UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

New England Office 1 Congress Street, Suite 1100

Boston, Massachusetts 02114-2023

July 18, 2006

Mr. Andrew T. Silfer 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 June 2006 *Pilot Study Work Plan for*

Silver Lake Sediments, GE-Pittsfield/Housatonic River Site, Pittsfield, Massachusetts.

Dear Mr. Silfer:

This letter constitutes the Environmental Protection Agency's (EPA) Conditional Approval of the *Pilot Study Work Plan for Silver Lake Sediments* (Work Plan) dated June 2006. The Report 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 (MassDEP), EPA requires that GE address the Agencies' comments provided below:

<u>Page 1-2, Section 1.2</u> - Specify in the objectives the need to understand shear strength behavior and side slope creep, and later in the report, where appropriate, discuss how the evaluation tools will be used to achieve the objective.

<u>Page 3-2, Section 3.3</u> - Provide a figure illustrating the three different cap configurations in a cross-sectional view.

<u>Page 3-2, Section 3.2.1</u> - Be more specific regarding what constitutes the appropriate management and disposal of debris removed from the lake bed.

<u>Page 3-4, Section 3.3.3</u> – It is noted in the work plan that the composite geotextile is being proposed at this stage primarily to assess the extent to which inclusion of geotextile minimizes mixing. Evaluate the potential effectiveness of including a layer of activated carbon or alternative active substance in controlling PCB migration through the cap for the full-scale cap placement.

<u>Page 3-4, Section 3.4</u> - Discuss sequencing of cap placement to minimize the lateral motion or surge resulting from the termination of descent of cap material when it encounters the sediment bed. Consider how this can be minimized, particularly in the placement of the initial lift by correctly sequencing the placement (always working outward from areas with cap material).

<u>Page 3-5, Section 3.5 and Figure 5</u> - Describe the sequencing of cap placement and shoreline erosion protection.

Confirm that the ACE guidance for thickness of riprap is 1.5 X the D_{100} , and specify the D_{100} and provide the calculations. If the calculations differ proposed in the work plan are incorrect, modify the plan to correct the riprap thickness.

It is stated that the armor layer will be constructed to extend from an elevation of 973.1 ft (2.8 ft below wsel) upward to an elevation of 978.1 ft (2.2 ft above wsel) along the shore of the test area. Given that the test area is on the eastern shore, explain how this will satisfy the description of implementation of the performance standard provided in Section 6.2.1 of Attachment I to the SOW of the armor layer extending into the lake to a mean water depth of approximately 5.3 ft along the east and west shores and approximately 2.5 ft along the north and south shores.

<u>Page 4-3, Section 4.3.1</u> – Provide a more informative rationale for the locations selected for all monitoring devices.

<u>Page 4-4, Section 4.3.1</u> - Provide the basis for the specification of a consolidation rate of 1 inch/day. Has the impact of the settlement plate directly on consolidation been considered? Provide discussion in the text as to how this will be interpreted.

<u>Page 4-5, Section 4.3.2</u> - Confirm that the SPI can penetrate the cap material (sand) to the depth of four lifts (nominally 8"). The device can have reduced penetration capabilities with increasing grain size. Perform SDI measurements at the maximum number of locations that can be done within a reasonable deployment (i.e. no less than 20). Provide a figure with the proposed locations.

<u>Page 4-5 Section 4.3.3</u> - Provide more specifics regarding the conditions under which exceedence of the turbidity reading of 50 NTUs will be evaluated (e.g. average, duration of measurements, instantaneous). Specify the sampling locations at which the visual observations of sheens or plumes will be evaluated for additional sampling.

<u>Page 4-6, Section 4.4.1</u> - The different surveying techniques may provide alternative output and capabilities in resolution when determining cap placement effectiveness. Therefore, both the bathymetric survey and acoustic profiler should used to establish pre-construction baselines. Likewise, without a baseline, it may be difficult to distinguish the mixed layer using the SPI technique. Include some baseline locations in the center area, after the geotextile has been placed in the adjacent areas.

Page 4-7 Section 4.4.2 – Instead of submitting the 6" to top-of-isolation layer horizon for analysis, analyze the top 2" (nominally 12" to 14") horizon and the remaining 6" to ? (nominally 12") horizon separately. Retain the analysis of the bottom 6" as described. There may be problems with sample core retention given the nature of the cap material. Discuss how this will be handled if encountered and ways to minimize this issue. Add a sediment collection location in the center run, second cell from shore, of the composite geotextile layer test area to evaluate performance in the area of moderate slope.

<u>General comment</u> – Specifications, testing methods, and frequency of testing must be provided for the construction materials to be used in the pilot project (e.g. rip rap, TOC, geotextiles, etc.).

EPA reserves its rights to perform additional sampling and/or require additional sampling or Response Actions, if necessary, to meet the requirements of the CD.

EPA shall resubmit the Pilot Scale Work Plan addressing the comments above within 30 days of receipt of this letter.

If you have any questions, please give me a call.

Sincerely,

Susan C Svirsky, Project Manager

cc: Mike Carroll, GE Rod McLaren, GE Kevin Mooney, GE

James Bieke, Goodwin Procter

James Nuss, BBL

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