



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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GE - 04102 - 4AYW

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SDMS 275753

18 April 2002

Mr. Andrew T. Silfer  
Corporate Environmental Programs  
General Electric Company  
100 Woodlawn Avenue  
Pittsfield, MA 01201

Via Electronic and U.S. Mail

**Re: Comments on General Electric Company's (GE) December 2001 *Removal Design/Removal Action Work Plan for the Future City Recreational Area* and February 2002 *East Street Area 2-South Future City Recreational Area – Supplemental Soil Sampling Report*, GE Housatonic River Project Site, Pittsfield, Massachusetts.**

Dear Mr. Silfer:

This letter contains the Environmental Protection Agency's (EPA) conditional approval of the above-referenced *Removal Design/Removal Action Work Plan for the Future City Recreational Area* and the January 2002 submittal by GE titled *East Street Area 2-South Future City Recreational Area – Supplemental Soil Sampling Report* (Report). The Future City Recreational Area is a portion of the East Street Area 2-South Removal Action Area (RAA), also referred to as RAA 4 in project documents. This *Removal Design/Removal Action Work Plan for the Future City Recreational Area* (Work Plan) is subject to the terms and conditions specified in the Consent Decree (CD) that was entered in U.S. District Court on October 27, 2000.

Pursuant to Paragraph 73 of the CD, EPA, after consultation with the Massachusetts Department of Environmental Protection (MDEP), approves the above referenced submittal subject to the following conditions:

**Conditions**

1. The Work Plan strategy complies with the general requirements stated in the CD and Scope-of-Work (SOW); however, GE indicates in several sections of the Work Plan that the Work Plan is incomplete as submitted. EPA's ability to conditionally approve the Work Plan has been limited due to the documents incomplete nature. EPA reserves the right to provide additional comments to the Work Plan in future submissions.
2. In Section 3.2, second bullet, GE cites the SOW that response actions for depths greater than 3 feet below ground surface (ft bgs) shall be determined as part of the response actions for the overall averaging area within East Street Area 2-South where the FCRA is located. Possible response actions include removal and replacement of soils in the 1- to 6-foot depth increment and the installation of an engineered barrier over the 0- to 15-foot increment.

In Section 5.1, GE further indicates that it is likely that the only response action for the FCRA will consist of the installation of a 1-foot-thick soil cover over the surface of the area, in accordance with the SOW. Installing the soil cover prior to determining the required response actions for the deeper increments (possible soil removal and replacement or engineered barrier installation) has the potential to impact the construction of the FCRA. In accordance with the SOW, potential response actions for soil in the 1- to 6-foot and 0- to 15-foot increments must be as part of the Former Gas Plant/Scrap Yard averaging area, which has not yet been fully characterized. However, GE further notes that 48 pre-design samples have been collected from beneath the FCRA from depths of 2 to 14 ft bgs, and that PCBs were detected in only nine of the samples, with a maximum concentration of 2.72 parts per million (ppm).

3. GE has proposed that, for the East Street Area 2-South RAA, the evaluation of the 1- to 6-foot depth interval take into consideration the actual thickness of clean soil to be installed as cover at the FCRA. Technical Attachment E of the SOW, Section 4.0, indicates that initial calculations of PCB spatial averaging shall address soils present at all depths; subsequent PCB spatial averaging calculations may account for an anticipated surface cover. GE shall evaluate the 1- to 6-foot depth interval using PCB data from current 0- to 2-ft and 2- to 5-ft depths bgs, and will not attempt to adjust the evaluation to account for any extra thickness in subsequent soil cover.
4. In Table 2-3, two samples, 95-210-6 and 210SO-6, have the same location identifier (210S) and depth interval (0- to 0.5-ft bgs) but were collected on different days. In addition, the PCB result for sample 210SO-6 is qualified with a "B", that is not described in the footnotes to the table. GE shall explain the reason for both samples, define the "B" qualifier, and explain how the analytical results will be used in the Addendum to the Work Plan.
5. In Subsection 4.3.5, GE references "draft revised Method S-1 Soil Standards...which are expected to be published for public comment within the next few months." GE shall limit data evaluation to refer only to criteria that have been formally adopted and are publicly available.
6. In Section 4.3.4, GE has proposed to use a portion of the Appendix IX+3 background data set presented in the GE Background Soil Data Assessment for the GE-Pittsfield/Housatonic River Site, dated December 15, 2000 to compare against the detected concentrations of sulfide. EPA has never approved this background submittal. The background data for sulfide used by GE to determine the sulfide background concentration are unacceptable because the sulfide detection limits in the majority of the soil samples (ranging from 200 to 400 milligrams per kilogram (mg/kg)) are 40 to 80 times the sulfide reporting limit and practical quantitation limit from Table 3 of GE's Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP) (5 mg/kg), resulting an elevated background concentration.

In addition, GE indicates in Table 4-3 that the maximum concentration of sulfide detected in the FCRA was 29 mg/kg. However, according to Table 2-4, the maximum concentration of sulfide detected in the FCRA was 152 mg/kg, detected in sample 202S in the depth interval 0.0- to 0.5-feet bgs.

To address the detection of sulfide, which has no Preliminary Remediation Goal (PRG), GE shall use an alternate screening concentration rather than rely on the unacceptable background data set. Consistent with previous RD/RA Work Plans submitted by GE, the

carbon disulfide residential PRG of 350 mg/kg and industrial PRG of 1,200 mg/kg will be used for sulfide.

7. Three issues were identified in the Risk Evaluation included as Appendix C of the Work Plan.
  - The use of time-weighted exposure assumption for the child recreational exposure scenario is not appropriate and underestimates risk. The Risk Assessment did not follow the methodology for age-adjusting risk that is presented in the EPA reference cited in the Risk Assessment;
  - When calculating dermal risks, the toxicity factors must be modified to represent an absorbed dose;
  - If a relative oral absorption factor other than 100% is used in the soil ingestion dose calculations, the toxicity factors must be modified to represent an absorbed dose.

GE shall address the abovementioned issues, recalculate the cancer risks and non-cancer hazards as necessary, and present the amended results in the Addendum to the Work Plan.

8. Figure 5-1 of the Work Plan depicts the soil cover for the FCRA as extending beyond the fence line. In future submittals, GE shall modify the text describing the extent of the soil cover to specify how far beyond the fence line/FCRA boundary the soil cover will extend, in order to minimize contact with underlying materials at the boundary.
9. In Subsection 5.5, GE states that the Addendum to the Work Plan will provide information including identification of backfill materials and soil cover sources. In accordance with Attachment C to the conditionally-approved Project Operations Plan, GE shall characterize these cover materials sources for PCBs and Appendix IX+3 constituents and provide those results to EPA for review and approval.
10. In Subsection 5.7.1, GE indicates that certain ancillary features, such as fencing, parking area, and access road are not part of the response action for the area. However, the fencing proposed to separate the FCRA from the remainder of the East Street Area 2-South RAA will serve to restrict access to the East Street Area 2-South RAA, and, therefore, is part of the response action for the East Street Area 2-South RAA. Further, regardless of potential removal actions, the parking area and access road will need to be maintained at their post-remediation elevations in order for the remedy to remain valid. As such, GE shall have responsibility for the maintenance of this portion of the fencing (which should be adequate to prevent trespassing into East Street Area 2-South), and for maintaining the post-remediation elevations of the parking area and the access road, to the extent that the City does not perform these maintenance activities.
11. GE and EPA have agreed that the upper 3 feet of soil in the access road area will be considered a separate averaging area and will be subject to the Performance Standards for GE-owned recreational areas as specified in CD Paragraphs 25.d(iv) and 26.b(i). GE shall also meet the Performance Standards set forth in CD Paragraphs 29.a and 24.a, 24.e, and 24.f, particularly, not-to-exceed PCB concentrations in the top foot of soil .

EPA reserves its right to perform additional sampling in RAA 4 and/or require additional sampling or Response Actions, if necessary, to meet the requirements of the Consent Decree. If you have any questions, please contact me at (617) 918-1268.

Sincerely,



Michael Nalipinski

GE Facility Project Manager

cc: John Novotny, GE  
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