

01-0293

United States Environmental Protection Agency *SDMS 157081*  
Region I  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

March 17, 1999

Mr. Andrew T. Silfer, P.E.  
General Electric Company  
100 Woodlawn Avenue  
Pittsfield, Massachusetts 01201

**RE: GE's March 1, 1999 submittal titled *Conditional Approval of Supplemental Source Control Containment/Recovery Measures East Street Area 2, General Electric Company, Pittsfield, Massachusetts***

EPA reviewed the above-referenced submittal and approves the submittal subject to the following conditions:

**Performance Standards and Revised Monitoring Procedures**

The proposed performance standards are modified as follows:

1. Prevention of discharges of LNAPL to the Housatonic River and/or river sediments in the area of the proposed containment barrier.
2. Prevention of bank seeps, as well as sheens to the Housatonic River in this area resulting from either bank seeps or residual LNAPL in soils/sediments located on the river side of the proposed containment barrier or from failure of the containment barrier.
3. Prevention of any measurable LNAPL migration around the ends of the containment barrier.

The 3<sup>rd</sup> sentence of Bullet 4 of the section discussing measurement and monitoring activities shall be revised as follows:

"However, Performance Standards #1 and #2 will not become effective until after the completion of activities outlined in the *Removal Action Work Plan - Upper 1/2-Mile Reach of the Housatonic River (1/2-Mile Removal Action Work Plan)*. Performance Standard #3 will become effective upon completion of the sheetpile installation."

The subsequent paragraph shall be revised as follows:

"As noted above, Performance Standards #1 and #2 will not become effective until after the completion of activities outlined in the *Removal Action Work Plan - Upper 1/2-Mile Reach of the Housatonic River (1/2-Mile Removal Action Work Plan)*. Performance Standard #3 will become effective upon completion of the sheetpile installation. If, after the effective date, the performance standards are not met, GE shall propose corrective measures and implement corrective measures upon USEPA approval."

### **Semi-Annual Reports**

GE shall continue to submit semi-annual reports to EPA for approval. The reports are currently titled, *Occurrence of Oil at East Street Area 2/USEPA Area 4*. The semi-annual reports shall be modified to include a comparison of the monitoring results to the performance standards, documentation of any exceedances of the performance standards, an assessment of the containment and NAPL recovery operations, and proposals for any additions and/or modifications to the containment, recovery, and/or monitoring procedures.

### **Figure 1. Containment Barrier Plan**

Relocate the proposed monitoring well on the upstream end of the proposed containment barrier fifteen feet to the east.

### **Page 6, 3rd paragraph and Figure 4. Containment Barrier Profile (and/or other contract drawings/specifications)**

Include the following as notes on Figure 4 and other appropriate contract drawings/specifications:

1. The elevation of the top of sheetpile from control location CP2 to station 4+42 (approximately) shall be 977 feet above mean sea level.
2. The minimum depth of embedment of the sheetpiling from control location CP2 to station 3+80 and from station 4+40 to CP8 shall be 952 feet above mean sea level. (Note to GE. This requires a slightly deeper embedment and length of sheetpiling from approximately 4+42 to CP8).
3. The minimum depth of embedment of the sheetpiling from station 3+80 to 4+40 shall be 949 feet above mean sea level.

## **Geotechnical**

GE did not fully address EPA's concerns regarding the potential for localized hard driving conditions along the sheetpile alignment. EPA believes the potential is real due to the low Section Moduli (15.9 and 24.9 in<sup>3</sup>/ft) and hence the light duty structural integrity of the selected Waterloo WZ75 and WEZ95 sections. These sections may therefore only be able to withstand limited driving stresses before buckling under hard driving conditions. For comparison purposes, conventional heavy duty sheetpiling sections are available with section modulus values as high as 60 in<sup>3</sup>/ft. GE shall monitor the sheetpile installation to ensure that buckling does not occur. If buckling is observed, the GE shall take corrective action such as welding steel plates to the flanges of Z shaped sheeting to stiffen these sections.

## **West Headwall**

GE shall take measures to eliminate or minimize groundwater seepage at the concrete spillway/sheetpile interface where the sheetpile is cut to elevation 974.70. This may include the use of sealant, gasket or other mechanism.

In subsequent submittals for the ½-Mile Removal Action, GE shall account for the scour induced by the proposed west headwall protrusion into the river. This shall be factored into the design of the toe protection, armored cap, or other restoration proposed in the vicinity of the west headwall. The design shall be consistent with EM 1110-2-1601, Hydraulic Design of Flood Control Channels.

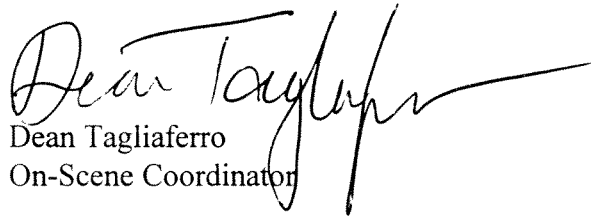
## **Schedule**

For the purpose of establishing a start date, GE shall issue the authorization-to-proceed to their construction contractor on April 19, 1999. Therefore, according to GE's proposed schedule, the completion date for the installation for the sheetpile is June 11, 1999 and the completion date for the project is June 18, 1999. Prior to April 19, 1999, GE may order materials (including the sheetpiling) necessary to complete the project on schedule.

Additional performance standards, objectives and other requirements for the containment/recovery systems will be included in the Scope of Work for Removal Actions Outside the River, which is currently being negotiated by GE, EPA, and other government agencies.

If you have any questions, please contact me at (617) 918-1282.

Sincerely,

  
Dean Tagliaferro  
On-Scene Coordinator

cc: John Ciampa, GE  
Lyn Cutler, MA DEP  
John Ziegler, MA DEP  
John Kilborn, EPA  
Steve Acree, US EPA  
Dawn Veillieux, Roy F. Weston  
Joel Lindsay, Roy F. Weston  
John Kullberg, USACE  
Margaret Meehan, EPA  
Anton Giedt, NOAA  
Dale Young, MA EOE  
Tom O'Brien, MA EOE  
Mayor Doyle, City of Pittsfield  
Pittsfield Conservation Commission  
Pittsfield City Council, c/o Tom Hickey  
Site File