(4.2)	ND(0.80)
4-Chlorophenol	NA	NA	NA	ND(0.74)
4-Chlorophenyl-phenylether	ND(0.72) [ND(3.9)]	ND(3.6)	ND(3.5)	ND(0.67)
4-Methylphenol	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
4-Nitroaniline	ND(1.3) [ND(7.1)]	ND(6.5)	ND(6.5)	ND(1.2)
4-Nitrophenol	ND(5.4) [ND(29)]	ND(27)	ND(26)	ND(5.1)
4-Nitroquinoline-1-oxide	ND(5.8) [ND(31)]	ND(29)	ND(28)	ND(5.4)
5-Nitro-o-toluidine	ND(1.2) [ND(6.5)]	ND(6.0)	ND(5.9)	ND(1.1)
7,12-Dimethylbenz(a)anthracene	ND(0.49) [ND(2.7)]	ND(2.4)	ND(2.4)	ND(0.46)



**TABLE 2-6  
HISTORICAL APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	ES1-7 ES1070608 6-8 05/16/96	ES1-8 ES1080406 4-6 05/16/96	ES1-9 ES1090406 4-6 05/16/96	ES1-14 ES1141416 14-16 07/29/96
<b>Semivolatile Organics (continued)</b>				
a,a'-Dimethylphenethylamine	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Acenaphthene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Acenaphthylene	ND(0.80) [ND(4.3)]	ND(4.0)	ND(3.9)	ND(0.75)
Acetophenone	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Aniline	ND(0.67) [ND(3.6)]	ND(3.3)	ND(3.3)	ND(0.63)
Anthracene	ND(0.89) [ND(4.8)]	ND(4.4)	ND(4.4)	ND(0.83)
Aramite	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Benzal chloride	NA	NA	NA	ND(0.60)
Benzidine	ND(1.9) [ND(10)]	ND(9.5)	ND(9.4)	ND(1.8)
Benzo(a)anthracene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Benzo(a)pyrene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Benzo(b)fluoranthene	ND(0.92) [ND(5.0)]	ND(4.6)	ND(4.5)	ND(0.87)
Benzo(g,h,i)perylene	ND(0.74) [ND(4.0)]	ND(3.7)	ND(3.6)	ND(0.70)
Benzo(k)fluoranthene	ND(0.74) [ND(4.0)]	ND(3.7)	ND(3.6)	ND(0.70)
Benzoic Acid	NA	NA	NA	ND(2.1)
Benzotrichloride	NA	NA	NA	ND(0.70)
Benzyl Alcohol	ND(0.66) [ND(3.6)]	ND(3.3)	ND(3.2)	ND(0.62)
Benzyl Chloride	NA	NA	NA	ND(0.65)
bis(2-Chloroethoxy)methane	ND(0.80) [ND(4.3)]	ND(4.0)	ND(3.9)	ND(0.75)
bis(2-Chloroethyl)ether	ND(0.71) [ND(3.8)]	ND(3.5)	ND(3.5)	ND(0.66)
bis(2-Chloroisopropyl)ether	ND(0.78) [ND(4.2)]	ND(3.9)	ND(3.8)	ND(0.73)
bis(2-Ethylhexyl)phthalate	0.10 J [ND(4.9)]	ND(4.5)	ND(4.4)	0.47 J
Butylbenzylphthalate	ND(0.82) [ND(4.4)]	ND(4.0)	ND(4.0)	ND(0.76)
Chrysene	ND(0.65) [ND(3.5)]	ND(3.2)	ND(3.2)	ND(0.61)
Cyclophosphamide	NA	NA	NA	ND(0.71)
Diallate (cis isomer)	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Diallate (trans isomer)	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Dibenz(a,j)acridine	NA	NA	NA	ND(0.46)
Dibenzo(a,h)anthracene	ND(0.52) [ND(2.8)]	ND(2.6)	ND(2.5)	ND(0.48)
Dibenzofuran	ND(0.83) [ND(4.5)]	ND(4.1)	ND(4.1)	ND(0.78)
Diethylphthalate	ND(0.86) [ND(4.7)]	ND(4.3)	ND(4.2)	ND(0.81)
Dimethoate	NA	NA	NA	ND(0.74)
Dimethylphthalate	ND(1.2) [ND(6.3)]	ND(5.8)	ND(5.7)	ND(1.1)
Di-n-Butylphthalate	ND(0.92) [ND(5.0)]	ND(4.6)	ND(4.5)	ND(0.87)
Di-n-Octylphthalate	ND(0.58) [ND(3.1)]	ND(2.9)	ND(2.8)	ND(0.54)
Diphenylamine	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)
Disulfoton	NA	NA	NA	ND(0.74)
Ethyl Methacrylate	NA	NA	NA	ND(0.66)
Ethyl Methanesulfonate	ND(0.72) [ND(3.9)]	ND(3.6)	ND(3.5)	ND(0.67)
Ethyl Parathion	NA	NA	NA	ND(0.74)
Famphur	NA	NA	NA	ND(2.2)
Fluoranthene	ND(1.1) [ND(6.0)]	ND(5.5)	ND(5.4)	ND(1.0)
Fluorene	ND(0.83) [ND(4.5)]	ND(4.1)	ND(4.1)	ND(0.78)
Hexachlorobenzene	ND(0.92) [ND(5.0)]	ND(4.6)	ND(4.5)	ND(0.87)
Hexachlorobutadiene	ND(0.67) [ND(3.6)]	ND(3.3)	ND(3.3)	ND(0.63)
Hexachlorocyclopentadiene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Hexachloroethane	ND(0.72) [ND(3.9)]	ND(3.6)	ND(3.5)	ND(0.67)
Hexachloropropene	ND(0.68) [ND(3.7)]	ND(3.4)	ND(3.4)	ND(0.64)
Indeno(1,2,3-cd)pyrene	ND(0.55) [ND(3.0)]	ND(2.7)	ND(2.7)	ND(0.52)
Isodrin	ND(1.1) [ND(6.0)]	ND(5.5)	ND(5.4)	ND(1.0)
Isophorone	ND(0.82) [ND(4.4)]	ND(4.0)	ND(4.0)	ND(0.76)
Isosafrole	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
Methapyrilene	ND(1.6) [ND(8.4)]	ND(7.7)	ND(7.6)	ND(1.5)
Methyl Methanesulfonate	ND(0.84) [ND(4.5)]	ND(4.2)	ND(4.1)	ND(0.79)
Methyl Parathion	NA	NA	NA	ND(0.74)
Naphthalene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Nitrobenzene	ND(0.82) [ND(4.4)]	ND(4.0)	ND(4.0)	ND(0.76)
N-Nitrosodiethylamine	ND(0.72) [ND(3.9)]	ND(3.6)	ND(3.5)	ND(0.67)
<b>Semivolatile Organics (continued)</b>				
N-Nitrosodimethylamine	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
N-Nitroso-di-n-butylamine	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)

**TABLE 2-6  
HISTORICAL APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	ES1-7 ES1070608 6-8 05/16/96	ES1-8 ES1080406 4-6 05/16/96	ES1-9 ES1090406 4-6 05/16/96	ES1-14 ES1141416 14-16 07/29/96
N-Nitroso-di-n-propylamine	ND(0.73) [ND(3.9)]	ND(3.6)	ND(3.6)	ND(0.69)
N-Nitrosodiphenylamine	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)
N-Nitrosomethylethylamine	ND(0.65) [ND(3.5)]	ND(3.2)	ND(3.2)	ND(0.61)
N-Nitrosomorpholine	ND(0.90) [ND(4.9)]	ND(4.5)	ND(4.4)	ND(0.84)
N-Nitrosopiperidine	ND(0.89) [ND(4.8)]	ND(4.4)	ND(4.4)	ND(0.83)
N-Nitrosopyrrolidine	ND(0.64) [ND(3.4)]	ND(3.2)	ND(3.1)	ND(0.60)
o,o,o-Triethylphosphorothioate	ND(6.4) [ND(34)]	ND(32)	ND(31)	ND(6.0)
o-Toluidine	ND(2.4) [ND(13)]	ND(12)	ND(12)	ND(2.2)
Paraldehyde	NA	NA	NA	ND(0.40)
p-Dimethylaminoazobenzene	ND(0.80) [ND(4.3)]	ND(4.0)	ND(3.9)	ND(0.75)
Pentachlorobenzene	ND(0.79) [ND(4.3)]	ND(3.9)	ND(3.9)	ND(0.74)
Pentachloroethane	ND(1.0) [ND(5.4)]	ND(4.9)	ND(4.9)	ND(0.93)
Pentachloronitrobenzene	ND(0.77) [ND(4.1)]	ND(3.8)	ND(3.8)	ND(0.72)
Pentachlorophenol	ND(1.7) [ND(9.1)]	ND(8.3)	ND(8.2)	ND(1.6)
Phenacetin	ND(0.73) [ND(3.9)]	ND(3.6)	ND(3.6)	ND(0.69)
Phenanthrene	ND(0.74) [ND(4.0)]	ND(3.7)	ND(3.6)	ND(0.70)
Phenol	ND(0.68) [ND(3.7)]	ND(3.4)	ND(3.4)	ND(0.64)
Phorate	NA	NA	NA	ND(0.74)
Pronamide	ND(0.78) [ND(4.2)]	ND(3.9)	ND(3.8)	ND(0.73)
Pyrene	ND(0.88) [ND(4.7)]	ND(4.3)	ND(4.3)	ND(0.82)
Pyridine	ND(0.66) [ND(3.6)]	ND(3.3)	ND(3.2)	ND(0.62)
Safrole	ND(0.70) [ND(3.8)]	ND(3.5)	ND(3.4)	ND(0.65)
Sulfotep	NA	NA	NA	ND(0.74)
Thionazin	ND(0.80) [ND(4.3)]	ND(4.0)	ND(3.9)	ND(0.75)
Tributylphosphate	NA	NA	NA	ND(0.74)
<b>Furans</b>				
2,3,7,8-TCDF	ND(0.0000025) [ND(0.0000035)]	0.0000079 J	ND(0.00000067)	ND(0.00000010)
TCDFs (total)	ND(0.0000025) [ND(0.0000035)]	0.0000079	ND(0.0000010)	ND(0.0000010)
1,2,3,7,8-PeCDF	ND(0.00000091) [ND(0.0000011)]	ND(0.0000038) Y	ND(0.0000011)	ND(0.00000051)
2,3,4,7,8-PeCDF	ND(0.0000017) [ND(0.0000025)]	ND(0.0000066)	ND(0.00000092)	ND(0.00000056)
PeCDFs (total)	ND(0.0000050) [ND(0.0000088)]	ND(0.0000038)	ND(0.0000025)	ND(0.00000051)
1,2,3,4,7,8-HxCDF	ND(0.0000057) [ND(0.000010)]	0.0000036 J	ND(0.00000066)	ND(0.00000043)
1,2,3,6,7,8-HxCDF	ND(0.0000020) [ND(0.0000018)]	ND(0.0000059)	ND(0.00000066)	ND(0.00000035)
1,2,3,7,8,9-HxCDF	ND(0.0000020) [ND(0.0000020)]	ND(0.0000055)	ND(0.00000051)	ND(0.00000047)
2,3,4,6,7,8-HxCDF	ND(0.0000021) [ND(0.0000034)]	ND(0.0000093)	ND(0.00000093)	ND(0.00000041)
HxCDFs (total)	ND(0.0000096) [ND(0.000016)]	0.0000036	ND(0.0000051)	ND(0.00000035)
1,2,3,4,6,7,8-HpCDF	ND(0.0000012) [ND(0.0000014)]	0.0000045 J	ND(0.0000026)	ND(0.00000028)
1,2,3,4,7,8,9-HpCDF	ND(0.0000079) [ND(0.0000078)]	ND(0.0000031)	ND(0.0000021)	ND(0.00000032)
HpCDFs (total)	ND(0.0000017) [ND(0.0000023)]	0.000011	ND(0.0000045)	ND(0.00000028)
OCDF	0.000017 [ND(0.0000061)]	0.000015	ND(0.0000038)	ND(0.00000058)
<b>Dioxins</b>				
2,3,7,8-TCDD	ND(0.00000085) [ND(0.0000020)]	ND(0.0000013)	ND(0.0000012)	ND(0.00000067)
TCDDs (total)	ND(0.0000028) [ND(0.0000020)]	ND(0.0000054)	ND(0.0000012)	ND(0.00000067)
1,2,3,7,8-PeCDD	ND(0.0000020) [ND(0.0000011)]	ND(0.0000045)	ND(0.00000087)	ND(0.0000010)
PeCDDs (total)	ND(0.0000045) [ND(0.0000020)]	ND(0.0000075)	ND(0.0000017)	ND(0.0000010)
1,2,3,4,7,8-HxCDD	ND(0.00000092) [ND(0.00000072)]	ND(0.0000036)	ND(0.00000055)	ND(0.00000071)
1,2,3,6,7,8-HxCDD	ND(0.00000093) [ND(0.0000017)]	ND(0.0000066)	ND(0.00000053)	ND(0.00000059)
1,2,3,7,8,9-HxCDD	ND(0.00000097) [ND(0.00000075)]	ND(0.0000070)	ND(0.00000085)	ND(0.00000063)
HxCDDs (total)	ND(0.0000031) [ND(0.0000048)]	0.0000043	ND(0.0000017)	ND(0.00000059)
1,2,3,4,6,7,8-HpCDD	ND(0.0000021) [ND(0.0000031)]	0.0000060 J	ND(0.0000052)	ND(0.00000060)
HpCDDs (total)	ND(0.0000021) [ND(0.0000031)]	0.000011	ND(0.0000057)	ND(0.00000060)
OCDD	0.000021 [0.000029]	0.000045	ND(0.0000065)	ND(0.00000084)
Total TEQs (WHO TEFs)	0.0000030 [0.0000037]	0.000013	0.0000016	0.0000012

**TABLE 2-6  
HISTORICAL APPENDIX IX+3 SOIL ANALYTICAL RESULTS**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results are presented in dry weight parts per million, ppm)**

Location ID: Sample ID: Sample Depth(Feet): Date Collected:	ES1-7 ES1070608 6-8 05/16/96	ES1-8 ES1080406 4-6 05/16/96	ES1-9 ES1090406 4-6 05/16/96	ES1-14 ES1141416 14-16 07/29/96
<b>Inorganics</b>				
Antimony	0.500 BN [ND(0.390) N]	ND(0.350) N	ND(0.340) N	ND(0.250) N
Arsenic	7.10 [7.60]	4.90	3.00	3.80
Barium	35.1 [20.5 B]	10.7 B	16.4 B	22.7
Beryllium	0.390 B [0.300 B]	0.260 B	0.270 B	0.180 B
Cadmium	ND(0.0600) N [ND(0.0700) N]	ND(0.0600) N	ND(0.0600) N	ND(0.0300) N
Chromium	11.4 [8.50]	5.70	4.70	7.30
Cobalt	12.1 [9.80]	15.6	5.80	7.90 E
Copper	29.2 [36.0]	29.2	12.3	14.7 *
Cyanide	ND(0.620) N [ND(0.630) N]	ND(0.550) N	ND(0.600) N	NA
Lead	9.20 [9.40]	7.80	5.50	7.40 E
Mercury	ND(0.110) N [ND(0.130) N]	ND(0.120) N	0.130 N	ND(0.110)
Nickel	22.9 [17.8]	20.6	10.1	14.5 E
Selenium	ND(0.330) N [ND(0.380) N]	ND(0.330) N	ND(0.320) N	ND(0.340) N
Silver	ND(0.0800) [ND(0.0900)]	ND(0.0800)	ND(0.0800)	ND(0.0700)
Sulfide	ND(76.8) [ND(107)]	ND(35.1)	ND(67.9)	ND(61.7)
Thallium	ND(0.430) [ND(0.480)]	ND(0.430)	ND(0.410)	ND(0.350)
Tin	ND(1.00) [ND(1.10)]	ND(1.00)	ND(0.980)	1.40 B
Vanadium	8.30 [5.70 B]	3.60 B	3.60 B	5.40 B
Zinc	74.7 [50.9]	42.4	35.0	46.6

Notes:

1. Samples were collected and analyzed by General Electric Company subcontractors for Appendix IX + 3 constituents.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. NA - Not Analyzed.
4. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, dioxin/furans)

- B - Analyte was also detected in the associated method blank.
- J - Indicates an estimated value less than the practical quantitation limit (PQL).
- Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).
- N - Indicates sample matrix spike analysis was outside control limits.
- E - Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
- \* - Indicates laboratory duplicate analysis was outside control limits.

**TABLE 2-7  
 JPPLEMENTAL PRE-DESIGN INVESTIGATION SOIL SAMPLING DATA FOR APPENDIX IX+3 SOIL ANALYTICAL RESULT**

**CONCEPTUAL RD/RA WORK PLAN FOR THE EAST STREET AREA 1 - NORTH  
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
 (Results are presented in dry weight parts per million, ppm)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-A15 0-1 08/11/03	RAA6-A17 0-1 08/11/03	RAA6-B16 0-1 08/11/03	RAA6-C6 0-1 08/29/03	RAA6-C6 6-8 08/11/03
<b>Volatile Organics</b>					
1,1,1,2-Tetrachloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,1,1-Trichloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,1,2,2-Tetrachloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,1,2-Trichloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,1-Dichloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,1-Dichloroethene	NA	NA	NA	ND(0.029)	ND(0.0063)
1,2,3-Trichloropropane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,2-Dibromo-3-chloropropane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,2-Dibromoethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,2-Dichloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,2-Dichloropropane	NA	NA	NA	ND(0.029)	ND(0.0063)
1,4-Dioxane	NA	NA	NA	ND(0.29)	ND(0.13)
2-Butanone	NA	NA	NA	ND(0.029)	ND(0.013)
2-Chloro-1,3-butadiene	NA	NA	NA	ND(0.029)	ND(0.0063)
2-Chloroethylvinylether	NA	NA	NA	ND(0.029)	ND(0.0063)
2-Hexanone	NA	NA	NA	ND(0.058)	ND(0.013)
3-Chloropropene	NA	NA	NA	ND(0.029)	ND(0.0063)
4-Methyl-2-pentanone	NA	NA	NA	ND(0.058)	ND(0.013)
Acetone	NA	NA	NA	ND(0.058)	ND(0.025)
Acetonitrile	NA	NA	NA	ND(0.58)	ND(0.13)
Acrolein	NA	NA	NA	ND(0.58)	ND(0.13)
Acrylonitrile	NA	NA	NA	ND(0.029)	ND(0.0063)
Benzene	NA	NA	NA	ND(0.029)	ND(0.0063)
Bromodichloromethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Bromofom	NA	NA	NA	ND(0.029)	ND(0.0063)
Bromomethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Carbon Disulfide	NA	NA	NA	ND(0.029)	ND(0.0063)
Carbon Tetrachloride	NA	NA	NA	ND(0.029)	ND(0.0063)
Chlorobenzene	NA	NA	NA	ND(0.029)	ND(0.0063)
Chloroethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Chloroform	NA	NA	NA	ND(0.029)	ND(0.0063)
Chloromethane	NA	NA	NA	ND(0.029)	ND(0.0063)
cis-1,3-Dichloropropene	NA	NA	NA	ND(0.029)	ND(0.0063)
Dibromochloromethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Dibromomethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Dichlorodifluoromethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Ethyl Methacrylate	NA	NA	NA	ND(0.029)	ND(0.0063)
Ethylbenzene	NA	NA	NA	14	0.048
Iodomethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Isobutanol	NA	NA	NA	ND(0.58)	ND(0.13)
Methacrylonitrile	NA	NA	NA	ND(0.029)	ND(0.0063)
Methyl Methacrylate	NA	NA	NA	ND(0.029)	ND(0.0063)
Methylene Chloride	NA	NA	NA	ND(0.029)	ND(0.0063)
Propionitrile	NA	NA	NA	ND(0.029)	ND(0.013)
Styrene	NA	NA	NA	ND(0.029)	ND(0.0063)
Tetrachloroethene	NA	NA	NA	ND(0.029)	ND(0.0063)
Toluene	NA	NA	NA	0.33	ND(0.0063)
trans-1,2-Dichloroethene	NA	NA	NA	ND(0.029)	ND(0.0063)
trans-1,3-Dichloropropene	NA	NA	NA	ND(0.029)	ND(0.0063)
trans-1,4-Dichloro-2-butene	NA	NA	NA	ND(0.029)	ND(0.0063)
Trichloroethene	NA	NA	NA	ND(0.029)	ND(0.0063)
Trichlorofluoromethane	NA	NA	NA	ND(0.029)	ND(0.0063)
Vinyl Acetate	NA	NA	NA	ND(0.029)	ND(0.0063)
Vinyl Chloride	NA	NA	NA	ND(0.029)	ND(0.0063)
Xylenes (total)	NA	NA	NA	120	0.41
<b>Inorganics</b>					
Antimony	520	4.50 B	4.10 B [8.30]	NA	NA
Lead	3,800	37.0	93.0 [93.0]	NA	NA

**TABLE 4-1  
COMPARISON OF DETECTED APPENDIX IX+3 CONSTITUENTS TO INDUSTRIAL SCREENING PRGs  
GE-OWNED PARCELS**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

<b>Analytical Parameter</b>	<b>Maximum Detect</b>	<b>USEPA Region 9 Industrial PRGs (See Notes 1, 2, and 3)</b>	<b>Constituent Retained for Further Evaluation? (See Note 4)</b>
<b>Volatile Organics</b>			
1,3-Dichlorobenzene	0.32	140	No
1,4-Dichlorobenzene	2.3	7.3	No
2-Butanone	0.22	27,000	No
2-Hexanone	6.1	Not Listed	Yes
Acetone	0.05	6,100	No
Benzene	0.02	1.4	No
Bromoform	0.14	380	No
Ethylbenzene	16.5	230	No
m&p-Xylene	0.2	210	No
Methyl Methacrylate	0.73	7,300	No
Methylene Chloride	0.013	20	No
Tetrachloroethene	0.0044	16	No
Toluene	0.33	520	No
Xylenes (total)	140	210	No
<b>Semivolatile Organics</b>			
1,2,4-Trichlorobenzene	0.086	1,700	No
1,3-Dichlorobenzene	0.18	140	No
1,4-Dichlorobenzene	1.4	7.3	No
2,4-Dimethylphenol	0.34	21,000	No
2-Methylnaphthalene	7.2	190	No
Acenaphthene	0.91	28,000	No
Acenaphthylene	0.24	190	No
Acetophenone	0.6	1.6	No
Anthracene	3.2	220,000	No
Benzo(a)anthracene	5.3	3.6	Yes
Benzo(a)pyrene	3.8	0.36	Yes
Benzo(b)fluoranthene	4	3.6	Yes
Benzo(g,h,i)perylene	1.8	190	No
Benzo(k)fluoranthene	1.7	36	No
bis(2-Ethylhexyl)phthalate	0.1	210	No
Chrysene	4.3	360	No
Dibenzo(a,h)anthracene	0.57	0.36	Yes
Dibenzofuran	0.57	3,200	No
Fluoranthene	11	37,000	No
Fluorene	1	22,000	No
Hexachloroethane	0.099	210	No
Indeno(1,2,3-cd)pyrene	1.7	3.6	No
Naphthalene	10	190	No
Phenanthrene	9.5	190	No
Phenol	8.2	100,000	No
Pyrene	8.5	26,000	No
<b>Inorganics</b>			
Antimony	1.3	750	No
Arsenic	11.8	3	Yes
Barium	58	100,000	No
Beryllium	0.39	3,400	No
Cadmium	0.96	930	No
Chromium	14.2	450	No
Cobalt	16.6	29,000	No
Copper	46	70,000	No
Cyanide	0.2	21,000	No
Lead	210	1,000	No
Mercury	0.19	560	No
Nickel	26.7	37,000	No
Selenium	1.8	9,400	No
Silver	1.4	9,400	No
Sulfide	210	1,200	No
Tin	0.55	100,000	No
Vanadium	13.8	13,000	No
Zinc	110	100,000	No

**TABLE 4-1  
COMPARISON OF DETECTED APPENDIX IX+3 CONSTITUENTS TO INDUSTRIAL SCREENING PRGs  
GE-OWNED PARCELS**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Notes:

1. PRG = Preliminary Remediation Goal.
2. Per Attachment F to *Statement of Work for Removal Actions Outside the River* (SOW), comparison to PRGs is required for all detected Appendix IX+3 constituents except PCBs, dioxins and furans.
3. In accordance with Technical Attachment F of the SOW, USEPA Region 9 PRGs for commercial/industrial areas were used for initial screening comparison. For constituents for which there are no such PRGs, the following surrogate Region 9 PRGs were used for initial screening:
  - a. benzo(a)pyrene for carcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - b. naphthalene for noncarcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - c. hydrogen cyanide for total cyanide, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - d. m-xylene for total xylenes, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - e. carbon disulfide for sulfide, per EPAs 20s, 30s, 40s Complexes RD/RA Work Plan Conditional Approval Letter, dated March 19, 2002.
4. Constituent is retained for further evaluation if its maximum detected concentration exceeds its corresponding PRG.

**TABLE 4-2  
COMPARISON OF DETECTED APPENDIX IX+3 CONSTITUENTS TO INDUSTRIAL SCREENING PRGs  
NON GE-OWNED PARCEL K10-14-1**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Analytical Parameter	Maximum Detect	USEPA Region 9 Industrial PRGs (See Notes 1, 2, and 3)	Constituent Retained for Further Evaluation? (See Note 4)
<b>Volatile Organics</b>			
Acetone	0.023	6,100	No
Methylene Chloride	0.014	20	No
<b>Semivolatile Organics</b>			
1,4-Dichlorobenzene	0.36	7.3	No
2-Methylnaphthalene	0.5	190	No
Acenaphthylene	0.22	190	No
Anthracene	0.22	220,000	No
Benzo(a)anthracene	0.8	3.6	No
Benzo(a)pyrene	0.8	0.36	Yes
Benzo(b)fluoranthene	1.1	3.6	No
Benzo(g,h,i)perylene	0.53	190	No
Benzo(k)fluoranthene	0.45	36	No
bis(2-Ethylhexyl)phthalate	0.47	210	No
Chrysene	0.8	360	No
Dibenzo(a,h)anthracene	0.14	0.36	No
Di-n-Butylphthalate	0.11	110,000	No
Fluoranthene	2	37,000	No
Indeno(1,2,3-cd)pyrene	0.49	3.6	No
Naphthalene	0.81	190	No
Phenanthrene	0.97	190	No
Pyrene	1.4	26,000	No
<b>Inorganics</b>			
Antimony	1,600	750	Yes
Arsenic	19	3	Yes
Barium	77	100,000	No
Beryllium	1.8	3,400	No
Cadmium	2.2	930	No
Chromium	15	450	No
Cobalt	10	29,000	No
Copper	4,100	70,000	No
Cyanide	0.22	21,000	No
Lead	3,800	1,000	Yes
Mercury	0.82	560	No
Nickel	34	37,000	No
Selenium	2	9,400	No
Silver	0.55	9,400	No
Sulfide	54	210	No
Thallium	2	150	No
Tin	6,600	100,000	No
Vanadium	12	13,000	No
Zinc	160	100,000	No

**Notes:**

1. PRG = Preliminary Remediation Goal.
2. Per Attachment F to *Statement of Work for Removal Actions Outside the River (SOW)*, comparison to PRGs is required for all detected Appendix IX+3 constituents except PCBs, dioxins and furans.
3. In accordance with Technical Attachment F of the SOW, USEPA Region 9 PRGs for commercial/industrial areas were used for initial screening comparison. For constituents for which there are no such PRGs, the following surrogate Region 9 PRGs were used for initial screening:
  - a. benzo(a)pyrene for carcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - b. naphthalene for noncarcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - c. hydrogen cyanide for total cyanide, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - d. m-xylene for total xylenes, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - e. carbon disulfide for sulfide, per EPAs 20s, 30s, 40s Complexes RD/RA Work Plan Conditional Approval Letter, dated March 19, 2002.
4. Constituent is retained for further evaluation if its maximum detected concentration exceeds its corresponding PRG.

**TABLE 4-3  
COMPARISON OF DETECTED APPENDIX IX+3 CONSTITUENTS TO INDUSTRIAL SCREENING PRGs  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

<b>Analytical Parameter</b>	<b>Maximum Detect</b>	<b>USEPA Region 9 Industrial PRGs (See Notes 1, 2, and 3)</b>	<b>Constituent Retained for Further Evaluation? (See Note 4)</b>
<b>Volatile Organics</b>			
Acetone	0.033	6,100	No
Methylene Chloride	0.013	20	No
Toluene	0.0058	520	No
Trichloroethene	0.008	6.1	No
<b>Semivolatile Organics</b>			
1,3-Dichlorobenzene	0.064	140	No
1,4-Dichlorobenzene	0.46	7.3	No
2-Methylnaphthalene	2.2	190	No
2-Methylphenol	0.16	53,000	No
3&4-Methylphenol	0.56	5,300	No
Acenaphthene	1.2	28,000	No
Acenaphthylene	1.1	190	No
Acetophenone	0.19	1.6	No
Aniline	0.11	530	No
Anthracene	1	220,000	No
Benzo(a)anthracene	3.3	3.6	No
Benzo(a)pyrene	1.6	0.36	<b>Yes</b>
Benzo(b)fluoranthene	3.5	3.6	No
Benzo(g,h,i)perylene	1.8	190	No
Benzo(k)fluoranthene	1.4	36	No
bis(2-Ethylhexyl)phthalate	0.1	210	No
Chrysene	3.8	360	No
Dibenzo(a,h)anthracene	0.36	0.36	No
Dibenzofuran	1.4	3,200	No
Diethylphthalate	0.088	100,000	No
Dimethylphthalate	1	100,000	No
Fluoranthene	10	37,000	No
Fluorene	0.69	22,000	No
Indeno(1,2,3-cd)pyrene	1.5	3.6	No
Naphthalene	5.4	190	No
N-Nitrosopiperidine	3.6	Not Listed	<b>Yes</b>
Phenanthrene	5.7	190	No
Phenol	0.61	100,000	No
Pyrene	8.7	26,000	No
<b>Inorganics</b>			
Antimony	1,600	750	<b>Yes</b>
Arsenic	19	3	<b>Yes</b>
Barium	77	100,000	No
Beryllium	1.8	3,400	No
Cadmium	2.2	930	No
Chromium	19	450	No
Cobalt	12.1	29,000	No
Copper	4,100	70,000	No
Cyanide	0.34	21,000	No
Lead	3,800	1,000	<b>Yes</b>
Mercury	0.82	560	No
Nickel	34	37,000	No
Selenium	2	9,400	No
Sulfide	74	210	No
Thallium	2	150	No
Tin	6,600	100,000	No
Vanadium	12	13,000	No
Zinc	160	100,000	No



**TABLE 4-3**  
**COMPARISON OF DETECTED APPENDIX IX+3 CONSTITUENTS TO INDUSTRIAL SCREENING PRGs**  
**NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results in ppm, dry weight)**

Notes:

1. PRG = Preliminary Remediation Goal.
2. Per Attachment F to *Statement of Work for Removal Actions Outside the River (SOW)*, comparison to PRGs is required for all detected Appendix IX+3 constituents except PCBs, dioxins and furans.
3. In accordance with Technical Attachment F of the SOW, USEPA Region 9 PRGs for commercial/industrial areas were used for initial screening comparison. For constituents for which there are no such PRGs, the following surrogate Region 9 PRGs were used for initial screening:
  - a. benzo(a)pyrene for carcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - b. naphthalene for noncarcinogenic PAHs, per Technical Attachment F, Section 2.0, Step 3a.
  - c. hydrogen cyanide for total cyanide, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - d. m-xylene for total xylenes, per EPAs Newell Street Area I RD/RA Work Plan Conditional Approval Letter, dated May 24, 2002.
  - e. carbon disulfide for sulfide, per EPAs 20s, 30s, 40s Complexes RD/RA Work Plan Conditional Approval Letter, dated March 19, 2002.
  - f. 4-methylphenol for 3&4-methylphenol.
4. Constituent is retained for further evaluation if its maximum detected concentration exceeds its corresponding PRG.

**TABLE 4-4  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
GE-OWNED PARCELS (0- TO 1-FOOT DEPTH INTERVAL)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C4 0-1 01/10/03	RAA6-C6 (See Note 6) 0-1 01/10/2003 & 08/29/03	RAA6-D5 0-1 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-E1 0-1 01/09/03
<b>Semivolatile Organics</b>						
Benzo(a)anthracene		0.14	0.70	0.43	0.65	0.27
Benzo(a)pyrene		0.14	0.55	0.56	0.56	0.30
Benzo(b)fluoranthene		0.20	0.63	0.70	0.64	0.33
Dibenzo(a,h)anthracene		<b>0.185</b>	<b>0.19</b>	0.14	<b>0.195</b>	<b>0.325</b>
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)		1.60E-05	3.80E-06	5.10E-06	2.20E-05	9.50E-06
<b>Inorganics</b>						
Arsenic		3.40	9.00	7.10	5.90	5.60

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-E3 0-1 01/14/03	Maximum Sample Result (See Note 3)	Arithmetic Average Concentration (See Note 3)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 4)	Constituent Exceeds Initial Comparison Criteria? (See Note 5)
<b>Semivolatile Organics</b>						
Benzo(a)anthracene		0.45	N/A (See Note 5)	0.44	1	No
Benzo(a)pyrene		0.39	N/A (See Note 5)	0.42	0.7	No
Benzo(b)fluoranthene		0.48	N/A (See Note 5)	0.50	1	No
Dibenzo(a,h)anthracene		<b>0.195</b>	N/A (See Note 5)	0.21	0.7	No
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)		1.90E-05	2.20E-05	N/A (See Note 5)	5.00E-03	No
<b>Inorganics</b>						
Arsenic		6.20	N/A (See Note 5)	6.20	30	No

**Notes:**

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-2 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in the *Conceptual RD/RA Work Plan for Newell Street Area 1*.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- Sampling data for sampling location RAA6-C6 have been included in these evaluations as follows: (a) For detected constituents, either the average of both samples (if the constituent was detected during both sampling events) or the value of the detected constituent (if the constituent was only detected during one of the sampling events); and (b) for non-detected constituents, half the value of the detection limit achieved during the supplemental sampling conducted in August 2003.

**TABLE 4-5  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
GE-OWNED PARCELS (1- TO 6-FOOT DEPTH INTERVAL)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	ES1-8 4-6 05/16/96	ES1-9 4-6 05/16/96	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03
<b>Semivolatile Organics</b>						
Benzo(a)anthracene	1.95	1.95	0.19	--	0.185	--
Benzo(a)pyrene	1.95	1.95	0.19	--	0.185	--
Benzo(b)fluoranthene	2.30	2.25	0.19	--	0.185	--
Dibenzo(a,h)anthracene	1.30	1.25	0.19	--	0.19	--
<b>Inorganics</b>						
Arsenic	4.90	3.00	5.40	--	8.60	--

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D7 1-3 01/13/03	RAA6-E3 1-6 01/14/03	RAA6-E3 4-6 01/14/03	Arithmetic Average Concentration (See Note 2)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 3)	Constituent Exceeds Initial Comparison Criteria? (See Note 4)
<b>Semivolatile Organics</b>						
Benzo(a)anthracene	5.30	0.17	--	1.62	1	Yes
Benzo(a)pyrene	3.80	0.16	--	1.37	0.7	Yes
Benzo(b)fluoranthene	4.00	0.14	--	1.51	1	Yes
Dibenzo(a,h)anthracene	0.57	0.19	--	0.61	0.7	No
<b>Inorganics</b>						
Arsenic	6.80	6.80	--	5.92	30	No

**Notes:**

1. The constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations and presented in bold.
3. The Method 1 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent).
4. Arithmetic average concentrations of all constituents are compared to Method 1 Soil Standards.
5. -- = constituent not subject to analysis.

**TABLE 4-6  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
GE-OWNED PARCELS (0- TO 15-FOOT DEPTH INTERVAL)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C4 0-1 01/10/03	RAA6-C6 (See Note 3) 0-1 01/10/2003 & 08/29/03	RAA6-D5 0-1 01/14/03	RAA6-D7 0-1 01/13/03	RAA6-E1 0-1 01/09/03	RAA6-E3 0-1 01/14/03
<b>Semivolatile Organics</b>						
Benzo(a)anthracene	0.14	0.70	0.43	0.65	0.27	0.45
Benzo(a)pyrene	0.14	0.55	0.70	0.56	0.30	0.39
Benzo(b)fluoranthene	0.20	0.63	0.70	0.64	0.33	0.48
Dibenzo(a,h)anthracene	0.185	0.19	0.14	0.195	0.325	0.195
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)
<b>Inorganics</b>						
Arsenic	3.40	9.00	7.10	5.90	5.60	6.20

Sample ID: Sample Depth(Feet): Date Collected:	ES1-8 4-6 05/16/96	ES1-9 4-6 05/16/96	RAA6-C2 1-6 01/09/03	RAA6-C2 5-6 01/09/03	RAA6-D5 1-6 01/14/03	RAA6-D5 4-6 01/14/03
<b>Semivolatile Organics</b>						
Benzo(a)anthracene	1.95	1.95	0.19	--	0.185	--
Benzo(a)pyrene	1.95	1.95	0.19	--	0.185	--
Benzo(b)fluoranthene	2.30	2.25	0.19	--	0.185	--
Dibenzo(a,h)anthracene	1.30	1.25	0.19	--	0.19	--
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)	1.30E-06	1.60E-07	1.70E-05	--	3.30E-06	--
<b>Inorganics</b>						
Arsenic	4.90	3.00	5.40	--	8.60	--

Sample ID: Sample Depth(Feet): Date Collected:	RAA6-D7 1-3 01/13/03	RAA6-E3 1-6 01/14/03	RAA6-E3 4-6 01/14/03	ES1-7 6-8 05/16/96	RAA6-C2 6-15 01/09/03	RAA6-C2 8-10 01/09/03
<b>Semivolatile Organics</b>						
Benzo(a)anthracene	5.30	0.17	--	1.27	0.19	--
Benzo(a)pyrene	3.80	0.16	--	1.27	0.19	--
Benzo(b)fluoranthene	4.00	0.14	--	1.48	0.19	--
Dibenzo(a,h)anthracene	0.57	0.19	--	0.83	0.19	--
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)	1.20E-05	5.40E-06	--	3.35E-07	7.20E-07	--
<b>Inorganics</b>						
Arsenic	6.80	6.80	--	7.35	5.80	--

**TABLE 4-6  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
GE-OWNED PARCELS (0- TO 15-FOOT DEPTH INTERVAL)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-C3 10-12 01/15/03	RAA6-C5 6-15 01/09/03	RAA6-C6 (See Note 3) 6-8 01/10/2003 & 08/11/03	RAA6-C6 6-15 01/10/03	RAA6-E1 6-15 01/09/03	RAA6-E1 12-15 01/09/03
<b>Semivolatile Organics</b>							
Benzo(a)anthracene		2.10	0.17	--	0.20	0.19	--
Benzo(a)pyrene		2.10	0.17	--	0.20	0.19	--
Benzo(b)fluoranthene		2.10	0.17	--	0.20	0.19	--
Dibenzo(a,h)anthracene		2.10	0.17	--	0.20	0.19	--
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)		--	--	--	2.45E-06	6.20E-07	--
<b>Inorganics</b>							
Arsenic		8.90	5.00	--	7.80	5.60	--

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	RAA6-E6 6-15 01/13/03	RAA6-E6 8-10 01/13/03	Maximum Sample Result (See Note 6)	Arithmetic Average Concentration (See Note 6)	MCP Method 1 S-3 (GW-2/GW-3) Soil Standard (See Note 7)	Constituent Exceeds Initial Comparison Criteria? (See Note 8)
<b>Semivolatile Organics</b>							
Benzo(a)anthracene		0.20	--	(See Note 8)	0.88	4	No
Benzo(a)pyrene		0.20	--	(See Note 8)	0.79	0.7	Yes
Benzo(b)fluoranthene		0.20	--	(See Note 8)	0.87	4	No
Dibenzo(a,h)anthracene		0.20	--	(See Note 8)	0.46	0.8	No
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)		--	--	1.70E-05	(See Note 8)	2.00E-02	No
<b>Inorganics</b>							
Arsenic		11.80	--	(See Note 8)	6.63	30	No

**Notes:**

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- Total TEQs were evaluated for the 1- to 15-foot depth increment only.
- Sampling data for sampling location RAA6-C6 have been included in these evaluations as follows: (a) For detected constituents, either the average of both samples (if the constituent was detected during both sampling events) or the value of the detected constituent (if the constituent was only detected during one of the sampling events); and (b) for non-detected constituents, half the value of the detection limit achieved during the supplemental sampling conducted in August 2003.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-3 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in the *Conceptual RD/RA Work Plan for Newell Street Area 1*.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- = constituent not subject to analysis.

**TABLE 4-7  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 1-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A15 0-1 08/11/03	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03	RAA6-B14 0-1 01/03/03	RAA6-B16 0-1 08/11/03	RAA6-C17 0-1 01/02/03	RAA6-D10 0-1 01/13/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	--	0.5	--	0.5	--	0.22	0.36
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)	--	2.60E-05	--	2.00E-05	--	2.60E-05	7.20E-06
<b>Inorganics</b>							
Antimony	520	1,600	4.5	7.7	6.2	33	0.96
Arsenic	--	19	--	10	--	5.9	6.8
Lead	3,800	3,200	37	150	93	140	29

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03	Maximum Sample Result (See Note 3)	Arithmetic Average Concentration (See Note 3)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 4)	Constituent Exceeds Initial Comparison Criteria? (See Note 5)
<b>Semivolatile Organics</b>						
Benzo(a)pyrene	0.8	<b>0.18</b>	N/A (See Note 5)	0.43	0.7	No
<b>Dioxins/Furans</b>						
Total TEQs (WHO TEFs)	2.00E-05	4.20E-06	2.60E-05	N/A (See Note 5)	5.00E-03	No
<b>Inorganics</b>						
Antimony	1.5	2.5	N/A (See Note 5)	242	40	Yes
Arsenic	7.9	6.8	N/A (See Note 5)	9.4	30	No
Lead	140	18	N/A (See Note 5)	845	600	Yes

**Notes:**

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-2 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in evaluations performed for the Conceptual RD/RA Work Plan for Newell Street Area I.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- = constituent not subject to analysis.

**TABLE 4-8  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 3-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A15 0-1 08/11/03	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03	RAA6-B14 0-1 01/03/03	RAA6-B16 0-1 08/11/03	RAA6-C17 0-1 01/02/03	RAA6-D10 0-1 01/13/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	--	0.5	--	<b>0.5</b>	--	0.22	0.36
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)	--	2.60E-05	--	2.00E-05	--	2.60E-05	7.20E-06
<b>Inorganics</b>							
Antimony	520	1,600	4.5	7.7	6.2	33	0.96
Arsenic	--	19	--	10	--	5.9	6.8
Lead	3,800	3,200	37	150	93	140	29

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03	RAA6-A17 1-3 01/08/03	Maximum Sample Result (See Note 3)	Arithmetic Average Concentration (See Note 3)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 4)	Constituent Exceeds Initial Comparison Criteria? (See Note 5)
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	0.8	0.18	0.18	N/A (See Note 5)	0.39	0.7	No
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)	2.00E-05	4.20E-06	3.70E-06	2.60E-05	N/A (See Note 5)	5.00E-03	No
<b>Inorganics</b>							
Antimony	1.5	2.5	2.1	N/A (See Note 5)	217.85	40	<b>Yes</b>
Arsenic	7.9	6.8	4.8	N/A (See Note 5)	8.7	30	No
Lead	140	18	21	N/A (See Note 5)	762.80	600	<b>Yes</b>

**Notes:**

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-2 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River* (SOW) or the other TEQ comparison criteria utilized in evaluations performed for the Conceptual RD/RA Work Plan for Newell Street Area I.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- = constituent not subject to analysis.

**TABLE 4-9  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K10-14-1  
1- TO 6-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A15 3-6 01/08/03	RAA6-A17 1-3 01/08/03	RAA6-C15 3-6 01/07/03	Arithmetic Average Concentration (See Note 3)	MCP Method 1 S-3 (GW-2/GW-3) Soil Standard (See Note 4)	Constituent Exceeds Initial Comparison Criteria? (See Note 5)
<b>Semivolatile Organics</b>						
Benzo(a)pyrene	<b>0.19</b>	<b>0.18</b>	<b>0.19</b>	0.18	0.7	No
<b>Inorganics</b>						
Antimony	1.6	2.1	1.5	1.73	40	No
Arsenic	5.8	4.8	5.6	5.40	30	No
Lead	13	21	9.0	14.33	600	No

Notes:

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-3 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in evaluations performed for the Conceptual RD/RA Work Plan for Newell Street Area I.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).



**TABLE 4-10  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A15 0-1 08/11/03	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03	RAA6-B14 0-1 01/03/03	RAA6-B16 0-1 08/11/03	RAA6-C17 0-1 01/02/03	RAA6-D10 0-1 01/13/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	--	0.5	--	0.5	--	0.22	0.36
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)	(See Note 2)
<b>Inorganics</b>							
Antimony	520	1,600	4.5	7.7	6.2	33	0.96
Arsenic	--	19	--	10	--	5.9	6.8
Lead	3,800	3,200	37	150	93	140	29

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D12 0-1 01/09/03	RAA6-D14 0-1 01/07/03	RAA6-A15 3-6 01/08/03	RAA6-A17 1-3 01/08/03	RAA6-C15 3-6 01/07/03	ES1141416 14-16 07/29/96	RAA6-B15 6-15 01/07/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	0.8	0.18	0.19	0.18	0.19	0.37	0.20
<b>Dioxins/Furans</b>							
Total TEQs (WHO TEFs)	(See Note 2)	(See Note 2)	5.50E-07	3.70E-06	3.30E-07	1.20E-07	4.65E-07
<b>Inorganics</b>							
Antimony	1.5	2.5	1.6	2.1	1.5	0.13	2.0
Arsenic	7.9	6.8	5.8	4.8	5.6	3.8	4.2
Lead	140	18	13	21	9.0	7.4	4.7

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-D10 6-15 01/13/03	Maximum Sample Result (See Note 3)	Arithmetic Average Concentration (See Note 3)	MCP Method 1 S-3 (GW-2/GW-3) Soil Standard (See Note 4)	Constituent Exceeds Initial Comparison Criteria? (See Note 5)
<b>Semivolatile Organics</b>					
Benzo(a)pyrene	0.20	N/A (See Note 5)	0.32	0.7	No
<b>Dioxins/Furans</b>					
Total TEQs (WHO TEFs)	2.50E-06	3.70E-06	N/A (See Note 5)	2.00E-02	No
<b>Inorganics</b>					
Antimony	1.9	N/A (See Note 5)	145.70	40	Yes
Arsenic	5.2	N/A (See Note 5)	7.15	30	No
Lead	6.8	N/A (See Note 5)	511.26	600	No

**TABLE 4-10  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Notes:

1. Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
2. With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
3. Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
4. The Method 1 S-3 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in evaluations performed for the Conceptual RD/RA Work Plan for Newell Street Area I.
5. Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
6. -- = constituent not subject to analysis.

**TABLE 4-11  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA  
0- TO 1-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C4 0-1 01/10/03	RAA6-A11 0-1 01/08/03	RAA6-A15 0-1 08/11/03	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03
<b>Semivolatile Organics</b>					
Benzo(a)pyrene	0.14	1.60	--	0.50	--
<b>Furans</b>					
Total TEQs (WHO TEFs)	1.60E-05	2.20E-05	--	2.60E-05	--
<b>Inorganics</b>					
Antimony	<b>3.00</b>	3.80	520.00	1,600.00	4.50
Arsenic	3.40	9.30	--	19.00	--
Lead	24.00	120.00	3,800.00	3,200.00	37.00

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-B14 0-1 01/03/03	Maximum Sample Result (See Note 4)	Arithmetic Average Concentration (See Note 4)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 5)	Constituent Exceeds Initial Comparison Criteria? (See Note 6)
<b>Semivolatile Organics</b>					
Benzo(a)pyrene	<b>0.50</b>	N/A (See Note 5)	0.69	0.7	No
<b>Furans</b>					
Total TEQs (WHO TEFs)	2.00E-05	2.60E-05	N/A (See Note 5)	5.00E-03	No
<b>Inorganics</b>					
Antimony	7.70	N/A (See Note 5)	356.50	40	<b>Yes</b>
Arsenic	10.00	N/A (See Note 5)	10.43	30	No
Lead	150.00	N/A (See Note 5)	1,221.83	600	<b>Yes</b>

**Notes:**

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-2 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River* (SOW) or the other TEQ comparison criteria utilized in evaluations performed for the Newell Street Area I RAA.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- = constituent not subject to analysis.

**TABLE 4-12  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA  
0- TO 3-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C4 0-1 01/10/03	RAA6-C2 1-6 01/09/03	RAA6-A11 0-1 01/08/03	RAA6-A15 0-1 08/11/03	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03	RAA6-B14 0-1 01/03/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	0.14	<b>0.19</b>	1.60	--	0.50	--	<b>0.50</b>
<b>Furans</b>							
Total TEQs (WHO TEFs)	1.60E-05	1.70E-05	2.20E-05	--	2.60E-05	--	2.00E-05
<b>Inorganics</b>							
Antimony	<b>3.00</b>	<b>3.00</b>	3.80	520.00	1,600.00	4.50	7.70
Arsenic	3.40	5.40	9.30	--	19.00	--	10.00
Lead	24.00	17.00	120.00	3,800.00	3,200.00	37.00	150.00

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A11 1-3 01/08/03	RAA6-A17 1-3 01/08/03	Maximum Sample Result (See Note 4)	Arithmetic Average Concentration (See Note 4)	MCP Method 1 S-2 (GW-2/GW-3) Soil Standard (See Note 5)	Constituent Exceeds Initial Comparison Criteria? (See Note 6)
<b>Semivolatile Organics</b>						
Benzo(a)pyrene	0.22	<b>0.18</b>	N/A (See Note 5)	0.48	0.7	No
<b>Furans</b>						
Total TEQs (WHO TEFs)	2.40E-05	3.70E-06	2.60E-05	N/A (See Note 5)	5.00E-03	No
<b>Inorganics</b>						
Antimony	100.00	2.10	N/A (See Note 5)	249.34	40	<b>Yes</b>
Arsenic	13.00	4.80	N/A (See Note 5)	9.27	30	No
Lead	470.00	21.00	N/A (See Note 5)	871.00	600	<b>Yes</b>

Notes:

- Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
- With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
- Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
- The Method 1 S-2 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria utilized in evaluations performed for the Newell Street Area I RAA.
- Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
- = constituent not subject to analysis.

**TABLE 4-13  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA  
1- TO 6-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	ES1-9 4-6 05/16/96	RAA6-C2 1-6 01/09/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A17 1-3 01/08/03
<b>Semivolatile Organics</b>					
Benzo(a)pyrene	1.95	0.19	0.22	0.19	0.18
<b>Inorganics</b>					
Antimony	0.17	3.00	100.00	1.60	2.10
Arsenic	3.00	5.40	13.00	5.80	4.80
Lead	5.50	17.00	470.00	13.00	21.00

Sample ID: Sample Depth(Feet): Parameter Date Collected:	Arithmetic Average Concentration (See Note 4)	MCP Method 1 S-3 (GW-2/GW-3) Soil Standard (See Note 5)	Constituent Exceeds Initial Comparison Criteria? (See Note 6)
<b>Semivolatile Organics</b>			
Benzo(a)pyrene	0.55	0.70	No
<b>Inorganics</b>			
Antimony	21.37	40	No
Arsenic	6.40	30	No
Lead	105.30	600	No

Notes:

1. The constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations and presented in bold.
3. The Method 1 S-3 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent).
4. Arithmetic average concentrations of all constituents are compared to Method 1 Soil Standards.

**TABLE 4-14  
EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA  
0- TO 15-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-C4 0-1 01/10/03	ES1-9 4-6 05/16/96	RAA6-C2 1-6 01/09/03	ES1-7 6-8 05/16/96	RAA6-C2 6-15 01/09/03	RAA6-A11 0-1 01/08/03	RAA6-A15 0-1 08/11/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	0.14	1.95	0.19	1.27	0.19	1.60	--
<b>Furans</b>							
Total TEQs (WHO TEFs)	(See Note 2)	1.60E-07	1.70E-05	3.35E-07	7.20E-07	(See Note 2)	(See Note 2)
<b>Inorganics</b>							
Antimony	3.00	0.17	3.00	0.35	3.00	3.80	520.00
Arsenic	3.40	3.00	5.40	7.35	5.80	9.30	--
Lead	24.00	5.50	17.00	9.30	7.00	120.00	3800.00

Sample ID: Sample Depth(Feet): Parameter Date Collected:	RAA6-A16 0-1 01/02/03	RAA6-A17 0-1 08/11/03	RAA6-B14 0-1 01/03/03	RAA6-A11 1-3 01/08/03	RAA6-A15 3-6 01/08/03	RAA6-A17 1-3 01/08/03	RAA6-B15 6-15 01/07/03
<b>Semivolatile Organics</b>							
Benzo(a)pyrene	0.50	--	0.50	0.22	0.19	0.18	0.20
<b>Furans</b>							
Total TEQs (WHO TEFs)	(See Note 2)	(See Note 2)	(See Note 2)	2.40E-05	5.50E-07	3.70E-06	4.65E-07
<b>Inorganics</b>							
Antimony	1,600.00	4.50	7.70	100.00	1.60	2.10	1.95
Arsenic	19.00	--	10.00	13.00	5.80	4.80	4.20
Lead	3,200.00	37.00	150.00	470.00	13.00	21.00	4.65

Sample ID: Sample Depth(Feet): Parameter Date Collected:	Maximum Sample Result (See Note 4)	Arithmetic Average Concentration (See Note 4)	MCP Method 1 S-3 (GW-2/GW-3) Soil Standard (See Note 5)	Constituent Exceeds Initial Comparison Criteria? (See Note 6)
<b>Semivolatile Organics</b>				
Benzo(a)pyrene	N/A (See Note 5)	0.59	0.70	No
<b>Furans</b>				
Total TEQs (WHO TEFs)	2.40E-05	N/A (See Note 5)	2.00E-02	No
<b>Inorganics</b>				
Antimony	N/A (See Note 5)	160.80	40	Yes
Arsenic	N/A (See Note 5)	7.59	30	No
Lead	N/A (See Note 5)	562.75	600	No

**TABLE 4-14**  
**EXISTING CONDITIONS - COMPARISON TO METHOD 1 SOIL STANDARDS**  
**NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA**  
**0- TO 15-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Notes:

1. Total 2,3,7,8-TCDD toxicity equivalency quotients (TEQs) were calculated using World Health Organization (WHO) Toxicity Equivalency Factors (TEFs) for all PCDD/PCDF compounds. Where individual compounds were not detected, a value of one-half the analytical detection limit was used to calculate the TEQ concentrations.
2. Total TEQs were evaluated for the 1- to 15-foot depth increment only.
3. With the exception of Total TEQs, constituents evaluated above have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
4. Non-detect sample results included as one-half the detection limit in the calculation of maximum and arithmetic average concentrations and presented in bold.
5. The Method 1 S-3 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent), except for Dioxin/Furan Total TEQs. Total TEQs are compared to the EPA PRGs for such TEQs set out in Attachment F of the *Statement of Work for Removal Actions Outside the River (SOW)* or the other TEQ comparison criteria requested in EPA's May 24, 2002 comment letter regarding this RAA.
6. Arithmetic average concentrations of all constituents, except Total TEQs, are compared to Method 1 Soil Standards. For TEQs, the maximum concentration is compared to the appropriate EPA PRG (or other comparison criterion).
7. -- = constituent not subject to analysis.

**TABLE 4-15  
EXISTING CONDITIONS - COMPARISON TO UPPER CONCENTRATION LIMITS (UCLs)  
GE-OWNED PARCELS (0- TO 15-FOOT DEPTH INCREMENT)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	Arithmetic Average Concentration (See Note 2)	MCP UCL for Soils	Average Exceeds UCL?
<b>Semivolatile Organics</b>				
Benzo(a)anthracene		0.88	100	No
Benzo(a)pyrene		0.79	100	No
Benzo(b)fluoranthene		0.87	100	No
Dibenzo(a,h)anthracene		0.46	100	No
<b>Inorganics</b>				
Arsenic		6.63	300	No

**Notes:**

1. Constituents evaluated have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
2. For sampling locations other than RAA6-C6, non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations. Sampling data for sampling location RAA6-C6 have been included in these evaluations as follows: (a) For detected constituents, either the average of both samples (if the constituent was detected during both sampling events) or the value of the detected constituent (if the constituent was only detected during one of the sampling events); and (b) for non-detected constituents, half the value of the detection limit achieved during the supplemental sampling conducted in August 2003.



**TABLE 4-16**  
**EXISTING CONDITIONS - COMPARISON TO UPPER CONCENTRATION LIMITS (UCLs)**  
**NON GE-OWNED PARCEL K10-14-1 (0- TO 15-FOOT DEPTH INCREMENT)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**(Results in ppm, dry weight)**

Sample ID: Parameter	Sample Depth(Feet): Date Collected:	Arithmetic Average Concentration (See Note 2)	MCP UCL for Soils	Average Exceeds UCL?
<b>Semivolatile Organics</b>				
Benzo(a)pyrene		0.32	100	No
<b>Inorganics</b>				
Antimony		145.70	400	No
Arsenic		7.15	300	No
Lead		511.26	6,000	No

Notes:

1. Constituents evaluated have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations.

**TABLE 4-17  
EXISTING CONDITIONS - COMPARISON TO UPPER CONCENTRATION LIMITS (UCLs)  
NON GE-OWNED PARCEL K11-1-15 WITH PROJECTED DATA  
0- TO 15-FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1 - NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS  
(Results in ppm, dry weight)**

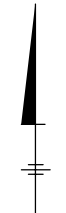
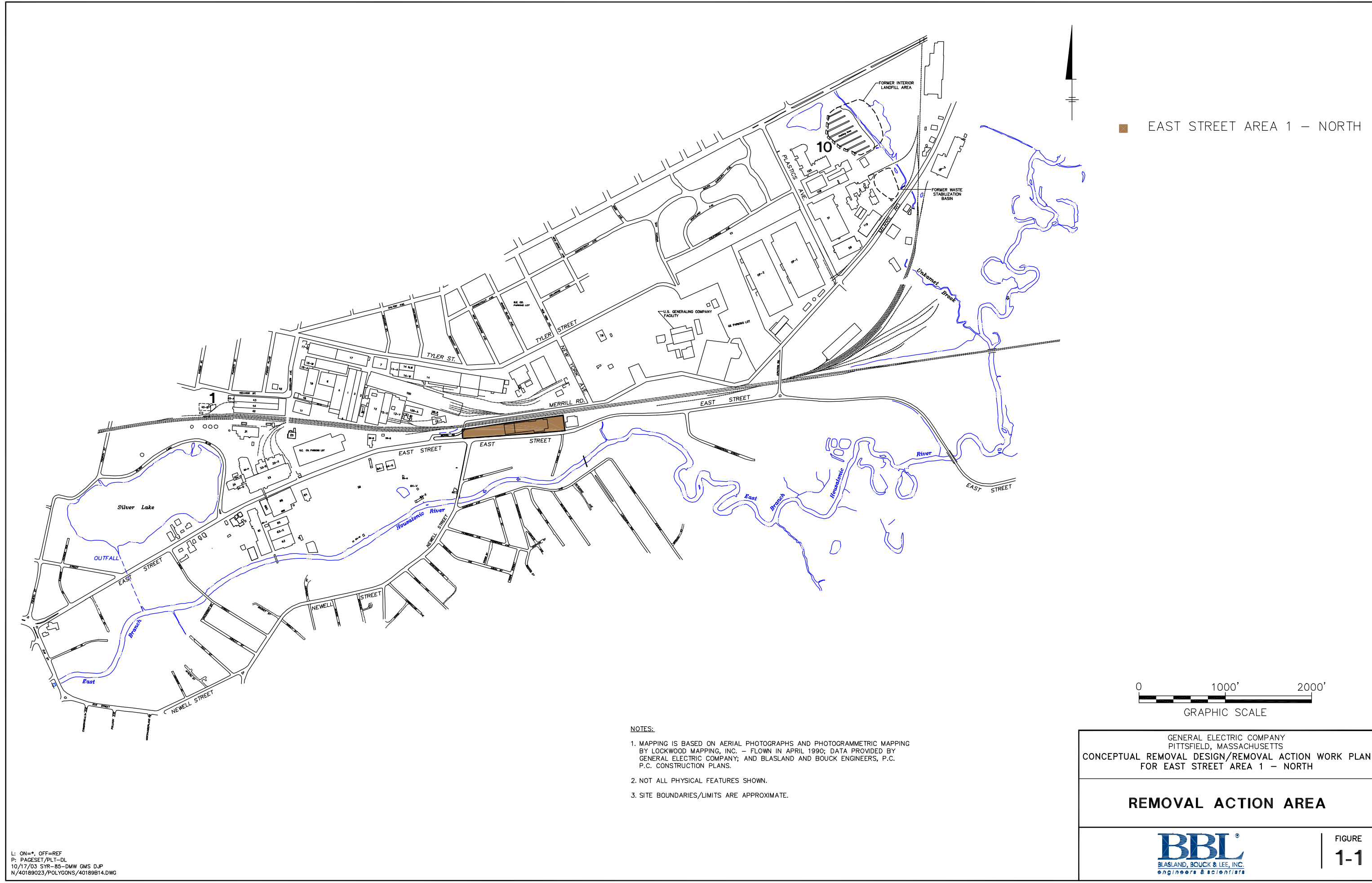
Sample ID: Sample Depth(Feet): Parameter Date Collected:	Arithmetic Average Concentration (See Note 2)	MCP UCL for Soils	Average Exceeds UCL?
<b>Semivolatile Organics</b>			
Benzo(a)pyrene	0.59	100	No
<b>Inorganics</b>			
Antimony	160.80	400	No
Arsenic	7.59	300	No
Lead	562.75	6,000	No

**Notes:**

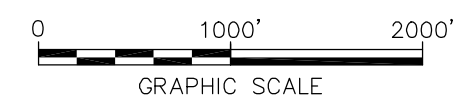
1. Constituents evaluated have a maximum sample result that exceeds their respective EPA Region 9 Industrial PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations.

# *Figures*

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■ EAST STREET AREA 1 – NORTH



- NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
  2. NOT ALL PHYSICAL FEATURES SHOWN.
  3. SITE BOUNDARIES/LIMITS ARE APPROXIMATE.

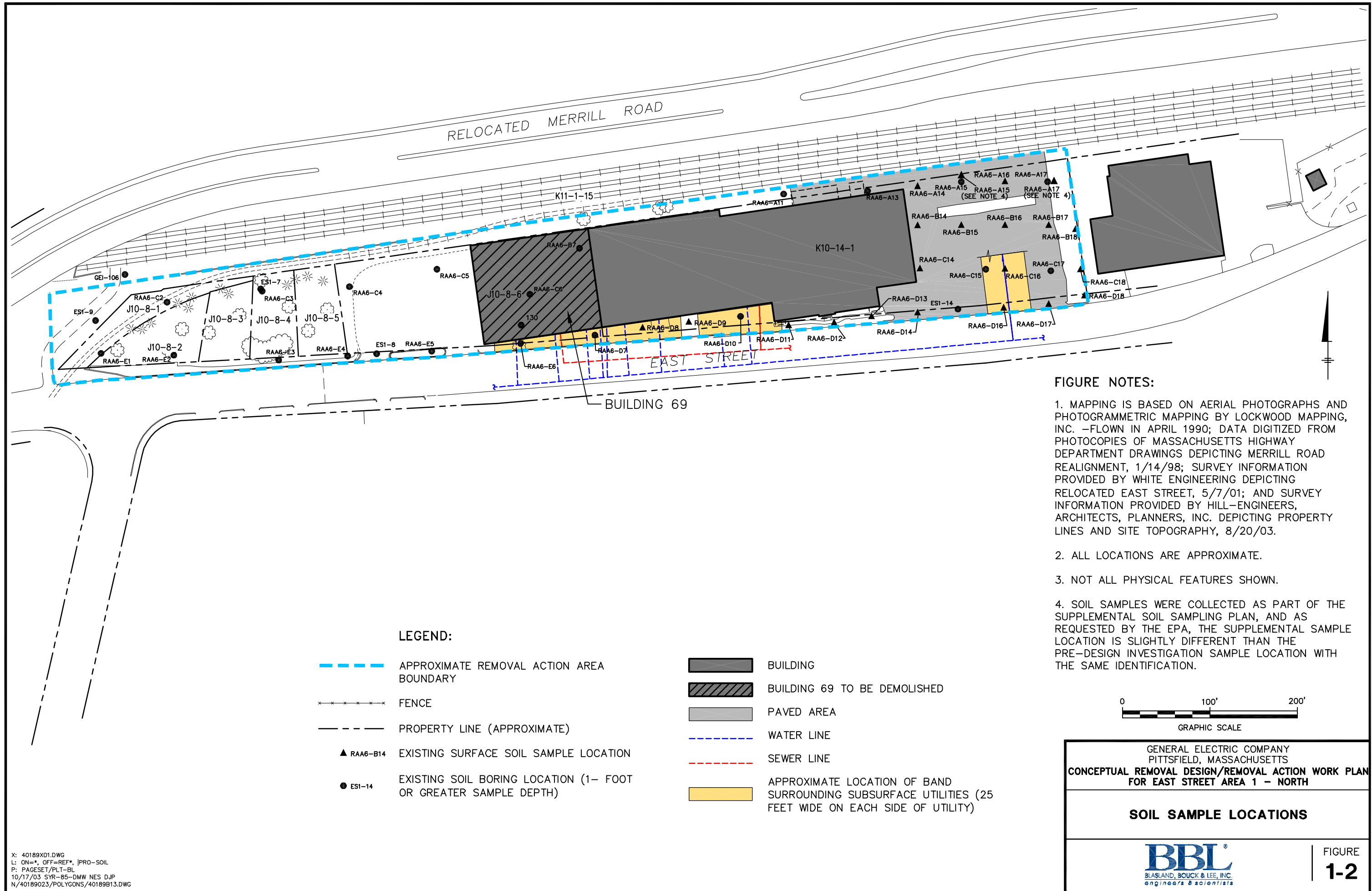
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH

**REMOVAL ACTION AREA**



FIGURE  
**1-1**

L: ON=\*, OFF=REF  
P: PAGESET/PLT-DL  
10/17/03 SYR-85-DMW GMS D.P  
N/40189023/POLYGONS/40189B14.DWG



RELOCATED MERRILL ROAD

BUILDING 69

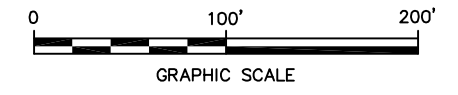
EAST STREET

**LEGEND:**

- - - - - APPROXIMATE REMOVAL ACTION AREA BOUNDARY
- FENCE
- PROPERTY LINE (APPROXIMATE)
- ▲ RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION
- ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)
- BUILDING
- BUILDING 69 TO BE DEMOLISHED
- PAVED AREA
- WATER LINE
- SEWER LINE
- APPROXIMATE LOCATION OF BAND SURROUNDING SUBSURFACE UTILITIES (25 FEET WIDE ON EACH SIDE OF UTILITY)

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.
4. SOIL SAMPLES WERE COLLECTED AS PART OF THE SUPPLEMENTAL SOIL SAMPLING PLAN, AND AS REQUESTED BY THE EPA, THE SUPPLEMENTAL SAMPLE LOCATION IS SLIGHTLY DIFFERENT THAN THE PRE-DESIGN INVESTIGATION SAMPLE LOCATION WITH THE SAME IDENTIFICATION.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**SOIL SAMPLE LOCATIONS**




FIGURE  
**1-2**

X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, IPRO-SOIL  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B13.DWG

# *Appendices*

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## *Appendix A*

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# **Data Validation Report for Supplemental Soil Investigations**

## APPENDIX A

### GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

#### EAST STREET AREA 1-NORTH SUPPLEMENTAL PRE-DESIGN INVESTIGATION

#### SOIL SAMPLING DATA VALIDATION REPORT

##### 1.0 General

This appendix summarizes the Tier I and Tier II data reviews performed for soil samples collected during supplemental pre-design investigation activities at the East Street Area 1-North RAA, located in Pittsfield, Massachusetts. The supplemental sampling activities consisted of the collection of three surface samples for lead and antimony analysis, and the collection of two samples from a previous sampling location for VOC analysis. Data validation was performed on all samples (including field and laboratory quality control samples).

##### 2.0 Data Evaluation Procedures

This Soil Sampling Data Validation Report outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. (FSP/QAPP, approved November 4, 2002 and resubmitted December 10, 2002);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996); and
- *National Functional Guidelines for Dioxin/Furan Data Validation*, USEPA (Draft, January 1996).

A summary of the Tier I and Tier II data evaluations is presented in Table 1. Each sample subjected to evaluation is listed in Table 1 to document that the data review was performed, as well as to present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J The compound or analyte was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound or analyte is detected at estimated concentrations less than the practical quantitation limit (PQL).



- U The compound or analyte was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detected sample results are presented as ND(PQL) within data reporting tables and in Table 1 for consistency with previous documents prepared for this investigation.
- UJ The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual level of quantitation. Non-detected sample results that required qualification are presented as ND(PQL) J within this report and in Table 1 for consistency with previous documents prepared for this investigation.
- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purposes.

### **3.0 Data Validation Procedures**

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present.

In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with USEPA Region I Tier I data completeness requirements.

The Tier II data review consisted of a review of all data package summary forms for identification of Quality Assurance/Quality Control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for Relative Percent Difference (RPD) compliance with the criteria specified in the FSP/QAPP.

A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

**Summary of Samples Subjected to Tier I and Tier II Data Validation**

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
VOCs	0	0	0	3	0	2	5
Metals	0	0	0	4	1	0	5
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>10</b>

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in USEPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented below for each analytical method.

### **4.0 Data Review**

Initial calibration criterion for organic analyses requires that the average Relative Response Factor (RRF) has a

value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

**Analysis Qualified Due to Initial Calibration Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,4-Dioxane	5	J
	2-Butanone	4	J
	Acetonitrile	5	J
	Acrolein	1	J
	Isobutanol	4	J

The continuing calibration criterion requires that the Percent Deviation (%D) between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detected and non-detected compounds with %D values that exceeded the continuing calibration criterion were qualified as estimated (J). A summary of the compounds that exceeded continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

**Compounds Qualified Due to Continuing Calibration of %D Values**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Acetone	1	J
	Bromoform	1	J
	Bromomethane	1	J
	Dichlorodifluoromethane	2	J
	Isobutanol	1	J

Matrix spike (MS) sample analysis recovery criteria for organics require that the RPD between the MS and matrix spike duplicate (MSD) be less than the laboratory generated QC acceptance limits specified on the MS reporting form. The compounds that exceeded RPD limits and the number of samples qualified due to deviations are presented below.

**Compounds Qualified Due to Matrix Spike RPD Deviations**

Analysis	Compounds	Number of Affected Samples	Qualification
VOCs	Chlorobenzene	1	J

Laboratory duplicate samples were analyzed to evaluate the overall precision of laboratory and field procedures for inorganic analysis. The RPD between duplicate samples is required to be less than 35% for soil samples with analyte concentrations greater than five times the PQL. Detected sample results for analytes that exceeded these limits were qualified as estimated (J). The inorganic analytes that did not meet laboratory duplicate RPD criteria and the samples qualified due to those deviations are presented below.

**Analytes Qualified Due to Laboratory Duplicate Deviations**

Analysis	Analytes	Number of Affected Samples	Qualification
Inorganics	Antimony	4	J

## **5.0 Overall Data Usability**

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of sample results determined to be usable during the data validation process. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analyses. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated below.

<b>Data Usability</b>		
<b>Parameter</b>	<b>Percent Usability</b>	<b>Rejected Data</b>
Inorganics	100	None
VOCs	100	None

The data package completeness as determined from the Tier I data review was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the Data Quality Objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

### **5.1 Precision**

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, MS/MSD samples, and ICP serial dilution samples. For this analytical program, 1.1 % of the data required qualification for laboratory duplicate RPD deviations and 0.27% of the data required qualification MS/MSD RPD deviations. None of the data required qualification for ICP serial dilution deviations or field duplicate RPD deviations.

### **5.2 Accuracy**

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, Laboratory Control Standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 6.8% of the data required qualification for calibration deviations. None of the data required qualification for LCS recovery deviations, CRDL standard recoveries, internal standard recoveries, or surrogate compound standard recoveries.

### **5.3 Representativeness**

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are

selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in Agency-approved work plans and by following the procedures for sample collection/analyses described in the FSP/QAPP. Additionally, the analytical program used procedures that were consistent with USEPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical program, none of the data required qualification for exceeding holding time requirements.

#### **5.4 Comparability**

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846<sup>1</sup> analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (i.e., sample extraction/preparation, instrument calibration, QA/QC procedures, etc.). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

#### **5.5 Completeness**

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. The actual completeness of this analytical data for individual analytical parameters and overall usability of this data set is 100%.

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<sup>1</sup> Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

TABLE A-1  
EAST AREA 1 NORTH SUPPLEMENTAL PRE-DESIGN INVESTIGATION SAMPLES

ANALYTICAL DATA VALIDATION SUMMARY  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>Metals</b>											
3H0P239	RAA6-A15 (0 - 1)	8/11/2003	Soil	Tier II	Yes	Antimony	Laboratory Duplicate RPD (Soil)	67.7%	<35%	520 J	
3H0P239	RAA6-A17 (0 - 1)	8/11/2003	Soil	Tier II	Yes	Antimony	Laboratory Duplicate RPD (Soil)	67.7%	<35%	4.50 J	
3H0P239	RAA6-B16 (0 - 1)	8/11/2003	Soil	Tier II	Yes	Antimony	Laboratory Duplicate RPD (Soil)	67.7%	<35%	4.10 J	
3H0P239	RAA6-DUP-7 (0 - 1)	8/11/2003	Soil	Tier II	Yes	Antimony	Laboratory Duplicate RPD (Soil)	67.7%	<35%	8.30 J	
3H0P239	RB-081103-1 (0 - 0)	8/11/2003	Water	Tier II	No						
<b>VOCs</b>											
3H0P239	RAA6-C6 (6 - 8)	8/11/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.010	>0.05	ND(0.13) J	
						Acetone	CCAL %D	69.2%	<25%	ND(0.025) J	
						Acetonitrile	ICAL RRF	0.041	>0.05	ND(0.13) J	
						Acrolein	ICAL RRF	0.005	>0.05	ND(0.13) J	
						Bromoform	CCAL %D	31.2%	<25%	ND(0.0063) J	
						Bromomethane	CCAL %D	38.4%	<25%	ND(0.0063) J	
						Chlorobenzene	MS/MSD RPD	57.0%	<50%	ND(0.0063) J	
3H0P239	RB-081103-1 (0 - 0)	8/11/2003	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.049	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.044	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
3H0P239	TRIP BLANK	8/11/2003	Water	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						2-Butanone	ICAL RRF	0.049	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.044	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.10) J	
3H0P616	RAA6-C6 (0 - 1)	8/29/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.29) J	
						2-Butanone	ICAL RRF	0.049	>0.05	ND(0.029) J	
						Acetonitrile	ICAL RRF	0.044	>0.05	ND(0.58) J	
						Dichlorodifluoromethane	CCAL %D	30.4%	<25%	ND(0.029) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.58) J	
3H0P616	TRIP BLANK	8/29/2003	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.29) J	
						2-Butanone	ICAL RRF	0.049	>0.05	ND(0.029) J	
						Acetonitrile	ICAL RRF	0.044	>0.05	ND(0.58) J	
						Dichlorodifluoromethane	CCAL %D	30.4%	<25%	ND(0.029) J	
						Isobutanol	ICAL RRF	0.011	>0.05	ND(0.58) J	

## *Appendix B*

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# **PCB Spatial Averaging Evaluation Tables and Polygon Maps**

**TABLE B-1  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
0- TO 1- FOOT DEPTH INCREMENT (UNPAVED)**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	178	8,314	0 - 0.5	1.9	153.97	2.05	631.27
			0.5 - 1	2.2	307.94		
RAA6-C2	196	4,415	0 - 1	2.0	163.52	2.00	327.05
RAA6-E2	192	6,094	0 - 1	0.14	225.70	0.14	31.60
ES1-7	181	5,987	0 - 0.5	0.45	110.87	0.93	205.11
			0.5 - 1	1.4	221.74		
RAA6-E3	191	5,563	0 - 1	0.54	206.05	0.54	111.27
RAA6-C4	190	6,966	0 - 1	0.70	258.00	0.70	180.60
ES1-8	179	4,184	0 - 0.5	1.1	77.48	0.72	111.57
			0.5 - 1	0.34	154.95		
RAA6-C5	189	6,363	0 - 1	0.49	235.66	0.49	115.47
RAA6-E5	187	4,330	0 - 1	0.83	160.39	0.83	133.12
RAA6-C6	202,222	53	0 - 1	<b>0.019</b>	1.95	0.02	0.04
RAA6-B7	215	73	0 - 1	0.137	2.69	0.14	0.37
RAA6-E6	186	1,517	0 - 1	1.38	56.18	1.38	77.53
RAA6-D7	185	891	0 - 1	1.62	33.01	1.62	53.47
<b>Totals:</b>	--	54,750	--	--	2,027.78	--	1,978.46
<b>Volume Weighted Average:</b>							<b>0.98</b>

Notes:

1. Polygon ID and area based on information shown on Figure B-1.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-2  
EXISTING CONDITIONS  
GE-OWNED PARCELS (OVERALL)  
0- TO 1- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	178	8,314	0 - 0.5	1.9	153.97	2.05	631.27
			0.5 - 1	2.2	307.94		
RAA6-C2	196	4,415	0 - 1	2.0	163.52	2.00	327.05
RAA6-E2	192	6,094	0 - 1	0.14	225.70	0.14	31.60
ES1-7	181	5,987	0 - 0.5	0.45	110.87	0.93	205.11
			0.5 - 1	1.4	221.74		
RAA6-E3	191	5,563	0 - 1	0.54	206.05	0.54	111.27
RAA6-C4	190	6,966	0 - 1	0.70	258.00	0.70	180.60
ES1-8	179	4,184	0 - 0.5	1.1	77.48	0.72	111.57
			0.5 - 1	0.34	154.95		
RAA6-C5	189,203	7,254	0 - 1	0.49	268.66	0.49	131.65
RAA6-E5	187	4,330	0 - 1	0.83	160.39	0.83	133.12
RAA6-C6	188,202,222	7,280	0 - 1	<b>0.019</b>	269.62	0.02	5.12
RAA6-B7	197,215	3,595	0 - 1	0.137	133.13	0.14	18.24
RAA6-E6	186,201	3,639	0 - 1	1.38	134.76	1.38	185.97
RAA6-D7	185,200	2,656	0 - 1	1.62	98.38	1.62	159.38
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	2,231.94
<b>Volume Weighted Average:</b>							<b>0.86</b>

Notes:

1. Polygon ID and area based on information shown on Figure B-1.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.



**TABLE B-3  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**1- TO 2-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	114	8,314	1 - 2	2.2	307.94	2.20	677.46
RAA6-C2	132	4,415	1 - 2	2.7	163.53	2.70	441.52
RAA6-E2	128	6,094	1 - 2	0.065	225.69	0.07	14.67
ES1-7	117	5,987	1 - 2	1.4	221.74	1.40	310.43
RAA6-E3	127	5,563	1 - 2	0.71	206.05	0.71	146.29
RAA6-C4	126	6,966	1 - 2	3.2	257.99	3.20	825.57
ES1-8	115	4,184	1 - 2	0.34	154.97	0.34	52.69
RAA6-C5	125,152	7,254	1 - 2	1.9	268.68	1.90	510.50
RAA6-E5	123	4,330	1 - 2	1.3	160.37	1.30	208.48
RAA6-C6	124,137,151	6,564	1 - 2	0.35	243.12	0.35	85.09
RAA6-E6	150, 122	3,639	1 - 2	0.67	134.76	0.67	90.29
RAA6-B7	133, 141	3,594	1 - 2	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	149, 121	2,656	1 - 2	0.24	98.38	0.24	23.61
<b>Totals:</b>	--	69,561	--	--	2,576.33	--	3,389.14
<b>Volume Weighted Average:</b>							<b>1.32</b>

**2- TO 3-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	114	8,314	2 - 3	0.73	307.94	0.73	224.79
RAA6-C2	132	4,415	2 - 3	2.7	163.53	2.70	441.52
RAA6-E2	128	6,094	2 - 3	0.065	225.69	0.07	14.67
ES1-7	117	5,987	2 - 3	1.7	221.74	1.70	376.95
RAA6-E3	127	5,563	2 - 3	0.71	206.05	0.71	146.29
RAA6-C4	126	6,966	2 - 3	3.2	257.99	3.20	825.57
ES1-8	115	4,184	2 - 3	1.4	154.97	1.40	216.95
RAA6-C5	125,138	7,192	2 - 3	1.9	266.38	1.90	506.12
RAA6-E5	123	4,274	2 - 3	1.3	158.28	1.30	205.77
RAA6-C6	124,151	6,233	2 - 3	0.35	230.86	0.35	80.80
130	136,136A,137	3,037	2 - 3	1.3	112.50	1.30	146.25
RAA6-E6	122,122A	1,793	2 - 3	0.67	66.41	0.67	44.49
RAA6-B7	133,146	3,594	2 - 3	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	135,121	2,629	2 - 3	0.24	97.39	0.24	23.37
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	3,256.09
<b>Volume Weighted Average:</b>							<b>1.25</b>

**TABLE B-3  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**3- TO 4-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	114	8,314	3 - 4	0.73	307.94	0.73	224.79
RAA6-C2	132	4,415	3 - 4	2.7	163.53	2.70	441.52
RAA6-E2	128	6,094	3 - 4	0.065	225.69	0.07	14.67
ES1-7	117	5,987	3 - 4	1.7	221.74	1.70	376.95
RAA6-E3	127	5,563	3 - 4	0.71	206.05	0.71	146.29
RAA6-C4	126	6,966	3 - 4	3.2	257.99	3.20	825.57
ES1-8	115	4,184	3 - 4	1.4	154.97	1.40	216.95
RAA6-C5	125,138	7,254	3 - 4	1.9	268.68	1.90	510.50
RAA6-E5	123	4,330	3 - 4	1.3	160.37	1.30	208.48
RAA6-C6	124,151,137	7,280	3 - 4	0.35	269.62	0.35	94.37
RAA6-E6	136,122	3,639	3 - 4	0.67	134.76	0.67	90.29
RAA6-B7	133,146	3,594	3 - 4	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	135,121	2,656	3 - 4	0.69	98.38	0.69	67.88
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	3,220.81
<b>Volume Weighted Average:</b>							<b>1.24</b>

**4- TO 5-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	114	8,314	4 - 5	<b>0.039</b>	307.94	0.04	12.01
RAA6-C2	132	4,415	4 - 5	2.7	163.53	2.70	441.52
RAA6-E2	128	6,094	4 - 5	0.065	225.69	0.07	14.67
ES1-7	117	5,987	4 - 5	6.4	221.74	6.40	1,419.11
RAA6-E3	127	5,563	4 - 5	0.71	206.05	0.71	146.29
RAA6-C4	126	6,966	4 - 5	3.2	257.99	3.20	825.57
ES1-8	115	4,184	4 - 5	7.7	154.97	7.70	1,193.25
RAA6-C5	125,138	7,192	4 - 5	1.9	266.38	1.90	506.12
RAA6-E5	123	4,330	4 - 5	1.3	160.37	1.30	208.48
RAA6-C6	124,151	6,253	4 - 5	0.35	231.58	0.35	81.05
130	136,136A,137	3,037	4 - 5	<b>0.5</b>	112.50	0.50	56.25
RAA6-E6	122,122A	1,793	4 - 5	0.67	66.41	0.67	44.49
RAA6-B7	133,146	3,594	4 - 5	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	135,121	2,629	4 - 5	0.69	97.39	0.69	67.20
<b>Totals:</b>	--	70,352	--	--	2,605.65	--	5,018.55
<b>Volume Weighted Average:</b>							<b>1.93</b>

**TABLE B-3  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**5- TO 6-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	112	8,116	5 - 6	<b>0.039</b>	300.60	0.04	11.72
GEI-106	151	386	5 - 6	<b>0.5</b>	14.31	0.50	7.16
RAA6-C2	129	4,227	5 - 6	2.7	156.56	2.70	422.71
RAA6-E2	125	6,094	5 - 6	0.065	225.69	0.07	14.67
ES1-7	115	5,987	5 - 6	6.4	221.74	6.40	1,419.11
RAA6-E3	124	5,563	5 - 6	0.71	206.05	0.71	146.29
RAA6-C4	123	6,966	5 - 6	3.2	257.99	3.20	825.57
ES1-8	113	4,184	5 - 6	7.7	154.97	7.70	1,193.25
RAA6-C5	122,134	8,546	5 - 6	1.9	316.51	1.90	601.36
RAA6-E5	121	4,330	5 - 6	1.3	160.37	1.30	208.48
RAA6-E6	133,120	6,706	5 - 6	0.67	248.38	0.67	166.41
RAA6-B7	130,142	6,112	5 - 6	<b>0.019</b>	226.36	0.02	4.30
RAA6-D7	132,119	3,060	5 - 6	0.69	113.33	0.69	78.20
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	5,099.23
<b>Volume Weighted Average:</b>							<b>1.96</b>

**SUMMARY 1- TO 6-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	70,352	--	--	12,990.50	--	19,983.81
<b>Volume Weighted Average:</b>							<b>1.54</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-2 through B-6.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-4  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**0- TO 1- FOOT DEPTH INCREMENT (SEE TABLE B-2)**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	2,231.94
<b>Volume Weighted Average:</b>							<b>0.86</b>

**1- TO 6- FOOT DEPTH INCREMENT (SEE TABLE B-3)**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	70,352	--	--	12,990.50	--	19,983.81
<b>Volume Weighted Average:</b>							<b>1.54</b>

**6- TO 7-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	122	3,905	6 - 7	<b>0.039</b>	144.62	0.04	5.64
RAA6-E1	137	4,845	6 - 7	0.14	179.46	0.14	25.12
GEI-106	168	386	6 - 7	<b>0.5</b>	14.31	0.50	7.16
RAA6-C2	141	4,225	6 - 7	<b>0.019</b>	156.49	0.02	2.97
RAA6-E2	136	5,456	6 - 7	0.039	202.06	0.04	7.88
ES1-7	124	1,961	6 - 7	2.25	72.64	2.25	163.44
RAA6-C3	144	4,200	6 - 7	0.64	155.56	0.64	99.56
RAA6-E3	135	4,743	6 - 7	0.66	175.66	0.66	115.94
RAA6-C4	134	6,801	6 - 7	1.3	251.89	1.30	327.45
RAA6-E4	131	4,118	6 - 7	0.93	152.54	0.93	141.86
RAA6-C5*	133,148	7,197	6 - 7	1.295	266.54	1.30	345.17
RAA6-E5	130	5,151	6 - 7	1.6	190.78	1.60	305.25
RAA6-C6	132,161	6,233	6 - 7	0.1585	230.86	0.16	36.59
130	146,146A,147	3,037	6 - 7	2.6	112.50	2.60	292.50
RAA6-E6	129,129A	1,793	6 - 7	0.17	66.41	0.17	11.29
RAA6-B7	142,156	3,594	6 - 7	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	145,128	2,629	6 - 7	0.38	97.39	0.38	37.01
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	1,927.36
<b>Volume Weighted Average:</b>							<b>0.74</b>

**TABLE B-4  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**7- TO 8-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
ES1-9	119	4,103	7 - 8	<b>0.039</b>	151.97	0.04	5.93
RAA6-E1	134	4,845	7 - 8	0.14	179.46	0.14	25.12
RAA6-C2	138	4,413	7 - 8	<b>0.019</b>	163.46	0.02	3.11
RAA6-E2	133	5,456	7 - 8	0.039	202.06	0.04	7.88
ES1-7	121	1,961	7 - 8	2.25	72.64	2.25	163.44
RAA6-C3	141	4,200	7 - 8	0.64	155.56	0.64	99.56
RAA6-E3	132	4,743	7 - 8	0.66	175.66	0.66	115.94
RAA6-C4	131	6,801	7 - 8	1.3	251.89	1.30	327.45
RAA6-E4	128	4,118	7 - 8	0.93	152.54	0.93	141.86
RAA6-C5*	130,145	7,259	7 - 8	1.295	268.85	1.30	348.16
RAA6-E5	127	5,207	7 - 8	1.6	192.87	1.60	308.59
RAA6-C6	129,158,144	7,280	7 - 8	0.1585	269.62	0.16	42.74
RAA6-E6	143,126	3,639	7 - 8	0.17	134.76	0.17	22.91
RAA6-B7	139,153	3,594	7 - 8	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	142,125	2,656	7 - 8	0.38	98.38	0.38	37.39
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	1,652.59
<b>Volume Weighted Average:</b>							<b>0.63</b>

**8- TO 10-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
RAA6-E1	127	8,531	8 - 10	0.14	631.93	0.14	88.47
RAA6-C2	131	4,853	8 - 10	<b>0.019</b>	359.45	0.02	6.83
RAA6-E2	126	5,456	8 - 10	0.039	404.13	0.04	15.76
RAA6-C3	134	6,140	8 - 10	0.64	454.79	0.64	291.06
RAA6-E3	125	4,743	8 - 10	0.66	351.32	0.66	231.87
RAA6-C4	124	6,801	8 - 10	1.3	503.77	1.30	654.91
RAA6-E4	121	4,118	8 - 10	0.93	305.07	0.93	283.72
RAA6-C5*	123,138	7,197	8 - 10	1.295	533.09	1.30	690.35
RAA6-E5	120	5,151	8 - 10	1.6	381.56	1.60	610.50
RAA6-C6	122,151	6,233	8 - 10	0.1585	461.73	0.16	73.18
130	136,136A,137	3,037	8 - 9	3.1	112.50	1.60	360.00
			9 - 10	0.1	225.00		
RAA6-E6	119,119A	1,793	8 - 10	0.17	132.82	0.17	22.58
RAA6-B7	132,146	3,594	8 - 10	<b>0.019</b>	266.25	0.02	5.06
RAA6-D7	135,118	2,629	8 - 10	0.38	194.77	0.38	74.01
<b>Totals:</b>	--	70,277	--	--	5,205.68	--	3,408.30
<b>Volume Weighted Average:</b>							<b>0.65</b>

**TABLE B-4  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**10- TO 12-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
RAA6-E1	127	8,531	10 - 12	0.14	631.93	0.14	88.47
RAA6-C2	131	4,853	10 - 12	<b>0.019</b>	359.45	0.02	6.83
RAA6-E2	126	5,456	10 - 12	0.039	404.13	0.04	15.76
RAA6-C3*	134	6,140	10 - 12	1.37	454.79	1.37	623.06
RAA6-E3	125	4,743	10 - 12	0.66	351.32	0.66	231.87
RAA6-C4	124	6,801	10 - 12	1.3	503.77	1.30	654.91
RAA6-E4	121	4,118	10 - 12	0.93	305.07	0.93	283.72
RAA6-C5*	123,138	7,259	10 - 12	1.295	537.69	1.30	696.31
RAA6-E5	120	5,207	10 - 12	1.6	385.74	1.60	617.18
RAA6-C6	122,151,137	7,280	10 - 12	0.1585	539.25	0.16	85.47
RAA6-E6	136,119	3,639	10 - 12	0.17	269.52	0.17	45.82
RAA6-B7	132,146	3,594	10 - 12	<b>0.019</b>	266.25	0.02	5.06
RAA6-D7	135,118	2,656	10 - 12	0.38	196.77	0.38	74.77
<b>Totals:</b>	--	70,277	--	--	5,205.68	--	3,429.22
<b>Volume Weighted Average:</b>							<b>0.66</b>

**12- TO 14-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
RAA6-E1	125	8,531	12 - 14	0.14	631.93	0.14	88.47
RAA6-C2	128	4,853	12 - 14	<b>0.019</b>	359.45	0.02	6.83
RAA6-E2	124	5,456	12 - 14	0.039	404.13	0.04	15.76
RAA6-C3	131	6,140	12 - 14	0.64	454.79	0.64	291.06
RAA6-E3	123	4,743	12 - 14	0.66	351.32	0.66	231.87
RAA6-C4	122	6,801	12 - 14	1.3	503.77	1.30	654.91
RAA6-E4	119	4,118	12 - 14	0.93	305.07	0.93	283.72
RAA6-C5*	121,135,	7,259	12 - 14	1.295	537.69	1.30	696.31
RAA6-E5	118	5,207	12 - 14	1.6	385.74	1.60	617.18
RAA6-C6	120,148,134	7,280	12 - 14	0.1585	539.25	0.16	85.47
RAA6-E6	133,117	3,639	12 - 14	0.17	269.52	0.17	45.82
RAA6-B7	129,143	3,594	12 - 14	<b>0.019</b>	266.25	0.02	5.06
RAA6-D7	132,116	2,656	12 - 14	0.38	196.77	0.38	74.77
<b>Totals:</b>	--	70,277	--	--	5,205.68	--	3,097.23
<b>Volume Weighted Average:</b>							<b>0.59</b>

**TABLE B-4  
EXISTING CONDITIONS  
GE-OWNED PARCELS  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**14- TO 15-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
RAA6-E1	130	8,531	14 - 15	0.14	315.97	0.14	44.24
RAA6-C2	133	4,831	14 - 15	<b>0.019</b>	178.91	0.02	3.40
RAA6-E2	129	5,456	14 - 15	0.039	202.06	0.04	7.88
ES1-7	138	1,961	14 - 15	<b>1.9</b>	72.64	1.90	138.02
RAA6-C3	136	4,200	14 - 15	0.64	155.56	0.64	99.56
RAA6-E3	128	4,743	14 - 15	0.66	175.66	0.66	115.94
RAA6-C4	127	6,466	14 - 15	1.3	239.47	1.30	311.31
RAA6-E4	124	2,707	14 - 15	0.93	100.24	0.93	93.22
ES1-8	137	2,629	14 - 15	<b>0.0375</b>	97.38	0.04	3.65
RAA6-C5*	126,142	7,254	14 - 15	1.295	268.68	1.30	347.94
RAA6-E5	123	4,330	14 - 15	1.6	160.37	1.60	256.59
RAA6-C6	125,155,141	7,280	14 - 15	0.1585	269.62	0.16	42.74
RAA6-E6	140,122	3,639	14 - 15	0.17	134.76	0.17	22.91
RAA6-B7	134,150	3,594	14 - 15	<b>0.019</b>	133.13	0.02	2.53
RAA6-D7	139,121	2,656	14 - 15	0.38	98.38	0.38	37.39
<b>Totals:</b>	--	70,277	--	--	2,602.84	--	1,527.31
<b>Volume Weighted Average:</b>							<b>0.59</b>

**SUMMARY 0- TO 15-FOOT DEPTH INCREMENT**

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	70,277	--	--	39,018.90	--	37,257.77
<b>Volume Weighted Average:</b>							<b>0.95</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-7 through B-12.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.
5. \* = Concentration represents an average of sample collected by GE and sample collected by USEPA.

**TABLE B-5  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 1- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	204	102	0 - 1	0.137	3.79	0.14	0.52
RAA6-A11	206	1,082	0 - 1	0.77	40.09	0.77	30.87
RAA6-A13	184	635	0 - 1	0.048	23.50	0.05	1.13
RAA6-A14	165	1,372	0 - 1	0.021	50.80	0.02	1.07
RAA6-A15	183	1,676	0 - 1	0.102	62.06	0.10	6.33
RAA6-A16	166	2,031	0 - 1	0.25	75.22	0.25	18.80
RAA6-A17	182	2,427	0 - 1	0.049	89.88	0.05	4.40
RAA6-B14	168	1,660	0 - 1	0.128	61.47	0.13	7.87
RAA6-B15	160	2,710	0 - 1	0.209	100.39	0.21	20.98
RAA6-B16	167	2,457	0 - 1	0.132	90.99	0.13	12.01
RAA6-B17	161	2,081	0 - 1	0.26	77.08	0.26	20.04
RAA6-B18	171	941	0 - 1	0.69	34.86	0.69	24.05
RAA6-C14	169	2,183	0 - 1	0.172	80.85	0.17	13.91
RAA6-C15	195	2,166	0 - 1	0.060	80.21	0.06	4.81
RAA6-C16	170	1,765	0 - 1	0.20	65.37	0.20	13.07
RAA6-C17	193	1,908	0 - 1	0.177	70.66	0.18	12.51
RAA6-C18	172	767	0 - 1	0.34	28.40	0.34	9.66
RAA6-D7	230	360	0 - 1	1.62	13.33	1.62	21.59
RAA6-D8	177	1,207	0 - 1	1.17	44.71	1.17	52.31
RAA6-D9	199	1,460	0 - 1	1.1	54.07	1.10	59.47
RAA6-D10	194	1,745	0 - 1	0.113	64.62	0.11	7.30
RAA6-D11	164	890	0 - 1	0.38	32.96	0.38	12.53
RAA6-D12	176	724	0 - 1	0.33	26.81	0.33	8.85
RAA6-D13	163	1,268	0 - 1	0.14	46.96	0.14	6.57
RAA6-D14	175	1,666	0 - 1	0.039	61.70	0.04	2.41
RAA6-D16	174	1,344	0 - 1	0.72	49.77	0.72	35.84
RAA6-D17	162	1,133	0 - 1	0.24	41.98	0.24	10.08
RAA6-D18	173	584	0 - 1	0.52	21.64	0.52	11.25
ES1-14	180	1,812	0 - 1	1.8	67.12	1.80	120.82
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	551.04
<b>Volume Weighted Average:</b>							<b>0.35</b>

Notes:

1. Polygon ID and area based on information shown on Figure B-1.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.



**TABLE B-6  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 3- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**0- TO 1- FOOT DEPTH INCREMENT (SEE TABLE B-5)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	551.04
<b>Volume Weighted Average:</b>							<b>0.35</b>

**1- TO 2-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	1 - 2	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	138	1,082	1 - 2	0.12	40.09	0.12	4.81
RAA6-A13	120	1,622	1 - 2	1.03	60.06	1.03	61.86
RAA6-A15	119	6,323	1 - 2	0.13	234.18	0.13	30.44
RAA6-A17	118	5,547	1 - 2	0.022	205.44	0.02	4.52
RAA6-C15	131	7,621	1 - 2	<b>0.020</b>	282.24	0.02	5.64
RAA6-C17	129	6,915	1 - 2	0.24	256.12	0.24	61.47
RAA6-D7	159	1,623	1 - 2	0.24	60.10	0.24	14.42
RAA6-D10	130	4,703	1 - 2	<b>0.020</b>	174.17	0.02	3.40
ES1-14	116	6,617	1 - 2	1.8	245.08	1.80	441.15
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	627.79
<b>Volume Weighted Average:</b>							<b>0.40</b>

**2- TO 3-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	2 - 3	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	141	1,082	2 - 3	0.12	40.09	0.12	4.81
RAA6-A13	120	1,622	2 - 3	1.03	60.06	1.03	61.86
RAA6-A15	119	6,323	2 - 3	0.13	234.18	0.13	30.44
RAA6-A17	118	5,547	2 - 3	0.022	205.44	0.02	4.52
RAA6-C15	131	7,621	2 - 3	<b>0.020</b>	282.24	0.02	5.64
RAA6-C17	129	6,915	2 - 3	0.24	256.12	0.24	61.47
RAA6-D7	159	1,623	2 - 3	0.24	60.10	0.24	14.42
RAA6-D10	130	4,703	2 - 3	<b>0.020</b>	174.17	0.02	3.40
ES1-14	116	6,617	2 - 3	0.23	245.08	0.23	56.37
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	243.01
<b>Volume Weighted Average:</b>							<b>0.16</b>

**TABLE B-6  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 3- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**SUMMARY 0- TO 3-FOOT DEPTH INCREMENT**

<b>Sample ID (s)</b>	<b>Polygon ID</b>	<b>Polygon Area (sq. ft.)</b>	<b>Sample Depth (ft.)</b>	<b>PCB Conc. (ppm)</b>	<b>Volume (cumulative) (cy)</b>	<b>Average PCB Concentration Per Foot (ppm)</b>	<b>Average PCB Conc. TIMES Total Volume</b>
<b>Totals:</b>	--	42,154	--	--	4,683.83	--	1,421.84
<b>Volume Weighted Average:</b>							<b>0.30</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-1 through B-3.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-7  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**1- TO 2-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	1 - 2	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	138	1,082	1 - 2	0.12	40.09	0.12	4.81
RAA6-A13	120	1,622	1 - 2	1.03	60.06	1.03	61.86
RAA6-A15	119	6,323	1 - 2	0.13	234.18	0.13	30.44
RAA6-A17	118	5,547	1 - 2	0.022	205.44	0.02	4.52
RAA6-C15	131	7,621	1 - 2	<b>0.020</b>	282.24	0.02	5.64
RAA6-C17	129	6,915	1 - 2	0.24	256.12	0.24	61.47
RAA6-D7	159	1,623	1 - 2	0.24	60.10	0.24	14.42
RAA6-D10	130	4,703	1 - 2	<b>0.020</b>	174.17	0.02	3.40
ES1-14	116	6,617	1 - 2	1.8	245.08	1.80	441.15
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	627.79
<b>Volume Weighted Average:</b>							<b>0.40</b>

**2- TO 3-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	2 - 3	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	141	1,082	2 - 3	0.12	40.09	0.12	4.81
RAA6-A13	120	1,622	2 - 3	1.03	60.06	1.03	61.86
RAA6-A15	119	6,323	2 - 3	0.13	234.18	0.13	30.44
RAA6-A17	118	5,547	2 - 3	0.022	205.44	0.02	4.52
RAA6-C15	131	7,621	2 - 3	<b>0.020</b>	282.24	0.02	5.64
RAA6-C17	129	6,915	2 - 3	0.24	256.12	0.24	61.47
RAA6-D7	159	1,623	2 - 3	0.24	60.10	0.24	14.42
RAA6-D10	130	4,703	2 - 3	<b>0.020</b>	174.17	0.02	3.40
ES1-14	116	6,617	2 - 3	0.23	245.08	0.23	56.37
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	243.01
<b>Volume Weighted Average:</b>							<b>0.16</b>

**TABLE B-7  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**3- TO 4-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	3 - 4	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	141	1,082	3 - 4	<b>0.019</b>	40.09	0.02	0.74
RAA6-A13	120	1,622	3 - 4	<b>0.020</b>	60.06	0.02	1.20
RAA6-A15	119	6,323	3 - 4	<b>0.019</b>	234.18	0.02	4.45
RAA6-A17	118	5,547	3 - 4	<b>0.019</b>	205.44	0.02	3.90
RAA6-C15	131	7,621	3 - 4	<b>0.019</b>	282.24	0.02	5.22
RAA6-C17	129	6,915	3 - 4	0.22	256.12	0.22	56.35
RAA6-D7	159	1,623	3 - 4	0.69	60.10	0.69	41.47
RAA6-D10	130	4,703	3 - 4	0.86	174.17	0.86	149.79
ES1-14	116	6,617	3 - 4	0.23	245.08	0.23	56.37
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	319.56
<b>Volume Weighted Average:</b>							<b>0.20</b>

**4- TO 5-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	4 - 5	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	141	1,082	4 - 5	<b>0.019</b>	40.09	0.02	0.74
RAA6-A13	120	1,622	4 - 5	<b>0.020</b>	60.06	0.02	1.20
RAA6-A15	119	6,323	4 - 5	<b>0.019</b>	234.18	0.02	4.45
RAA6-A17	118	5,547	4 - 5	<b>0.019</b>	205.44	0.02	3.90
RAA6-C15	131	7,621	4 - 5	<b>0.019</b>	282.24	0.02	5.22
RAA6-C17	129	6,915	4 - 5	0.22	256.12	0.22	56.35
RAA6-D7	159	1,623	4 - 5	0.69	60.10	0.69	41.47
RAA6-D10	130	4,703	4 - 5	0.86	174.17	0.86	149.79
ES1-14	116	6,617	4 - 5	<b>0.039</b>	245.08	0.04	9.56
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	272.75
<b>Volume Weighted Average:</b>							<b>0.17</b>

**TABLE B-7  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**5- TO 6-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	135	102	5 - 6	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	137	1,082	5 - 6	<b>0.019</b>	40.09	0.02	0.74
RAA6-A13	118	1,622	5 - 6	0.020	60.06	0.02	1.20
RAA6-A15	117	6,323	5 - 6	<b>0.019</b>	234.18	0.02	4.45
RAA6-A17	116	5,547	5 - 6	<b>0.019</b>	205.44	0.02	3.90
RAA6-C15	128	7,621	5 - 6	<b>0.019</b>	282.24	0.02	5.22
RAA6-C17	126	6,915	5 - 6	0.22	256.12	0.22	56.35
RAA6-D7	155	1,623	5 - 6	0.69	60.10	0.69	41.47
RAA6-D10	127	4,703	5 - 6	0.86	174.17	0.86	149.79
ES1-14	114	6,617	5 - 6	<b>0.039</b>	245.08	0.04	9.56
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	272.75
<b>Volume Weighted Average:</b>							<b>0.17</b>

**SUMMARY 1- TO 6-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	42,154	--	--	7,806.38	--	1,735.86
<b>Volume Weighted Average:</b>							<b>0.22</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-1 through B-6.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-8  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**0- TO 1- FOOT DEPTH INCREMENT (SEE TABLE B-5)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	551.04
<b>Volume Weighted Average:</b>							<b>0.35</b>

**1- TO 6-FOOT DEPTH INCREMENT (SEE TABLE B-7)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	42,154	--	--	7,806.38	--	1,735.86
<b>Volume Weighted Average:</b>							<b>0.22</b>

**6- TO 7-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	149	102	6 - 7	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	151	1,082	6 - 7	<b>0.019</b>	40.09	0.02	0.74
RAA6-A13	127	1,622	6 - 7	<b>0.020</b>	60.06	0.02	1.17
RAA6-A15	126	6,323	6 - 7	<b>0.019</b>	234.18	0.02	4.33
RAA6-A17	125	5,547	6 - 7	<b>0.020</b>	205.44	0.02	4.01
RAA6-C15	140	7,621	6 - 7	<b>0.020</b>	282.24	0.02	5.50
RAA6-C17	138	6,915	6 - 7	0.078	256.12	0.08	19.98
RAA6-D7	172	1,623	6 - 7	0.38	60.10	0.38	22.84
RAA6-D10	139	4,703	6 - 7	0.83	174.17	0.83	144.56
ES1-14	123	6,617	6 - 7	<b>0.039</b>	245.08	0.04	9.56
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	212.76
<b>Volume Weighted Average:</b>							<b>0.14</b>

**TABLE B-8  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**7- TO 8-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	146	102	7 - 8	0.019	3.79	0.02	0.07
RAA6-A11	148	1,082	7 - 8	0.019	40.09	0.02	0.74
RAA6-A13	124	1,622	7 - 8	0.020	60.06	0.02	1.17
RAA6-A15	123	6,323	7 - 8	0.019	234.18	0.02	4.33
RAA6-A17	122	5,547	7 - 8	0.020	205.44	0.02	4.01
RAA6-C15	137	7,621	7 - 8	0.020	282.24	0.02	5.50
RAA6-C17	135	6,915	7 - 8	0.078	256.12	0.08	19.98
RAA6-D7	167	1,623	7 - 8	0.38	60.10	0.38	22.84
RAA6-D10	136	4,703	7 - 8	0.83	174.17	0.83	144.56
ES1-14	120	6,617	7 - 8	0.039	245.08	0.04	9.56
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	212.76
<b>Volume Weighted Average:</b>							<b>0.14</b>

**8- TO 10-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	8 - 10	0.019	7.58	0.02	0.14
RAA6-A11	141	1,082	8 - 10	0.019	80.17	0.02	1.48
RAA6-A13	117	1,622	8 - 10	0.020	120.12	0.02	2.34
RAA6-A15	116	6,323	8 - 10	0.019	468.36	0.02	8.66
RAA6-A17	115	5,547	8 - 10	0.020	410.89	0.02	8.01
RAA6-C15	130	7,621	8 - 10	0.020	564.49	0.02	11.01
RAA6-C17	128	6,915	8 - 10	0.078	512.23	0.08	39.95
RAA6-D7	159	1,623	8 - 10	0.38	120.20	0.38	45.67
RAA6-D10	129	4,703	8 - 10	0.83	348.34	0.83	289.13
ES1-14	114	6,617	8 - 10	5.0	490.17	5.00	2,450.85
<b>Totals:</b>	--	42,154	--	--	3,122.55	--	2,857.26
<b>Volume Weighted Average:</b>							<b>0.92</b>

**TABLE B-8  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**10- TO 12-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	139	102	10 - 12	0.019	7.58	0.02	0.14
RAA6-A11	141	1,082	10 - 12	0.019	80.17	0.02	1.48
RAA6-A13	117	1,622	10 - 12	0.020	120.12	0.02	2.34
RAA6-A15	116	6,323	10 - 12	0.019	468.36	0.02	8.66
RAA6-A17	115	5,547	10 - 12	0.020	410.89	0.02	8.01
RAA6-C15	130	7,621	10 - 12	0.020	564.49	0.02	11.01
RAA6-C17	128	6,915	10 - 12	0.078	512.23	0.08	39.95
RAA6-D7	159	1,623	10 - 12	0.38	120.20	0.38	45.67
RAA6-D10	129	4,703	10 - 12	0.83	348.34	0.83	289.13
ES1-14	114	6,617	10 - 12	0.060	490.17	0.06	29.41
<b>Totals:</b>	--	42,154	--	--	3,122.55	--	435.82
<b>Volume Weighted Average:</b>							<b>0.14</b>

**12- TO 14-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	136	102	12 - 14	0.019	7.58	0.02	0.14
RAA6-A11	138	1,082	12 - 14	0.019	80.17	0.02	1.48
RAA6-A13	115	1,622	12 - 14	0.020	120.12	0.02	2.34
RAA6-A15	114	6,323	12 - 14	0.019	468.36	0.02	8.66
RAA6-A17	113	7,356	12 - 14	0.020	544.88	0.02	10.63
RAA6-C15	127	12,727	12 - 14	0.020	942.73	0.02	18.38
RAA6-D7	156	1,623	12 - 14	0.38	120.20	0.38	45.67
RAA6-D10	126	4,703	12 - 14	0.83	348.34	0.83	289.13
ES1-14	112	6,617	12 - 14	0.041	490.17	0.04	19.85
<b>Totals:</b>	--	42,154	--	--	3,122.55	--	396.29
<b>Volume Weighted Average:</b>							<b>0.13</b>



**TABLE B-8  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K10-14-1  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**14- TO 15-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-B7	143	102	14 - 15	<b>0.019</b>	3.79	0.02	0.07
RAA6-A11	145	1,082	14 - 15	<b>0.019</b>	40.09	0.02	0.74
RAA6-A13	120	1,622	14 - 15	<b>0.020</b>	60.06	0.02	1.17
RAA6-A15	119	6,323	14 - 15	<b>0.019</b>	234.18	0.02	4.33
RAA6-A17	118	7,356	14 - 15	<b>0.020</b>	272.44	0.02	5.31
RAA6-C15	132	12,727	14 - 15	<b>0.020</b>	471.37	0.02	9.19
RAA6-D7	164	1,623	14 - 15	0.38	60.10	0.38	22.84
RAA6-D10	131	4,703	14 - 15	0.83	174.17	0.83	144.56
ES1-14	117	6,617	14 - 15	0.30	245.08	0.30	73.53
<b>Totals:</b>	--	42,154	--	--	1,561.28	--	261.75
<b>Volume Weighted Average:</b>							<b>0.17</b>

**SUMMARY 0- TO 15-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	42,154	--	--	23,419.14	--	6,663.54
<b>Volume Weighted Average:</b>							<b>0.28</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-7 through B-12.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-9  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 1- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	228	1,176	0 - 0.5	1.9	21.78	2.05	89.29
			0.5 - 1	2.2	43.56		
RAA6-C2	227	1,367	0 - 1	2.0	50.61	2.00	101.23
ES1-7	226	1,534	0 - 0.5	0.45	28.42	0.93	52.57
			0.5 - 1	1.4	56.83		
RAA6-C4	225	1,411	0 - 1	0.70	52.27	0.70	36.59
RAA6-C5	224	1,900	0 - 1	0.49	70.36	0.49	34.47
RAA6-C6	223	379	0 - 1	<b>0.019</b>	14.05	0.02	0.27
RAA6-B7	221	2,808	0 - 1	0.137	104.00	0.14	14.25
RAA6-A11	198	2,370	0 - 1	0.77	87.76	0.77	67.58
RAA6-A13	220	1,004	0 - 1	0.048	37.17	0.05	1.78
RAA6-A14	219	677	0 - 1	0.021	25.07	0.02	0.53
RAA6-A15	218	641	0 - 1	0.102	23.74	0.10	2.42
RAA6-A16	217	595	0 - 1	0.25	22.02	0.25	5.50
RAA6-A17	216	545	0 - 1	0.049	20.17	0.05	0.99
<b>Totals:</b>	--	16,406	--	--	607.61	--	407.47
<b>Volume Weighted Average:</b>							<b>0.67</b>

Notes:

1. Polygon ID and area based on information shown on Figure B-1.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-10  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 3- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**0- TO 1- FOOT DEPTH INCREMENT (SEE TABLE B-9)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	16,406	--	--	607.61	--	395.19
<b>Volume Weighted Average:</b>							<b>0.66</b>

**1- TO 2-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	148	1,176	1 - 2	2.2	43.56	2.20	95.83
RAA6-C2	147	1,367	1 - 2	2.7	50.61	2.70	136.65
ES1-7	146	1,534	1 - 2	1.4	56.83	1.40	79.56
RAA6-C4	145	1,411	1 - 2	3.2	52.27	3.20	167.26
RAA6-C5	144	1,900	1 - 2	1.9	70.36	1.90	133.68
RAA6-C6	143	379	1 - 2	0.35	14.05	0.35	4.92
RAA6-B7	140	2,808	1 - 2	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	1 - 2	0.12	87.76	0.12	10.53
RAA6-A13	137	1,322	1 - 2	1.03	48.97	1.03	50.44
RAA6-A15	136	1,295	1 - 2	0.13	47.95	0.13	6.23
RAA6-A17	135	844	1 - 2	0.022	31.25	0.02	0.69
<b>Totals:</b>	--	16,406	--	--	607.61	--	687.78
<b>Volume Weighted Average:</b>							<b>1.13</b>

**2- TO 3-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	157	1,176	2 - 3	0.73	43.56	0.73	31.80
RAA6-C2	156	1,367	2 - 3	2.7	50.61	2.70	136.65
ES1-7	155	1,534	2 - 3	1.7	56.83	1.70	96.61
RAA6-C4	154	1,411	2 - 3	3.2	52.27	3.20	167.26
RAA6-C5	153	1,900	2 - 3	1.9	70.36	1.90	133.68
RAA6-C6	152	379	2 - 3	0.35	14.05	0.35	4.92
RAA6-B7	150	2,808	2 - 3	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	2 - 3	0.12	87.76	0.12	10.53
RAA6-A13	149	1,322	2 - 3	1.03	48.97	1.03	50.44
RAA6-A15	148	1,295	2 - 3	0.13	47.95	0.13	6.23
RAA6-A17	147	844	2 - 3	0.022	31.25	0.02	0.69
<b>Totals:</b>	--	16,406	--	--	607.61	--	640.79
<b>Volume Weighted Average:</b>							<b>1.05</b>

**TABLE B-10  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 3- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**SUMMARY 0- TO 3-FOOT DEPTH INCREMENT**

<b>Sample ID (s)</b>	<b>Polygon ID</b>	<b>Polygon Area (sq. ft.)</b>	<b>Sample Depth (ft.)</b>	<b>PCB Conc. (ppm)</b>	<b>Volume (cumulative) (cy)</b>	<b>Average PCB Concentration Per Foot (ppm)</b>	<b>Average PCB Conc. TIMES Total Volume</b>
<b>Totals:</b>	--	16,406	--	--	1,822.84	--	1,723.77
<b>Volume Weighted Average:</b>							<b>0.95</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-1 through B-3.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-11  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**1- TO 2-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	148	1,176	1 - 2	2.2	43.56	2.20	95.83
RAA6-C2	147	1,367	1 - 2	2.7	50.61	2.70	136.65
ES1-7	146	1,534	1 - 2	1.4	56.83	1.40	79.56
RAA6-C4	145	1,411	1 - 2	3.2	52.27	3.20	167.26
RAA6-C5	144	1,900	1 - 2	1.9	70.36	1.90	133.68
RAA6-C6	143	379	1 - 2	0.35	14.05	0.35	4.92
RAA6-B7	140	2,808	1 - 2	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	1 - 2	0.12	87.76	0.12	10.53
RAA6-A13	137	1,322	1 - 2	1.03	48.97	1.03	50.44
RAA6-A15	136	1,295	1 - 2	0.13	47.95	0.13	6.23
RAA6-A17	135	844	1 - 2	0.022	31.25	0.02	0.69
<b>Totals:</b>	--	16,406	--	--	607.61	--	687.78
<b>Volume Weighted Average:</b>							<b>1.13</b>

**2- TO 3-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	157	1,176	2 - 3	0.73	43.56	0.73	31.80
RAA6-C2	156	1,367	2 - 3	2.7	50.61	2.70	136.65
ES1-7	155	1,534	2 - 3	1.7	56.83	1.70	96.61
RAA6-C4	154	1,411	2 - 3	3.2	52.27	3.20	167.26
RAA6-C5	153	1,900	2 - 3	1.9	70.36	1.90	133.68
RAA6-C6	152	379	2 - 3	0.35	14.05	0.35	4.92
RAA6-B7	150	2,808	2 - 3	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	2 - 3	0.12	87.76	0.12	10.53
RAA6-A13	149	1,322	2 - 3	1.03	48.97	1.03	50.44
RAA6-A15	148	1,295	2 - 3	0.13	47.95	0.13	6.23
RAA6-A17	147	844	2 - 3	0.022	31.25	0.02	0.69
<b>Totals:</b>	--	16,406	--	--	607.61	--	640.79
<b>Volume Weighted Average:</b>							<b>1.05</b>

**TABLE B-11  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**3- TO 4-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	157	1,176	3 - 4	0.73	43.56	0.73	31.80
RAA6-C2	156	1,367	3 - 4	2.7	50.61	2.70	136.65
ES1-7	155	1,534	3 - 4	1.7	56.83	1.70	96.61
RAA6-C4	154	1,411	3 - 4	3.2	52.27	3.20	167.26
RAA6-C5	153	1,900	3 - 4	1.9	70.36	1.90	133.68
RAA6-C6	152	379	3 - 4	0.35	14.05	0.35	4.92
RAA6-B7	150	2,808	3 - 4	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	3 - 4	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	149	1,322	3 - 4	<b>0.020</b>	48.97	0.02	0.98
RAA6-A15	148	1,295	3 - 4	<b>0.019</b>	47.95	0.02	0.91
RAA6-A17	147	844	3 - 4	<b>0.019</b>	31.25	0.02	0.59
<b>Totals:</b>	--	16,406	--	--	607.61	--	577.09
<b>Volume Weighted Average:</b>							<b>0.95</b>

**4- TO 5-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	157	1,176	4 - 5	<b>0.039</b>	43.56	0.04	1.70
RAA6-C2	156	1,367	4 - 5	2.7	50.61	2.70	136.65
ES1-7	155	1,534	4 - 5	6.4	56.83	6.40	363.72
RAA6-C4	154	1,411	4 - 5	3.2	52.27	3.20	167.26
RAA6-C5	153	1,900	4 - 5	1.9	70.36	1.90	133.68
RAA6-C6	152	379	4 - 5	0.35	14.05	0.35	4.92
RAA6-B7	150	2,808	4 - 5	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	134	2,370	4 - 5	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	149	1,322	4 - 5	<b>0.020</b>	48.97	0.02	0.98
RAA6-A15	148	1,295	4 - 5	<b>0.019</b>	47.95	0.02	0.91
RAA6-A17	147	844	4 - 5	<b>0.019</b>	31.25	0.02	0.59
<b>Totals:</b>	--	16,406	--	--	607.61	--	814.10
<b>Volume Weighted Average:</b>							<b>1.34</b>

**TABLE B-11  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
1- TO 6- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**5- TO 6-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	153	805	5 - 6	<b>0.039</b>	29.80	0.04	1.16
GEI-106	152	729	5 - 6	<b>0.5</b>	26.99	0.50	13.49
RAA6-C2	150	1,009	5 - 6	2.7	37.38	2.70	100.93
ES1-7	149	1,534	5 - 6	6.4	56.83	6.40	363.72
RAA6-C4	148	1,411	5 - 6	3.2	52.27	3.20	167.26
RAA6-C5	147	2,046	5 - 6	1.9	75.78	1.90	143.98
RAA6-B7	146	3,041	5 - 6	<b>0.019</b>	112.63	0.02	2.14
RAA6-A11	131	2,370	5 - 6	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	145	1,322	5 - 6	<b>0.020</b>	48.97	0.02	0.98
RAA6-A15	144	1,295	5 - 6	<b>0.019</b>	47.95	0.02	0.91
RAA6-A17	143	844	5 - 6	<b>0.019</b>	31.25	0.02	0.59
<b>Totals:</b>	--	16,406	--	--	607.61	--	796.88
<b>Volume Weighted Average:</b>							<b>1.31</b>

**SUMMARY 1- TO 6-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	16,406	--	--	3,038.06	--	3,516.65
<b>Volume Weighted Average:</b>							<b>1.16</b>

Notes:

1. Polygon ID and area based on information shown on Figures B-1 through B-6.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.

**TABLE B-12  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**0- TO 1- FOOT DEPTH INCREMENT (SEE TABLE B-9)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	16,406	--	--	607.61	--	395.19
<b>Volume Weighted Average:</b>							<b>0.66</b>

**1- TO 6- FOOT DEPTH INCREMENT (SEE TABLE B-11)**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	16,406	--	--	3,038.06	--	3,516.65
<b>Volume Weighted Average:</b>							<b>1.16</b>

**6- TO 7-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	170	805	6 - 7	<b>0.039</b>	29.80	0.04	1.16
GEI-106	169	729	6 - 7	<b>0.5</b>	26.99	0.50	13.49
RAA6-C2	167	1,009	6 - 7	<b>0.019</b>	37.38	0.02	0.71
ES1-7	166	1,473	6 - 7	2.25	54.57	2.25	122.77
RAA6-C3	165	62	6 - 7	0.64	2.29	0.64	1.47
RAA6-C4	164	1,411	6 - 7	1.3	52.24	1.30	67.91
RAA6-C5	163	1,900	6 - 7	0.59	70.36	0.59	41.51
RAA6-C6	162	379	6 - 7	0.159	14.05	0.16	2.23
RAA6-B7	160	2,808	6 - 7	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	143	2,370	6 - 7	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	159	1,322	6 - 7	<b>0.020</b>	48.97	0.02	0.96
RAA6-A15	158	1,295	6 - 7	<b>0.019</b>	47.95	0.02	0.89
RAA6-A17	157	844	6 - 7	<b>0.020</b>	31.25	0.02	0.61
<b>Totals:</b>	--	16,406	--	--	607.61	--	257.40
<b>Volume Weighted Average:</b>							<b>0.42</b>



**TABLE B-12  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**7- TO 8-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
ES1-9	165	1,176	7 - 8	<b>0.039</b>	43.56	0.04	1.70
RAA6-C2	164	1,367	7 - 8	<b>0.019</b>	50.61	0.02	0.96
ES1-7	163	1,473	7 - 8	2.25	54.57	2.25	122.77
RAA6-C3	162	62	7 - 8	0.64	2.29	0.64	1.47
RAA6-C4	161	1,411	7 - 8	1.3	52.24	1.30	67.91
RAA6-C5	160	1,900	7 - 8	0.59	70.36	0.59	41.51
RAA6-C6	159	379	7 - 8	0.159	14.05	0.16	2.23
RAA6-B7	157	2,808	7 - 8	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	140	2,370	7 - 8	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	156	1,322	7 - 8	<b>0.020</b>	48.97	0.02	0.96
RAA6-A15	155	1,295	7 - 8	<b>0.019</b>	47.95	0.02	0.89
RAA6-A17	154	844	7 - 8	<b>0.020</b>	31.25	0.02	0.61
<b>Totals:</b>	--	16,406	--	--	607.61	--	244.69
<b>Volume Weighted Average:</b>							<b>0.40</b>

**8- TO 10-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-E1	157	869	8 - 10	0.14	64.39	0.14	9.01
RAA6-C2	156	1,690	8 - 10	<b>0.019</b>	125.19	0.02	2.38
RAA6-C3	155	1,518	8 - 10	0.64	112.45	0.64	71.96
RAA6-C4	154	1,410	8 - 10	1.3	104.45	1.30	135.79
RAA6-C5	153	1,900	8 - 10	0.59	140.71	0.59	83.02
RAA6-C6	152	379	8 - 10	0.159	28.10	0.16	4.45
RAA6-B7	150	2,808	8 - 10	<b>0.019</b>	208.00	0.02	3.95
RAA6-A11	133	2,370	8 - 10	<b>0.020</b>	175.52	0.02	3.42
RAA6-A13	149	1,322	8 - 10	<b>0.020</b>	97.95	0.02	1.91
RAA6-A15	148	1,295	8 - 10	<b>0.019</b>	95.90	0.02	1.77
RAA6-A17	147	844	8 - 10	<b>0.020</b>	62.50	0.02	1.22
<b>Totals:</b>	--	16,405	--	--	1,215.15	--	318.90
<b>Volume Weighted Average:</b>							<b>0.26</b>

**TABLE B-12  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**10- TO 12-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-E1	157	869	10 - 12	0.14	64.39	0.14	9.01
RAA6-C2	156	1,690	10 - 12	<b>0.019</b>	125.19	0.02	2.38
RAA6-C3	155	1,518	10 - 12	0.64	112.45	0.64	71.96
RAA6-C4	154	1,411	10 - 12	1.3	104.53	1.30	135.88
RAA6-C5	153	1,900	10 - 12	0.59	140.71	0.59	83.02
RAA6-C6	152	379	10 - 12	0.159	28.10	0.16	4.45
RAA6-B7	150	2,808	10 - 12	<b>0.019</b>	208.00	0.02	3.95
RAA6-A11	133	2,370	10 - 12	<b>0.020</b>	175.52	0.02	3.42
RAA6-A13	149	1,322	10 - 12	<b>0.020</b>	97.95	0.02	1.91
RAA6-A15	148	1,295	10 - 12	<b>0.019</b>	95.90	0.02	1.77
RAA6-A17	147	844	10 - 12	<b>0.020</b>	62.50	0.02	1.22
<b>Totals:</b>	--	16,406	--	--	1,215.22	--	318.99
<b>Volume Weighted Average:</b>							<b>0.26</b>

**12- TO 14-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-E1	154	869	12 - 14	0.14	64.39	0.14	9.01
RAA6-C2	153	1,690	12 - 14	<b>0.019</b>	125.19	0.02	2.38
RAA6-C3	152	1,518	12 - 14	0.64	112.45	0.64	71.96
RAA6-C4	151	1,411	12 - 14	1.3	104.53	1.30	135.88
RAA6-C5	150	1,900	12 - 14	0.59	140.71	0.59	83.02
RAA6-C6	149	379	12 - 14	0.159	28.10	0.16	4.45
RAA6-B7	147	2,808	12 - 14	<b>0.019</b>	208.00	0.02	3.95
RAA6-A11	130	2,370	12 - 14	<b>0.020</b>	175.52	0.02	3.42
RAA6-A13	146	1,322	12 - 14	<b>0.020</b>	97.95	0.02	1.91
RAA6-A15	145	1,295	12 - 14	<b>0.019</b>	95.90	0.02	1.77
RAA6-A17	144	844	12 - 14	<b>0.020</b>	62.50	0.02	1.22
<b>Totals:</b>	--	16,406	--	--	1,215.22	--	318.99
<b>Volume Weighted Average:</b>							<b>0.26</b>

**TABLE B-12  
EXISTING CONDITIONS  
NON GE-OWNED PARCEL K11-1-15  
0- TO 15- FOOT DEPTH INCREMENT**

**CONCEPTUAL RD/RA WORK PLAN FOR EAST STREET AREA 1-NORTH  
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**14- TO 15-FOOT DEPTH INCREMENT**

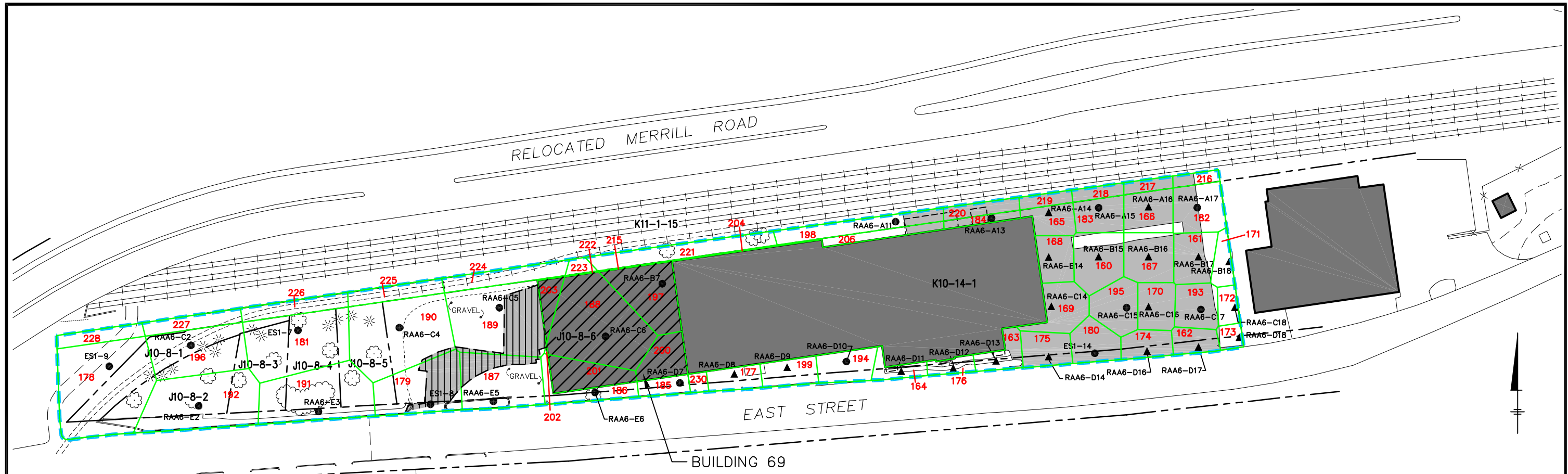
Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA6-E1	162	869	14 - 15	0.14	32.20	0.14	4.51
RAA6-C2	161	1,673	14 - 15	<b>0.019</b>	61.98	0.02	1.18
ES1-7	160	1,473	14 - 15	<b>1.9</b>	54.57	1.90	103.67
RAA6-C3	159	62	14 - 15	0.64	2.29	0.64	1.46
RAA6-C4	158	1,411	14 - 15	1.3	52.24	1.30	67.91
RAA6-C5	157	1,900	14 - 15	0.59	70.36	0.59	41.51
RAA6-C6	156	379	14 - 15	0.159	14.05	0.16	2.23
RAA6-B7	154	2,808	14 - 15	<b>0.019</b>	104.00	0.02	1.98
RAA6-A11	135	2,370	14 - 15	<b>0.020</b>	87.76	0.02	1.71
RAA6-A13	153	1,322	14 - 15	<b>0.020</b>	48.97	0.02	0.96
RAA6-A15	152	1,295	14 - 15	<b>0.019</b>	47.95	0.02	0.89
RAA6-A17	151	844	14 - 15	<b>0.020</b>	31.25	0.02	0.61
<b>Totals:</b>	--	16,405	--	--	607.60	--	228.61
<b>Volume Weighted Average:</b>							<b>0.38</b>



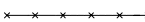

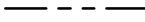






**SUMMARY 0- TO 15-FOOT DEPTH INCREMENT**

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
<b>Totals:</b>	--	16,406	--	--	9,114.10	--	5,599.42
<b>Volume Weighted Average:</b>							<b>0.61</b>

Notes:

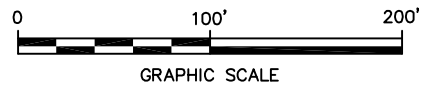
1. Polygon ID and area based on information shown on Figures B-7 through B-12.
2. Non-detectable PCBs included as 1/2 the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the table are displayed as rounded numbers for clarity.



LEGEND:			
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY		BUILDING
	FENCE		BUILDING 69 TO BE DEMOLISHED
	PROPERTY LINE (APPROXIMATE)		PAVED AREA
	RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION		DEGRADED PAVEMENT
	ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)		HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
			POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
0-TO 1-FOOT DEPTH INCREMENT**


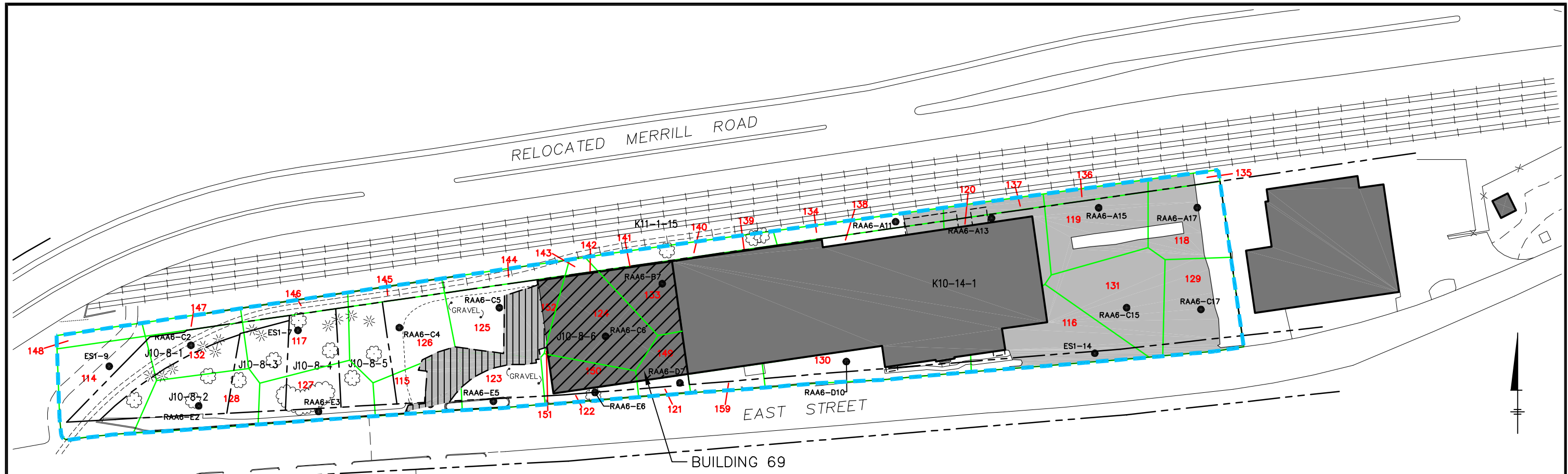

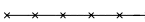
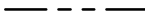








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FIGURE  
**B-1**

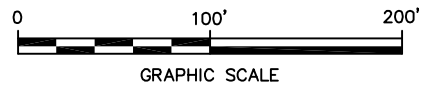
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L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B01.DWG



LEGEND:	
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY
	FENCE
	PROPERTY LINE (APPROXIMATE)
	RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION
	ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)
	BUILDING
	BUILDING 69 TO BE DEMOLISHED
	PAVED AREA
	DEGRADED PAVEMENT
	HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
	POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. –FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



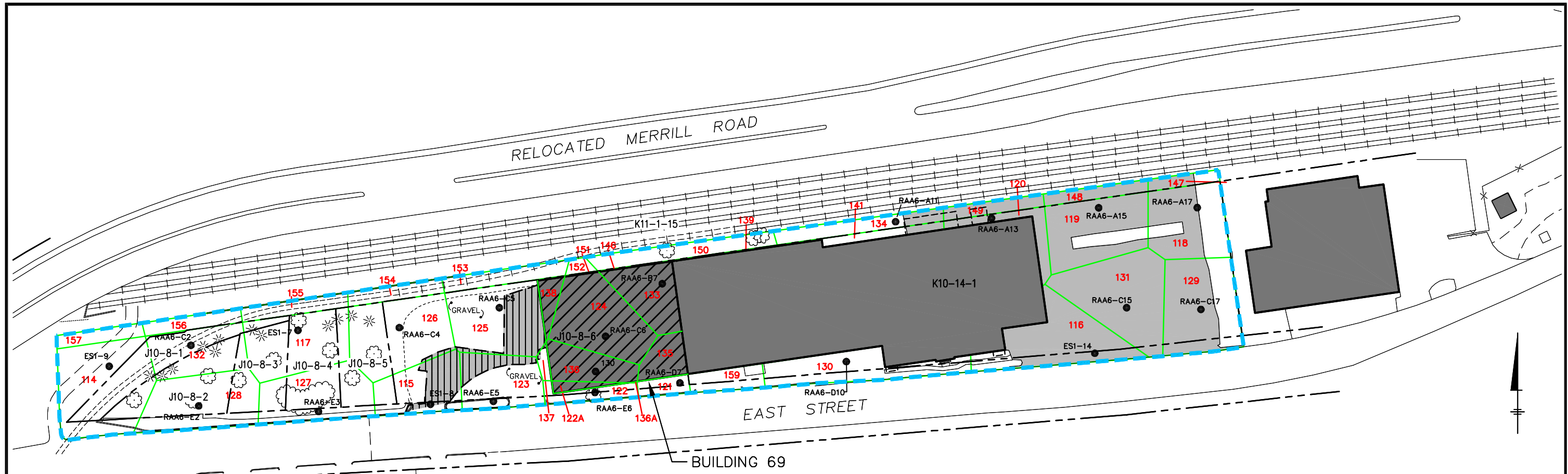
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH**


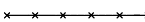
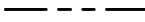








**THEISSEN POLYGON MAP  
1-TO 2-FOOT DEPTH INCREMENT**

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FIGURE  
**B-2**

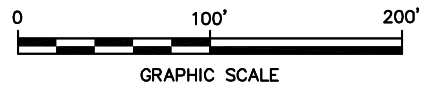
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L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B02.DWG



LEGEND:	
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY
	FENCE
	PROPERTY LINE (APPROXIMATE)
	▲ RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION
	● ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)
	BUILDING
	BUILDING 69 TO BE DEMOLISHED
	PAVED AREA
	DEGRADED PAVEMENT
	HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
	POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



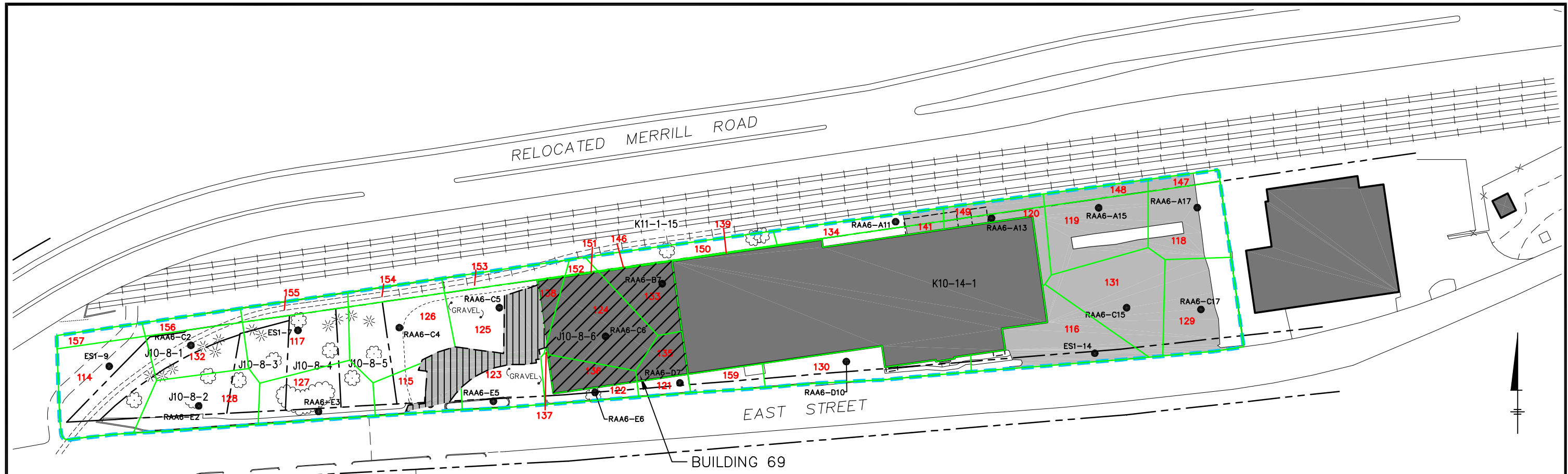
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
2-TO 3-FOOT DEPTH INCREMENT**





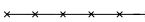






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FIGURE  
**B-3**

X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW D.J.P. NES  
N/40189023/POLYGONS/40189B03.DWG

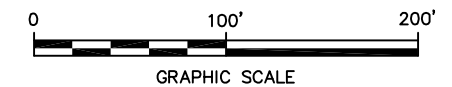


**LEGEND:**

- |   |  |   |   |
|---|--|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                               |  | BUILDING  |
|  | FENCE  |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)  |  | PAVED AREA  |
|  | RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION                         |  | DEGRADED PAVEMENT   |
|  | ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |  |  | POLYGON ID  |

**FIGURE NOTES:**

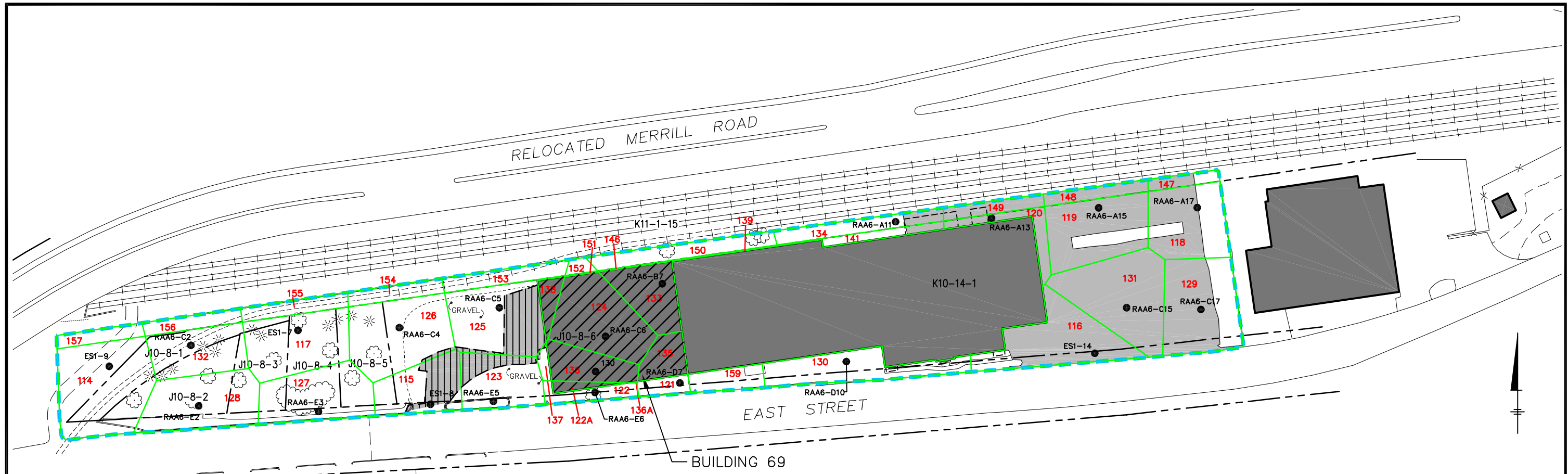
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. –FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.







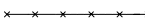






GENERAL ELECTRIC COMPANY  
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**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH**

**THEISSEN POLYGON MAP  
3-TO 4-FOOT DEPTH INCREMENT**



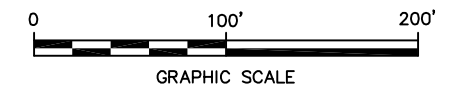


**LEGEND:**

- |   |  |   |   |
|---|--|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                               |  | BUILDING  |
|  | FENCE  |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)  |  | PAVED AREA  |
|  | RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION                         |  | DEGRADED PAVEMENT   |
|  | ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |  |  | POLYGON ID  |

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



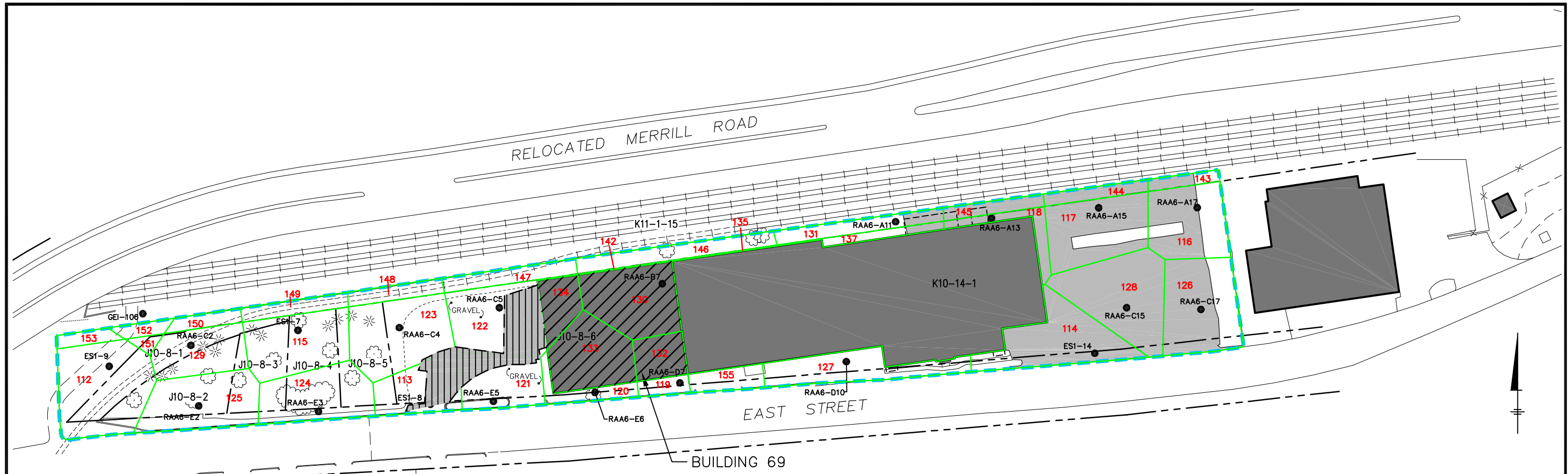
GENERAL ELECTRIC COMPANY  
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**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
4-TO 5-FOOT DEPTH INCREMENT**







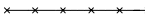
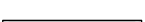





FIGURE  
**B-5**



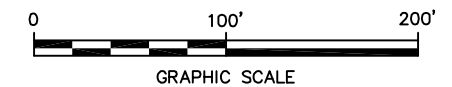


**LEGEND:**

- |   |   |   |   |
|---|---|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                        |  | BUILDING  |
|  | FENCE   |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)                                     |  | PAVED AREA  |
|  | EXISTING SURFACE SOIL SAMPLE LOCATION                           |  | DEGRADED PAVEMENT   |
|  | EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |   |  | POLYGON ID  |

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.

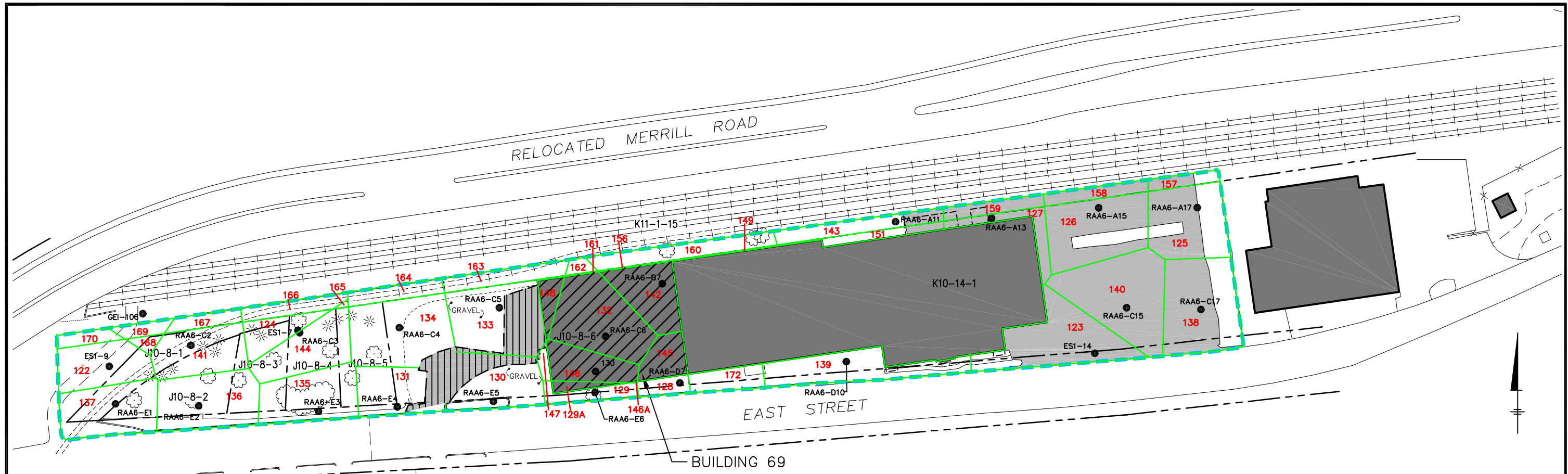


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**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**












**THEISSEN POLYGON MAP  
5-TO 6-FOOT DEPTH INCREMENT**



FIGURE  
**B-6**

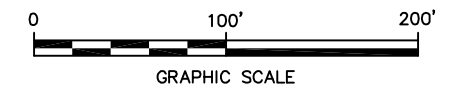


**LEGEND:**

- |   |  |   |   |
|---|--|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                               |  | BUILDING  |
|  | FENCE  |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)  |  | PAVED AREA  |
|  | RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION                         |  | DEGRADED PAVEMENT   |
|  | ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |  |  | POLYGON ID  |

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.

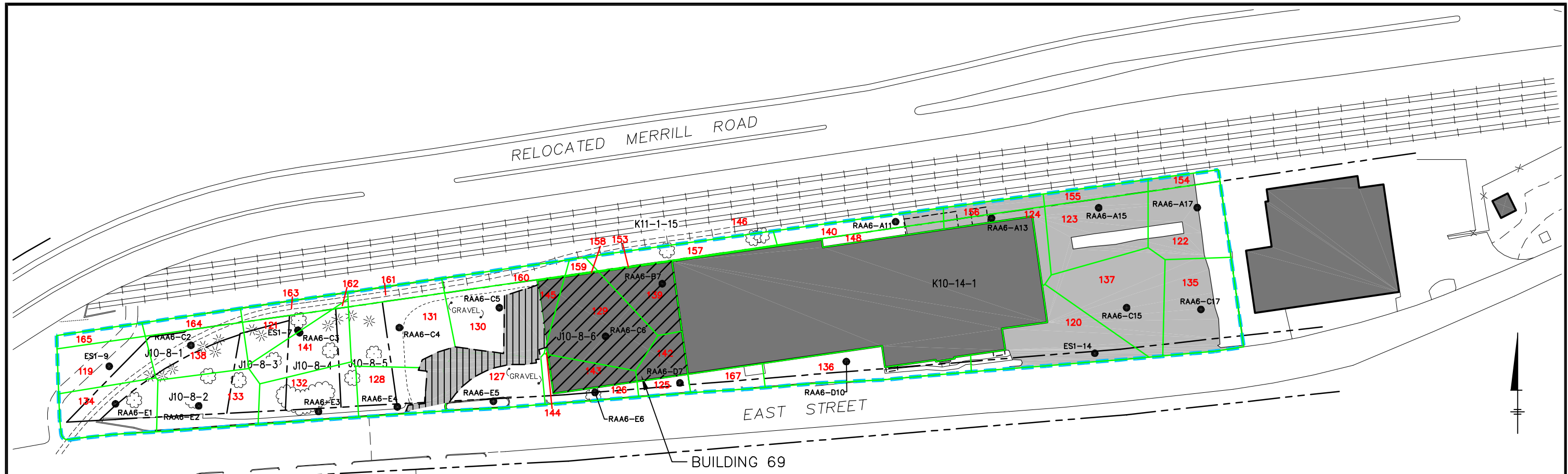




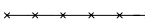

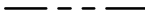






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**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
6-TO 7-FOOT DEPTH INCREMENT**



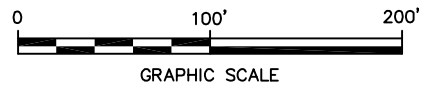
FIGURE  
**B-7**



LEGEND:			
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY		BUILDING
	FENCE		BUILDING 69 TO BE DEMOLISHED
	PROPERTY LINE (APPROXIMATE)		PAVED AREA
	▲ RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION		DEGRADED PAVEMENT
	● ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)		HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
			POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. –FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
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**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH**

**THEISSEN POLYGON MAP  
7-TO 8-FOOT DEPTH INCREMENT**


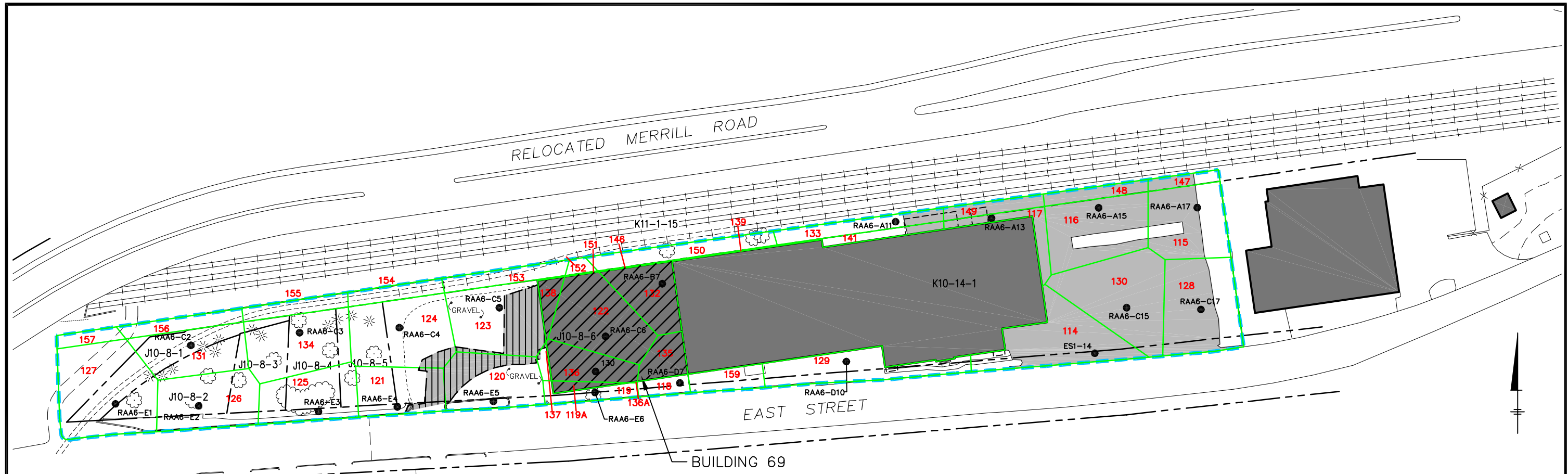


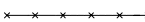








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FIGURE  
**B-8**

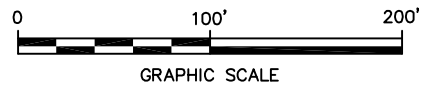
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10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B08.DWG



LEGEND:			
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY		BUILDING
	FENCE		BUILDING 69 TO BE DEMOLISHED
	PROPERTY LINE (APPROXIMATE)		PAVED AREA
	EXISTING SURFACE SOIL SAMPLE LOCATION		DEGRADED PAVEMENT
	EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)		HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
			POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. –FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH**

**THEISSEN POLYGON MAP  
8-TO 10-FOOT DEPTH INCREMENT**


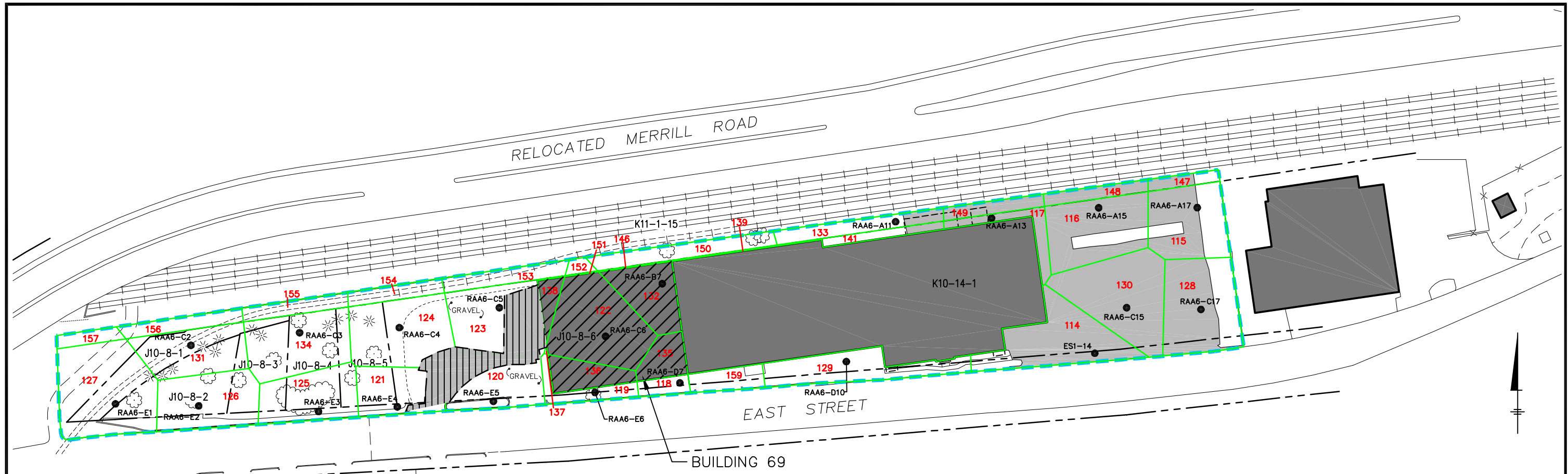


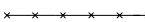










FIGURE  
**B-9**

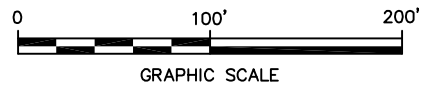
X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW D.J.P. NES  
N/40189023/POLYGONS/40189B09.DWG



LEGEND:			
	APPROXIMATE REMOVAL ACTION AREA BOUNDARY		BUILDING
	FENCE		BUILDING 69 TO BE DEMOLISHED
	PROPERTY LINE (APPROXIMATE)		PAVED AREA
	RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION		DEGRADED PAVEMENT
	ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH)		HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH
			POLYGON ID

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. –FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 – NORTH**

**THEISSEN POLYGON MAP  
10-TO 12-FOOT DEPTH INCREMENT**


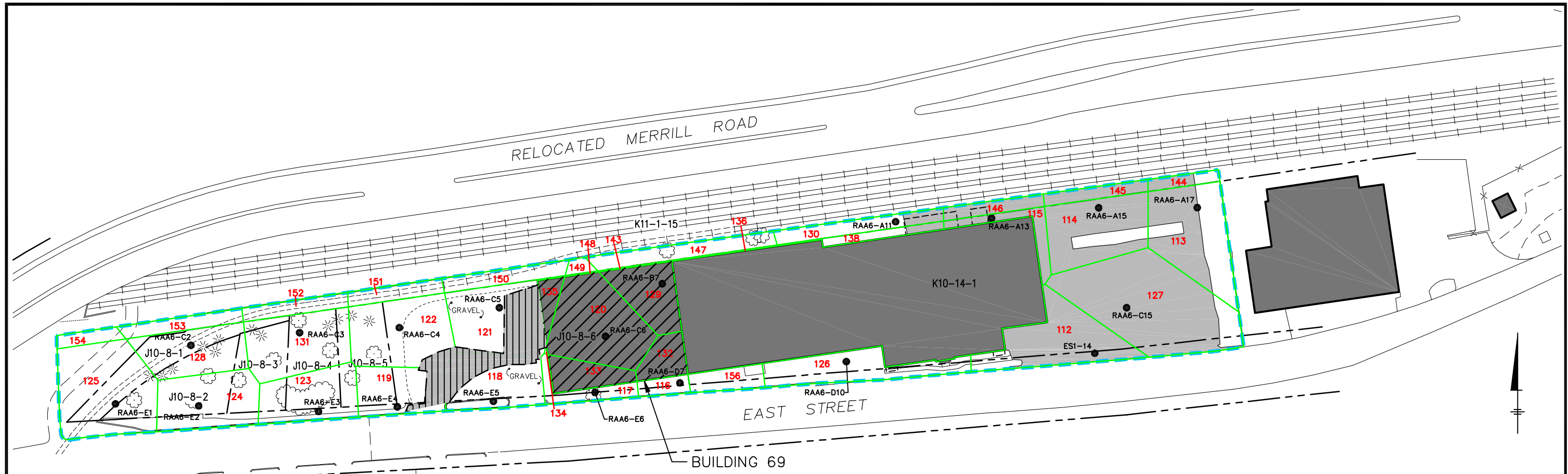


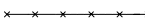

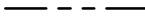








FIGURE  
**B-10**

X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B10.DWG

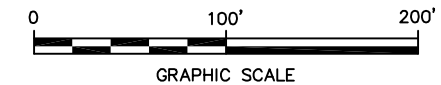


**LEGEND:**

- |   |  |   |   |
|---|--|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                               |  | BUILDING  |
|  | FENCE  |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)  |  | PAVED AREA  |
|  | RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION                         |  | DEGRADED PAVEMENT   |
|  | ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |  |  | POLYGON ID  |

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. -FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; AND SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



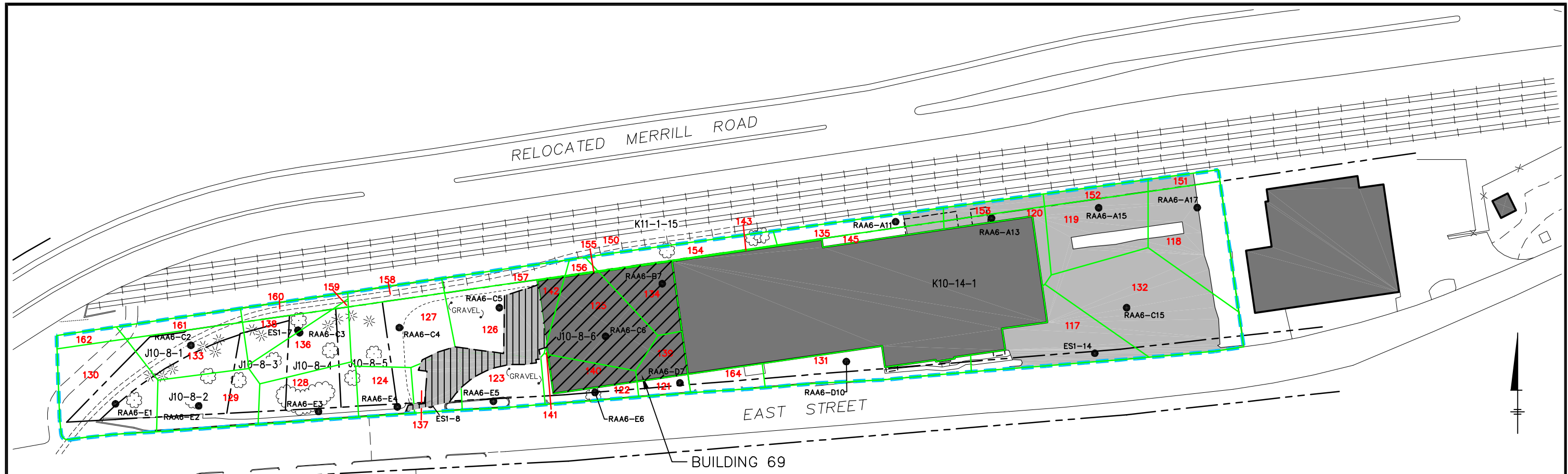
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
12-TO 14-FOOT DEPTH INCREMENT**



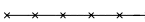








**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

FIGURE  
**B-11**

X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B11.DWG

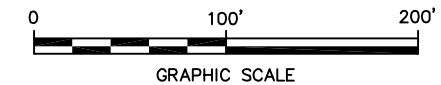


**LEGEND:**

- |   |  |   |   |
|---|--|---|---|
|  | APPROXIMATE REMOVAL ACTION AREA BOUNDARY                                 |  | BUILDING  |
|  | FENCE  |  | BUILDING 69 TO BE DEMOLISHED  |
|  | PROPERTY LINE (APPROXIMATE)  |  | PAVED AREA  |
|  | ▲ RAA6-B14 EXISTING SURFACE SOIL SAMPLE LOCATION                         |  | DEGRADED PAVEMENT   |
|  | ● ES1-14 EXISTING SOIL BORING LOCATION (1- FOOT OR GREATER SAMPLE DEPTH) |  | HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH |
|   |  |  | POLYGON ID  |

**FIGURE NOTES:**

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA DIGITIZED FROM PHOTOCOPIES OF MASSACHUSETTS HIGHWAY DEPARTMENT DRAWINGS DEPICTING MERRILL ROAD REALIGNMENT, 1/14/98; SURVEY INFORMATION PROVIDED BY WHITE ENGINEERING DEPICTING RELOCATED EAST STREET, 5/7/01; AND SURVEY INFORMATION PROVIDED BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. DEPICTING PROPERTY LINES AND SITE TOPOGRAPHY, 8/20/03.
2. ALL LOCATIONS ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL REMOVAL DESIGN/REMOVAL ACTION WORK PLAN  
FOR EAST STREET AREA 1 - NORTH**

**THEISSEN POLYGON MAP  
14-TO 15-FOOT DEPTH INCREMENT**




FIGURE  
**B-12**

X: 40189X01.DWG  
L: ON=\*, OFF=REF\*, |PRO-SOIL, BNDRY\*  
P: PAGESET/PLT-BL  
10/17/03 SYR-85-DMW NES DJP  
N/40189023/POLYGONS/40189B12.DWG

## *Appendix C*

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# **Risk Evaluation of Non-PCB Appendix IX+3 Constituents in Soils at East Street Area 1-North**





**Risk Evaluation of Non-PCB Appendix IX+3  
Constituents in Soils at East Street Area 1-North**

**Appendix C**

**to**

**Conceptual Removal Design/Removal Action  
Work Plan for East Street Area 1-North**



## APPENDIX C

### Risk Evaluation of Non-PCB Appendix IX+3 Constituents in Soils at East Street Area 1-North

#### 1.0 Introduction

A number of non-PCB constituents have been detected in the existing soils of properties located in the East Street Area 1-North portion of the GE-Pittsfield/Housatonic River Site. These constituents have been evaluated in accordance with the multi-step process established for non-PCB Appendix IX+3 constituents in the *Statement of Work for Removal Actions Outside the River (SOW)* (BBL, 1999). The steps in this process are described in the text of this Conceptual RD/RA Work Plan. These steps included screening by comparison of the maximum detected concentrations of the constituents at each area to EPA's applicable Preliminary Remediation Goals (PRGs) for soil (or, in some cases, screening based on other considerations, such as low frequency of detection). Following this screening, the average concentrations of the remaining constituents in each relevant depth increment at each area were compared to the applicable Method 1 soil standards set out in the Massachusetts Contingency Plan (MCP).

As described in the text of this Work Plan, for three sections of East Street Area 1-North – the GE-owned area, Parcel K10-14-1, and the portion of Parcel K11-1-15 within East Street Area 1-North – one or more non-PCB constituents had existing average concentrations that exceeded the applicable Method 1 soil standards in at least one of the relevant depth increments. For each of these areas, GE requested AMEC Earth & Environmental (AMEC) to conduct area-specific risk evaluations of the non-PCB constituents under existing conditions. The risk evaluations were performed for all non-PCB constituents that were retained prior to the comparison to the Method 1 soil standards (except for dioxins/furans, which were evaluated separately in accordance with the procedures set forth in the SOW).

This Appendix describes and presents the results of the area-specific risk evaluations for the three above-listed areas at East Street Area 1-North. All three of these areas are considered commercial/industrial properties. In accordance with the SOW, these risk evaluations were based on: (a) the arithmetic average concentrations of the retained non-PCB constituents for

each area; (b) the same exposure scenarios, soil depth increments, and exposure assumptions used by EPA in developing the PCB Performance Standards for commercial/industrial areas (as described in EPA, 1999a); and (c) standard EPA toxicity values. As discussed below, for the areas and constituents evaluated, estimated cancer risks and non-cancer hazards fall below the acceptable benchmarks prescribed in the SOW.

## **2.0 Constituents and Depth Increments Evaluated**

In accordance with the protocols set forth in the SOW, the risk evaluations presented herein have considered all chemicals of potential concern (COPCs) that were retained for evaluation after the initial screening steps described in this Work Plan but before the comparison to MCP Method 1 standards, and have used the average concentrations of those constituents at each of the areas in question. The constituents evaluated, which vary somewhat from area to area, are shown in Table 1 and discussed in detail in the area-specific risk evaluations presented in Section 5. For each relevant area and COPC, average concentrations have been calculated for the same depth increments evaluated by EPA (1999a) in developing the PCB Performance Standards. For commercial/industrial properties, these increments are the 0-1 foot and the 1-6 foot depth increments, although average concentrations have also been calculated for the 0-3 foot depth increment for those commercial/industrial parcels that are subject to Conditional Solutions.

With the exception of lead, area-specific COPCs have been included in risk calculations for each area to determine whether cancer risks and non-cancer hazards fall within acceptable limits. (In accordance with the SOW, PCBs and dioxins/furans have not been included in these evaluations.) Since EPA has not developed standard toxicity values for lead, that constituent has been evaluated through the application of the EPA's adult lead model, as discussed below.

## **3.0 Risk Evaluation Assumptions and Procedures (for All COPCs Except Lead)**

In accordance with the SOW, the exposure scenarios that have been evaluated are the same exposure scenarios utilized by EPA (1999a) in supporting the PCB Performance Standards.



For commercial/industrial properties, these are the Commercial Groundskeeper scenario for surface soil (0-1 foot depth) and the Utility Worker scenario for subsurface soil (1-6 foot depth). In addition, for commercial/industrial parcels subject to Conditional Solutions, the Commercial Groundskeeper scenario has also been applied to the 0-3 foot depth increment.

The Commercial Groundskeeper scenario assumes that an adult is exposed to constituents in surficial soils 84 days per year for a period of 25 years. With the exception of chemical-specific absorption criteria, all exposure assumptions used to evaluate this scenario were the same as those used by EPA (1999a). Exposure assumptions used in the evaluation of this scenario are provided in Table 2.

The Utility Worker scenario assumes that an adult is in contact with subsurface soils 5 days per year for 25 years. As with the Groundskeeper scenario, all exposure assumptions used in this scenario were the same as the assumptions used by EPA (1999a). These assumptions are also presented in Table 2.

With respect to absorption factors, EPA's dermal guidance document (EPA, 2001) specifies oral absorption factors less than 100 percent for certain of the constituents evaluated (e.g., 89 percent for the carcinogenic polycyclic aromatic hydrocarbons [PAHs]), and notes that where such factors are greater than 50 percent, the toxicity factors do not need to be modified to represent the absorbed dose. Nevertheless, for purposes of the evaluations at these properties, we have conservatively assumed that the oral absorption of all chemicals evaluated is 100 percent. The dermal absorption factors used were taken from EPA's dermal guidance (EPA, 2001a), where available, or otherwise from Massachusetts DEP sources (MDEP, 1994). The specific absorption factors used in these evaluations are shown in Table 3.

The carcinogenic COPCs have been evaluated for potential carcinogenic risks, while the non-carcinogenic COPCs have been evaluated for potential non-cancer hazards. The toxicity values – i.e., Cancer Slope Factors (CSFs) and/or Reference Doses (RfDs) – used in the evaluations were those set forth on EPA's (2003) Integrated Risk Information System (IRIS), when available. For the carcinogenic PAHs for which no specific toxicity information

is provided, relative potency factors (RPFs) recommended by EPA (1993) have been used to adjust the CSF values for these PAHs based on their assumed potency relative to benzo(a)pyrene. The specific toxicity values used in these evaluations are included in Table 3.

Based on these input values, predicted cancer risks and non-cancer hazards have been calculated for the COPCs at each area using standard risk assessment procedures. The results have been compared to the benchmarks set forth in the SOW (for constituents other than PCBs and dioxins/furans) of an Excess Lifetime Cancer Risk (ELCR) of  $1 \times 10^{-5}$  and a Hazard Index (HI) of 1.0 for non-cancer effects.

#### **4.0 Evaluation of Lead Exposures and Risks**

Lead has been retained as a COPC at two of the areas evaluated (Parcel K10-14-1 and the portion of Parcel K11-1-15 within East Street Area 1-North). However, EPA has not developed toxicity criteria for lead (EPA, 2003). Consequently, it is not possible to evaluate potential hazards associated with lead exposure in the same way that other COPCs are evaluated. Instead, EPA has established a "safe" fetal blood lead level of 10  $\mu\text{g}/\text{dL}$  and has developed a model to evaluate adult exposures to lead, considering fetal blood levels as the critical endpoint.

For the adult who may be exposed to lead in a non-residential setting, EPA has developed the Adult Lead Methodology (ALM) (EPA, 1996, 1999b, 2001b). This methodology predicts the blood levels of lead that would likely occur in a pregnant woman and in her fetus after non-residential exposure to lead-contaminated soil and dust. The biokinetic ALM incorporates background blood lead levels as a starting concentration and predicts blood levels that will likely result after additional exposure to lead-contaminated soil occurs. The model also incorporates a geometric standard deviation (GSD) for background blood lead levels to account for variability within an exposed population. The model then considers the ingestion of lead by adults in a non-residential setting, using a soil ingestion rate of 50 mg/day and an assumed exposure frequency of 219 days/year, based on occupational exposure. The oral absorption of lead after ingestion is assumed to be 12 percent. Using a



starting soil concentration, the model is able to predict the 95<sup>th</sup> percentile blood lead concentration in the fetus of an exposed pregnant woman. If this concentration does not exceed the maximum allowable concentration of 10 µg/dL, it is concluded that exposures result in no risk of harm.

The model assumes that there is adequate exposure to result in a steady-state blood lead concentration (EPA, 2001b) and assumes that exposure continues regularly and for an indefinite period of time. Thus, there is no exposure duration factor in the model. Instead, it assumes that exposure occurs 219 out of 365 days per year, for every year of exposure, and that steady state is reached.

To evaluate potential hazards associated with the presence of lead in soil at particular commercial/industrial areas at East Street Area 1-North, the ALM has been applied to “back-calculate” a soil lead concentration that could result in a 95<sup>th</sup> percentile fetal blood level of 10 µg/dL. This is the same methodology that was applied to evaluate lead in soil at commercial/industrial properties at Newell Street Area I, as described in Appendix F to the *Conceptual RD/RA Work Plan Addendum for Newell Street Area I* (BBL, 2003), which was approved by EPA. Based on discussions with EPA Region I risk assessors (McDonough, personal communication, 2/20/03), AMEC has used the higher end of the default range recommended by EPA for background blood lead level (1.8 µg/dL) and the low estimate of the GSD (1.9), as shown in Table 4. In addition, at EPA’s request, AMEC has used an exposure frequency of 3 days and an averaging time of 7 days to represent that individuals are expected to be exposed three days per week throughout the exposure period, as was assumed by EPA (1999a) for the Groundskeeper scenario. These calculations result in a back-calculated PRG of 2,008 mg/kg (as shown in Table 4), which, for purposes of this evaluation, will be used as a Risk-Based Concentration (RBC) for lead under this scenario. This is the same RBC used for this scenario in the *Conceptual RD/RA Work Plan Addendum for Newell Street Area I* (BBL, 2003), as approved by EPA. This RBC has been applied to evaluate lead exposures at Parcels K10-14-1 and K11-1-15 for the depth increments where the Groundskeeper scenario applies – i.e. the 0-1 foot and 0-3 foot depth increments. Where the average area-specific lead concentrations at those depth intervals are below the RBC, it is assumed that lead exposures will not result in adverse effects.

Because the ALM assumes that a steady-state blood lead concentration is reached, short-term or intermittent exposures (such as those assumed to be experienced by the Utility Worker) would not be well represented by the model (EPA, 2001b). Accordingly, for the Utility Worker scenario, which is based on exposure only five days per year at a given area (see EPA, 1999a), the ALM has not been used. Instead, based on agreement between GE and EPA, and again consistent with the approach used in the EPA-approved *Conceptual RD/RA Work Plan Addendum for Newell Street Area I* (BBL, 2003), lead concentrations in the depth interval where the Utility Worker scenario would apply – i.e., the 1-6 foot depth interval – have been evaluated by comparing the average area-specific lead concentration for that depth interval to a default level equivalent to the Upper Concentration Limit (UCL) set forth in the MCP for lead, which is 6,000 mg/kg.

## **5.0 Area-Specific Risk Evaluations**

Area-specific risk evaluations were conducted for the three areas at which there were exceedances of the Method 1 soil standards after the screening process. Specific COPCs and depth increments evaluated for each area are described below along with the results of each risk evaluation. Spreadsheets showing pathway-specific and COPC-specific calculations are provided in Attachment A of this Appendix.

### **5.1 GE-Owned Property**

A portion of East Street Area 1-North consists of GE-owned parcels at which GE will execute Grants of Environmental Restrictions and Easements (EREs). An area-specific risk evaluation has been performed for this section of East Street Area 1-North based on the average concentrations of all constituents that were retained for evaluation prior to the comparison to the MCP Method 1 soil standards. The depth increments subject to risk evaluation for this section are the 0-1 foot and 1-6 foot depth increments. The COPCs evaluated and their average existing concentrations are as follows:



<b>COPCs</b>	<b>Avg. Conc. Per Depth Increment (mg/kg)</b>	
	<b>0-1 foot</b>	<b>1-6 foot</b>
Benzo(a)anthracene	0.44	1.62
Benzo(a)pyrene	0.42	1.37
Benzo(b)fluoranthene	0.50	1.51
Dibenzo(a,h)anthracene	0.21	0.61
Arsenic	6.20	5.92

Consistent with the approach used by EPA in supporting the Performance Standards for PCBs, the Groundskeeper scenario has been used to evaluate risks for the 0-1 foot depth increment and the Utility Worker scenario has been used to evaluate risks for the 1-6 foot depth increment. The calculated total cancer risks and non-cancer hazards for all COPCs evaluated at the GE-owned area are as follows:

<b>Scenario</b>	<b>ECLR</b>	<b>HI</b>
Groundskeeper (0-1 foot)	$1.2 \times 10^{-6}$	0.0041
Utility Worker (1-6 foot)	$7.0 \times 10^{-7}$	0.00083

All these estimated risks and hazards are below the levels of concern specified in the SOW. Lead is not a COPC for this area and thus has not been evaluated.

## 5.2 Parcel K10-14-1

Parcel K10-14-1 is a non-GE-owned commercial/industrial property for which GE will implement a Conditional Solution. A property-specific risk evaluation has been performed for this parcel based on the average concentrations of all constituents that were retained for evaluation prior to the comparison to the MCP Method 1 soil standards. The soil depths subject to risk evaluation for this parcel are the 0-1 foot, 0-3 foot, and 1-6 foot increments. The COPCs evaluated and their average concentrations are as follows:

<b>COPCs</b>	<b>Avg. Conc. Per Depth Increment (mg/kg)</b>		
	<b>0-1 foot</b>	<b>0-3 foot</b>	<b>1-6 foot</b>
Benzo(a)pyrene	0.43	0.39	0.18
Antimony	242	217.85	1.73
Arsenic	9.4	8.7	5.4
Lead	845	762.8	14.33





Consistent with the approach used by EPA in supporting the Performance Standards for PCBs, the Groundskeeper scenario has been used to evaluate risks for the 0-1 foot depth increment, while the Utility Worker scenario has been used to evaluate risks for the 1-6 foot depth increment. The Groundskeeper scenario also has been used to evaluate risks for the 0-3 foot depth increment. The calculated total cancer risks and non-cancer hazards for all COPCs evaluated at Parcel K10-14-1 are as follows:

<b>Scenario</b>	<b>ECLR</b>	<b>HI</b>
Groundskeeper (0-1 foot)	$1.3 \times 10^{-6}$	0.17
Groundskeeper (0-3 foot)	$1.2 \times 10^{-6}$	0.15
Utility Worker (1-6 foot)	$1.7 \times 10^{-7}$	0.0011

All these estimated risks and hazards are well below the levels of concern specified in the SOW.

The average lead concentrations in the 0-1 and 0-3 foot soil increments, 845 and 762.8 mg/kg, respectively, are well below the calculated RBC of 2,008 mg/kg for lead in soil in such depths at commercial/industrial properties. The average concentration in the 1-6 foot increment, 14.33 mg/kg, is far below the UCL of 6,000 mg/kg. Thus, lead concentrations in the surface and subsurface soils of this parcel are below the benchmark levels of concern.

### **5.3 Parcel K11-1-15 (portion)**

Parcel K11-1-15 consists of a narrow strip of railroad-owned land, a portion of which lies within East Street Area 1-North. GE will implement a Conditional Solution for that portion. A property-specific risk evaluation has been performed for the portion of this parcel within East Street Area 1-North based on the average concentrations of all constituents that were retained for evaluation prior to the comparison to the MCP Method 1 soil standards. The depth increments subject to risk evaluation for this parcel are the 0-1 foot, 0-3 foot, and 1-6 foot depth increments. The COPCs evaluated and their average concentrations are as follows:

<b>COPCs</b>	<b>Avg. Conc. Per Depth Increment (mg/kg)</b>		
	<b>0-1 foot</b>	<b>0-3 foot</b>	<b>1-6 foot</b>
Benzo(a)pyrene	0.69	0.48	0.55
Antimony	356.5	249.34	21.37
Arsenic	10.43	9.27	6.4
Lead	1221.83	871	105.3

Consistent with the approach used by EPA in supporting the Performance Standards for PCBs, the Groundskeeper scenario has been used to evaluate risks for the 0-1 foot increment, while the Utility Worker scenario has been used to evaluate risks for the 1-6 foot depth increment. The Groundskeeper scenario also has been used to evaluate risks for the 0-3 foot depth increment. The calculated total cancer risks and non-cancer hazards for all COPCs evaluated at Parcel K11-1-15 are as follows:

<b>Scenario</b>	<b>ECLR</b>	<b>HI</b>
Groundskeeper (0-1 foot)	$1.6 \times 10^{-6}$	0.25
Groundskeeper (0-3 foot)	$1.4 \times 10^{-6}$	0.18
Utility Worker (1-6 foot)	$2.8 \times 10^{-7}$	0.0051

All these estimated risks and hazards are well below the levels of concern specified in the SOW.

The average lead concentrations in the 0-1 foot and 0-3 foot soil increments, 1,221.83 and 871 mg/kg, respectively, are below the calculated Groundskeeper RBC of 2,008 mg/kg. The average concentration in the 1-6 foot increment, 105.3 mg/kg, is well below the UCL of 6,000 mg/kg. Thus, the lead concentrations in the soils of this parcel are below the benchmark levels of concern.

## 6.0 Summary of Results of Area-Specific Risk Evaluations

The predicted cancer risks and non-cancer hazards for the non-PCB COPCs at each of the East Street Area 1-North areas evaluated are summarized in Table 5. That table shows the cancer risk and non-cancer hazard results for each exposure pathway and depth increment evaluated at these areas. (Backup COPC-specific calculations are provided in Attachment A.) As shown in Table 5, total estimated cancer risks do not exceed the identified cancer risk benchmark of  $1 \times 10^{-5}$  for any depth increment at any of the areas evaluated. Similarly, non-

cancer hazards resulting from exposures to surficial and subsurface soils do not exceed the target Hazard Index of 1.0 at any of these areas. Finally, as discussed above, none of the average lead concentrations at the areas where lead is a COPC exceeds the RBC for the Groundskeeper scenario or the UCL for the Utility Worker scenario. Thus, it can be concluded that, under current conditions, the soil concentrations for all such COPCs at the East Street Area 1-North areas would not present a risk of harm under the exposure scenarios evaluated.

## References

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**Table 1. Parcel-Specific Arithmetic Mean Exposure Point Concentrations**

Constituent	GE-Owned		K10-14-1			K11-1-15		
	0-1 Foot	1-6 Foot	0-1 Foot	0-3 Foot	1-6 Foot	0-1 Foot	0-3 Foot	1-6 Foot
Benzo(a)anthracene	0.44	1.62	NR	NR	NR	NR	NR	NR
Benzo(a)pyrene	0.42	1.37	0.43	0.39	0.18	0.69	0.43	0.55
Benzo(b)fluoranthene	0.50	1.51	NR	NR	NR	NR	NR	NR
Dibenzo(a,h)anthracene	0.21	0.61	NR	NR	NR	NR	NR	NR
Antimony	NR	NR	242	217.85	1.73	356.5	249.34	21.37
Arsenic	6.2	5.92	9.4	8.7	5.4	10.43	9.27	6.4
Lead	NR	NR	845	762.8	14.33	1221.83	871	105.3

NR = Not relevant; constituent is not a COPC for this parcel

**Table 2. Summary of Exposure Parameters for the Groundskeeper and Utility Worker Scenarios**

Parameter	Values		Basis
	Groundskeeper	Utility Worker	
Soil Ingestion Rate	50 mg/day	137 mg/day	EPA, 1999a
Fraction from the Site	1.0	1.0	EPA, 1999a
Dermal Adherence Factor	0.1 mg/cm <sup>2</sup>	0.8 mg/cm <sup>2</sup>	EPA, 1999a
Skin Surface Area Exposed	3300 cm <sup>2</sup>	3300 cm <sup>2</sup>	EPA, 1999a
Exposure Frequency	84 days/year	5 days/year	EPA, 1999a
Exposure Duration	25 years	25 years	EPA, 1999a
Body Weight	70 kg	70 kg	EPA, 1999a
Carcinogenic Averaging Time	25,550 days	25,550 days	EPA, 1999a
Non-Carcinogenic Averaging Time	9125 days	9125 days	EPA, 1999a

**Table 3. Summary of Chemical-Specific Exposure Point Concentrations, Absorption Factors, and Toxicity Values**

<b>Constituent</b>	<b>Oral Absorption Factor<sup>1</sup></b>	<b>Dermal Absorption Factor<sup>2</sup></b>	<b>Cancer Slope Factor (mg/kg-day)<sup>-1</sup></b>	<b>Reference Dose (mg/kg-day)</b>
Benzo(a)anthracene	1	0.13	0.73 <sup>4</sup>	---
Benzo(a)pyrene	1	0.13	7.3 <sup>3</sup>	---
Benzo(b)fluoranthene	1	0.13	0.73 <sup>4</sup>	---
Dibenz(a,h)anthracene	1	0.13	7.3 <sup>4</sup>	---
Antimony	1	0.1 <sup>5</sup>	---	0.0004 <sup>3</sup>
Arsenic	1	0.03 <sup>5</sup>	1.5 <sup>3</sup>	0.0003 <sup>3</sup>
Lead <sup>6</sup>	NA	NA	NA	NA

Notes:

1. Conservative default
2. From EPA Dermal Guidance Document (EPA, 2001a), except where noted.
3. From IRIS (EPA, 2003)
4. Derived through application of RPFs (EPA, 1993) to CSF for benzo(a)pyrene.
5. MDEP (1994)
6. Lead evaluated using EPA's Adult Lead Methodology (see text).

**Table 4. Calculation of Preliminary Remediation Goal (PRG) for Lead at Newell Street I for the Groundskeeper Scenario**

U.S. EPA Technical Review Workgroup for Lead, Adult Lead Committee

Version date 2/19/03

Exposure Variable	PRG Equation <sup>1</sup>		Description of Exposure Variable	Units	Values for Non-Residential Exposure Scenario
	1*	2**			Using Equation 1
					GSDi = Hom
PbB <sub>fetal, 0.95</sub>	X	X	95 <sup>th</sup> percentile PbB in fetus	ug/dL	10
R <sub>fetal/maternal</sub>	X	X	Fetal/maternal PbB ratio	--	0.9
BKSF	X	X	Biokinetic Slope Factor	ug/dL per ug/day	0.4
GSD <sub>i</sub>	X	X	Geometric standard deviation PbB	--	1.9
PbB <sub>0</sub>	X	X	Baseline PbB	ug/dL	1.8
IR <sub>s</sub>	X		Soil ingestion rate (including soil-derived indoor dust)	g/day	0.050
IR <sub>s+D</sub>		X	Total ingestion rate of outdoor soil and indoor dust	g/day	--
W <sub>s</sub>		X	Weighting factor; fraction of IR <sub>s+D</sub> ingested as outdoor soil	--	--
K <sub>SD</sub>		X	Mass fraction of soil in dust	--	--
AF <sub>s,D</sub>	X	X	Absorption fraction (same for soil and dust)	--	0.12
EF <sub>s,D</sub>	X	X	Exposure frequency (same for soil and dust)	days/yr	3
AT <sub>s,D</sub>	X	X	Averaging time (same for soil and dust)	days/yr	7
<b>PRG</b>	<b>Preliminary Remediation Goal</b>			<b>ppm</b>	<b>2,008</b>

Equation 1 does not apportion exposure between soil and dust ingestion (excludes W<sub>s</sub>, K<sub>SD</sub>).

When IR<sub>s</sub> = IR<sub>s+D</sub> and W<sub>s</sub> = 1.0, the equations yield the same PRG.

\*Equation 1, based on Eq. 4 in USEPA (1996).

$\text{PRG} = \frac{([\text{PbB}_{95\text{fetal}}/(\text{R}*(\text{GSD}_i^{1.645}))]-\text{PbB}_0)*\text{AT}_{\text{s,D}}}{\text{BKSF}*(\text{IR}_{\text{s+D}}*\text{AF}_{\text{s,D}}*\text{EF}_{\text{s,D}})}$
---



**Table 5. Summary of Risks and Hazards at East Street Area 1 North Properties**

Parcel Number	Exposure Pathway	Cancer Risk			Hazard Index		
		0- to 1-foot	0- to 3-foot	1- to 6-foot	0- to 1-foot	0- to 3-foot	1- to 6-foot
<b>GE-Owned Commercial</b>	Soil Ingestion	8.6E-07	NR	2.5E-07	0.0034	NR	0.00053
	Dermal Exposure	3.7E-07	NR	4.5E-07	0.00067	NR	0.00031
	<b>Total</b>	<b>1.2E-06</b>	<b>NR</b>	<b>7.0E-07</b>	<b>0.0041</b>	<b>NR</b>	<b>0.00083</b>
<b>K10-14-1 Commercial</b>	Soil Ingestion	1.0E-06	9.3E-07	9.0E-08	0.10	0.094	0.00060
	Dermal Exposure	3.2E-07	3.0E-07	7.6E-08	0.067	0.060	0.00050
	<b>Total</b>	<b>1.3E-06</b>	<b>1.2E-06</b>	<b>1.7E-07</b>	<b>0.17</b>	<b>0.15</b>	<b>0.0011</b>
<b>K11-1-15 Commercial</b>	Soil Ingestion	1.2E-06	1.0E-06	1.3E-07	0.15	0.11	0.0020
	Dermal Exposure	4.4E-07	3.4E-07	1.5E-07	0.10	0.069	0.0031
	<b>Total</b>	<b>1.6E-06</b>	<b>1.4E-06</b>	<b>2.8E-07</b>	<b>0.25</b>	<b>0.18</b>	<b>0.0051</b>

NR = Not relevant for this property

**Attachment A**

**Risk Calculations for the  
East Street Area 1-North Site**

**GE-Owned Area**

**Table A1a - East Street Area 1 North - GE-Owned Area: Cancer and Non-Cancer Risks from Ingestion Exposure to 0- to 1-Foot Soil**

**Pathway: Incidental Soil Ingestion**

**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)anthracene	0.44	50	1.0	84	25	1E-06	70	25550	2.6E-08	0.73	1.9E-08
Benzo(b)fluoranthene											

**Total 8.6E-07**

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Arsenic	6.2	50	1.0	84	25	1E-06	70	9,125	1.0E-06	0.0003	3.4E-03
										<b>Total</b>	<b>3.4E-03</b>

**Table A1b - East Street Area 1 North - GE-Owned Area: Cancer and Non-Cancer Risks from Dermal Exposure to 0- to 1-Foot Soil**

**Pathway: Dermal Contact**

**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)anthracene	0.44	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.2E-08	0.73	1.6E-08
Benzo(a)pyrene	0.42	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.1E-08	7.3	1.5E-07
Benzo(b)fluoranthene	0.5	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.5E-08	0.73	1.8E-08
Dibenzo(a,h)anthracene	0.21	0.1	3,300	0.13	84	25	1E-06	70	25,550	1.1E-08	7.3	7.7E-08
Arsenic	6.2	0.1	3,300	0.03	84	25	1E-06	70	25,550	7.2E-08	1.5	1.1E-07
											<b>Total</b>	<b>3.7E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Arsenic	6.2	0.1	3,300	0.03	84	25	1E-06	70	9,125	2.0E-07	0.0003	6.7E-04
											<b>Total</b>	<b>6.7E-04</b>

<b>Total Carcinogenic Risk</b>		Ingestion	Dermal	Total
	Benzo(a)anthracene	1.9E-08	1.6E-08	3.5E-08
	Benzo(a)pyrene	1.8E-07	1.5E-07	3.3E-07
	Benzo(b)fluoranthene	2.1E-08	1.8E-08	4.0E-08
	Dibenzo(a,h)anthracene	9.0E-08	7.7E-08	1.7E-07
	Arsenic	5.5E-07	1.1E-07	6.5E-07
	<b>Total</b>	<b>8.6E-07</b>	<b>3.7E-07</b>	<b>1.2E-06</b>
<b>Total Noncarcinogenic Hazard</b>		Ingestion	Dermal	Total
	Arsenic	3.4E-03	6.7E-04	4.1E-03
	<b>Total</b>	<b>0.00340</b>	<b>0.00067</b>	<b>0.00407</b>

**Table A1c - East Street Area 1 North - GE-Owned Parcel: Cancer and Non-Cancer Risks from Ingestion Exposure to 1- to 6-Foot Soil**

**Pathway: Incidental Soil Ingestion**

**Receptor: Utility Worker**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)anthracene	1.62	137	1.0	5	25	1E-06	70	25550	1.6E-08	0.73	1.1E-08
Benzo(a)pyrene											
Benzo(b)fluoranthene											
Dibenzo(a,h)anthracene											
<b>Total</b>											<b>2.5E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Arsenic	5.92	137	1.0	5	25	1E-06	70	9.125	1.6E-07	0.0003	5.3E-04

**Table A1d - East Street Area 1 North - GE-Owned Parcel: Cancer and Non-Cancer Risks from Dermal Exposure to 1- to 6-Foot Soil**

**Pathway: Dermal Contact**

**Receptor: Utility Worker**

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/Atc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)anthracene	1.62	0.8	3,300	0.13	5	25	1E-06	70	25,550	3.9E-08	0.73	2.8E-08
Benzo(a)pyrene	1.37	0.8	3,300	0.13	5	25	1E-06	70	25,550	3.3E-08	7.3	2.4E-07
Benzo(b)fluoranthene	1.51	0.8	3,300	0.13	5	25	1E-06	70	25,550	3.6E-08	0.73	2.6E-08
Dibenzo(a,h)anthracene	0.61	0.8	3,300	0.13	5	25	1E-06	70	25,550	1.5E-08	7.3	1.1E-07
Arsenic	5.92	0.8	3,300	0.03	5	25	1E-06	70	25,550	3.3E-08	1.5	4.9E-08
											Total	4.5E-07

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Arsenic	5.92	0.8	3,300	0.03	5	25	1E-06	70	9,125	9.2E-08	0.0003	3.1E-04
											Total	3.1E-04

Total Carcinogenic Risk		Ingestion	Dermal	Total
	Benzo(a)anthracene	1.1E-08	2.8E-08	4.0E-08
	Benzo(a)pyrene	9.6E-08	2.4E-07	3.4E-07
	Benzo(b)fluoranthene	1.1E-08	2.6E-08	3.7E-08
	Dibenzo(a,h)anthracene	4.3E-08	1.1E-07	1.5E-07
	Arsenic	8.5E-08	4.9E-08	1.3E-07
	<b>Total</b>	<b>2.5E-07</b>	<b>4.5E-07</b>	<b>7.0E-07</b>
Total Noncarcinogenic Hazard		Ingestion	Dermal	Total
	Arsenic	5.3E-04	3.1E-04	8.3E-04
	<b>Total</b>	<b>0.00053</b>	<b>0.00031</b>	<b>0.00083</b>

**Parcel K10-14-1**





Table A2b - East Street Area 1 North - Parcel K10-14-1: Cancer and Non-Cancer Risks from Dermal Exposure to 0- to 1-Foot Soil

Pathway: Dermal Contact

Receptor: Groundskeeper

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.43	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.2E-08	7.3	1.6E-07
Arsenic	9.4	0.1	3,300	0.03	84	25	1E-06	70	25,550	1.1E-07	1.5	1.6E-07
											<b>Total</b>	<b>3.2E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	242	0.1	3,300	0.1	84	25	1E-06	70	9,125	2.6E-05	0.0004	6.6E-02
Arsenic	9.4		3,300	0.03	84	25	1E-06	70	9,125	3.1E-07	0.0003	1.0E-03
											<b>Total</b>	<b>6.7E-02</b>

Total Carcinogenic Risk		Ingestion	Dermal	Total
	Benzo(a)pyrene	1.8E-07	1.6E-07	3.4E-07
	Arsenic	8.3E-07	1.6E-07	9.9E-07
	<b>Total</b>	<b>1.0E-06</b>	<b>3.2E-07</b>	<b>1.3E-06</b>
Total Noncarcinogenic Hazard		Ingestion	Dermal	Total
	Antimony	9.9E-02	6.6E-02	1.7E-01
	Arsenic	5.2E-03	1.0E-03	6.2E-03
	<b>Total</b>	<b>0.10460</b>	<b>0.06666</b>	<b>0.17126</b>

**Table A2c - East Street Area 1 North - Parcel K10-14-1: Cancer and Non-Cancer Risks from Ingestion Exposure to 0- to 3-Foot Soil**

**Pathway: Incidental Soil Ingestion**

**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times IgR \times OA \times EF \times ED \times CF \times 1/BW \times 1/ATc$$

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.39	50	1.0	84	25	1E-06	70	25550	2.3E-08	7.3	1.7E-07
Arsenic	8.7	50	1.0	84	25	1E-06	70	25550	5.1E-07	1.5	7.7E-07
										<b>Total</b>	<b>9.3E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times IgR \times OA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Antimony	217.85	50	1.0	84	25	1E-06	70	9,125	3.6E-05	0.0004	9.0E-02
Arsenic	8.7	50	1.0	84	25	1E-06	70	9,125	1.4E-06	0.0003	4.8E-03
										<b>Total</b>	<b>9.4E-02</b>

Table A2d - East Street Area 1 North - Parcel K10-14-1: Cancer and Non-Cancer Risks from Dermal Exposure to 0- to 3-Foot Soil

Pathway: Dermal Contact

Receptor: Groundskeeper

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.39	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.0E-08	7.3	1.4E-07
Arsenic	8.7	0.1	3,300	0.03	84	25	1E-06	70	25,550	1.0E-07	1.5	1.5E-07
											<b>Total</b>	<b>3.0E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	217.85	0.1	3,300	0.1	84	25	1E-06	70	9,125	2.4E-05	0.0004	5.9E-02
Arsenic	8.7	0.1	3,300	0.03	84	25	1E-06	70	9,125	2.8E-07	0.0003	9.4E-04
											<b>Total</b>	<b>6.0E-02</b>

Total Carcinogenic Risk		Ingestion	Dermal	Total
	Benzo(a)pyrene	1.7E-07	1.4E-07	3.1E-07
	Arsenic	7.7E-07	1.5E-07	9.2E-07
	<b>Total</b>	<b>9.3E-07</b>	<b>3.0E-07</b>	<b>1.2E-06</b>
Total Noncarcinogenic Hazard		Ingestion	Dermal	Total
	Antimony	9.0E-02	5.9E-02	1.5E-01
	Arsenic	4.8E-03	9.4E-04	5.7E-03
	<b>Total</b>	<b>0.09429</b>	<b>0.06003</b>	<b>0.15433</b>

**Table A2e - East Street Area 1 North - Parcel K10-14-1: Cancer and Non-Cancer Risks from Ingestion Exposure to 1- to 6-Foot Soil**

**Pathway: Incidental Soil Ingestion**

**Receptor: Utility Worker**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.18	137	1.0	5	25	1E-06	70	25550	1.7E-09	7.3	1.3E-08
Arsenic	5.4	137	1.0	5	25	1E-06	70	25550	5.2E-08	1.5	7.8E-08
										<b>Total</b>	<b>9.0E-08</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Antimony	1.73	137	1.0	5	25	1E-06	70	9,125	4.6E-08	0.0004	1.2E-04
Arsenic	5.4	137	1.0	5	25	1E-06	70	9,125	1.4E-07	0.0003	4.8E-04
										<b>Total</b>	

Table A2f - East Street Area 1 North - Parcel K10-14-1: Cancer and Non-Cancer Risks from Dermal Exposure to 1- to 6-Foot Soil

Pathway: Dermal Contact

Receptor: Utility Worker

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.18	0.8	3,300	0.13	5	25	1E-06	70	25,550	4.3E-09	7.3	3.2E-08
Arsenic	5.4	0.8	3,300	0.03	5	25	1E-06	70	25,550	3.0E-08	1.5	4.5E-08
											<b>Total</b>	<b>7.6E-08</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	1.73	0.8	3,300	0.1	5	25	1E-06	70	9,125	8.9E-08	0.0004	2.2E-04
Arsenic	5.4	0.8	3,300	0.03	5	25	1E-06	70	9,125	8.4E-08	0.0003	2.8E-04
											<b>Total</b>	<b>5.0E-04</b>

Total Carcinogenic Risk		Ingestion	Dermal	Total
	Benzo(a)pyrene	1.3E-08	3.2E-08	4.4E-08
	Arsenic	7.8E-08	4.5E-08	1.2E-07
	<b>Total</b>	<b>9.0E-08</b>	<b>7.6E-08</b>	<b>1.7E-07</b>
Total Noncarcinogenic Hazard		Ingestion	Dermal	Total
	Antimony	1.2E-04	2.2E-04	3.4E-04
	Arsenic	4.8E-04	2.8E-04	7.6E-04
	<b>Total</b>	<b>0.00060</b>	<b>0.00050</b>	<b>0.00110</b>

**Parcel K11-1-15**

**Table A3a - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Ingestion Exposure to 0- to 1-Foot Soil**  
**Pathway: Incidental Soil Ingestion**  
**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.69	50	1.0	84	25	1E-06	70	25550	4.1E-08	7.3	3.0E-07
Arsenic	10.43	50	1.0	84	25	1E-06	70	25550	6.1E-07	1.5	9.2E-07
										<b>Total</b>	<b>1.2E-06</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Antimony	356.5	50	1.0	84	25	1E-06	70	9,125	5.9E-05	0.0004	1.5E-01
Arsenic	10.43	50	1.0	84	25	1E-06	70	9,125	1.7E-06	0.0003	5.7E-03
										<b>Total</b>	<b>1.5E-01</b>



Table A3b - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Dermal Exposure to 0- to 1-Foot Soil

Pathway: Dermal Contact

Receptor: Groundskeeper

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/Atc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.69	0.1	3,300	0.13	84	25	1E-06	70	25,550	3.5E-08	7.3	2.5E-07
Arsenic	10.43	0.1	3,300	0.03	84	25	1E-06	70	25,550	1.2E-07	1.5	1.8E-07
											<b>Total</b>	<b>4.4E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	356.5	0.1	3,300	0.1	84	25	1E-06	70	9,125	3.9E-05	0.0004	9.7E-02
Arsenic	10.43	0.1	3,300	0.03	84	25	1E-06	70	9,125	3.4E-07	0.0003	1.1E-03
											<b>Total</b>	<b>9.8E-02</b>

Total Carcinogenic Risk		Ingestion	Dermal	Total
	Benzo(a)pyrene	3.0E-07	2.5E-07	5.5E-07
	Arsenic	9.2E-07	1.8E-07	1.1E-06
	<b>Total</b>	<b>1.2E-06</b>	<b>4.4E-07</b>	<b>1.6E-06</b>
Total Noncarcinogenic Hazard		Ingestion	Dermal	Total
	Antimony	1.5E-01	9.7E-02	2.4E-01
	Arsenic	5.7E-03	1.1E-03	6.8E-03
	<b>Total</b>	<b>0.15222</b>	<b>0.09783</b>	<b>0.25005</b>

**Table A3c - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Ingestion Exposure to 0- to 3-Foot Soil**  
**Pathway: Incidental Soil Ingestion**  
**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.48	50	1.0	84	25	1E-06	70	25550	2.8E-08	7.3	2.1E-07
Arsenic	9.27	50	1.0	84	25	1E-06	70	25550	5.4E-07	1.5	8.2E-07
										<b>Total</b>	<b>1.0E-06</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Antimony	249.34	50	1.0	84	25	1E-06	70	9,125	4.1E-05	0.0004	1.0E-01
Arsenic	9.27	50	1.0	84	25	1E-06	70	9,125	1.5E-06	0.0003	5.1E-03
										<b>Total</b>	<b>1.1E-01</b>

**Table A3d - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Dermal Exposure to 0- to 3-Foot Soil**  
**Pathway: Dermal Contact**  
**Receptor: Groundskeeper**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.48	0.1	3,300	0.13	84	25	1E-06	70	25,550	2.4E-08	7.3	1.8E-07
Arsenic	9.27	0.1	3,300	0.03	84	25	1E-06	70	25,550	1.1E-07	1.5	1.6E-07
											<b>Total</b>	<b>3.4E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x DAF x SA x DA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	249.34	0.1	3,300	0.1	84	25	1E-06	70	9,125	2.7E-05	0.0004	6.8E-02
Arsenic	9.27	0.1	3,300	0.03	84	25	1E-06	70	9,125	3.0E-07	0.0003	1.0E-03
											<b>Total</b>	<b>6.9E-02</b>

<b>Total Carcinogenic Risk</b>		Ingestion	Dermal	Total
	Benzo(a)pyrene	2.1E-07	1.8E-07	3.8E-07
	Arsenic	8.2E-07	1.6E-07	9.8E-07
	<b>Total</b>	<b>1.0E-06</b>	<b>3.4E-07</b>	<b>1.4E-06</b>
<b>Total Noncarcinogenic Hazard</b>		Ingestion	Dermal	Total
	Antimony	1.0E-01	6.8E-02	1.7E-01
	Arsenic	5.1E-03	1.0E-03	6.1E-03
	<b>Total</b>	<b>0.10755</b>	<b>0.06863</b>	<b>0.17618</b>

**Table A3e - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Ingestion Exposure to 1- to 6-Foot Soil**

**Pathway: Incident Soil Ingestion**

**Receptor: Utility Worker**

**CARCINOGENIC**

Risk = CDI x CSF

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.55	137	1.0	5	25	1E-06	70	25550	5.3E-09	7.3	3.8E-08
Arsenic	6.4	137	1.0	5	25	1E-06	70	25550	6.1E-08	1.5	9.2E-08
										<b>Total</b>	<b>1.3E-07</b>

**NONCARCINOGENIC**

HQ = CDI/RfD

CDI = Cs x IgR x OA x EF x ED x CF x 1/BW x 1/ATnc

Chemical	Cs Soil Concentration (mg/kg)	IgR Ingestion Rate (mg/d)	OA Oral Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose (mg/kg-d)	HQ Hazard Quotient
Antimony	21.37	137	1.0	5	25	1E-06	70	9,125	5.7E-07	0.0004	1.4E-03
Arsenic	6.4	137	1.0	5	25	1E-06	70	9,125	1.7E-07	0.0003	5.7E-04
										<b>Total</b>	<b>2.0E-03</b>

Table A3f - East Street Area 1 North - Parcel K11-1-15: Cancer and Non-Cancer Risks from Dermal Exposure to 1- to 6-Foot Soil

Pathway: Dermal Contact

Receptor: Utility Worker

**CARCINOGENIC**

Risk = CDI x CSF

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATc Averaging Time Carcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	CSF Cancer Slope Factor <sup>a</sup> (mg/kg-d) <sup>-1</sup>	Risk
Benzo(a)pyrene	0.55	0.8	3,300	0.13	5	25	1E-06	70	25,550	1.3E-08	7.3	9.6E-08
Arsenic	6.4	0.8	3,300	0.03	5	25	1E-06	70	25,550	3.5E-08	1.5	5.3E-08
											Total	1.5E-07

**NONCARCINOGENIC**

HQ = CDI/RfD

$$CDI = Cs \times DAF \times SA \times DA \times EF \times ED \times CF \times 1/BW \times 1/ATnc$$

Chemical	Cs Soil Concentration (mg/kg)	DAF Dermal Adherence Factor (mg/cm <sup>2</sup> )	SA Surface Area Exposed (cm <sup>2</sup> /day)	DA Dermal Absorption (unitless)	EF Exposure Frequency (d/yr)	ED Exposure Duration (yrs)	CF Conversion Factor (kg/mg)	BW Body Weight (kg)	ATnc Averaging Time Noncarcinogenic (days)	CDI Chronic Daily Intake (mg/kg-d)	RfD Reference Dose <sup>b</sup> (mg/kg-d)	HQ Hazard Quotient
Antimony	21.37	0.8	3,300	0.1	5	25	1E-06	70	9,125	1.1E-06	0.0004	2.8E-03
Arsenic	6.4	0.8	3,300	0.03	5	25	1E-06	70	9,125	9.9E-08	0.0003	3.3E-04
											Total	3.1E-03

<b>Total Carcinogenic Risk</b>		Ingestion	Dermal	Total
	Benzo(a)pyrene	3.8E-08	9.6E-08	1.3E-07
	Arsenic	9.2E-08	5.3E-08	1.5E-07
	<b>Total</b>	<b>1.3E-07</b>	<b>1.5E-07</b>	<b>2.8E-07</b>
<b>Total Noncarcinogenic Hazard</b>		Ingestion	Dermal	Total
	Antimony	1.4E-03	2.8E-03	4.2E-03
	Arsenic	5.7E-04	3.3E-04	9.0E-04
	<b>Total</b>	<b>0.00200</b>	<b>0.00309</b>	<b>0.00510</b>