

GE 159 Plostics Avenue Pittsfield, MA 01201 USA

### Transmitted via Overnight Courier

August 27, 2008

Ms. Dale C. Young Lead Administrative Trustee Massachusetts Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, Massachusetts 02114-2119

## Re: GE-Pittsfield/Housatonic River Site Lyman Street Area (GECD430) Summary of July 2008 Inspection of Natural Resource Restoration/Enhancement Measures

Dear Ms. Young:

On July 28, 2008, the General Electric Company (GE) performed the first inspection of the natural resource restoration/enhancement (NRRE) measures installed at the Lyman Street Area. As shown on Figure 1, the areas subject to NRRE measures are: (1) the southern portion of Parcel I9-8-1 (the GE Lyman Street parking lot area) which has been covered by a vegetative engineered barrier (i.e., the parking lot area excluding the paved access road); and (2) the unpaved area in the northern portion of Parcel I9-8-1. The NRRE measures installed in these areas consist of the planting of an herbaceous native grassland community, as well as the placement of bluebird boxes on the southern edge of the parking lot area adjacent to the Housatonic River. This letter provides some background information on these measures and presents the results of the July 28, 2008 inspection.

## **Background**

Section 5.7 of GE's September 2005 Final Removal Design/Removal Action Work Plan for Lyman Street Area (Final Work Plan) described the NRRE measures to be installed in the above-described portions of the Lyman Street Area in accordance with the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site and associated Statement of Work for Removal Actions Outside the River (SOW). EPA conditionally approved the Final Work Plan in a letter to GE dated March 6, 2006, and the Natural Resource Trustees (Trustees) provided comments in a letter to GE dated March 7, 2006. GE subsequently submitted an Addendum to Final RD/RA Work Plan for Lyman Street Area (Final Work Plan Addendum), dated April 4, 2006, responding to EPA's and the Trustees' comments. That Addendum also contained a revised Post-Removal Site Control/Restoration Project Monitoring and Maintenance Plan (Restoration M&M Plan), which included the requirements for monitoring and maintenance of the NRRE measures in accordance with Technical Attachment I to the SOW. The Final Work Plan Addendum was conditionally approved by EPA on April 13, 2006. A later submittal, titled Properties East of Lyman Street – Supplemental Information Package (SIP), submitted in March 2007, provided additional details on the NRRE measures to be installed in these areas and was conditionally approved by EPA on April 16, 2007.

The NRRE measures described in these documents, in accordance with the applicable Performance Standards set out in Attachment I to the SOW, consisted of: (1) planting of an herbaceous native grassland habitat on the surface of the vegetative engineered barrier at the Lyman Street parking lot area (excluding the paved access road), as well as in the unpaved area of the northern portion of Parcel 19-8-1 (as shown on Figure 1), using a mixture of native grass and wildflower species proposed in the Final Work Plan and approved by EPA; and (2) placement of a bluebird box along the edge of the Lyman Street parking lot area adjacent to the Housatonic River. (Although the Performance Standards also called for the installation of uncontaminated stumps and rock pikes throughout the NRRE areas, the Trustees requested, in their March 7, 2006 letter, that GE not place such stumps and rock pikes.)

GE performed the EPA-approved remediation actions at the portion of the Lyman Street Area east of Lyman Street between May and November 2007. These actions also included the planting of an herbaceous native grassland community in the NRRE areas. On January 4, 2008, GE submitted a *Completion of Installation of Restoration Work Report* describing the installation of these NRRE measures and reiterating the required monitoring and maintenance activities in accordance with the Restoration M&M Plan. Subsequently, two bluebird boxes were installed along the edge of the Lyman Street parking lot area adjacent to the River.

On May 5, 2008, GE attended an inspection and meeting at the NRRE areas with EPA and the Trustees. The results of this inspection indicated a need for supplemental replanting activities, as documented in a May 7, 2008 letter from the Trustees to GE. Following this inspection and meeting, GE submitted to the Trustees an electronic mail message proposing replanting activities in the NRRE areas to satisfy the relevant Performance Standard. That replanting proposal was approved by the Trustees in an electronic mail message dated June 2, 2008.

Between June 6 and June 13, 2008, in accordance with the Trustee-approved replanting proposal, GE scarified the surface of the vegetative engineered barrier and the unpaved northern portion of Parcel I9-8-1 and installed the Trustee-proposed native grassland seed mix at an application rate of 30 pounds per acre, with an additional 10 pounds per acre of annual rye (*Lolium temulentum*). Straw mulch with a thickness of no more than 2 inches was then applied and anchored.

## **Summary of Inspection Activities**

The July 28, 2008 inspection was conducted in accordance with the requirements for such inspections set out in the Restoration M&M Plan provided in the Final Work Plan Addendum. This inspection consisted of a field inspection and survey of the planting areas to: (a) verify areal coverage by herbaceous species; (b) determine any evidence of trespassing or herbivory; (c) assess the apparent vigor of the vegetation; (d) inspect for the presence of invasive species (as listed in the Restoration M&M Plan); and (e) assess the condition of the bluebird boxes. Representatives of EPA and the Trustees were present at this inspection.

To document the results of the July 2008 inspection, GE completed an NRRE Inspection Checklist and collected photographic documentation of the conditions of the NRRE areas. Copies of the completed checklist and the photographs are provided in Attachments A and B, respectively.

The July 2008 inspection also served as the restoration work installation inspection and meeting among GE, EPA, and the Trustees required by Paragraph 120 of the CD. The Trustees determined that the installation of the restoration work had been completed in accordance with the applicable requirements and Performance Standards in the CD. GE anticipates receiving a Certification of Completion of Installation Work from the Trustees under Paragraph 120 of the CD in the near future.

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### Summary of Observations During Inspection

The July 2008 inspection identified the presence of two different stages of vegetation establishment within the two portions (northern and southern) of the NRRE areas, which are shown on Figure 1. The southern portion of the NRRE areas supported the tallest vegetation and exhibited approximately 100% ground cover. The northern portion also exhibited approximately 100% ground cover, but the observed vegetation was shorter in height than the vegetation observed in the southern portion by approximately one foot. As indicated in the Restoration M&M Plan, the percent coverage Performance Standard for the NRRE areas is 100%, and the ground cover observed during the July 2008 inspection in both areas met that standard.

No significant signs of herbivory or stress were observed in the developing plant communities. One invasive species listed in the Restoration M&M Plan, Japanese knotweed, was observed within the NRRE areas. The Japanese knotweed was observed in the northeastern portion of the NRRE areas and had been established prior to the initiation of remediation activities at the Lyman Street Area. The total percentage of area occupied by this species was observed to be less than 1%, which is well below the 5% Performance Standard for invasive species cover. Nevertheless, as a follow-up maintenance activity, GE will institute a treatment program to eradicate the Japanese knotweed in the NRRE areas. That program is scheduled to commence in Fall 2008. In addition, given that the NRRE areas are surrounded by a locked chain-link fence restricting trespasser access, no signs of damage from trespassers were observed. Finally, the bluebird boxes were found to be present, intact, and functional.

### **Schedule of Future Activities and Inspections**

As noted above, GE will begin a program of invasive species treatment for the Japanese knotweed in Fall 2008. In addition, GE plans to remove one of the bluebird boxes in order to meet the requirement of Attachment I to the SOW that a minimum distance of 300 yards must be maintained between bluebird boxes. Further, in accordance with the Restoration M&M Plan, the grass will be mowed in late Fall 2008.

With respect to future inspections, the Restoration M&M Plan provides that monitoring activities are to consist of two site visits during each of the first three years after planting, one visit during the fifth year after planting, and one visit during the seventh year after planting. In each of the first three years after planting, visits are to be conducted in the late spring after the first leaf flush (May/June) and in the summer (July/August) to assess plant survival. The single visit in the fifth and seventh year after planting is to be conducted in the summer (July/August). GE will commence this schedule in 2009, conducting two monitoring visits in 2009, 2010, and 2011, one in 2013, and one in 2015. These inspections and any necessary maintenance will be performed in accordance with the NRRE inspection/maintenance requirements set out in the forthcoming Final Completion Report for the Lyman Street Area Removal Action and will utilize the NRRE Inspection Checklist included in that document. Following each inspection, an inspection report will be prepared and submitted to the Trustees (through the Lead Administrative Trustee), with copies to EPA and the MDEP. In addition, GE will prevent shrub and tree growth within the NRRE areas through mowing of the grass in those areas once every year no earlier than late October and removal of any shrub/tree growth in these areas for the duration of the monitoring period.

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Please call me if you have any comments or questions.

Sincerely,

Richard W Catus / MTB

Richard W. Gates Remediation Project Manager

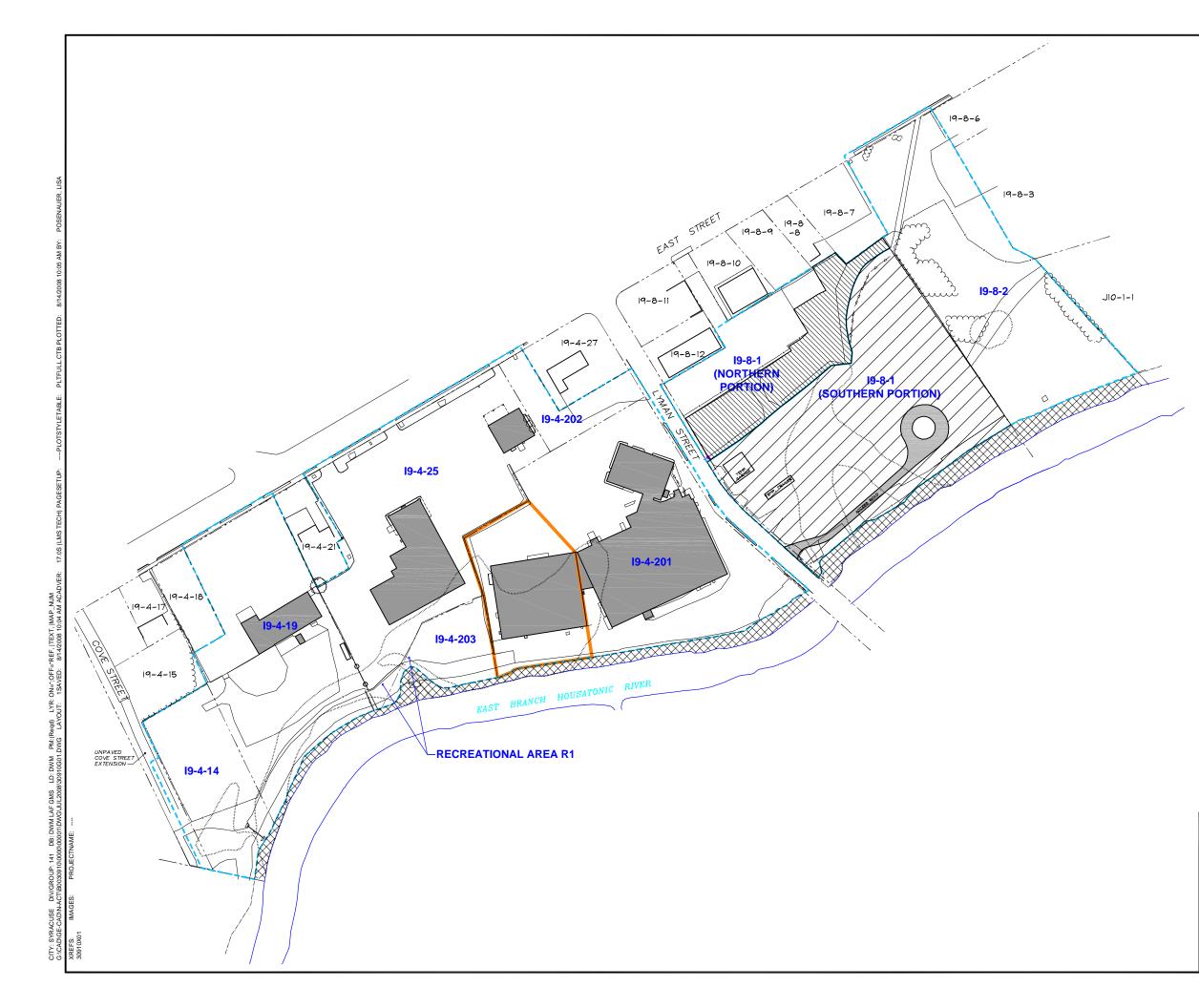
Attachments

Dean Tagliaferro, EPA cc: Richard Fisher, EPA Tim Conway, EPA Holly Inglis, EPA Rose Howell, EPA\* Linda Palmieri, Weston (2 copies) Michael Gorski, MDEP (2 copies) Anna Symington, MDEP\* Jane Rothchild, MDEP\* Susan Steenstrup, MDEP Todd Chadwell, Stantec Mayor James Ruberto, City of Pittsfield Nancy E. Harper, MA AG\* Michael Carroll, GE\* Rod McLaren, GE James Nuss, ARCADIS James Bieke, Goodwin Procter **Public Information Repositories GE** Internal Repositories

\* without attachments

# ARCADIS

Figure



#### LEGEND

		APPROXIMATE RAA BOUNDARY
		PARCEL BOUNDARY
	<b>I9-8-1</b>	PARCEL ID
	<del>~~~~~~</del>	GUARD RAIL
-	o	CHAIN LINK FENCE
_		WOODEN FENCE
		FORMER OXBOW/LOW LYING AREA
		BUILDING
		PAVED ACCESS ROAD
		AREA ADDRESSED AS PART OF 1/2-MILE REACH REMOVAL ACTION OR 1 1/2-MILE REACH REMOVAL ACTION
		AREA SUBJECT TO NATURAL RESOURCE RESTORATION/ENHANCEMENT
		AREA SUBJECT TO INSTALLATION OF VECETATIVE ENGINEERED BARRIER AND NATURAL RESOURCE RESTORATION/ ENHANCEMENT
		SUB-AREA 201A (SUBJECT TO SAMPLING ON RESIDENTIAL-AREA GRID)
		DIVIDING LINE SEPARATING THE NORTHERN PORTION OF PARCEL 19-8-1 FROM THE SOUTHERN PORTION

#### FIGURE NOTES:

 MAPPING IS BASED ON SITE SURVEY BY HILL ENGINEERS, ARCHITECTS & PLANNERS INC., DATED 2/5/04 AND FROM AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990 (EDGE OF RIVER).

GRAPHIC SCALE

#### GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS JULY 2008 INSPECTION

## AREAS SUBJECT TO NATURAL RESOURCE RESTORATION/ENHANCEMENT ACTIVITIES

**ARCADIS** 

FIGURE 1

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Attachment A

Completed Inspection Form

NATURAL RESOURCE RESTORATION / ENHANCEMENT INSPECTION CHECKLIST			
LYMAN STREET AREA REMOVAL ACTION			
PARCEL 19-8-1 (UNPAVED NORTHERN PORTION AND VEGETATIVE ENGINEERED BARRIER OVER SOUTHERN PORTION)			
I. GENERAL INFORMATION			
Inspection Date:	7/28/08		
Conducted By:	Paolo Filippetti - (585) 385-0090 ext. 35		
Weather Conditions:	Sunny, 80°F		
Date of Last Inspection:	NA		
II. INSPECTION SUMMARY			
vegetation; note any dan	r (Note a percentage of groundcover by herbaceous species; note evidence of areas of bare/sparse mage from trespassing or herbivory; note any physical changes since last inspection, etc.) area - approximately 100% total groundcover; 90% of the species observed from seed mix.		
	area - approximately 100% total groundcover, 30% of the species observed from seed mix.		
not limited to the followin buckthorn, Garlic musta knotweed, Morrow's hon	<b>pecies</b> (Note a percentage of area occupied by invasive species; note the species present including but ng: Amur honeysuckle, Autumn olive, Black locust, Black swallow-wort, Common barberry, Common rd, Glossy buckthorn, Goutweed or Bishop's weed, Japanese barberry, Japanese honeysuckle, Japanese eysuckle, Morrow's X Tartarian honeysuckle [hybrid], Multiflora rose, Norway maple, Oriental bittersweet, s, Porcelain berry, Purple loosestrife, Russian olive, Tartarian honeysuckle, or Yellow iris, etc.)		
	erved in the northeastern portion of the Lyman Street parking lot area. Total percentage of area occupied		
by this species is less th	an 1%.		
the need to be replaced.			
<ul> <li>Bluebird boxes observed</li> </ul>	to be in good condition.		
	onfirm that repair/maintenance measures identified during prior inspection have been performed; note any ns, including parcel-specific restoration activities.		
- NA			
III. FOLLOW-UP MAINTENA	NCE AND REPAIR ACTIVITIES		
- Initiate a treatment progr	am for the eradification of the Japanese knotweed in fall 2008.		

## ATTACH ADDITIONAL INFORMATION AS APPROPRIATE

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Attachment B

Photo Log



