

**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

In the Matter of:	)	
	)	
GENERAL ELECTRIC COMPANY	)	RCRA Appeal No. 16-05
Modification of RCRA Corrective Action	)	
Permit No. MAD002084093	)	

**REGION 1'S RESPONSE TO PETITION OF  
BERSKSHIRE ENVIRONMENTAL ACTION TEAM, INC. FOR  
REVIEW OF FINAL MODIFICATION OF RCRA CORRECTIVE  
ACTION PERMIT ISSUED BY REGION 1**

Respectfully Submitted,

(s) Timothy M. Conway  
Timothy M. Conway  
Joanna Jerison  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square, Suite 100  
Boston, MA 02109  
P: 617-918-1705; 617-918-1781  
F: 617-918-0705; 617-918-0781  
[Conway.tim@epa.gov](mailto:Conway.tim@epa.gov); [Jerison.joanna@epa.gov](mailto:Jerison.joanna@epa.gov)

Of Counsel:

Tracy Sheppard  
U.S. Environmental Protection Agency  
Solid Waste and Emergency Response Law Office  
Office of General Counsel

David Dowton  
U.S. Environmental Protection Agency  
Office of Site Remediation Enforcement  
Office of Enforcement and Compliance Assurance

**TABLE OF CONTENTS**

**TABLE OF AUTHORITIES ..... iii**

**TABLE OF ATTACHMENTS ..... v**

**GLOSSARY OF TERMS.....vii**

**I. INTRODUCTION .....1**

**II. STATEMENT OF THE CASE.....3**

    II.A Statutory and Regulatory Background.....3

    II.B Factual and Procedural Background.....4

        II.B.1 The Housatonic River and the “Rest of River” Contamination.....4

        II.B.2 Decree and CD-Permit.....5

        II.B.3 Rest of River Remedy Selection Process.....6

        II.B.4 Position of the States .....10

    II.C Standard of Review.....11

**III. ARGUMENT.....13**

    III.A Petition Includes Arguments Not Raised Before, or Which Fail to Confront  
    Region’s Response to Comments .....13

    III.B The Floodplain and Vernal Pool Remedies Reflect the Region’s Considered  
    Judgment.....14

        III.B.1 Floodplains .....14

        III.B.2 Vernal Pools .....15

    III.C The Record Supports Use of Engineered Capping .....18

    III.D Sampling and Remediation Responsibilities in Downstream Reaches Have  
    Been Fairly Evaluated and Determined .....20

    III.E The Record Supports Region’s Approach to Sampling Behind Dams .....21

    III.F BEAT’s Support for Off-Site Disposal.....23

**IV. CONCLUSION .....25**

**STATEMENT OF COMPLIANCE WITH WORD LIMITATION.....26**

**REQUEST FOR ORAL ARGUMENT.....27**

**CERTIFICATE OF SERVICE .....28**

**TABLE OF AUTHORITIES**

**Federal Cases**

*Burlington Northern and Santa Fe Ry. v. United States*, 556 U.S. 599 (2009) ..... 3  
*Chicago v. EDF*, 511 U.S. 328 (1994)..... 3  
*Dedham Water Co. v. Cumberland Farms Dairy*, 805 F.2d 1074 (1<sup>st</sup> Cir. 1986) ..... 3  
*Sierra Club v. United States EPA*, 499 F.3d 653 (7<sup>th</sup> Cir. 2007) ..... 11  
*Upper Blackstone Water Pollution Abatement Dist. v. United States EPA*, 690 F.3d 9, 23 (1st Cir. 2012), *cert. denied* 133 S. Ct. 2382 (May 13, 2013)..... 2

**Environmental Appeals Board Decisions**

*In re Ash Grove Cement Co.*, 7 E.A.D. 387 (EAB 1997) ..... 12  
*In re Beeland Group, LLC*, 14 E.A.D. 189 (EAB 2008) ..... 11  
*In re City of Attleboro*, 14 E.A.D. 398 (EAB 2009) ..... 12  
*In re City of Moscow*, 10 E.A.D. 135 (EAB 2001)..... 12  
*In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009)..... 12  
*In re City of Taunton Dept. of Public Works*, NPDES Appeal No. 15-08 (EAB May 3, 2016), 17 E.A.D. \_\_\_\_\_ ..... 11-14  
*In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490 (EAB 2006)..... 13  
*In re Encogen Cogeneration Facility*, 8 E.A.D. 244 (EAB 1999)..... 13  
*In re Guam Waterworks Auth.*, 15 E.A.D. 437 (EAB 2011) ..... 12  
*In re Indeck-Elwood, LLC*, 13 E.A.D. 126 (EAB 2006)..... 11  
*In re New Eng. Plating Co.*, 9 E.A.D. 726 (EAB 2001) ..... 13  
*In re Peabody W. Coal Co.*, 12 E.A.D. 22 (EAB 2005) ..... 13  
*In re Steel Dynamics, Inc.*, 9 E.A.D. 165 (EAB 2000) ..... 12  
*In re Teck Cominco Alaska, Inc.*, 11 E.A.D. 457 (EAB 2004) ..... 12  
*In re West Bay Exploration Co.*, UIC Appeal No. 15-03 (EAB Jul. 26, 2016), 17 E.A.D. \_\_\_\_\_ ..... 11, 13  
*In re Westborough*, 10 E.A.D. 297 (EAB 2002)..... 12

**Federal Statutes**

42 U.S.C. §6901 et seq..... 1  
42 U.S.C. §6924..... 3  
42 U.S.C. §6925..... 3  
42 U.S.C. §6924 (Section 3004 of RCRA)..... 24  
42 U.S.C. §6976 (Section 7006 of RCRA)..... 3  
42 U.S.C. §9601 et seq..... 1

**Federal Regulations**

40 C.F.R. §124.13 ..... 12  
40 C.F.R. §124.19 ..... 2-3, 11-14, 21, 26, 27  
40 C.F.R. §264.303 ..... 24  
40 C.F.R. §264.525(a) (proposed) ..... 8  
40 C.F.R. §300.440 ..... 23-24  
40 C.F.R. §761.61 ..... 23  
40 C.F.R. §761.75 ..... 24

**TABLE OF AUTHORITIES (CONTINUED)**

**Federal Register Notices**

Consolidated Permit Regulations, RCRA Hazardous Waste; SDWA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration, 45 Fed. Reg. 33,290 (May 19, 1980)..... 11

Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities, Advanced Notice of Public Rulemaking, 61 Fed. Reg. 19,432 (May 1, 1996)..... 8-9

Corrective Action for Solid Waste Management Units (SWMUs) at Hazardous Waste Management Facilities, 55 Fed. Reg. 30,798 (Jul. 27, 1990)..... 8

Revisions to Procedural Rules to Clarify Practices and Procedures Applicable in Permit Appeals Pending Before the Environmental Appeals Board, 78 Fed. Reg. 5,281 (Jan. 25, 2013)..... 11

**EPA Guidance Documents**

“Contaminated Sediment Remediation Guidance for Hazardous Waste Sites,” December 2005 (AR287029)..... 19

EPA, The Feasibility Study: Detailed Analysis of Remedial Action Alternatives, OSWER # 9355.3-011FS4 (March 1990), <https://semspub.epa.gov/work/HQ/174412.pdf> ..... 9

## TABLE OF ATTACHMENTS

<b>Attachment No.</b>	<b>AR/SEMS Number*</b>	<b>Title</b>
Attachment 1	AR593921	2016 RCRA Corrective Action Final Permit Modification (Permit)
Attachment 2	AR9420, 38256, 38258	Excerpts from Consent Decree in <i>United States et al. v. General Electric Company</i> Civil Action No. 99-30225-MAP <i>et seq.</i> (October 27, 2000) (Consent Decree, Decree, or CD), including excerpts from Appendix E to the Decree and Annex 1 to Appendix E
Attachment 3	AR586286	Excerpts from EPA's Statement of Position in Support of the Intended Final Decision on the Modification to the Reissued RCRA Permit and Selection of CERCLA Response Action (February 29, 2016) (Region SOP)
Attachment 4	AR593922	Excerpts from EPA's Response to Comments on Draft Permit Modification and Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River" (RTC)
Attachment 5	AR558621	Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River," released June 2014 (Statement of Basis or Stmt/Basis)
Attachment 6	AR38267	Excerpts from Reissued RCRA Permit, Appendix G to the CD (Note: permit was reissued in October 2000 and again effective December 7, 2007) (CD-Permit)
Attachment 7	AR586286	Timeline for Opportunities for GE and the Public to Comment during Rest of River Process (Attachment A to EPA's SOP)
Attachment 8	AR472605, 580275	Excerpts from General Electric's Revised Corrective Measures Study Report, Housatonic River, Rest of River (October 2010) (RCMS) (GE Response only)
Attachment 9	AR508662	Housatonic River Status Report: Potential Remediation Approaches to the GE-Pittsfield-Housatonic River Site "Rest of River" PCB Contamination, released May 2012 (Status Report)
Attachment 10	AR557091	Excerpts from Comparative Analysis of Remedial Alternatives for the GE-Pittsfield/Housatonic River Project Rest of River (May 2014) (CA or Comparative Analysis)
Attachment 11	AR593967	Excerpts from EPA's Final Decision in Dispute of EPA's Notification of Intended Final Decision on Rest of River Remedy (October 13, 2016) (Regional Counsel Decision)
Attachment 12	SEMS593981	2016 EPA Fact Sheet "EPA Releases Final Permit Modification for Cleanup of Housatonic River 'Rest of River'"
Attachment 13	AR593972	Commonwealth Concurrence, GE – Housatonic Rest of River Site Final Permit Modification (October 19, 2016)

**TABLE OF ATTACHMENTS (CONTINUED)**

<b>Attachment No.</b>	<b>AR/SEMS Number*</b>	<b>Title</b>
Attachment 14	SEMS 29935	<i>United States et al. v. General Electric</i> , No. 99-30225, slip op. at 4 (D. Mass. Filed Oct. 27, 2000) (GE Response only)
Attachment 15	SEMS596379	Response to EPA's Notice of Uncontested and Severable Permit Conditions, Letter from GE to EPA, December 21, 2016 (GE Response only)
Attachment 16	N/A	Complaint: <i>United States v. General Electric Company</i> (Municipalities Response only)
Attachment 17	AR518898	Excerpts from the Regional Response to the National Remedy Review Board Comments on the Site Information Package for the GE-Pittsfield/Housatonic River Project, Rest of River (August 3, 2012) (HRI Response only)

\*Cross-references with AR numbers indicate the document numbers in EPA's Administrative Record for the October 2016 Final Modification of the Reissued RCRA Permit (October 2016). SEMS numbers are for documents in the GE-Pittsfield/Housatonic River Site file, but not in the Rest of River Administrative Record.

## GLOSSARY OF TERMS

AC	activated carbon
ANPR	Advanced Notice of Proposed Rulemaking
AR or Record	Administrative Record
ARARs	Applicable or Relevant and Appropriate state and federal Requirements
Att.	Attachment to this Response
BEAT	Berkshire Environmental Action Team, Inc.
Board or EAB	Environmental Appeals Board
C.F.R.	Code of Federal Regulations
CA or Comparative Analysis	EPA's Comparative Analysis of Remedial Alternatives for the GE-Pittsfield/Housatonic River Project Rest of River
CD or Decree	Consent Decree in <i>United States et al. v. General Electric Company</i> Civil Action No. 99-30225-MAP <i>et seq.</i> (October 27, 2000)
CD-Permit	Reissued RCRA Permit (reissued by EPA in October 2000 and again effective December 7, 2007), incorporated into Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMS	Corrective Measures Study
Draft Permit	2014 RCRA Corrective Action Draft Permit Modification
E.A.D.	Environmental Appeals Decision
EPA	U.S. Environmental Protection Agency
ERA	Ecological Risk Assessment
Fed. Reg.	Federal Register
FP	Floodplain
GE	General Electric Company
HHRA	Human Health Risk Assessment
HRI	Housatonic River Initiative
IMPG	Interim Media Protection Goals
mg/kg	milligram per kilogram (equivalent to parts per million)
MNR	monitored natural recovery
Municipalities	Housatonic Rest of River Municipal Committee

**GLOSSARY OF TERMS (CONTINUED)**

NCP	National Contingency Plan
NHESP	Natural Heritage and Endangered Species Program
NPDES	National Pollutant Discharge Elimination System
OSWER	Office of Solid Waste and Emergency Response
PCB	polychlorinated biphenyl
Permit	2016 RCRA Corrective Action Final Permit Modification
Pet	Petition
RCMS or revised CMS	Revised CMS Report
RCRA	Resource Conservation and Recovery Act
Region	U.S. Environmental Protection Agency, Region 1
RTC	EPA's Response to Comments on Draft Permit Modification and Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River"
SED	sediment
SEMS	Superfund Enterprise Management System
SOP	Statement of Position
States	Massachusetts and Connecticut
Status Report	EPA's Potential Remediation Approaches to the GE-Pittsfield-Housatonic River Site 'Rest of River' PCB Contamination," released May 2012
Stmnt/Basis	Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River," released June 2014
T/D	treatment and/or disposition
TSCA	Toxic Substances Control Act
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers

## **I. INTRODUCTION**

This appeal arises from EPA Region 1's October 2016 issuance of a Permit Modification ("Permit") (Attachment (Att.) 1) to General Electric Company ("GE") concerning a portion of the Housatonic River ("Rest of River") pursuant to a 2000 Consent Decree ("Consent Decree", Decree" or "CD"). Att. 2. The Permit was issued pursuant to a process set forth in the Consent Decree that provides that the remedy for the Rest of River will be selected and reviewed as a RCRA permit and implemented as CERCLA cleanup.<sup>1</sup> Att. 2, CD ¶22.q (review of Permit Modification and remedy selection under RCRA), CD ¶22.z (remedy implementation under CERCLA). In selecting the remedy set forth in the Permit, EPA relied upon its scientific, technical and policy expertise, following a decade and a half of analysis, modeling, risk assessments, independent external peer review, and internal EPA reviews. To arrive at the appropriate level and method of cleanup for Rest of River, including different components of the remedy, EPA first evaluated a large and complex Administrative Record ("Record" or "AR")<sup>2</sup> comprised primarily of scientific and technical material. The Region then exercised its scientific and policy discretion to select among the range of possible outcomes. This lengthy scientific analysis was informed by an extraordinary degree of public participation. EPA repeatedly sought the input and involvement of GE, the States of Massachusetts and Connecticut (collectively, "the States"), and the public.

---

<sup>1</sup> Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §6901 *et seq.*, and Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §9601 *et seq.*, respectively.

<sup>2</sup> The Record is comprised of information EPA considered or relied on for the Rest of River remedy evaluation, proposal and selection. These materials have been assigned AR numbers. The Record is a subset of the overall Site file for the GE-Pittsfield/Housatonic River Site, that also includes information related to the other response actions undertaken pursuant to the Decree, as well as compliance, enforcement, cost recovery and other Site-related information. These other materials have generally been assigned SEMS numbers.

The Berkshire Environmental Action Team, Inc. (“BEAT”) has petitioned the Board for review of the Region’s October 20, 2016 Permit. The Region responds herein to BEAT’s petition. BEAT’s petition is flawed for the following reasons.

First, BEAT in significant measure expresses differences of opinion on inherently technical matters within EPA’s expertise. While BEAT may agree with alternative technical theories on various issues, simply articulating these preferences does not demonstrate error. Rather, determinations made on the record by EPA’s experts, even in the face of other plausible options, deserve deference from the Board.

In almost every case, more data can be collected, models further calibrated to match real world conditions; the hope or anticipation that better science will materialize is always present, to some degree, in the context of science-based agency decisionmaking. . . . As in many science-based policymaking contexts [...] the EPA is required to exercise its judgment even in the face of some scientific uncertainty.

*Upper Blackstone Water Pollution Abatement Dist. v. United States EPA*, 690 F.3d 9, 23 (1st Cir. 2012), *cert. denied*, 133 S. Ct. 2382 (May 13, 2013).

BEAT never justifies why the Region’s exercise of discretion in selecting a cleanup based on the CD-Permit criteria was flawed. While BEAT may have opted for a different approach, this difference of opinion does not constitute reviewable error or abuse of discretion.

Second, BEAT’s Petition has significant procedural flaws. BEAT has not preserved sufficiently two arguments, and has failed to confront EPA’s responses to public comments on other issues, counter to the Board requirements at 40 C.F.R. 124.19(a)(4)(ii).

The Board should deny the Petition.

## **II. STATEMENT OF THE CASE**

The Board has jurisdiction to review the Permit as a RCRA permit modification. 40 C.F.R. Part 124.19, Section 7006 of RCRA.

### **II.A Statutory and Regulatory Background**

This case involves an unusual combination of EPA's authority under CERCLA and RCRA. In 1980, Congress enacted CERCLA in response to the serious environmental and health risks posed by industrial pollution. CERCLA was designed to promote the "timely cleanup of hazardous waste sites" and to ensure that the costs of such cleanup efforts were borne by those responsible for the contamination. *Burlington Northern and Santa Fe Ry. v. United States*, 556 U.S. 599 (2009). CERCLA is essentially a remedial statute designed by Congress to protect and preserve public health and the environment. "We are therefore obligated to construe its provisions liberally to avoid frustration of beneficial legislative purposes." *Dedham Water Co. v. Cumberland Farms Dairy, Inc.*, 805 F. 2d 1074, 1081 (1st Cir. 1986).

Enacted in 1976, RCRA empowers EPA "to regulate hazardous wastes from cradle to grave...." *Chicago v. EDF*, 511 U.S. 328, 331 (1994). As part of RCRA, Congress established a permitting program for facilities that treat, store or dispose of hazardous waste and directed EPA to implement the program. 42 U.S.C. §6925. In 1984, Congress amended RCRA, providing that any person seeking a RCRA permit must perform any "corrective action" necessary to clean up releases of hazardous wastes or hazardous constituents from any solid waste management unit at the facility. 42 U.S.C. §6924(u), (v).

## **II.B Factual and Procedural Background**

### **II.B.1 The Housatonic River and the “Rest of River” Contamination**

The Housatonic River begins immediately north of Pittsfield, Massachusetts, and continues through Massachusetts and Connecticut to Long Island Sound. Att. 1, Permit, Figure 1. In Pittsfield, the Housatonic River flows adjacent to the former GE facility, where GE used PCBs extensively from 1932-1977. Att. 3, EPA Statement of Position (SOP”) at 5.

PCBs are classified as a known human and animal carcinogen, and have been linked to a number of other adverse health effects in humans and animals. EPA Response to Comment (“RTC”) Response 42 *et al.*, at 39-42, Response 85 *et al.*, at 43; Statement of Basis for EPA’s Proposed Remedial Action for the Housatonic River, “Rest of River” (“Statement of Basis” or “Stmt/Basis”), at 14-18. (Att. 4 and Att. 5, respectively). During this time, the Transformer Division manufactured and repaired transformers containing PCBs. Att. 3, SOP at 5. Significant amounts of PCBs and other hazardous substances were released to soil, groundwater, Silver Lake, the Housatonic River and were disposed of within and around the facility in landfills, former river oxbows, residential yards, and other locations, including migrating downstream. A former GE manager estimated that 1.5 million pounds of PCBs entered the river system. AR512751. GE itself estimated that between 111,000 and 576,000 pounds of PCBs remain in sediment and floodplain. AR260320, Tables 2-7, 2-8. In light of the foregoing, EPA concluded that PCBs have contaminated the riverbed, riverbanks, floodplain, fish, ducks, other biota, and their habitats, and have created unacceptable risks to human health and the environment.

## **II.B.2 Decree and CD-Permit**

In 2000, Plaintiffs the United States and the States, and Defendant GE, entered into a Decree to address PCB contamination from the former GE facility in Pittsfield. The Decree provides for investigation and cleanup of PCBs and other hazardous substances released from GE's former Pittsfield facility, which migrated to numerous areas in Pittsfield and the Housatonic River. The Permit is one component of the Decree.

The "Rest of River" is defined under the Decree to include approximately 125 miles of riverbed and banks, and the associated Floodplain and Backwaters. Att. 1, Permit, Figures 1 and 2.

Many of the areas requiring investigation and/or cleanup under the Decree incorporate Performance Standards and corrective measures for addressing PCBs and other hazardous substances. Att. 1, Permit II. However, at the time of Decree entry, the Rest of River investigation was not complete. Therefore, the Decree included a RCRA permit to govern the Rest of River investigation, corrective measures alternatives analysis and remedy selection process. Att. 2, CD ¶¶22; Att. 6, CD Appendix G (the "CD-Permit"). The Decree also provides that, as part of this process, EPA would modify the CD-Permit to address the risks posed by GE's PCBs in the "Rest of River" through the Permit. Att. 2, CD ¶¶22.p. Following issuance of the Permit and resolution of any challenges to the Permit, GE was required to perform the Permit's selected Rest of River Remedial Action and operation and maintenance, pursuant to CERCLA and the Decree. Att. 2, CD ¶¶22.p., z.

### **II.B.3 Rest of River Remedy Selection Process**

The Decree established a process for selecting a cleanup for the Rest of River. This process, which spanned more than a decade, included efforts by EPA (beyond those called for by the Decree) to solicit and respond to the views of the public.<sup>3</sup> Technical/ scientific milestones included EPA's river modeling (AR258097), Human Health Risk Assessment ("HHRA") (AR219190) and Ecological Risk Assessment ("ERA") (AR215498), and five independent peer reviews of the modeling and risk assessments. After each peer review, EPA issued a Responsiveness Summary and revised document.<sup>4</sup> This body of scientific evidence demonstrated unacceptable threats to human health and the environment in the Rest of River system. Att. 4, RTC 42, *et al.* at 39-42. Also, GE submitted its analysis of the nature and extent of Rest of River contamination (RCRA Facility Investigation, AR49294), its identification of preliminary cleanup standards (Interim Media Protection Goals, AR248143), and, in 2008 and 2010, two versions of a Corrective Measures Study to analyze different remediation alternatives. AR283374, 472605. GE's recommendation from its 2010 Revised Corrective Measures Study (RCMS) landed on the second-least amount of PCB removal from Rest of River, with on-site disposal of the PCB-contaminated material. Att. 8, RCMS at 11-1 to 11-2.

Based on that work and public input, EPA in 2011 presented a potential remedy for review by two national EPA advisory review boards. AR487308. Following that review, EPA entered into technical discussions with the States. In May 2012, the EPA/States' discussions yielded a jointly-prepared Status Report of potential remediation approaches. Att. 9, Housatonic

---

<sup>3</sup> For more details on the specific public involvement steps afforded by EPA, see Att. 7, Timeline for Public Comments.

<sup>4</sup> HHRA (AR204922, 219190), ERA (AR204922, 215498, 580279, 580280, 580281), Modeling (AR65093, 204991, 65093, 229322, 237323, 252993, 258098).

River Status Report (AR 508662).<sup>5</sup> Following the Status Report's issuance, at GE's request, EPA and GE entered into seventeen months of remedy discussions above and beyond the process opportunities afforded in the Decree. AR558617.

In May 2014, EPA proposed a Rest of River remedy for public comment. Draft Permit Modification ("Draft Permit"), AR558619. The rationale for the proposed remedy is documented in EPA's Comparative Analysis of Remedial Alternatives ("Comparative Analysis" or "CA") (Att. 10), and the Statement of Basis (Att. 5).

EPA's remedy proposal followed its evaluation of a wide range of alternatives to address the unacceptable risks posed by GE's PCB contamination. Att. 5, Stmt/Basis; Att. 10, CA. The CD-Permit describes nine criteria for consideration. There are three threshold "General Standards" to be met: (1) Overall Protection of Human Health and the Environment ("Protectiveness"); (2) Control of Sources of Releases; and (3) Compliance with ARARs.<sup>6</sup> And there are six additional "Selection Decision Factors" to be balanced against one another including: (1) Long-Term Reliability and Effectiveness; (2) Attainment of Interim Media Protection Goals;<sup>7</sup> (3) Reduction of Toxicity, Mobility, or Volume of Wastes; (4) Short-Term Effectiveness; (5) Implementability; and (6) Cost. Att. 2, CD-Permit II.G. EPA evaluated all the alternatives against these criteria (referred to herein as "CD-Permit criteria" or "nine criteria") and any other relevant information in the Record.

---

<sup>5</sup> "Potential Remediation Approaches to the GE-Pittsfield-Housatonic River Site 'Rest of River' PCB Contamination" ("Status Report"), released May 2012, Att. 9.

<sup>6</sup> ARARs are Applicable or Relevant and Appropriate state and federal Requirements.

<sup>7</sup> Interim Media Protection Goals, or "IMPGs", are media-specific protection goals to be used in the Corrective Measures Study as part of the evaluation of remedial alternatives.

EPA conducted a multi-layered analysis of the remediation and disposal alternatives against the CD-Permit criteria. For remediation of PCB contamination in sediment and floodplain, EPA reviewed nine separate remediation alternatives (denoted as “SED/FP” alternatives). Att. 10, CA at 10, Table 1, Combination Alternatives Matrix. Similarly, in evaluating alternatives for treatment/disposition of the excavated PCB-contaminated material, EPA evaluated five alternatives (denoted as “T/D” alternatives). Att. 10, CA at 59-78. Based on that comprehensive review, EPA proposed a remedy referenced in EPA’s Comparative Analysis as “SED 9/FP 4 MOD and TD 1/TD1 RR” that was in its judgment best suited to meet the CD-Permit’s General Standards in consideration of the CD-Permit’s Selection Decision Factors, including a balancing of those factors against one another. Att. 10, CA at 59, 77.

The distinction between the threshold General Standards and the balancing Selection Decision Factors is an important consideration. The CD-Permit describes the process as determining which corrective measure or combination of corrective measures “is best suited to meet the *general standards* ... in consideration of the *decision factors*..., including a balancing of *those factors* against one another.” Att. 6, CD-Permit, II.G.3 (emphasis added). Accordingly, the Region’s evaluation of the three threshold criteria – Protectiveness, Control of Sources of Releases, and Compliance with ARARs – requires that those standards be met.<sup>8</sup> In contrast, EPA’s consideration of the latter six Selection Decision Factors includes the balancing of those factors against one another. EPA’s RCRA Corrective Action guidance includes a very similar structure, establishing a two-phase evaluation for remedy selection. “During the first phase,

---

<sup>8</sup> See also, 1990 Proposed Subpart S (proposed 40 C.F.R. 264.525(a) cited at Corrective Action for Solid Waste Management Units (SWMUs) at Hazardous Waste Management Facilities, 55 Fed. Reg. 30,798 (Jul. 27, 1990) specified that remedies must meet the threshold criteria); “Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities, EPA, Advanced Notice of Proposed Rulemaking (“ANPR”), 61 Fed. Reg. 19431 (May 1, 1996) (AR593978).

potential remedies are screened to see if they meet “threshold criteria; remedies which meet the threshold criteria are then evaluated using various “balancing criteria” to identify the remedy that provides the best relative combination of attributes.” “Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities, Advanced Notice of Proposed Rulemaking (“ANPR”), 61 Fed. Reg. 19431 (May 1, 1996) (AR593978). With respect to the Selection Decision Factors, or balancing factors, no one factor is preeminent among them. EPA has stated, any one of the balancing criteria might prove to be the most important at a particular site. ANPR, at 19449.

CERCLA’s National Contingency Plan (NCP) structure, while not identical, is similar.<sup>9</sup> It has two threshold criteria (Protectiveness, and Compliance with ARARs) that relate to statutory requirements that each alternative must satisfy in order to be eligible for selection, and another set of “balancing criteria.” “The Feasibility Study: Detailed Analysis of Remedial Action Alternatives”, OSWER # 9355.3-011FS4 (March 1990).

During the more-than-four-month public comment period, EPA received over 2,000 pages of comments from over 140 commenters, including from the States.<sup>10</sup> Following EPA’s review of the comments, but prior to issuance of the Permit and the Response to Comments, the

---

<sup>9</sup> While the Comparative Analysis was performed in accordance with RCRA, reference to general guidance under CERCLA can be instructive in light of the Agency’s desire for parity between the programs. ANPR, 61 Fed. Reg. 19439 (May 1, 1996): As a general philosophy, EPA believes that the RCRA and CERCLA remedial programs should operate consistently and result in similar environmental solutions when faced with similar circumstances. ANPR II.F.5 (AR593978). Referencing a 1990 RCRA proposal, EPA stated that one of the Agency’s primary objectives was “to achieve substantial consistency with the policies and procedures of the Superfund remedial program. The logic behind that concept is that since both programs address cleanup of potential and actual releases, both programs should arrive at similar remedial solutions. EPA’s position is that any procedural differences between RCRA and CERCLA should not substantively affect the outcome of remediation.” ANPR III.B.1 (AR593978).

<sup>10</sup> Public comments are at AR565679, 567442, 568076, 568088, 568410, 568471, 568474, 568476 to 568479, and 579608 to 579621.

Decree required EPA to identify to GE EPA's Intended Final Decision, and allow GE the opportunity to contest the Intended Final Decision in informal and formal administrative dispute resolution. Att. 2, CD ¶22.o. For purposes of the Intended Final Decision (AR582991), and to address GE's and other comments on the remedy proposal, EPA made several modifications to the remedy. The Decree's dispute resolution process included an informal period administered by a neutral third-party mediator, followed by a formal dispute, including written SOPs by GE (AR586218, 587218) and EPA (AR586286).

That process concluded on October 13, 2016 with the decision by the Regional Counsel of EPA Region 1 that supported the EPA's decision-making process. The Regional Counsel provided that "[g]iven the scope and variability associated with a site of this size and complexity, EPA's development of a cleanup approach overall is entirely reasonable and is supported by the data and information in the administrative record." Att. 11, EPA Final Decision at 10. The Regional Counsel concluded, "...I find that overall EPA's reasoning, rationale and analysis are sound and adequately supported by the data and information it has carefully considered." *Id.* Later that month, the Region finalized its Permit to include the Region's selected remedy, and issued its Response to Comments. That remedy relies on a combination of cleanup approaches to address PCB contamination, reduce downstream transport of PCBs, reduce PCBs in fish tissue and allow for greater consumption of fish, and avoid, minimize or mitigate impacts to sensitive areas, species and habitats. Att. 12, 2016 EPA Fact Sheet.

#### **II.B.4 Position of the States**

The selected remedy reflects EPA's coordination with, and support from, both States. Both States worked with EPA in developing the remedial approach outlined in the 2012 Status

Report, and those key principles remain integral components of the selected remedy.

Connecticut's 2014 supportive comments on the remedy note that "when fully implemented [the remedy] will reduce the downstream migration of PCBs to Connecticut to an acceptable level."

AR568089. In 2014, Massachusetts provided its written support of the proposed remedy.

AR568093. In 2016, Massachusetts formally concurred with the remedy. Att. 13,

Commonwealth Concurrence. Neither State challenges the Permit before the Board.

## **II.C Standard of Review**

The Board's review of the Permit is governed by 40 C.F.R. Section 124.19. Att. 2, CD ¶22.q. Therefore, it will deny review and not remand unless the Permit decision either is based on a clearly erroneous finding of fact or conclusion of law, or involves a matter of policy or exercise of discretion that warrants review. 40 C.F.R. 124.19(a)(4)(1)(A)-(B); *In re City of Taunton Dept. of Public Works*, NPDES Appeal No. 15-08, slip op. at 8 (EAB May 3, 2016), 17 E.A.D. \_\_\_\_, citing *inter alia*, *Sierra Club v. United States EPA*, 499 F3d 653 (7<sup>th</sup> Cir 2007); Revisions to Procedural Rules to Clarify Practices and Procedures Applicable in Permit Appeals Pending Before the Environmental Appeals Board, 78 Fed. Reg. 5281, 5282, 5284 (Jan. 25, 2013).

EPA's intent in promulgating these regulations was that this review should be only sparingly exercised. *In re West Bay Exploration Co.*, UIC Appeal No. 15-03, slip op. 5 (EAB Jul. 26, 2016), 17 E.A.D. \_\_\_\_, citing Consolidated Permit Regulations, RCRA Hazardous Waste; SDWA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration 45 Fed. Reg. 33290, 33412 (May 19, 1980) and *In re Beeland Group, LLC*, 14 E.A.D. 189, 195-96 (EAB 2008). Threshold procedural requirements such as timeliness, standing, issue preservation, and specificity must be met. *In re City of Taunton*, slip op. at 8, citing, *In re Indeck-Elwood, LLC* 13 E.A.D. 126, 143 (EAB 2006).

A petitioner must demonstrate that any issues and arguments it raises on appeal have been preserved for Board review unless the issues or arguments were not reasonably ascertainable at the time. 40 C.F.R. 124.13, 19(a)(4)(ii); *In re City of Taunton*, slip op. at 6, citing, *In re City of Attleboro*, 14 E.A.D. 398, 405-06, 444 (EAB 2009); *In re City of Moscow*, 10 E.A.D. 135, 141, 149-50 (EAB 2001). The Board consistently has denied review of petitions that merely cite, attach, incorporate or reiterate comments submitted on the draft permit. *In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009).

The appeal must provide a citation to the comment and response and must explain why the Region's previous response to that comment is clearly erroneous or otherwise warrants review. 40 C.F.R. 124.19(a)(4)(ii); *In re City of Taunton*, slip op. at 7, citing, *inter alia*, *In re Teck Cominco Alaska, Inc.*, 11 E.A.D. 457, 494-95 (EAB 2004), *In re Westborough*, 10 E.A.D. 297, 305, 311-312 (EAB 2002).

When evaluating a petition that claims a clear error, the Board examines the Administrative Record to determine whether the Region exercised its considered judgment. *In re City of Taunton*, slip op. at 8, citing *inter alia*, *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 191, 224-25 (EAB 2000).

The board will uphold a permitting authority's reasonable exercise of discretion if that decision is cogently explained and supported in the record. *In re City of Taunton*, slip op. at 8, citing, *In re Guam Waterworks Auth.*, 15 E.A.D. 437, 443n7 (EAB 2011), *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 397 (EAB 1997). On matters that are fundamentally technical or scientific in nature, the Board will defer to the Region's technical expertise and experience, as long as the Region adequately explains its rationale and supports its reasoning in the AR. *In re*

*City of Taunton*, slip op. at 8-9, citing, *inter alia*, *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 510, 560-62, 645-47, 668, 670-74 (EAB 2006). This heavy burden promotes the policy imperative of ensuring “that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience.” *In re Peabody W. Coal Co.*, E.A.D. 22, 33 (EAB 2005). “[W]here a permit decision pivots on the resolution of a genuine technical dispute or disagreement, the Board prefers not to substitute its judgment for the judgment of the decisionmaker specifically tasked with making such determinations in the first instance.” *Id.* at 34.

### **III. ARGUMENT**

As explained below in Section III.A., BEAT’s petition contains elements that do not satisfy the Board’s procedural standards at 40 C.F.R. §124.19. As such, those should not be considered. To the extent that the Board continues to review substantively the claims of BEAT, such claims, as demonstrated in Section III, must fail because BEAT has made no showing that the Region’s selected approach is clearly erroneous or otherwise warrants review.

#### **III.A Petition Includes Arguments Not Raised Before, or Which Fail to Confront Region’s Response to Comments**

The Region recognizes that the Board generally tries to liberally construe the issues presented by a self-represented petitioner, but even when self-represented, a petitioner bears the burden of demonstrating review is warranted. *In re West Bay Exploration Co.*, slip op. at 5, citing, *In re New Eng. Plating Co.*, 9 E.A.D. 726, 730, n. 9 (EAB 2001), *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249-250, n.10 (EAB 1999).

Two of BEAT's contentions - floodplain remediation and sampling behind dams in Connecticut - were not raised by BEAT in its 2014 comments, and BEAT did not explain why such issues were not raised at that time. Therefore, these arguments do not satisfy the Board's requirements that the argument be raised during the public comment period, 40 C.F.R. §124.19(a)(4)(ii).

Further, the Region responded in its Response to Comments to other aspects of BEAT's comments, and BEAT has not confronted the Region's response to these comments. *Id.; In re City of Taunton*, slip op. at 7. Standards for review provided in 40 C.F.R. §124.19(a)(4)(ii). are clear that the petitioner must provide a citation to the relevant comment and response and explain why the response to the comment was clearly erroneous or otherwise warrants review. With respect to floodplain remediation, Engineered Capping, and sampling behind the dams, BEAT's petition does not confront the Region's prior response. As such, those arguments should be dismissed.

To the extent the Board nonetheless substantively considers BEAT's' arguments, EPA's responds to these arguments in Section III below.

### **III.B The Floodplain and Vernal Pool Remedies Reflect the Region's Considered Judgment**

#### **III.B.1 Floodplains**

In its Petition, BEAT raised concerns that the remediation in the Core Areas of the Floodplain was insufficient because, in BEAT's opinion, more excavation is required. Pet. at 1. The Region disagrees. Moreover, BEAT did not directly raise this issue in its 2014 comments on the Draft Permit. Furthermore, there were other commenters who raised this issue, EPA

addressed these comments in its Response to Comments, and BEAT did not confront EPA's Response to Comments. See Section III.A. above.

If the Board substantively considers this argument, the Region recognized BEAT's concerns in crafting its approach in the selected remedy. However, the Region disagrees with BEAT on the remedy best suited for addressing those risks. As noted in EPA's RTC 749 at 12-13 for the overall remedy, and the RTC 54 *et al.* at 215-217 specifically with respect to Core Areas, the combination of different elements in EPA's selected remedy to remediate the unacceptable risks while reducing any adverse effects of the remediation makes EPA's selected remedy the alternative that achieves the project purposes with the least damage to the ecological resources. Att.4. Within the Region's evaluation of the nine CD-Permit criteria, the selected remedy properly balances the need for protection of human health and the environment and the extent of the remediation with the need for avoidance, minimization, and mitigation for state-listed species. EPA's approach is supported by Massachusetts's Natural Heritage and Endangered Species Program (NHESP). NHESP assisted EPA in developing the selected remedy's approach to avoid, minimize and mitigate effects on Core Areas. Att. 1, Permit Attachment B. At most, BEAT has raised a technical difference of opinion, which does not satisfy the standard of clear error to allow review.

### **III.B.2 Vernal Pools**

BEAT challenges the Region's approach to Vernal Pools as insufficient, arguing that the Vernal Pools should be subject to careful excavation. Pet. at 1-3. The Region considered excavation among different alternatives, but determined a different remedy was best suited under the CD-Permit criteria, as explained herein.

The Region modified the approach to Vernal Pools in response to public comments by revising the Permit to require that activated carbon (“AC”) and/or other comparable amendments be implemented as the preferred remedial approach.<sup>11</sup> If this method is unsuccessful, the Vernal Pools will be subject to careful excavation as suggested by BEAT. The use of AC and/or other comparable amendments was included as one of the methods to be implemented on a pilot scale basis and evaluated for Vernal Pools in the Draft Permit (II.B.2.b.(4)(c)) (AR558619), and thus the public had an opportunity to comment on its use. As discussed in EPA’s RTC 660 at 221, while the use of AC in Vernal Pools has not, to the Region’s knowledge, been specifically studied, there are a number of studies that have investigated the use of sediment amendments in various types of aquatic habitats (see Att. 10, Comparative Analysis Attachment 3; also see Att. 4, RTC 660 at 221 referencing additional study on use of AC at contaminated sediment sites). These studies clearly have relevance to Vernal Pools. As stated in RTC 660 at 221, results reported to date have been generally positive, with very limited effects on natural biota. Att. 4.

Furthermore, Sections II.B.3.b.(2)(a) through (g) of the Permit require careful assessment and planning in accordance with EPA-approved plans, in advance of and throughout any AC application in Vernal Pools. Att. 1. The Permit requires GE, in advance of remediation, to thoroughly characterize Vernal Pools, identify the potential ecological effects of remediation, and develop plans for measuring the ecological effects of AC (or other sediment amendment) placement. BEAT’s concern about Vernal Pools’ sensitivity to pH values (Pet. at 3) can be

---

<sup>11</sup> The Region, in the Draft Permit, had included evaluation or use of AC or another sediment amendment in Reach 5B (II.B.1.c.(1)) and the Backwaters (II.B.1.e.(4)) (AR558619). In the Permit, the Region continued evaluation or use of AC in those areas (II.B.2.b.(1)(b), and II.B.2.d.(1)(c), respectively, as well as including use in the Vernal Pools. Att. 1.

considered as part of this evaluation of ecological effects. Following this planning and analysis, the Permit requires GE to place a sediment amendment in ten initial Vernal Pools and to report to EPA on the amendment effectiveness, ecological effects, and suggested modification to support its proposal for how to address remaining Vernal Pools. If these initial evaluations indicate that the placement of sediment amendments in Vernal Pools is not successful, then the Final Permit Modification has provided for the alternate remedy of excavation and restoration. If remediation of Vernal Pools through excavation is necessary, EPA agrees, as discussed in its RTC 601 *et al.* at 127-129 that Vernal Pool restoration can be accomplished successfully with a careful approach and attention to detail. Att. 4.

In summary, as discussed in RTC 658 at 220, EPA believes that the primary remedy requiring the use of sediment amendments to remediate Vernal Pools, with the alternate remedy of excavation and restoration should sediment amendments prove not to be successful, is the remedy that best meets the CD-Permit criteria. Att. 4. EPA clearly and reasonably exercised discretion in selecting the Vernal Pool remedy and has adequately explained its rationale as is supported by the Record.

EPA agrees that the Vernal Pool remediation efforts by GE in the 1.5- Mile Reach in 2006 at Vernal Pool 8-VP-1 provide a good indication of the potential for successful Vernal Pool restoration following the removal of PCBs as noted in EPA's RTC 601 *et al.* at 128-129 (Att. 4). After restoration, as documented by both GE and EPA in post-remediation inspection reports, in a short time Vernal Pool 8-VP-1 was providing breeding habitat for Vernal Pool amphibian species, providing ecological functions similar to the pre-remediation pool, and was shown to be meeting the Massachusetts criteria for a certified Vernal Pool. While the greatest wood frog egg

mass count observed prior to remediation was 31 (in 2003), counts substantially increased following remediation to 75 in 2010, more than 100 in 2011, 60 in 2012, 170 in 2013, 59 in 2014, 96 in 2015, and more than 47 in 2016 (some had already hatched).<sup>12</sup> In addition, hundreds of fairy shrimp were observed most years following remediation. In years where fairy shrimp were not observed, their absence was attributed to the hydrologic conditions in that year or previous year(s). (AR589227, 501650).

### **III.C The Record Supports Use of Engineered Capping**

BEAT argues against the use of Engineered Caps in the Rest of River. Pet. at 3. The Region disagrees. Indeed, the Region's Engineered Cap Performance Standards, at II.B.2.i of the Permit, are structured to address precisely the concerns BEAT raises with respect to capping. Att. 1.

In its Petition, BEAT objects to the use of Engineered Caps in Rest of River based on the view that contaminated sediment should be removed, not capped. Pet. at 3. By contrast, while the Permit includes removal of an estimated 990,000 cubic yards of sediment and soil, the Region's selected remedy also includes elements of capping, and monitored natural recovery ("MNR") in different areas of the Rest of River. The Region's decision is in accordance with EPA guidance on cleanups of contaminated sediments, and is the product of a thorough evaluation and balancing of the CD-Permit remedy-selection criteria.

---

<sup>12</sup> 2010 Vernal Pool Literature Review and Field Survey Report (AR517769), 2011 Phase 4C Vernal Pool Survey (AR501650), 2012 Phase 4C Vernal Pool Survey (AR534849), 2013 Phase 4C Vernal Pool Survey (AR540414), 2014 Phase 4C Vernal Pool Survey (AR569337), 2015 Phase 4C Vernal Pool Survey (AR577223), 2016 Phase 4C Vernal Pool Survey (AR589227).

As is demonstrated in the Record, including the Comparative Analysis, EPA analyzed a wide variety of different cleanup options, including those with considerably greater, and considerable less, removal of PCBs. Att. 10, CA at 10, Table 1. EPA selected SED 9/FP 4 MOD as the remedy for the Permit. As the Comparative Analysis demonstrates, the Region's evaluation included a balancing of the six Selection Decision Factors, which include among others long-term reliability and effectiveness and cost. For example, an alternative with little PCB removal may have less cost but would also have less long-term reliability; conversely, an alternative with the most PCB removal, SED 8/FP7, shows greater long-term effectiveness but also considerably higher costs. The Region's decision on the selected remedy is totally reasonable and based on the CD-Permit criteria evaluation.

The selected remedy's use of capping is also consistent with EPA's guidance. EPA's "Contaminated Sediment Remediation Guidance for Hazardous Waste Sites," December 2005 at 3-1 (AR287029) recommends that project managers consider remediation goals that permit a range of alternatives to be developed including each of the three major approaches (MNR, capping, and removal). Furthermore, Section 3.1.1 and Highlight 7-1 of the 2005 Sediments Guidance describes that project managers have found that a combination of remediation methods may be appropriate for large or complex sites with multiple water bodies with differing characteristics or uses, or differing levels of contamination.

In the Permit, the Region has structured the Engineered Cap Performance Standards and corrective measures to address BEAT's other concerns that any cap that can withstand the rigors of a moving river may be an inappropriate substrate for the invertebrate life living in Rest of River, and that the type of cap proposed would fail and continue to send PCBs farther

downstream. As specified in Section II.B.2.i of the Permit, Engineered Caps will be designed with functional layers which act to address the very concerns that BEAT expresses, including a habitat layer “that provides functions and values equivalent to the pre-existing surface sediment substrate.” Permit II.B.2.i.(2)(f); a chemical isolation layer to minimize the flux of PCB concentrations through the cap, Permit, II.B.2.i.(2)(b); and an erosion protection layer designed to resist erosion and withstand storm events, Permit, II.B.2.i.(2)(c). Att. 1. As noted in the RTC 330 at 197-198, engineered capping has been successfully implemented at many sites throughout the U.S. with differing sediment types and hydrological conditions, including in the Upper ½ Mile and 1 ½ Mile Reaches of the East Branch of the Housatonic, for which indicators of success are discussed in the RTC 330 at 199. Att. 4. In addition, the Permit includes requirements for inspection, monitoring, and maintenance of Engineered Caps to ensure that they continue to function as designed (see Att. 1, Permit, II.B.2.i.(1)(c), II.C, and II.H.18).

In short, the Region has selected its Engineered Cap requirements based on a thorough evaluation, including consideration of public comments. The Region’s technical justification is logical, has been explained in the Record, and deserves deference.

#### **III.D Sampling and Remediation Responsibilities in Downstream Reaches Have Been Fairly Evaluated and Determined**

BEAT’s petition requests that Permit Section II.B.2.1 require GE to conduct thorough testing for PCBs behind all dams in Rest of River, and require the removal of all contaminated sediment discovered, regardless of whether the dam is being removed or undergoing major repair. While BEAT asserts that there should be testing behind *all dams*, Pet. at 4, its petition cites Permit Section II.B.2.1, which refers only to Response Actions for Dams and

Impoundments and Sediment, Riverbanks, and Backwaters in *Reaches 10 through 16* (emphasis added). This response is therefore limited to the dams in Connecticut in Reaches 10 through 16.

### **III.E The Record Supports Region's Approach to Sampling Behind Dams**

BEAT did not raise the issue of sampling and sediment removal behind any dams, including the dams in Connecticut, in its 2014 comments on the Draft Permit. In fact, the words "dam", "testing", and "sampling" do not appear in BEAT's 2014 comments. While BEAT had provided similar comments at an earlier stage of the Rest of River process<sup>13</sup>, BEAT has not provided a citation to its comment or the Region's response regarding sampling and sediment removal behind any dams nor has BEAT explained why the Region's previous response to that comment is clearly erroneous or otherwise warrants review. 40 C.F.R. §124.19(a)(4)(ii). Accordingly, Board review should be denied on this issue.

If the Board nonetheless substantively considers this argument, the sampling is sufficient that has taken place to date, along with the sampling and potential removal required in the Permit. As discussed in *RTC 73 et al.* at 195, the U.S. Army Corps of Engineers (USACE) prepared a report, on behalf of EPA, to document the sediment PCB data from the 540 samples collected in Connecticut from 1980 to 2005, which includes sampling behind all dams in Rest of River. Att. 4. In general, the Connecticut sampling data demonstrated relatively low concentrations of PCBs in sediments. For samples at all depths, including behind Impoundments, in 1998 or later, the average PCB concentration was 0.18 mg/kg and the

---

<sup>13</sup> In its Petition, BEAT references comments it made on the CMS proposal regarding sampling behind the dams (Pet. at 4), but did not include these in its comments on the Draft Permit.

maximum concentration was 2.33 mg/kg. (USACE, Sediment PCB Data Summary for Connecticut, March 23, 2015, (AR574803)). In addition, for remedy components including MNR, the Permit also requires further sampling as part of ongoing monitoring. Att. 1, Permit, Section II.B.4.b.(2).

To the extent that BEAT is claiming MNR is not the appropriate remedy in the Connecticut portion of River of River, EPA disagrees. Following the EPA's evaluation of remedial alternatives presented in the CMS Proposal, where GE proposed MNR in Connecticut, EPA instructed GE to "provide further justification and discussion (in the Supplement) of the corrective measure alternatives for Reaches 9 through 16." AR268525. In its May 2007 Supplement, GE responded to the EPA's condition and provided a weight-of-evidence approach using water column, sediment, and biota data collected over a 30-year period (AR268565). In its July 2007 conditional approval of the Supplement, EPA agreed with the conclusions presented in GE's weight-of-evidence discussion and evaluation of the alternatives considered for Reaches 9 – 16. EPA further instructed GE to note in the CMS that institutional controls may be a component of a remedy in which MNR is the primary response action, and further that GE shall evaluate the need for such controls in the evaluation of this response action (AR274224).

Along with selecting MNR as part of its analysis, EPA addressed the future removal of contaminated sediment behind Connecticut dams. Rather than requiring the removal of all contaminated sediment discovered, as BEAT urges, the Permit requires GE to address any contaminated sediment that is being impacted as part of Legally Permissible Future Project or Work. Att. 1, Permit II.B.2.1.(1). The Region described its analysis in RTC 462.d at 277-278:

EPA agrees that GE should be responsible to address the issues associated with contaminated sediment when there is a Legally Permissible Future Project or Work in Connecticut, including, but not limited to, dam maintenance, removal, repair, upgrades, and enhancement activities; flood management activities; road and infrastructure projects; and activities such as the installation of canoe and boat launches and docks. In part in response to this comment, the Final Permit Modification was modified to define the term Legally Permissible Future Project or Work. See Definitions Section and Section II.B.2.1. of the Final Permit Modification. ... Section II.B.2.1. of the Final Permit Modification now requires GE to perform actions such as engineering controls and materials handling and off-site disposal for the contaminated sediment. However, for sediment with less than 1 mg/kg PCBs, and for the sampling to determine whether sediment contains PCBs greater than 1 mg/kg, EPA has not included those responsibilities in the Final Permit Modification since risks to human health posed by such material are relatively low and disposal of material with PCBs less than 1 mg/kg is generally not regulated by Connecticut. GE's obligations related to Legally Permissible Future Projects or Work, however, are triggered once there is documentation that such Project or Work requires the handling or disturbance of sediment with total PCBs greater than 1 mg/kg.

Att. 4.

The Region's determinations on the contaminated sediments in Reaches 10-16 are supported in the Record, and have been adequately explained. As such they deserve deference.

### **III.F BEAT's Support for Off-Site Disposal**

BEAT expressed support for off-site disposal of contaminated sediment and soil at an already licensed, off-site facility. Pet. at 4. With regard to BEAT's point that off-site disposal locations be carefully monitored, Permit Section II.B.5 (Att. 1) states that GE "shall dispose of all contaminated sediment and soil, as well as other waste material, off-site at existing licensed facilities that are approved to receive such waste material and are in compliance with EPA's off-site rule (40 C.F.R. 300.440)."

Excavated soil and sediment containing PCB concentrations greater than or equal to 50 parts-per-million is required, by federal regulation, 40 C.F.R. §761.61, to be disposed of in a

hazardous waste landfill permitted under Section 3004 of RCRA or a PCB disposal facility approved under the Toxic Substances Control Act (“TSCA”). For each of these types of disposal facilities, there are specific monitoring requirements (see 40 C.F.R. §761.75 for TSCA landfill monitoring requirements and 40 C.F.R. §264.303 for RCRA landfill monitoring requirements). In addition, regular checks on all off-site disposal facility protectiveness are ensured by the Permit requirement that disposal complies with EPA’s off-site rule, under which EPA determines the acceptability “of any facility selected for the treatment, storage, or disposal of CERCLA waste,” including determining if there are relevant releases or violations (see 40 C.F.R. 300.440 (a)(4)).

BEAT also supports the suggestion that use of rail for transport would be the best option, but with the caution that the rail must be improved prior to use. The Permit does specify that “Permittee’s proposal shall include measures to maximize the transport of such waste material to off-site facilities via rail, to the extent practicable.” Att. 1, Permit, II.B.5.b.(2). The Region also concurs that an assessment of the rail system near the site needs to be evaluated, and if necessary, upgraded, to ensure safety of the rail system. Under the Permit, during remedial design, GE would propose the off-site disposal facility(ies) for excavated sediment and soil and method of transport. Att. 1, Permit, II.B.5. In addition, the Rest of River Statement of Work, requires that GE submit an “Off-Site Transportation Plan” (Permit, II.H.10) to EPA for review and approval. Att. 1. This Off-Site Transportation Plan and review process is the appropriate mechanism to address the necessity of rail upgrades.

#### **IV. CONCLUSION**

For all the foregoing reasons, the Petition for Review Submitted by the Berkshire Environmental Action Team, Inc. should be denied.

**STATEMENT OF COMPLIANCE WITH WORD LIMITATION**

I hereby certify that the Region's Response to the Petition for Review in the matter of General Electric Co., RCRA Appeal No. 16-05, contains less than 14,000 words in accordance with 40 C.F.R. § 124.19(d)(3).

Respectfully submitted,

Dated: February 14, 2017

(s) Timothy M. Conway  
Timothy M. Conway

**REQUEST FOR ORAL ARGUMENT**

In accordance with 40 C.F.R. Section 124.19(h), EPA Region 1 requests oral argument in this matter.

Dated: February 14, 2017

(s) Timothy M. Conway  
Timothy M. Conway

**CERTIFICATE OF SERVICE**

I, Timothy M. Conway, hereby certify that true and correct copies of EPA Region 1's Response were served via EPA's e-Filing system and email on February 14, 2017, and Federal Express on February 15, 2017:

Via the EPA's E-Filing System and Federal Express to:

Eurika Durr  
Clerk of the Board  
U.S. Environmental Protection Agency  
Environmental Appeals Board  
1201 Constitution Avenue, NW  
U.S. EPA East Building, Room 3334  
Washington, D.C. 20004

Via Federal Express to:

For General Electric Company (per discussion with GE counsel, Region providing GE counsel with hard-copy of Attachments and certified Administrative Record index for Response to GE Petition, but not for other four responses):

Jeffrey R. Porter  
Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C.  
One Financial Center  
Boston, MA 02111

James R. Bieke  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, D.C. 20005

Roderic J. McLaren  
Executive Counsel – Environmental Remediation  
General Electric Company  
159 Plastics Avenue  
Pittsfield, MA 01201

For Berkshire Environmental Action Team, Inc.:

Jane Winn  
Berkshire Environmental Action Team, Inc.  
29 Highland Avenue  
Pittsfield, MA 01201-2413

For Massachusetts:

Jeffrey Mickelson  
Deputy General Counsel  
Massachusetts Department of Environmental Protection  
One Winter Street  
Boston, MA 02108

For Connecticut:

Lori DiBella  
Assistant Attorney General  
55 Elm Street  
Hartford, CT 06141-0210

(s) Timothy M. Conway  
Timothy M. Conway