

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ONE CONGRESS STREET, SUITE 1100 BOSTON, MA 02114-2023

September 23, 2008

Mr. Richard Gates Corporate Environmental Programs General Electric Company 159 Plastics Avenue Pittsfield, MA 01201

Via Electronic and U.S. Mail

Re: EPA Conditional Approval of General Electric's May 25, 2007 submittal titled "Conceptual Removal Design/Removal Action Work Plan for Soils Adjacent to Silver Lake"

GE-Pittsfield/Housatonic River Site, Pittsfield, MA

This letter provides the Environmental Protection Agency's (EPA) conditional approval of the above-referenced May 25, 2007, *Conceptual Removal Design/Removal Action Work Plan for Soils Adjacent to Silver Lake* ("Conceptual Removal Design/Removal Action Work Plan"). The submittal is subject to the terms and conditions specified in the Consent Decree 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.

- 1. The exposure scenario described on page 23, Section 3.3.6 for commercial parcels in the 0'-15' depth interval is that of a utility worker. For the non-bank portions of non GE-owned commercial properties where an area specific risk evaluation is conducted for non-PCB contamination, a construction worker scenario shall be used (see Attachment B to March 27, 2007 Supplemental Sampling Report/Remedial Action Plan for Dalton Avenue Site).
- 2. The Appendix IX evaluations and proposed removals presented in of the Conceptual Removal Design/Removal Action Work Plan shall be modified based on additional sampling results and discussions and agreements with EPA. Additional sampling data collected by EPA and GE since the issuance of the Conceptual Removal Design/Removal Action Work Plan shall be incorporated into the revised evaluations. Additionally, all figures which show sample locations shall be modified to include this additional data. The bounding samples for the removals shall be identified on the appropriate figures and tabulated with the samples that drive each removal.

- 3. GE shall revise the sample locations for samples collected by Weston (EPA) START on Parcels I9-9-1, Esther Terrace, I9-10-7, I9-10-8, and I9-10-10 through I9-10-15. The revisions shall be based on Weston's report drawings and discussions with EPA. GE shall use the revised sample locations and conduct revised PCB spatial averaging evaluations.
- 4. GE shall use EPA "wild card" PCB sampling results and conduct revised PCB evaluations where such sampling occurred.
- 5. GE shall confirm that for the purpose of the performance of data evaluation, Esther Terrace has been divided equally along a north and south axis with each half combined with adjacent properties: I9-10-8 to the west and I9-9-1 to the east.
- 6. GE shall consider removing all soil associated with PCBs greater than 50 ppm on residential properties and in the top foot of recreational properties.
- 7. GE shall consider removing all surface soils (0-1 foot depth) associated with PCBs greater than 10 ppm on the bank and non-bank portions of residential properties.
- 8. GE shall expand the boundary for the non-bank portion of Parcel I9-9-9 by connecting sample location I9-9-9-SB-4 to I9-9-9-SB-5.
- 9. GE shall delineate the extent of soil removal performed as part of the sediment capping pilot project and describe how the removal affected the revised data evaluations and proposed soil removal areas.
- 10. GE shall include GE's December 3, 2007 letter to EPA titled "Summary of Recent Field Investigations and Analytical Results Related to Silver Lake Bank Materials" as an attachment to the Revised Conceptual Removal Design/Removal Action Work Plan for Soils Adjacent to Silver Lake. GE shall incorporate the data presented in this report for the relevant depth intervals into a revised evaluation for Recreational Area 4.
- 11. GE shall include an assessment of the NAPL indicators (sheen and odor) documented in GE's December 3, 2007 letter to EPA and propose a NAPL contingency plan in either the Revised Conceptual Removal Design/Removal Action Work Plan for Soils Adjacent to Silver Lake or the combined Silver Lake Sediment and Soil Removal Action Work Plan.
- 12. GE shall confirm that, for the purpose of bank soil evaluations, the horizontal boundary between the sediment and bank soil shall be at elevation 975.9 feet AMSL (except in the area of the scrub-shrub peninsulas). GE shall use the latest topographic survey as documented in the July 2008 Conceptual Removal Design/Removal Action Work Plan for Silver Lake Sediments when delineating the bank/sediment boundary in the next bank soil submittal.

- 13. GE shall submit a revised utility corridor analysis for all utilities that are potentially subject to emergency repair requirements and are identified in GE's July 2008 Conceptual Removal Design/Removal Action Work Plan for Silver Lake Sediments and in the Attachment to this letter. For such utilities, GE shall: perform a corridor-specific analysis and evaluation; document the average PCB concentration within each such corridor; and evaluate the need for future actions to address such corridors. If additional utilities are identified prior to or during the response action, GE shall perform subsequent corridor-specific evaluations.
- 14. In Section 5.5.1, Final Removal Limits (Page 104), GE states that excavation depths will be converted to target elevations. This is generally inappropriate for bank soils, especially those with proposed excavation depths of three feet or less. In the Revised Conceptual Removal Design/Removal Work Plan for Soils Adjacent to Silver Lake, GE shall propose a method describing how GE intends to perform bank excavation and backfill activities relative to proposed excavation depths, and shall also include typical cross-sections for various bank slopes, removal depths and removal locations (for example, top of bank, mid-bank, lower bank, etc.). In addition, if the final combined design of the removal activities associated with the sediment cap and bank soils requires that significant re-contouring of the banks is necessary, then the excavation and backfill depths will need to reflect post-remediation grades to ensure maintenance of applicable performance standards. GE shall address this issue in the forthcoming combined Silver Lake Sediment and Soil Removal Action Work Plan.
- 15. GE shall resolve all property ownership issues for the five recreational areas prior to submitting the Revised Conceptual Removal Design/Removal Work Plan for Bank Soils. GE shall provide a Figure identifying the property lines and owners for the five recreational areas. If there are any properties where it is uncertain whether an ERE can be obtained, GE shall perform for such properties evaluations under two scenarios; first assuming an ERE is implemented; and second, assuming a Conditional Solution is implemented. For the five recreational averaging areas, GE shall perform the evaluations under those two scenarios unless GE can show that an entire recreational averaging area will be subject to EREs or Conditional Solutions.
- 16. GE shall perform a metes and bounds survey prior to the initiation of bank soil removal activities to ensure that appropriate soil removal activities are performed on the appropriate properties.
- 17. The sample identified in Figure 4-4 as I9-9-SB-6-S shall be correctly identified as I9-9-1-SB-6-S.
- 18. GE shall conceptually describe how GE intends to comply with the flood storage compensation sections of the ARARs. This shall include a discussion of soil removal and replacement, the armor layer installed as part of the cap, the Natural Resource Restoration activities, and revised slopes to ensure bank stability.

GE shall address the above conditions by submitting a Revised Conceptual Removal Design/Removal Work Plan within 30 days of the date of this letter. EPA reserves its right to perform and/or require additional sampling or response actions, if necessary, to meet the requirements of the Consent Decree. If there is any conflict between the Performance Standards as stated in the Work Plan and the Performance Standards as stated in the Consent Decree and SOW, the Consent Decree and SOW shall control.

If you have any questions, please contact me at (617) 918-1721.

Sincerely,

Dean Tagliaferro

EPA Project Manager

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Attachment

cc:

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Attachment

This attachment been prepared to serve as a review of GE's Figure 1-2, Silver Lake Site Plan and Existing Conditions, and Table 3-1, Outfalls Identified Around Silver Lake, within GE's July 2008 Conceptual Removal Design/Removal Action Work Plan for Silver Lake Sediments (Outfall Survey). GE's Outfall Survey was conducted to identify outfalls to Silver Lake that will need to be taken into consideration during the design phase of both the Silver Lake In-Situ Sediment Capping project and the Silver Lake Bank Soils Removal. Figure 1-2 in the Conceptual RD/RA presents the location of each Silver Lake outfall or shoreline structure identified by GE, and assigns a number to each. Table 3-1 in the Conceptual RD/RA contains a description of each outfall and shoreline structure identified on Figure 1-2. Weston's review was conducted to field verify the findings of the Outfall Survey, and to address, to extent possible, any information gaps that may be present in the Outfall Survey. Weston determined the location of several outfalls that GE was aware of but unable to locate, or which were overlooked. The remainder of this attachment consists of photographs of outfalls that were the subject of Weston's review with attendant notes for each.

Figure 1 – General depiction of outfall locations not identified or incorrectly labeled by GE on Figure 1-2, Silver Lake Site Plan and Existing Conditions, and Table 3-1 in the Conceptual RD/RA. Not to scale and locations are approximate. Photo numbers correspond to photos listed below.

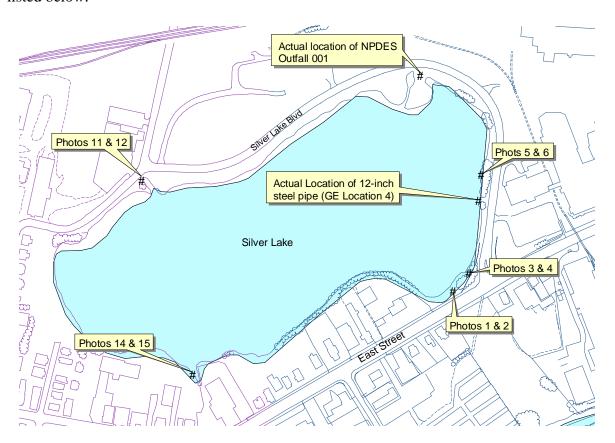




Photo 1 - GE Location 2 - Close-up view of a partially silted-in outfall pipe in the general vicinity of the "4-inch water blowoff" identified by Hill Engineers during September 2006 survey activities, but which GE was unable to locate during its 2008 survey. This location was omitted from Table 3-1 (Outfalls Identified Around Silver Lake) and Figure 1-2 (Silver Lake Site Plan and Existing Conditions) of GE's July 2008 *Conceptual Removal Design/Removal Action Work Plan for Silver Lake Sediments* (Conceptual Work Plan) because the pipe could not be located by GE in the field.



Photo 2 - GE Location 2 - View of the location of the partially silted-in outfall pipe in the vicinity of the "4-inch water blowoff" identified by Hill Engineers in 2006.



Photo 3 - Close-up view of a subsurface outfall pipe not identified by GE near the southeast corner of Sliver Lake (Recreational Area 5). This pipe is located between GE Location 2 (which was omitted from Conceptual Work Plan Table 3-1 and Figure 1-2) and GE Location 3, being approximately 30 feet south of the foundation of a former high-tension power line tower in this area.



Photo 4 - View of the location of the subsurface outfall pipe identified by EPA between GE Locations 2 and 3.



Photo 5 - GE Location 4 - Close-up view of a 20-inch steel outfall pipe at the location EPA believes to be GE NPDES Outfall 004. This location appears to be mapped correctly on GE Figure 1-2, except that GE identifies it as a <u>12</u>-inch steel pipe. EPA notes that there is a 12-inch steel pipe approximately 30 feet south of this location that is not presented on Figure 1-2 or Table 3-1. GE appears to be confusing the 20-inch pipe shown above with the 12-inch steel pipe.



Photo 6 - GE Location 4 - View of the location of the 20-inch outfall pipe believed by EPA to be GE NPDES Outfall 004.



Photo 7 - GE Location 14 - View of a submerged pipe believed by EPA to be GE NPDES Outfall 001. Figure 1-2 places this outfall pipe within approximately 20 feet of the concrete structure at GE Location 13. EPA notes that this outfall is actually located approximately 115 feet northwest of the structure at GE Location 13.



Photo 8 - GE Location 17 - View of the location of one of two outfall pipes at GE Location 17, which were identified by Hill Engineers in September 2006, but which GE referred to as "indications of a pipe" on Figure 1-2 and Table 3-1. There is a subsurface steel pipe at this location.



Photo 9 - GE Location 17 - Close-up view of the subsurface steel pipe at GE Location 17 referred to on Table 3-1 and Figure 1-2 as "indications of a pipe".



Photo 10 - GE Location 17 - View of the second of two outfall pipes at GE Location 17. This partially silted-in pipe, which is not referenced in Figure 1-2 or Table 3-1, appears to be associated with an adjacent pair of catch basins along Silver Lake Boulevard.



Photo 11 - Close-up view of a steel outfall pipe not identified by GE located between GE Locations 19 and 20 (immediately east of the 42-inch concrete spillway at GE Location 20). This outfall pipe appears to be associated with an adjacent pair of catch basins at the junction of Silver Lake Boulevard and Fourth Street.



Photo 12 - View of the location of the steel outfall pipe identified by EPA between GE Locations 19 and 20 that is apparently associated with catch basins at the junction of Silver Lake Boulevard and Fourth Street.



Photo 13 - GE Location 22 - View of a sand delta associated with the subsurface outfall pipe at GE Location 22. The amount of material in this deposit suggests that the outfall pipe at this location continues to experience heavy flow volume.



Photo 14 - Close-up view of a clay pipe which was not identified by GE, located between GE Locations 22 and 1, at Parcel I9-9-19.



Photo 15 - View of the location of the clay pipe between GE Locations 22 and 1, at Parcel I9-9-19.