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

In re: General Electric Company	) ) ) DCBA Association 21	Λ1
	) RCRA Appeal No. 21	-01
Permit No. MAD002084093	)	

# REGION 1'S RESPONSE TO PETITION OF HOUSATONIC RIVER INITIATIVE AND HOUSATONIC ENVIRONMENTAL ACTION LEAGUE

Respectfully Submitted,

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Attachment No.	AR Number*	Title
Attachment 1	AR650440	Revised Final Permit Modification to the 2016 RCRA Permit and Selection of CERCLA Remedial Action and Operation and Maintenance (O&M) For Rest of River (Final 2020 Permit or Final Permit)
Attachment 2	AR593921	2016 RCRA Corrective Action Final Permit Modification (October 2016) (RCRA Permit or 2016 Permit)
Attachment 3	AR647210	Determination on Remand and Supplemental Comparative Analyses of Remedial Alternatives for the General Electric (GE)-Pittsfield Housatonic River Site, Rest of River, EPA Region 1 (July 2020) (SCA)
Attachment 4	AR643538	Settlement Agreement Resolving Disputes Regarding October 2016 RCRA Corrective Action Permit Modification for the "Rest of River" (February 2020) (2020 Settlement Agreement)
Attachment 5	AR647214	Draft 2020 Modification to the 2016 Reissued RCRA Permit and Selection of CERCLA Remedial Action and Operation and Maintenance (O&M) For Rest of River (July 2020) (Draft Revised 2020 Permit or Draft 2020 Permit)
Attachment 6	AR647211	Statement of Basis for EPA's Proposed 2020 Revisions to the Remedial Action for the Housatonic River "Rest of River" (July 2020) (2020 Stmt/Basis)
Attachment 7	AR650441	Response to Comments on EPA Draft 2020 Permit Modification to the 2016 Reissued RCRA Permit and Associated Statement of Basis for EPA's Remedial Action for the "Rest of River" Portion of the Housatonic River, (December 2020) (2020 RTC).
Attachment 8	AR650441	Figure 1 - Upland Disposal Facility - Extracted from 2020 RTC
Attachment 9	AR647211	Example Cross-Section for the Upland Disposal Facility - Extracted from Statement of Basis (July 2020)
Attachment 10	AR650440	Figures 1 and 2Rest of River Reaches - Extracted from 2020 Permit
Attachment 11	AR558621	Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River," June 2014 (2014 Statement of Basis or Stmt/Basis)

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Attachment No.	AR Number*	Title
Attachment 12	AR593922	Response to Comments on Draft Permit Modification and Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River" (October 2016) (2016 RTC)
Attachment 13	AR9420	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)
Attachment 14	AR280170	Reissued RCRA Permit, Appendix G to the CD (Note: permit was reissued in October 2000 and again effective December 7, 2007) (CD-Permit)
Attachment 15	AR283374, AR580283 AR580285	General Electric's Corrective Measures Study (March 2008) (CMS), excluding Figures 6-1 through 6-6.
Attachment 16	AR472605, AR580275, AR580282	General Electric's Revised Corrective Measures Study Report, Housatonic River, Rest of River (October 2010) (RCMS or Revised CMS)
Attachment 17	AR558619	2014 Draft Permit Modification (Draft 2014 Permit)
Attachment 18	AR557091	Comparative Analysis of Remedial Alternatives for the GE-Pittsfield/Housatonic River Project Rest of River (May 2014) (2014 CA or 2014 Comparative Analysis)
Attachment 19	AR649382	Commonwealth of Massachusetts, GE-Housatonic River Site Public Comments (September 18, 2020)
Attachment 20	AR647217	Frequently Asked Questions on EPA's Proposed Revisions to the Remedial Action for the Housatonic River "Rest of River" (July 2020) (Frequently Asked Questions document or July 2020 FAQs)
Attachment 21	AR260320	General Electric's Corrective Measures Study Proposal (February 2017) (CMS-P)
Attachment 22	AR268565	General Electric's Corrective Measures Study Proposal – Supplement (May 2017) (CMS-P Supplement)

<sup>\*</sup>Cross-references with Administrative Record (AR) numbers indicate the document numbers in EPA's Administrative Record for the Revised Final Permit Modification to the 2016 RCRA Permit to the General Electric Company (December 2020)( Final 2020 Permit).

#### GLOSSARY OF TERMS

Area of Critical Environmental Concern **ACEC** 

**ADR** Alternative Dispute Resolution

AR or Record Administrative Record

ARARs Applicable or Relevant and Appropriate Requirements

Att. Attachment to this Response

Board or EAB Environmental Appeals Board

C.F.R. Code of Federal Regulations

2014 CA or EPA's Comparative Analysis of Remedial Alternatives for the

2014 Comparative Analysis Rest of River (May 2014)

CD or Decree Consent Decree in United States et al. v. General Electric

Company, Civil Action No. 99-30225-MAP et seq. (October 27,

2000)

**CD-Permit** Reissued RCRA Permit (reissued by EPA in October 2000 and

again effective December 7, 2007), incorporated into Consent

Decree

Comprehensive Environmental Response, Compensation, and **CERCLA** 

Liability Act

**CMS** Corrective Measures Study

CMS-P Corrective Measures Study Proposal

Draft 2014 Permit 2014 RCRA Corrective Action Draft Permit Modification

Draft 2020 Permit Draft Revised 2020 Permit

E.A.D. **Environmental Appeals Decision** 

**EPA** U.S. Environmental Protection Agency

**ERA Ecological Risk Assessment** 

**ESTCP** Environmental Security Technology Certification Program

**FAQs** Frequently Asked Questions

Final 2020 Permit or Revised Final Permit Modification to the 2016 Reissued RCRA 2020 Permit or Permit

Permit to the General Electric Company (December 2020)

FP Floodplain GE General Electric Company

HEAL Housatonic Environmental Action League

HHRA Human Health Risk Assessment

HRI Housatonic River Initiative

mg/kg milligram per kilogram (equivalent to parts per million)

MNA Monitored Natural Attenuation

MNR monitored natural recovery

MOD modified

NCP National Contingency Plan

O&M operation and maintenance

Order In re General Electric Company, Resource Conservation and

Recovery Act ("RCRA") Appeal Nos. 16-01 to 16-05, Order Remanding in Part and Denying Review in Part, 17 E.A.D. 434

(EAB 2018)

PCB polychlorinated biphenyl

2016 Permit 2016 RCRA Corrective Action Final Permit Modification

Pet. Petition

ppm parts per million (equivalent to milligrams per kilogram)

QAPP Quality Assurance Project Plan

RCMS Revised CMS

RCRA Resource Conservation and Recovery Act

Region U.S. Environmental Protection Agency, Region 1

2016 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" (October 2016)

2020 RTC EPA's Response to Comments on Draft 2020 Permit to the

2016 Reissued RCRA Permit and Associated Statement of Basis for EPA's Remedial Action for the "Rest of River"

Portion of the Housatonic River (December 2020)

SA Settlement Agreement (February 2020)

SCA Determination on Remand and Supplemental Comparative

Analysis for the General Electric (GE)-Pittsfield Housatonic

River Site, Rest of River, EPA Region 1 (July 2020)

SED sediment

States Massachusetts and Connecticut

2014 Stmt/Basis Statement of Basis for EPA's Proposed 2020 Revisions to the

Remedial Action for the Housatonic River "Rest of River,"

(June 2014)

2020 Stmt/Basis Statement of Basis for EPA's Proposed Remedial Action for the

Housatonic River "Rest of River," (July 2020)

T/D or TD treatment and/or disposition

TSCA Toxic Substances Control Act

U.S.C. United States Code

UDF Upland Disposal Facility

VOC Volatile Organic Compound

#### I. INTRODUCTION

This appeal arises from EPA Region 1's December 2020 issuance of a Revised Final Permit Modification to the 2016 RCRA Permit to the General Electric Company ("GE")("Final 2020 Permit" or "2020 Permit") (Attachment 1 (Att.)) for the remediation of the Housatonic River "Rest Of River." EPA's issuance of the 2020 Permit responds to the Environmental Appeal Board's ("Board" or "EAB") January 2018 decision, *In re General Electric Company*, 17 E.A.D. 434 (EAB 2018) ("Order"), regarding the Region's October 2016 RCRA permit (or "2016 Permit") (Att. 2) for cleanup of the Housatonic Rest of River. The Order upheld the 2016 Permit – including the Region's decision not to require treatment of excavated sediment and soil prior to disposal and the Region's decisions on the extent of the cleanup remedy, including components of monitored natural recovery ("MNR") – in all but two respects. First, the Board remanded to the Region the 2016 Permit provisions addressing additional response actions for future projects conducted by third parties. 17 E.A.D. 523. Second, the Board remanded for further consideration whether off-site or on-site disposal is appropriate. Id. 569. Only the latter issue is in play in this appeal.

Following the remand and prior to the commencement of any draft permit proceedings under 40 C.F.R. §124, the Region entered into mediated discussions with the prior EAB petitioners and other stakeholders. *Determination on Remand and Supplemental Comparative Analyses of Remedial Alternatives for the General Electric (GE)-Pittsfield/Housatonic River* 

Monitored Natural Recovery or MNR for sediments uses ongoing, naturally occurring processes to contain, destroy, or reduce the bioavailability or toxicity of contaminants and requires monitoring to see if recovery is occurring at the expected rate. See Permit, Definitions 21.

The Region addressed this issue via changes in the 2020 Permit, see for example, 2020 Permit Section II.B.2.j.(2)(e). These permit changes did not receive any public comments and are not the subject of the appeal, so they will not be further discussed.

Site, Rest of River, EPA Region 1, July 2020 ("SCA") (Att. 3) at 3 and 4. Nine parties participated in the mediated negotiations, including appellant Housatonic River Initiative ("HRI"). SCA at 4; AR643188 (restricted collection, copyrighted article). In February 2020, EPA and seven other mediation parties, including all of the prior appellants except HRI, concluded negotiations with a signed Settlement Agreement (SA) (Att. 4.). SCA at 4, 6, fn 16.

In July 2020, based on an extensive Administrative Record ("Administrative Record," "Record" or "AR"), 3 including a supplemental comparative analysis of disposal options pursuant to the applicable remedy selection criteria, EPA issued a Draft Revised 2020 Permit ("Draft 2020 Permit") (Att. 5) for public comment accompanied by a *Statement of Basis for EPA's Proposed Revisions to the Remedial Action for the Housatonic River "Rest of River*," July 2020 ("2020 Stmt/Basis") (Att. 6). On December 16, 2020, EPA issued its Final 2020 Permit along with its *Response to Comments on EPA Draft 2020 Permit Modification to the 2016 Reissued RCRA Permit and Associated Statement of Basis for EPA's Remedial Action for the "Rest of River" Portion of the Housatonic River*, December 2020 ("2020 RTC") (Att. 7).

The 2020 Permit makes two overall changes to the 2016 Permit. First, it allows for the disposal of material containing only low-level PCBs in an on-site Upland Disposal Facility ("UDF") in the Woods Pond area in the Town of Lee, with off-site disposal required for higher levels of PCB material ("Hybrid Disposal"). See Att. 8. Second, it enhances the remedy selected in the 2016 Permit by increasing the amount of PCB removal (thus relying less on

<sup>3</sup> The Record materials have been assigned AR numbers. To obtain the document from the Record, use https://semspub.epa.gov/src/document/01/XXXXXX where XXXXXX is the AR number.

capping), removing two dams, and requiring an enhanced Quality of Life Plan, among other improvements. 2020 Permit, II.B.2.c.(1); II.B.2.f.(1); II.B.2.g.(1); and II.H.11.

HRI and the Housatonic Environmental Action League ("HEAL") (collectively, "Petitioners") have jointly petitioned the Board for review of the Final 2020 Permit. Petitioners argue that EPA's new Hybrid Disposal remedy is an arbitrary reversal of prior factual findings regarding the suitability of the UDF area and one made without any new investigations or change in circumstances. Pet. 12. They also argue that the Region failed to properly consider treatment technologies, Pet. 26, and that the Permit's MNR provisions are unprotective. Pet. 34.

Petitioners expend considerable rhetorical energy to paint the Region's selection of a new disposal approach —Hybrid Disposal—as an unexplained reversal from its 2016 remedy selection, ignoring significant aspects of EPA's basis of decision and Record in 2020. Contrary to Petitioners' arguments, the Region explained, in detail, the basis for its decision to allow disposal of low-level PCBs in the UDF and demonstrated that the UDF fully protects human health and the environment. 2020 RTC, 11-22. The UDF will sequester the currently uncontrolled PCB contaminated sediments and floodplain soils that pose unacceptable risks into a containment landfill with multiple protective safeguards. SCA at 24-26; 2020 RTC at 11-14. These safeguards include a restriction prohibiting the disposal of high-level PCBs in the UDF, a low permeability cap and a low permeability double bottom liner with leachate collection that addresses the permeability of the underlying soils, 4 a groundwater monitoring system, and the

Leachate is a liquid that has percolated through a landfill and may contain dissolved or suspended materials from the landfill material. The leachate collection system collects the leachate at the bottom of the landfill through piping placed above a low-permeable bottom liner. In a system with two liners, piping placed under the top liner can collect and detect any leaks in the top liner. Also, the second liner acts as a redundant safeguard in case the top liner leaks.

Permit's requirement that GE inspect, monitor, and repair the UDF system, if necessary. *Id.* and Att. 9. The UDF contains durable technology that has been used in many other Superfund Sites in New England. 2020 RTC at 12. Moreover, the UDF is a quarter mile from the Housatonic River. *Id.* and Att. 8. To determine the suitability of this new Hybrid Disposal, the Region conducted a supplemental comparative analysis of on-site, off-site, and Hybrid Disposal against the nine remedy selection criteria in the CD-Permit (defined below) (referred to herein as the "Nine Evaluation Criteria"), and the Region has explained why Hybrid Disposal was the best suited of the alternatives evaluated according to the Nine Evaluation Criteria. SCA, Section II.G. As discussed below, Petitioners also ignore the support for the 2020 Permit by former EAB litigants and others, including municipalities representing the communities most impacted by the cleanup.

Petitioners' arguments regarding treatment and MNR issues amount to an attempt to relitigate challenges already firmly rejected by the Board. The Board did not remand these aspects of the 2016 Permit, and the Region did not make any modifications to them in the 2020 Permit. Even if they were properly before the Board, they should be upheld. As for treatment technologies, as explained below, EPA has extensively evaluated such technologies, including thermal desorption, bioremediation, and a number of others. EPA has incorporated treatment into the remedy as much as practicable. Given the current unacceptable threats posed by the PCBs and the need to control sources of PCB releases to downriver reaches, however, the Housatonic River cleanup cannot be indefinitely delayed in the hope that a less invasive cleanup technology becomes viable. 2020 RTC at 30. As for MNR, the Record is clear that the Region's limited use of MNR in the downriver reaches is appropriate, and incorporates multiple

Performance Standards, reasonable timeframes, and several avenues for contingent responses. Section V. *infra*.

Additionally, in both their challenge to the UDF (which is before the Board) and to the extent of treatment and reliance on MNR (which are not), Petitioners have failed to show that their arguments and documents were raised during the public comment period (counter to 40 C.F.R. §124.13 and 40 C.F.R. §124.19(a)(4)(ii)), and, for many arguments, have failed to confront EPA's 2020 RTC by explaining why EPA's response was clearly erroneous (40 C.F.R. §124.19(a)(4)(ii)). Although Petitioners' opinion on scientific and technical issues and the proper remedy plainly differs from EPA's, the mere existence of alternative theories on technical matters does not present grounds for review. The Board should not disturb the determinations of the Region's experts, whose judgments deserve deference.

Accordingly, the Board should deny the Petition.

#### II. STATEMENT OF THE CASE

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

The Rest of River cleanup decision-making is being conducted pursuant to a RCRA corrective action permit, and the Board has jurisdiction to review the Permit as a RCRA corrective action permit modification. 40 C.F.R. §124.19; 42 U.S.C. §6976; 17 E.A.D. 448-452.

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

The Housatonic River begins immediately north of Pittsfield, Massachusetts and continues through Massachusetts and Connecticut to Long Island Sound. 17 E.A.D. 452; Att. 10. In Pittsfield, the River flows adjacent to the former GE facility, where GE used PCBs extensively. 17 E.A.D. 452-456. The portion of the River two miles below the GE facility to the

Long Island Sound is defined as the "Rest of River." At the GE facility, significant amounts of PCBs were released to soil, groundwater, and the Housatonic River, including migrating downstream. *Id.* 445-456. EPA concluded that such PCBs have contaminated the riverbed, riverbanks, floodplain, fish, ducks, other biota, and their habitats, and that such contamination poses unacceptable risks to human health and the environment. *Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River,"* June 2014 ("2014 Stmt/Basis") (Att. 11) at 14-18; 2016 RTC 39-42 (Att. 12). Among other risks, fish in the River contain high PCB levels and are not fit for consumption. AR456069 at 4; AR219190.

An estimated ninety percent of the PCB contamination lies in the upriver portions of the River (Reaches 5 and 6), which are located from the confluence of the East and West Branches of the River to Woods Pond in the Town of Lee. *Id.* 456. Accordingly, the risks to human health and the environment associated with the PCB contamination are higher in Massachusetts than in Connecticut.<sup>5</sup> 17 E.A.D. 463. Downriver, in Connecticut, sediment PCBs levels are generally low. AR574803. As Petitioners acknowledge in their comments, current PCB concentrations (that is, data collected in 1998 or later) in Connecticut average 0.18 ppm.<sup>6</sup> Pet. Att. 1 at 3; Pet. Att. 16; AR574803. For comparison, the upriver cleanup standard is 1.0 ppm. 2020 Permit II.B.2.c.(1); II.B.2.d.(1); II.B.2.f.(1); II.B.2.g.(1).

PCBs are a known human and animal carcinogen and have been linked to a number of other adverse health effects in humans and animals. 2016 RTC 39-44; 2014 Stmt/Basis at 14-18.

Page 5 of the 2003 Human Health Risk Assessment ("HHRA") Fact Sheet: June 2014; AR44254; HHRA Section 8, and Figures 8-1 and 8-2.

<sup>&</sup>lt;sup>6</sup> The term "ppm," an abbreviation for parts per million, is equivalent to milligrams per kilogram or mg/kg.

#### **II.B.1** Consent Decree and CD-Permit

In 2000, Plaintiffs – the United States, Massachusetts, and Connecticut – and Defendant, GE, entered into a Consent Decree to address the PCB contamination. ("Consent Decree," "Decree" or "CD"). Att. 13. The Decree requires the investigation and cleanup of PCBs released at and from GE's facility into the Rest of River. See Att. 10. At the time of Decree entry, the Rest of River investigation was underway but incomplete. Therefore, the Decree included a RCRA corrective action permit to govern the Rest of River remedy selection process. CD ¶22; CD Appendix G (the "CD-Permit"). Att. 14. The Decree 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. CD ¶22.p. Following issuance of the Permit and resolution of any Permit challenges, GE is required to perform the Permit's selected Rest of River Remedial Action, including operation and maintenance, pursuant to CERCLA and the Decree. CD ¶¶22.p.,z; 17 E.A.D. 457-461.

#### **II.B.2** Rest of River Remedy Selection Process

The CD's Rest of River cleanup remedy selection process has spanned twenty-three years from 1998 to the present. 17 E.A.D. 457-461. In 1998, during Decree discussions, GE and EPA initiated further sampling and studies of the Rest of River, beyond those GE conducted beginning in 1980. 2014 Stmt/Basis at 16. In 2003, GE submitted its analysis of the nature and extent of Rest of River contamination (RCRA Facility Investigation, AR49294). In 2004, EPA completed its peer-reviewed Human Health ("HHRA," AR219190) and Ecological Risk Assessments ("ERA," AR215498). In 2006, EPA conducted extensive computer modeling of the river system concluding with a peer-reviewed watershed, fate and transport, and food chain model. AR258097. GE identified preliminary cleanup standards (Interim Media Protection

Goals, AR248143) and, in 2008 and 2010, completed two versions of a Corrective Measures Study ("CMS") that analyzed different remediation alternatives. Att. 15, CMS; Att. 16, Revised CMS ("RCMS"); 2014 Stmt/Basis at 16; 17 E.A.D. 461-478.

### II.B.2.a EPA Remedy Selection for and Issuance of 2016 Permit

After extensive public outreach and discussions with the States, GE, and the public, EPA proposed, in May 2014, a Rest of River remedy for public comment. 2014 Stmt/Basis at 16; 2014 Draft Permit Modification ("Draft 2014 Permit") (Att. 17); 17 E.A.D. 478. The Draft 2014 Permit was supported by a 2014 Comparative Analysis of Remedial Alternatives ("2014 CA"), Att. 18. EPA evaluated a wide range of alternatives to address the unacceptable risks posed by GE's PCB contamination. 2014 Stmt/Basis; 2014 CA. EPA evaluated all the alternatives against the Nine Evaluation Criteria and all other relevant information in the Record. CD-Permit, II.G. The Nine Evaluation Criteria contain three threshold "General Standards": (i) Overall Protection of Human Health and the Environment; (ii) Control of Sources of Releases; and (iii) Compliance with Applicable or Relevant and Appropriate Federal and State Requirements or "ARARs." They also contain six balancing "Selection Decision Factors": (i) Long-term Reliability and Effectiveness; (ii) Attainment of Interim Media Protection Goals; (iii) Reduction of Toxicity, Mobility or Volume of Wastes; (iv) Short-term Effectiveness; (v) Implementability; and (vi) Cost. CD-Permit 20-23; 17 E.A.D. 458-460. These criteria are very similar to RCRA criteria. 17 E.A.D. 450-452.

EPA reviewed nine separate remediation alternatives (denoted as "SED/FP" alternatives) for remediation of PCB contamination in sediment and floodplains, and five alternatives for treatment/disposition of the excavated PCB-contaminated material (denoted as "T/D" or "TD" alternatives) against the Nine Evaluation Criteria and other Record information. 2014 CA Table

1, Combination Alternatives Matrix, 2014 CA at 10, 59-78; 17 E.A.D. 465-472. The remedy evaluation included a review of treatment options, including thermal desorption and bioremediation.<sup>7</sup> Based upon that comprehensive review, EPA proposed a remedy referenced in EPA's 2014 CA as "SED 9/FP 4 MOD" and "TD 1/TD1 RR." 2014 CA at 59, 77.

In October 2016, after public comment, EPA finalized its 2016 Permit, accompanied by the 463-page 2016 RTC. 17 E.A.D. 481. That remedy relied on a combination of cleanup approaches to address PCB contamination, to reduce downstream transport of PCBs and PCBs in fish tissue, allowing for greater consumption of fish, and to avoid, minimize or mitigate impacts to sensitive areas, species, and habitats. 2014 Stmt/Basis at 1-2. In the upriver portions, the remedy required a combination of active excavation and capping of sediments and floodplain soils. 17 E.A.D. 467-470. For the downriver portions, that is, Reaches 9-16 and the flowing portions of Reach 7, the remedy selected was MNR. *Id.* 538. The Region determined that MNR was appropriate for those reaches because PCB concentrations are low in those areas, the sediment is reasonably stable, human health and ecological risks are generally low, and PCB levels in biota have been declining in the last 25 years. *Id.* 538-539. The 2016 Permit required off-site disposal of all material. *Id.* 470-474, 481; 2016 Permit, II.B.5.

In November 2016, five parties filed petitions for review of the 2016 Permit with the Board: GE, HRI, Mr. C. Jeffrey Cook, the Housatonic Rest of River Municipal Committee, and the Berkshire Environmental Action Team. Massachusetts and Connecticut filed pleadings supporting the Region's permitting decision, and other municipal or non-profit organizations

For the evaluation of treatment options, including thermal desorption, see CMS-Proposal, Section 4.0, CMS-P Supplement, Section 3.0, and CMS, Section 7.0. Bioremediation (including biological treatment) was screened out as not viable alternative and was not further evaluated in the CMS. For the screening of bioremediation, see CMS-Proposal, Sections 4.2.6 and 4.5.3; and CMS-P Supplement, Sections 3.4.3 and 3.5.3.

filed amicus curiae briefs expressing support for or opposition to various aspects of the permitting decision.

#### II.B.2.b The Board's 2018 Decision Largely Upholding the 2016 Permit.

In January 2018, the Board upheld the 2016 Permit against all challenges, with two exceptions. First, the Board remanded the 2016 Permit provisions addressing additional response actions for Legally Permissible Future Projects or Work and directed the Region to correct an apparent inconsistency with the Consent Decree. *Id.* 520-523. The Region did so in the 2020 Permit. Second, the Board remanded the selection of off-site disposal and directed the Region to "further consider whether off-site or on-site disposal is appropriate." *Id.* 569.

#### II.B.2.c The Region's Next Steps After the Board's Order

#### Mediation and Settlement Agreement

Following the Board's 2018 remand of the consideration of off-site or on-site disposal, the Region began to gather and evaluate information responsive to the Board's concerns. Concurrently and before any draft permit proceedings, the Region entered into mediated discussions with the prior EAB petitioners and other stakeholders. Nine parties participated in the mediated negotiations: EPA, the Rest of River Municipal Committee (Towns of Great Barrington, Lee, Lenox, Sheffield, and Stockbridge), the City of Pittsfield, the State of Connecticut, the Massachusetts Audubon Society, the Berkshire Environmental Action Team, C. Jeffrey Cook, GE, and HRI. Mediation was conducted from 2018 through early 2020, culminating with a Settlement Agreement in February 2020.

Despite Petitioners' repeated mischaracterization of the negotiations as "secret," one of the Petitioners, HRI, actually participated in the negotiations. Additionally, EPA kept the public informed regarding the status of the mediated discussions, within the bounds of the parties' mediation agreement. EPA updated the Site's Citizens Coordinating Council, of which HRI and HEAL are members, regarding the negotiations during regularly scheduled meetings. AR629332 and AR100012722. EPA held an open public meeting regarding the mediated discussions on December 3, 2018. AR631424, AR631451, and AR631413 (restricted collection, copyrighted article).

#### Development of the Draft 2020 Permit

The 2020 Permit is based on the information developed and analyses performed by the Region and presented for public comment and reflects EPA's responses to comments received, in accordance with 40 C.F.R Part 124. Following mediation, EPA conducted the supplemental comparative analyses described below to test the suitability of the conceptual remedy proposal against other alternatives, using the Nine Evaluation Criteria *prior to* issuing the Draft 2020 Permit for comment. This thorough technical evaluation, performed by EPA's experts, demonstrated that the Hybrid Disposal approach, *which the parties had coalesced around in principle* during the mediation process, was viable *in fact*, and it is this evaluation that is before the Board.

For Hybrid Disposal, the 2020 Permit contains binding restrictions regarding the PCB contaminant levels that can be disposed of at the UDF. Final 2020 Permit at Attachment E. The 2020 Permit's Attachment E allows disposal in the UDF of low-level material that does not require disposal in a chemical waste landfill regulated by the federal Toxic Substances Control Act ("TSCA") (that is, material equal to or exceeding an average of 50 parts per million ("ppm") PCBs) and that is not a hazardous waste that would require disposal in a RCRA hazardous waste Subtitle C landfill. *Id.* Higher-level material is not permitted in the UDF and will continue to be

disposed of off-site. *Id.* Based upon these Permit limitations and river and floodplain sampling data, the average concentrations of PCBs to be placed in the UDF will be approximately 20 to 25 ppm. 2020 RTC 61.

The 2020 Permit also incorporates a number of enhancements to the active upriver and floodplain cleanup, including the removal of more PCB contaminated sediments to 1 ppm (that is, more removal than the 2016 Permit) in six different reaches of the River that will eliminate almost 100 acres of capping of river sediments (one-third of all capping in the 2016 plan), the removal of two dams, enhanced floodplain removal, and an enhanced Quality of Life Plan to mitigate construction-related impacts. 2020 Permit, II.B.2.c.(1); II.B.2.f.(1); II.B.2.g.(1); II.B.3.a.(1); and II.H.11.

### II.B.2.d EPA's 2020 Supplemental Comparative Analyses of Alternatives ("SCA")

Prior to issuing its Draft 2020 Permit for public comment, EPA conducted two targeted supplemental comparative analyses against the Nine Evaluation Criteria. First, the Region compared two sediment/floodplain alternatives: the 2014 Alternative selected in the 2016 Permit that was reviewed by the Board ("2016 Alternative"), and a 2020 Alternative that included enhancements to the 2016 Alternative. Second, the Region compared three disposal alternatives: the entirely off-site disposal alternative selected in the 2016 Permit that the Board reviewed; onsite disposal at Woods Pond only, and Hybrid Disposal. In its comparative analyses, the Region found that the 2020 Alternative was the better suited sediment/floodplain alternative, and that the Hybrid Disposal alternative was the best suited disposal alternative. SCA at 24, 39.

#### II.B.2.e Draft 2020 Permit, Public Comment Period, and Final 2020 Permit

After completing the SCA in July 2020, EPA issued for public comment its Draft 2020 Permit accompanied by a 40-page Statement of Basis. The Draft 2020 Permit shows the changes from the 2016 Permit. EPA's 2020 Statement of Basis clearly stated EPA was only seeking comments on the proposed changes to the 2016 Permit, which as described above had been upheld by the Board in almost all respects.<sup>8</sup> 2020 Stmt/Basis at 1, 5 and 9. EPA not only followed, but exceeded, all required public notice and comment required under RCRA, 40 C.F.R. §124.10(b), 40 C.F.R. §124.14(a), and CERCLA, 40 C.F.R. §300.430(f)(3)(i)(C). EPA held a 66-day comment period on the Draft 2020 Permit, from July 14, 2020 to September 18, 2020.<sup>9</sup> EPA performed extensive outreach and received comments from 428 commenters. 2020 RTC I.C. EPA reviewed the public comments on the Draft 2020 Permit and, on December 16, 2020, issued the Final 2020 Permit and 2020 RTC.

#### **II.B.3** Position of the States

The remedy in the Final 2020 Permit reflects EPA's coordination with and support from Massachusetts and Connecticut. The State of Connecticut was a signatory to the 2020 Settlement Agreement and did not submit any comments on the Draft 2020 Permit.

Massachusetts provided comments on the Draft 2020 Permit but did not object to the selected remedy. Att. 19.

## II.C Principles Governing Board Review of the Appeal

#### II.C.1 Scope of the Appeal after a Remand

After a remand, "the scope of the appeal is further limited to the remanded permit condition(s) and to any changes to the permit." *In re Upper Blackstone Water Pollution* 

Although not required to do so, EPA responded to many comments regarding issues outside of the remand to facilitate public understanding of the cleanup. 2020 RTC 7. In the RTC, EPA stated that by responding to those comments it did not reopen for further review any matters or issues beyond the scope of the remand. *Id.* 

Prior to the formal public comment period, in February and March 2020 EPA participated in three informational sessions held by local officials regarding the February 2020 Settlement Agreement.

Abatement District, 15 E.A.D. 297, 302 (2011); See also In re Knauf Fiber Glass, GmbH, 9 E.A.D. 1, 7 (EAB 2000) ("All other issues pertaining to this [] permit should have been raised at the time of the first appeal. Issues raised outside of the appeals period on the original permit are considered untimely.") On remand, EPA reopened the comment period pursuant to 40 C.F.R. §124.14(c). Under that provision, comments filed during the reopened comment period are limited to the substantial new questions that caused its reopening.

In this appeal, the only issues properly before the EAB are the reconsideration of off-site versus on-site disposal and the other permit changes made in the 2020 Permit. The Board did not remand any permit conditions relating to alternative treatment technologies or MNR, and the 2020 Permit contains no changes from the 2016 Permit regarding alternative treatment technologies or MNR. 2020 Stmt/Basis at 1 and 3; Draft 2020 Permit; Paragraph II.B.2 *supra*. Accordingly, Petitioners' arguments regarding treatment technologies and MNR are beyond the scope of the remand and must fail.

Those two challenges are additionally flawed because the Board affirmatively rejected them in its prior decision. 17 E.A.D. 537-540, 577-582. Allowing a petitioner to relitigate issues already decided by the Board would raise many of the same policy concerns as does issue preservation, undermining the "efficiency, predictability, and finality of the permitting process." *In re BP Cherry Point*, 12 E.A.D. 209, 220 (EAB 2005). This is so even if the Board decided an issue on procedural grounds. As the Board has frequently noted, "procedural rules…add a needed finality to the permit process." 17 E.A.D. 580.

#### **II.C.2** Threshold Review Requirements before Substantive Review on the Merits

The Board first reviews whether a petitioner has satisfied threshold procedural requirements, and, if met, only then addresses a petition on its merits. 17 E.A.D. 446.

Petitioners misstate the relevant standard of review governing EAB appeals. They assert it is governed by the Administrative Procedures Act's arbitrary and capricious standard, but under 40 C.F.R. § 124.19(a)(4), a petitioner bears of the burden of demonstrating clear error of fact or law. Petitioners completely ignore the actual standard of review applicable to EAB appeals. Pet. 11-12.

#### II.C.2.a Preservation of Issues for Board Review

To preserve an issue for review, a petitioner has the burden to demonstrate, with specific citations, that each issue or argument was raised during a public comment period, unless the issues or arguments were not reasonably ascertainable. 40 C.F.R. §124.13 and 40 C.F.R. §124.19(a)(4)(ii); see also *In re City of Moscow*, 10 E.A.D. 135, 141, 149-50 (EAB 2001).

Petitioners failed to demonstrate that they have preserved multiple issues raised in the Petition, including the arguments related to the Area of Critical Environmental Concern ("ACEC") (III.D, *infra*), arguments made on treatment technologies (IV, *infra*), and the arguments about the appropriate guidance relating to MNR (V, *infra*).

#### **II.C.2.b** Specificity and Obligation to Confront Regional Responses

As a threshold requirement, a petitioner must, for each issue being contested, clearly and specifically argue, with legal and factual support, why the Board should grant review. 40 C.F.R. \$124.19(a)(4). The Board "will not entertain vague or unsubstantiated claims." *In re City of* 

Attleboro, 14 E.A.D. 398, 406 and 443 (EAB 2009); General Electric, 17 E.A.D. 488 (petitioner's blanket assertion was too general).

Additionally, a petitioner must confront the permit issuer's responses to comments and may not merely reiterate previously submitted comments. *In re Indeck-Elwood*, LLC, 13 E.A.D. 126, 170 (EAB 2006). (A "petitioner's failure to address the permit issuer's [response to comments] is fatal to its request for review."); 40 C.F.R. §124.19(a)(4)(ii) ("To the extent a petitioner challenges an issue the permit issuer addressed in its Response to Comments, the petitioner must provide a record citation to the comment and response and also must explain why the permit issuer's previous response to that comment is clearly erroneous or otherwise warrants review."); *In re City of Taunton*, 17 E.A.D. 105, 111-112. (EAB 2017).

Petitioners' vague and unsupported arguments that failed to confront the Region's 2020 RTC include the costs discussion in III.E below; the discussion on bioremediation, thermal desorption, and treatment technologies generally in IV; and MNR at V.

#### **II.C.3** Standard of Review on the Merits

The Board will deny review of a RCRA permit decision unless the decision is based on a clearly erroneous finding of fact or conclusion of law. 40 C.F.R. 124.19(a)(4)(i). The Board's review should be sparingly exercised, and most issues should be finally determined at the permit issuer level. 17 E.A.D. 446. Review is on the Administrative Record. *Id.* 446. The burden of demonstrating that review of a permit decision is warranted squarely rests with the petitioner. *Id.* 447.

#### II.C.3.a Deference for the Agency's Scientific/Technical Judgment

The Board gives substantial deference to the permit issuer's technical judgment. *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). "[C]lear error [] is not established simply because [a] petitioner presents a difference of opinion or alternative theory regarding a technical matter." *Id.* (citation omitted). Therefore, in a challenge to scientific or technical issues, a petitioner must present the Board "with references to studies, reports or other material that provide relevant, detailed, and specific facts and data about permitting matters that were not adequately considered by [EPA]." *Envtl. Disposal Sys., Inc.*, 12 E.A.D. 254, 291 (EAB 2005).

On matters that are fundamentally technical or scientific in nature, the Board defers to EPA's technical expertise and experience, as long as EPA adequately explains its rationale and supports its reasoning in the Administrative Record. *In re City of Taunton*, 17 E.A.D. 112. This deference 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.*, 12 E.A.D. 22, 33 (EAB 2005). Failure to rebut the region's technical conclusions leaves a record supportive of the region's permitting decision. 17 E.A.D. 491.

Regarding permit changes, an agency may change its position so long as it explains with "reasonable clarity" the reasons for the change. See *In re Veolia ES Technical Solutions, L.L.C.*, 18 E.A.D. 194, 208 (EAB 2020).

All of the issues raised by Petitioners are squarely technical/scientific decisions made by the Region, using its technical expertise and experience. The extensive Record supports the Region's decisions, as described more fully below in III-V. At best, Petitioners offer a difference of opinion on the Region's 2020 selection of the Hybrid Disposal approach, or their reiteration of the appropriate role for treatment technologies and MNR.

#### **II.C.3.b** Presumption of Regularity for Agency Action

There is a presumption that an agency's official duties have been "properly discharged" unless "clear evidence to the contrary" is presented. *United States v. Chem. Found., Inc.,* 272 U.S. 1, 14-15 (1926). Also see *Veolia*, 18 E.A.D. 228. For several of their assertions regarding EPA's actions or motivations, Petitioners have failed to support their beliefs with any supporting material, much less clear evidence to the contrary, and have thus failed to overcome this presumption. Pet. I.B. at 17-19; Pet. I.C. at 19-22; and I.E. at 24-25. As such, those claims must fail.

#### **ARGUMENT**

#### III. ARGUMENTS PERTAINING TO THE UPLAND DISPOSAL FACILITY

III.A Petitioners Have Not Shown Clear Error or Rebutted EPA's Conclusion that the UDF Is Safe, Effective, and Protective of Human Health and the Environment.

Petitioners allege that the UDF location is unsuitable for a disposal facility and that the Region's UDF decision runs contrary to its prior findings. Pet. at 14-17.

EPA, however, has explained in detail, without rebuttal, how the new Hybrid Disposal alternative at the UDF is protective of human health and the environment. SCA at 24-26; 2020 RTC 13. The 2020 RTC described a number of factors regarding the suitability and protectiveness of the UDF area for Hybrid Disposal: the fact that the UDF will only accept low-level PCB contamination (2020 RTC 11); the distance of the UDF from the River of more than ½ mile (2020 RTC 11); the UDF's low-permeability cap and low-permeability double liner system

with leachate collection (2020 RTC 11); studies showing the long-term durability of caps and liners, (2020 RTC 12, 18); the Region's experience with capping (2020 RTC 12); the fact that two landfills containing PCBs at the GE Site in Pittsfield are safely isolating and containing PCBs (2020 RTC 12, II.A.4 at 18); the Permit's requirement that GE monitor and repair the cap if necessary (2020 RTC 19); the tendency of PCBs to attach to soil and organic matter, which makes them less prone to migration in groundwater than other chemicals (2020 RTC 21); and the Permit's requirement for a system of groundwater monitoring wells to detect any elevated levels of contaminants (2020 RTC 21-22). <sup>10</sup> EPA agrees that the area underlying the UDF contains permeable soils, but the UDF's double low-permeability bottom liner and leachate collection address that concern. 2020 RTC 13.

The UDF will go beyond the requirements for PCB chemical waste landfills by using two bottom liners with permeabilities that meet or exceed federal TSCA requirements for PCB landfills (the second of which will detect any leaks from the top bottom liner). 40 C.F.R §761.75(b)(2). Furthermore, the low levels of PCBs slated to be disposed of in the UDF (a maximum average of less than 50 ppm and estimated to be between 20 and 25 ppm on average) are not even subject to the TSCA PCB chemical waste landfill regulations; they could be disposed of in a municipal solid waste landfill or a non-municipal non-hazardous waste landfill. 2020 RTC 12-13. Such landfills typically have lower levels of protection, such as not including any bottom liners or leachate collection. *Id.* 12. Further, for low occupancy areas, TSCA allows

Petitioners statement that monitoring wells may fail is not in the comments and should be disregarded. Pet. at 16. EPA notes, however, that monitoring wells can readily be repaired or replaced.

PCB remediation waste to remain in place at levels below 25 ppm without *any* excavation or capping. *Id.* 13.

As for being sited above a medium yield aquifer (or a potentially productive aquifer), the Region stated that use of the groundwater is unlikely due to existing groundwater contamination, a statement Petitioners have neither addressed nor rebutted. 2020 RTC at 65.

Petitioners have not rebutted any of these facts, let alone shown clear error. EPA has thoroughly explained why the UDF will be safe, effective, and protective of human health and the environment in its 2020 RTC and the other 2020 permitting documents and has been presented with no quantitative evidence or scientific studies to the contrary. Petitioners advance their arguments regarding the UDF without addressing or even mentioning the SCA or the 2020 Stmt/Basis, where EPA analyzed the suitability of the remedy against the Nine Evaluation Criteria.

In support of their argument, Petitioners attach a report from a geologist, Dr. David J. DeSimone, that was not submitted to EPA during the comment period or otherwise. See Pet. Att. 6. Accordingly, this report is procedurally improper, and EPA has moved to strike the report. Even if it were appropriate for Board review, the primary finding confirms what is already known and documented in the AR: there are permeable soils underlying the UDF location. EPA agrees that such soils are permeable and, based upon monitoring well elevation data, that the localized groundwater flows towards the River. EPA, however, has accounted for these facts and has determined that the UDF will be protective of human health and the

Contradictorily, the Petition states both that groundwater flows towards the River and that it is difficult to predict groundwater flow. Pet. at 15, line 10 vs Pet. fn 69.

environment. SCA II.F; 2020 Stmt/Basis at 28-35; 2020 RTC 11-14. The report neither addresses nor rebuts these findings. At most, the Report expresses a mere difference of opinion. Dr. DeSimone does not address the low-level concentrations of the PCBs designated for the UDF; the chemical nature of PCBs that does not make them prone to migration in groundwater; or, based upon monitoring well data, the upwelling of groundwater near the UDF that would prevent any contamination from reaching the bedrock. <sup>13</sup> 2020 RTC 21 and 22.

Because the Petitioners have failed to confront and rebut EPA's Record, and because they have relied on information outside the Record (which, even if considered by the Board, does not demonstrate clear error), Petitioners' argument that the UDF is not protective must fail.

# III.B Petitioners Ignore the New 2020 Supplemental Comparative Analysis that Supports Hybrid Disposal and the Fact that Hybrid Disposal Differs from the Alternatives Evaluated in 2016

Petitioners contend that the Region's disposal decision in the 2020 Permit is a reversal of prior factual findings without new investigation or a change of circumstances. Pet. at 12-14.

To the contrary, the Region's decision is based on a new alternative – Hybrid Disposal – that significantly differs from the all on-site and the all off-site disposal alternatives that were considered for the 2016 Permit. Furthermore, the on-site disposal remedy evaluated in 2016

Although the expert states that the UDF location is a "textbook" example of where not to locate a landfill (page 4), the expert has not cited a single source, regulation, guidance document, or textbook regarding the siting and protectiveness of landfills. (In addition, Attachment 6 contains no information indicating that Dr. DeSimone has any expertise in the siting of landfills for the purposes of remedial cleanups or otherwise.)

In footnote 67 of their Petition, Petitioners cite for the first time an EPA guidance and a scientific paper to support their argument that the EPA has acknowledged that liner systems may fail. These sources, however, do not recommend against properly designed and monitored landfills with a low-permeable cover, double bottom liner, and leachate collection, such as the proposed UDF. They recommend double bottom liners and groundwater monitoring longer than 30 years. EPA's Permit requires double bottom liners and such monitoring after closure. 2020 RTC 19. Petitioners have not explained why these sources were not cited in the public comments.

consisted of three disposal sites (Forest Street, Rising Pond, and Woods Pond), not just Woods Pond. The 2020 remedy is based upon a new supplemental comparative analysis of off-site disposal, on-site disposal at Woods Pond only, and Hybrid Disposal at Woods Pond. SCA Petitioners completely ignore this new analysis, not even citing the SCA in their UDF Section, and incorrectly state that EPA conducted no new evaluations in 2020.

Also, due to the low levels of PCBs, the federal TSCA chemical waste landfill regulations (40 C.F.R §761.75) that were at issue in the prior appeal are not ARARs for Hybrid Disposal and do not need to be waived. SCA at 33; 2020 Stmt/Basis at 29-30. Petitioners incorrectly imply that EPA is waiving the TSCA chemical waste requirements. Pet. 13. In fact, the UDF will comply with TSCA through the Region's risk-based determination under TSCA 761.61(c) that the remedy, including Hybrid Disposal, will not pose an unreasonable risk of injury to health or the environment as long as the remedy complies with all of the conditions set out in the TSCA Determination. SCA 33 and B-1; 2020 Permit, Attachment D; 2020 Stmt/Basis at 29-30.

Community support is another difference from 2016. Petitioners ignore that the 2020 remedy has significantly more community support—a consideration in the Implementability criterion of the Nine Evaluation Criteria—than did GE's 2016 alternative of entirely on-site disposal. 2020 RTC 73. The following parties affirmatively support the 2020 Permit: the six river-abutting municipalities most affected by the cleanup, the State of Connecticut, and a number of environmental organizations: Berkshire Environmental Action Team, Berkshire Natural Resources Council, Housatonic River Commission, Housatonic Valley Association, and

EPA did not receive any comments opposing EPA's use of a risk-based determination pursuant to TSCA 761.61(c), even though EPA specifically asked for comments on this determination. 2020 Stmt/Basis at 39.

the Massachusetts Audubon Society.<sup>15</sup> The Commonwealth of Massachusetts has stated that it does not object to the remedy. Att. 19. Except for HRI, none of the prior appellants to the EAB have appealed this Permit. Additionally, the Housatonic Rest of River Municipal Committee has filed an Amicus Brief supporting EPA's remedy, including Hybrid Disposal. Dkt. #14. EPA recognizes that the support is not unanimous and took that into account in the remedy selection process, including in the SCA and in responding to the comments against on-site disposal. SCA at 38-39; 2020 RTC 9-10.

Petitioners overstate EPA's past evaluation of on-site disposal, asserting that EPA previously found that the UDF site was "unsuitable." Pet. 14. Prior to 2020, EPA had never evaluated the Hybrid Disposal of low-level PCBs at Woods Pond, and EPA has never stated that such disposal was unprotective or unsafe.

In sum, Petitioners have not shown clear error in EPA's determination that Hybrid Disposal is the best suited under the Nine Evaluation Criteria. Petitioners entirely ignore the evolution of the permitting record that underlies the changes between the 2016 to 2020 Permits. The appropriate comparison is the record underlying the 2016 Permit proceeding with the Record supporting the 2020 Permit, which fully explains and justifies the changes made between the two permitting decisions.

is contained in their written comments. AR649584.

Support from the municipalities, the State of Connecticut, Massachusetts Audubon Society, and the Berkshire Environmental Team is evidenced by the Settlement Agreement, the Amicus Brief of the Rest of River Municipal Committee (Dkt #14), and comments of the individual entities. AR649584. Support from the Berkshire Natural Resources Council, the Housatonic River Commission, and the Housatonic Valley Association

# III.C The Region's Hybrid Disposal is Based upon Full and Careful Consideration of Disposal Alternatives

Petitioners contend that the Region's decision-making on the 2020 Permit was not the result of applying governing remedy selection standards to facts, but rather a sudden decision from "secret" settlement negotiations followed by after-the-fact decision-making. Pet. at 17-19.

This is incorrect. Far from sudden, the Region conducted a thorough, deliberate evaluation of alternatives for the 2020 Permit. The 2020 Permit is based on the Draft 2020 Permit the Region issued for comment and the accompanying supporting documents, the comments received, and the Region's response to comments and other documents developed for the Final 2020 Permit. In other words, the process for issuing and finalizing the Permit followed the standard regulatory process for RCRA permitting. Furthermore, the Administrative Record fully explains the Region's basis for determining that the Hybrid Remedy is supported by the Nine Evaluation Criteria. Any process the Region used in the exploratory stages of developing the Draft 2020 Permit is irrelevant to this appeal, because the Region complied with the regulatory process and the Permit stands or falls based upon the Administrative Record.

The decision to explore mediation prior to commencing draft permit proceedings was a policy choice, not a legal decision subject to review by the Board. See *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 127 (EAB 1999) (permit review process is not an open forum for consideration of every environmental aspect of a proposed project); *In Re Phelps Dodge* 

Petitioners also argue, in footnote 81, that the Decree requires public notice and comment on a proposed Rest of River permit prior to engaging in dispute resolution. Petitioners, however, mischaracterize the Decree. The Decree required that EPA issue its initial remedy decision as a RCRA permit modification for public comment (that is, the Draft 2014 Permit) and that after EPA notified GE of its intended decision, then *GE*, as Settling Defendant under the Decree, had a right to invoke dispute resolution. Decree Paragraphs 22.n and 22.o.

<sup>&</sup>lt;sup>17</sup> This mediation process was not part of the Decree's dispute resolution process.

Corporation, Verde Valley Ranch Development, 10 E.A.D 460, 522 (EAB 2002) (Board legally constrained to exercise review sparingly; no clear error where Region had discretion regarding which statutory authority to exercise). Alternative Dispute Resolution ("ADR"), including mediation, is a logical, proactive approach to attempt to resolve disputes. The Board's own website encourages the use of ADR: "Resolving conflict through the use of ADR can have many benefits including the faster resolution of issues and more creative, satisfying and enduring solutions." Confidentiality is important in ADR. See United States v. Town of Moreau, New York, 979 F. Supp. 129, 135-36 (N.D.N.Y. 1997). The Region's use of mediated negotiations with all the EAB challengers and other stakeholders led to eight of the nine mediation participants, including four of the five 2016 Permit challengers, coalescing around a scientific/technical solution to potentially settle complex issues. <sup>19</sup>

As support for their contentions, Petitioners cite a statement from an unnamed municipal official expressing concerns of other unnamed municipal officials regarding the potential outcomes of litigation. Pet. at 18. This third-party statement is irrelevant, does not directly concern EPA's permitting actions, and does not rebut the Region's analysis of alternatives. Petitioners also cite to an EPA response in an EPA July 2020 Frequently Asked Questions document ("July 2020 FAQs") (Att. 20). Pet. 18-19. Petitioners take this statement out of context to fit their narrative. The July 2020 FAQ statement is clearly related the Region's policy

<sup>18</sup> https://yosemite.epa.gov/oa/EAB\_Web\_Docket.nsf/General+Information/Alternative+Dispute+Resolution%20(A DR)?OpenDocument

Contrary to Petitioner's unsupported contention, the Settlement Agreement was not an agreement or Consent Decree subject to CERCLA. The Settlement Agreement memorializes the mediation parties' agreements and is clearly conditioned upon EPA's separate RCRA remedy-selection process. Settlement Agreement, Page 3.

choice in 2018 to attempt mediated discussions and not to its Permit decision-making, which complied with 40 C.F.R. Part 124.

# III.D For the ACEC, the Region Properly Considered the Potential Effects on Habitats and Properly Waived Massachusetts ACEC Regulations

With respect to the Region's analysis of state requirements prohibiting solid waste disposal in a state designated ACEC, Petitioners raise concerns about potential loss of habitat within the ACEC and question the Region's ARARs waiver finding that compliance with the state ACEC regulations would result in greater risk to human health and the environment than alternative options. Pet. 19-22.

#### III.D.1 The ACEC Habitat Concerns and ARARs Waiver Are Not Preserved for Review

Petitioners did not meet their burden of identifying where the habitat concerns and objection to the ACEC waiver were raised in the public comment period. 40 C.F.R. §124.19(a)(4)(ii). Public comments did not raise the habitat concern, and the only comments that referenced with any degree of specificity the ACEC issue did so without objection to EPA's waiver determination, or supported the Region's ARAR waiver.<sup>20</sup>

#### III.D.2 The Region Appropriately Considered the ACEC

Even if it were appropriate for Board review, the Region's consideration of the ACEC and its ARAR waiver of the state solid waste disposal requirements demonstrates considered judgment, is supported by the Record, and does not show clear error. The Region provided its

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In its September 18, 2020 public comments, the Commonwealth of Massachusetts stated that it did not object to the Region's use of the ARAR waiver for "greater risk to human health and the environment." Att. 19. The Rest of River Municipal Committee comments are at AR649587.

analysis and its detailed supporting rationale in the Record. SCA at 33 and Att. B; 2020 RTC II.I.4 to II.I.17 at 62-73; see also 2020 Stmt/Basis 29-30.

Petitioners incorrectly overstate the sensitive habitat in the UDF area.<sup>21</sup> Pet at 19-20. For context, the UDF disposal area constitutes about 20 acres and is located in an ACEC that contains 12,276 acres. Within the UDF area, including the operational area and the pipeline corridor, there are limited sensitive areas (that is, aquatic core habitats, wetlands, Vernal Pools, BioMap Critical Natural Habitats [Landscapes] or BioMap2 Core Habitats) and no mapped occurrences of Priority Habitat of Rare Species. SCA at 29 and C-3; AR647045. Any forested areas or sensitive habitats, including those in the proposed 10-foot wide pipeline corridor and the operational/support area, can be restored and/or replicated at the completion of disposal activities in areas outside the footprint of the disposal area. *Id*.

In questioning the Region's ARAR waiver determination (Pet. 21), Petitioners ignore a large body of Record material in their assertions about the Region's supposed failure to identify the benefits of the UDF and risks of other alternatives. Such UDF benefits and the risks of other alternatives are discussed in detail in the SCA.<sup>22</sup> SCA at B-3; 2020 RTC 63-65; see also 2020 Stmt/Basis 29-30. The Region specifically sought public comment on this proposed ARAR determination, including the potential ARARs waiver of the ACEC regulations. 2020 Stmt/Basis at 39. EPA did not receive any comments objecting to this waiver. 2020 RTC at 61-73.

But just one page later, in acknowledging the contamination in the Woods Pond area, Petitioner states: "There is no support, however, for the proposition that an ACEC are must be pristine." Pet. at 21.

Petitioners' critique of the Region's decision that the ACEC restrictions are not applicable is ultimately irrelevant. Pet 20-21. Even if the wastes were deemed to be solid waste under state law, the Region has stated that such requirements should be waived. 2020 RTC at 63.

Additionally, Petitioners frame the Region's 2020 ARAR waiver analysis as a change in position from 2016 and question why particular factors (the disturbed nature of the UDF area, its existing contamination, and the UDF's protectiveness safeguards) played a role in EPA's supposed change in position. However, Petitioners fail to acknowledge significantly changed circumstances under which the 2020 ARAR analysis was undertaken, which the Region clearly referenced. In determining whether compliance with the state ACEC requirements would create greater risk, the Region considered the factors highlighted by Petitioners and other circumstances present in 2020 but not in 2016, including the fact that the 2020 remedy contains cleanup enhancements, mitigation of impacts to towns and residents, and results in an expedited cleanup. SCA at B3-7, 2020 RTC 63-65; see also 2020 Stmt/Basis 29-30. Petitioner ignores Record material, especially pages B3-B7 of Appendix B to the SCA.

# III.E Petitioners Have Not Rebutted EPA's Conclusion that the UDF is Cost-Effective, and Their Assertions Regarding Certain Tangible and Intangible Costs are Unduly Vague and Speculative

For the UDF, Petitioners claim that the Region has not adequately evaluated ongoing costs of monitoring and repair and has not supported its cost-effectiveness finding; nor has it adequately evaluated costs to the community. Pet. at 22-24.

Citing no evidence or cost estimates, Petitioners make the bare allegation that any cost reductions from the UDF will be outweighed by longer-term costs of monitoring and repair. Pet. 23. Petitioners do not show how the Region committed clear error in evaluating the costs of the UDF compared to other alternatives. Petitioners do not even mention, let alone address, the Region's SCA, including the SCA's analysis of long-term reliability and effectiveness of the UDF (SCA 33-35), and the SCA's evaluation of Hybrid Disposal based upon detailed cost estimates, including operation and maintenance costs. SCA 39, 40, and Table 3.

Petitioners also assert that the UDF will impose certain tangible and intangible costs on the nearby communities. Pet. 23-24. Although both RCRA's and CERCLA's remedy selection processes do not consider the impact on nearby property values or tourism, 2020 RTC at 34-35, the Region nonetheless gave a detailed response to those concerns in its Response to Comments. 2020 RTC 34-40. Petitioners neither confront the substance of this response nor show clear error, other than stating that the Skeo Report EPA references in the RTC is not an appraisal. Pet. 23-24. The RTC and the Skeo Report, which was not meant to be an appraisal, provide unrebutted reasons why "a number of factors weigh against a significant decline in property values..." 23-24-2020 RTC at 35. The Petitioners' claims that the natural beauty of the area will be marred by the UDF are vague, speculative, and have been addressed in the RTC. See 2020 RTC 39-40. *In re City of Attleboro*, 14 E.A.D. 398, 443 (EAB 2009) ("[V]ague or unsubstantiated claims" are insufficient to warrant review).

### III.F The Region Properly Evaluated the Views of the Community

Petitioners assert the Region's evaluation of community support does not reflect the current community opposition and that the Region has not demonstrated a change in circumstances that warrants a different analysis than for the 2016 Permit. Pet. 24-25.

Contrary to Petitioners' claims, the Region carefully considered community acceptance in its 2020 remedy selection. Petitioners fail to acknowledge that the Hybrid Disposal approach,

<sup>&</sup>lt;sup>23</sup> Ironically, immediately after criticizing the Skeo report for not constituting an appraisal, Petitioners attach a one-page real estate broker's opinion that that is not an appraisal. Petition, Attachment 8.

Although a prior 2012 Skeo report concluded that there would be a 3.5% decline in property values near the Woods Pond landfill location, as EPA acknowledged in the RTC (page 39), that report was analyzing a landfill that was not limited to low-level PCB contamination. Also, the 2012 Skeo report estimated that overall property values would <u>increase</u> as a result of the cleanup. 2020 RTC at 39.

while not satisfactory to some stakeholders, has been endorsed by a number of parties, as discussed above. 2020 Stmt/Basis 34; 2020 SCA 38; 2020 RTC 43 and 73. Those expressions of support for Hybrid Disposal are much greater than the support in 2016 for the all on-site disposal alternative, which encountered substantial local and state opposition. 2016 RTC 235, 264-266.

### IV. ARGUMENTS REGARDING TREATMENT

## IV.A The Petitioners' Already-Rejected Treatment Arguments Must Fail; EPA Properly Evaluated the Preference for Treatment, Thermal Desorption, and Bioremediation

Petitioners contend that the 2020 Permit violates CERCLA's requirement to use alternative treatment technologies to the maximum extent practicable and that the Region failed to consider reasonable alternatives. Pet. 26-32. Petitioners assert a lack of testing of thermal desorption or bioremediation in the River (Pet. 27); disagree with the Region not reconsidering bioremediation or thermal desorption in the 2020 Permit process (Pet. at 29-30); disagree with the timing of the Region's 2020 commitment to begin a "Challenge" competition to identify innovative technology strategies and solutions (Pet. 30-31); and point to the potential use of innovative treatment technologies for some of the contaminated sediments (Pet. 31).

### IV.B Petitioners' Treatment-related Claims Fail Multiple Threshold Requirements

On multiple levels, Petitioners' claims fail threshold procedural requirements. First, Petitioners' treatment-related arguments are beyond the scope of the remand and are therefore not appealable to the Board. Treatment technologies were directly before the EAB during the 2016 appeal. 17 E.A.D. 577-584. The EAB upheld the extent of treatment required by the 2016 Permit, and the two aspects of the 2016 Permit remanded by the Board do not touch on treatment. *Id*.

Petitioners argue that when the EAB remanded the issue of off-site versus on-site disposal, the EAB somehow returned "the question of where and how" PCB contaminated sediments should be handled and therefore the question of whether some of the material should be treated. Pet. 29. Petitioners make this claim without any support, case law citations, or explanation of how an EAB ruling regarding where to dispose of contaminated material (off-site vs. on-site) necessitates an evaluation of whether and how that material should be treated. The 2018 EAB decision addressed off-site versus on-site disposal and issues relating to treatment in separate sections (Section V.C.1. and 2.), reflecting the straightforward fact that the "where" of disposal is logically separate from the question of whether the material should be treated. The EAB regulations are clear: comments filed during a reopened comment period are limited to the substantial new questions that caused its reopening. 40 C.F.R. §124.14. There would be no rationale for this regulatory limitation if every Permit change, regardless of how tangentially related, allowed all other provisions to be reopened. Petitioners fail to reconcile their expansive interpretation of the scope of the remand with the clear language of the EAB decision regarding the remand, and associated EAB precedent cited above. Section II.C., *supra*.

The 2018 EAB decision expressly rejected HRI's challenges regarding CERCLA's preference for treatment (17 E.A.D. 583-584),<sup>25</sup> thermal desorption (*Id.* at 581), and bioremediation (*Id.* at 582). Petitioners in this appeal raise almost identical arguments as were raised in the prior appeal. Pet. at 26-32. The 2020 Permit, however, makes no changes regarding treatment technologies. 2020 RTC at 23. Therefore, the Board should reject these

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The EAB rejected HRI's argument based upon a failure to preserve the preference for treatment argument. 17 E.A.D. 583. However, the EAB went further and held that notwithstanding the failure to comment, HRI presented "no specific argument challenging [the] record of consistency with CERCLA requirements." *Id* fn 63.

challenges.<sup>26</sup> It is unavailing that two of the three arguments were rejected on procedural grounds; procedural rules provide a needed finality to the permit process. 17 E.A.D. 580.

Second, Petitioners did not substantively confront the Region's 2020 RTC. Even though treatment is beyond the scope of the remand, in the 2020 RTC (Section II.B, Sections II.B.1 through II.B.6, in particular), EPA referred to the prior evaluations of treatment technologies and explained why EPA did not select such technologies. Other than incorrectly arguing that the Region did not consider treatment alternatives, Petitioners did not substantively confront the 2020 RTC regarding treatment. 2020 RTC at 23-27, citing 2016 RTC Section III.F.3 (pages 270 to 273). For example, the Petitioners did not substantively confront the significant drawbacks associated with thermal desorption, such as potential delays in the completion of the cleanup and the likelihood that treated material would need to be landfilled. 2020 RTC 27-28. Likewise, Petitioners did not substantively confront the issues related to the bioremediation project conducted at the New England Log Home Site (2020 RTC 27), or the Region's explanation regarding CERCLA's preference for treatment (2020 RTC 24). Petitioners have not met their burden of showing that EPA's RTC "was clearly erroneous or otherwise warrants review." 40 C.F.R. §124.19(a)(4)(ii).

Third, as described below, Petitioners have now included a significant amount of material that was not preserved for review and is not in the Administrative Record. This material should be rejected. 40 C.F.R. §124.19(a)(4)(ii).

Petitioners' case law regarding EPA's alleged failure to consider alternatives, see Pet. 26-27, is irrelevant, because EPA considered many remedial alternatives as discussed above.

## IV.C Even if Before the Board, Petitioners Have Not Met Their Burden of Showing Clear Error Regarding the Preference for Treatment

Petitioners allege that EPA's remedy does not meet CERCLA's "preference for treatment." Pet. at 26. Under CERCLA, however, the preference for treatment is not unbounded but is "to the maximum extent practicable," and EPA may select a remedy that is "not appropriate" for the preference if EPA explains why did not select treatment as the primary remedy element. 42 U.S.C. §9621 (b)(1) and NCP 40 C.F.R. §300.430(f)(5)(ii)(F).

Treatment is a part of the 2020 Permit remedy. The remedy employs amendments, such as activated carbon, that treat PCBs in lieu of excavation/dredging in Reach 5B sediments, certain backwaters, and as an initial remediation measure in vernal pools. 2020 Permit, II.B.2.b.(1)(b) and (2); II.B.2.d.(1)(c) and (2); II.B.3.b.(1)(b) and (2)(d)-(h). Petitioner's dispute with EPA turns on the precise extent of treatment incorporated in the remedy—in other words, a disagreement with EPA's experts over a quintessentially technical matter.<sup>27</sup>

EPA explained the extent to which the remedy met the preference for treatment in the 2014 Comparative Analysis, the 2014 Statement of Basis, the 2016 RTC, and the 2020 RTC. See 2020 RTC 24-25. EPA explained how treatment technologies were considered, screened, and evaluated in detail according to the Nine Evaluation Criteria, including requiring GE to conduct a pilot test of chemical extraction. *Id*.

Petitioners express interest in the potential use of innovative treatment technologies for some but not all of the contaminated sediments. Pet. 31. This suggestion does not confront the technical issues regarding treatment, much less consider other factors, such as cost, that EPA discussed in its RTC. See 2020 RTC 27-28 The EAB should ignore this suggestion because it is vague (see 17 E.A.D. 446), and because Petitioners have not shown where this issue was raised in the comments.

EPA did not require a pilot test on thermal desorption or bioremediation because the Record, including the CMS-Proposal ("CMS-P") (Att. 21), CMS-P Supplement (Att. 22), and the CMS contained sufficient information for EPA to properly evaluate those treatment technologies without pilot testing. Thermal desorption was not pilot tested because its efficacy was already known and could be evaluated. CMS-P at 4-57 to 4-60 and CMS-P Supplement at 3-16, 3-17. Bioremediation (biological treatment) was evaluated in both GE's CMS-P and CMS-P Supplement, and GE concluded, and EPA concurred, that biological treatment of sediment and soils was not a viable or effective cleanup option. CMS-P at 4-39 to 4-40, 4-63; CMS-P Supplement at 3-7 to 3-9 and 3-15 to 3-16; and AR274224 at 2. Biological treatment was not viable or effective because, among other reasons, biological treatment processes have not been successfully demonstrated full-scale for PCBs in soil, and no processes or sites were identified in the literature where significant reductions in PCB concentrations have been documented. *Id*. Thus, neither a pilot test of bioremediation nor a further evaluation in the CMS was necessary.

Contrary to Petitioners' claim, EPA's Challenge program is not an indication that EPA failed to consider treatment technologies. The Record is detailed and clear that EPA has a strong, long-standing desire to evaluate technologies that will render the PCBs in contaminated material non-toxic or significantly reduce their toxicity. 2020 RTC 29-30; 2016 RTC 270-273. To that end, EPA's Challenge program committed to facilitate opportunities for research and testing of innovative treatment and other technologies and approaches for reducing PCB toxicity and/or concentrations in excavated soil and/or sediment before, during, or after disposal in a landfill. 2020 RTC 29.

Petitioners cite a laundry list of activities related to the evaluation of technologies going back "17 years prior [to the remand]," including HRI and HEAL urging EPA to incorporate

thermal desorption and bioremediation into the remedy even *before* the 2000 Consent Decree, a letter from the then-Regional Administrator to explore technologies, and statement that the Region has never required GE to test these techniques on River sediment. Pet. 9 and 27. The Record, however, demonstrates EPA's longstanding commitment to exploring the use of alternative technologies. EPA efforts have included screenings, evaluations, a pilot study of chemical extraction, the use of treatment in certain River areas, and the use of adaptive management. EPA detailed these efforts in 2020 and in 2016. See 2020 RTC 22-31 (Response II.B.4 at 26-27 in particular), citing the 2016 RTC, Section III.F.3 at 270-273. In both the 2016 RTC and the 2020 RTC, EPA concluded that "EPA believes that the cleanup cannot be indefinitely delayed until a less invasive technology is found that is appropriate for all components of the cleanup." 2016 RTC at 270, 2020 RTC 30.

## IV.D Even if Before the Board, Petitioners Have Not Shown EPA Committed Clear Error by Not Selecting Thermal Desorption

Petitioners claim that the Region did not fully evaluate thermal desorption. Pet. at 27-31. Petitioners assert past failures by the Region in consideration or testing of thermal desorption (Pet. 27-28), referencing two attachments (Pet. 31, Atts. 10, 18): Attachment 18 by Mr. Mickey Friedman, and Attachment 10 by a thermal desorption technology vendor, TerraTherm.<sup>29</sup> The former adds no new information that would undermine EPA's existing determination on

The 2020 Permit requires adaptive management "to adapt and optimize project activities to account for 'lessons learned,' new information, changing conditions, evaluations of the use of innovative technologies, results from pilot studies, if any, and additional opportunities that may present themselves over the duration of the project." 2020 Permit, Section II.F; 2016 Permit, II.F.

The TerraTherm letter references but does not attach an enclosure. Therefore, any references to information in the attachment cannot be reviewed. In addition to being procedurally flawed, the TerraTherm letter consists of only two pages and does not contain enough information regarding their technology to be meaningfully evaluated. The letter also describes a large site where thermal desorption was alleged to be employed, but the site is unidentified.

treatment versus disposal, and the latter is outside the Administrative Record, but in any event, does nothing to demonstrate error.

Although this issue is not properly before the Board, thermal desorption was extensively analyzed in the RCMS.<sup>30</sup> EPA determined, for a number of reasons, that thermal desorption was not the best suited alternative under the Nine Evaluation Criteria. See 2020 RTC at 25 for references to the 2014 Comparative Analysis and 2014 Stmt/Basis at 35-39.

Attachment 18 was submitted as a written comment during the Draft 2020 Permit comment period as support for thermal desorption. EPA replied directly to the comments in Attachment 18 in its 2020 RTC 27-28, but Petitioners have neither substantively confronted EPA's response to Attachment 18 nor shown how EPA's response was clearly erroneous or otherwise warrants review. 40 C.F.R. §124.19(a)(4)(ii). For example, Petitioners did not confront the drawbacks and issues with thermal desorption discussed in the 2020 RTC at 27-28, including the air emissions from the treatment, the potential cleanup delays that the technology could cause, excavation and transport needed, treatment of the leachate produced, the method of disposal of treated material, and community acceptance for a large area for staging and thermal treatment, lasting 15 years or more. 2020 RTC 27-28. Attachment 18 suggests that the thermal desorption facility could be located at the UDF area, although elsewhere the Petition argues that the UDF is a sensitive area and should not be disturbed. Pet. 21. More generally, Petitioners did not substantially confront 2020 RTC Sections II.B.3, II.B.4, and II.B.6 (pages 25-29).

For example, Chapter 9.5 of the RCMS contains 30 pages on thermal desorption alone, and Chapter 9.6 is a comparative analysis on all treatment/disposition alternatives based on the Nine Evaluation Criteria.

Petitioners state that thermal desorption has been proven effective to accomplish PCB reduction on multiple large sites, citing to Attachments 10 and 18. Pet. 31. Yet Attachment 18 identifies only two small sediment demonstration projects that only treated a total of 27 cubic yards of contaminated sediment. Pet. Att. 18 at 3, 4. Attachment 18 also references a larger project in Vietnam. This project was raised in HRI's 2016 petition and was dismissed by the Board. 17.E.A.D. at 579-581. Attachment 18 provides no new substantive information on thermal desorption that was not in the Administrative Record.

Attachment 10 is new, and EPA has moved to strike this attachment. Even if this twopage document were before the Board, it provides no substantively new information. The only
substantive information in Attachment 10 is that the vendor claims its technology will achieve
less than 1 ppm residual PCBs in soil/sediment. However, the RCMS remedy evaluation
assumed that treatment would reduce PCB concentrations to below 1ppm in the treated material.
RCMS at 9-109. Thus, this treatment efficacy was factored into EPA's remedy analysis, and
Attachment 10 would not result in a revised determination by EPA. Attachment 10 claims
sediment could be thermally treated "in-situ" (paragraph 2) but then states (paragraph 3) that the
material would need to be excavated or dredged. No examples of in-situ sediment treatment
were provided, and it is implausible that the proposed large-scale thermal desorption system
(such as shown in Attachment 18, pages 30-37), which requires heating soil or sediments, could
be used in-situ on sediment in a flowing river covering approximately 40 river miles. See, CMSP-Supplement, Section 3.5.4; AR274224, Page 2.

## IV.E Even if Before the Board, Petitioners Have Not Met Their Burden of Showing EPA Committed Clear Error by Not Selecting Bioremediation

Petitioners claim EPA did not fully evaluate bioremediation and should have reevaluated it after remand. Pet. at 27-30. Petitioners reference a statement by a bioremediation vendor (Pet. at 28) and disagree with the Region's 2020 Permit process with respect to bioremediation. Pet. 29-30.

The EAB, however, has already rejected the bioremediation challenge. 17 E.A.D. 581-582. Nevertheless, the Petitioners adduce a newly submitted statement of Chris Young, an executive of a bioremediation company. Attachment 9; Pet. 28. Attachment 9 was not submitted as part of any comments on the Draft 2020 Permit and EPA has moved to strike the Attachment. In addition, EPA's 2020 RTC directly addressed the viability of the biotech remediation project at New England Log Homes conducted by C. Young's company, and the Petitioners again did not confront this response. 2020 RTC 27. Even if Attachment 9 were properly before the Board, nothing in this Petition or the attachment should lead the Board to revise its previous ruling on bioremediation. 17 E.A.D 581-582.<sup>31</sup>

### V. ARGUMENTS REGARDING MONITORTED NATUARAL RECOVERY

## V.A As with the 2016 Permit, the 2020 Permit Provides the Appropriate Limited Role for Monitored Natural Recovery (MNR) in the Downriver Reaches

Petitioners claim that the MNR provisions in the 2020 Permit are not protective of the environment and human health for several reasons: they fail to establish objectives or performance standards; they fail to establish a reasonable timeframe within which standards

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Also, while not properly before the Board, EPA disagrees with many of the statements made in Attachment 9, including that EPA never responded to the QAPP or that Biotech offered to perform the field pilot study at no cost to EPA.

would be achieved; and they fail to provide a contingent solution if natural processes fail to achieve a level of protectiveness in a reasonable timeframe. Pet. 33-49.

The MNR provisions have not changed since the Board upheld the 2016 Permit. Thus, MNR is clearly outside the scope of review. Even if the Board were to consider MNR, however, the Record is clear that the Region's limited use of MNR for specifically chosen downriver reaches is protective.<sup>32</sup>

## V.B Petitioner's Attempt to Reintroduce Already-Dismissed Claims Must Fail

Petitioners' MNR challenge is beyond the scope of the remand and should be denied. In 2018, HRI's MNR claim was before the Board, but the Board upheld the 2016 Permit regarding MNR. 17 E.A.D. 538-539 and 584. Since then, EPA has not changed the MNR provisions. 2020 Stmt/Basis at 3; 2020 RTC 80. Thus, Petitioners' MNR claims should be dismissed.

Petitioners improperly attempt to expand the remand's scope by asserting that because the Region enhanced the active upriver cleanup with greater PCB removal, even the unchanged remedy components – such as the downriver MNR -- become the subject of the remand. Pet. 47-48. Petitioners also argue that MNR is subject to review because EPA did not quantify the risk reduction from the additional upriver PCB removal. Pet 48.

Even though a quantification of risk reduction is not required, EPA in fact compared the effectiveness and risk reductions of the 2014 and 2020 alternatives in the SCA, among other

Petitioners question the protectiveness of MNR in passing, but provide few details beyond their MNR contentions and do not acknowledge the factors referenced by the Region and the Board as to why MNR's limited role is appropriate. 17 E.A.D. 539. Petitioners do not address substantively the Region's overall protectiveness findings for the 2020 Permit. 2020 SCA at II.D.10. At best, Petitioners' unsupported claims are merely a technical difference of opinion. Also, the remedy, including the MNR-related Performance Standards, has been designed to achieve protectiveness. 2020 RTC 2; 2020 RTC, Sections II.G.4 (pages 46-51) and II.K.15 (pages 81-82); 2020 Stmt/Basis 18.

evaluations. For MNR, for example, the SCA found that the 2014 and 2020 sediment/floodplain alternatives perform similarly regarding quantified, modeled average fish PCB concentrations, including such concentrations in downriver reaches. SCA at 17 and SCA Tables 4a-4d and Table 10. The alternatives also perform similarly regarding the downstream transport of PCBs. *Id.* at 15 and SCA Table 9. (As stated below (Section V.D), these two parameters are measures of MNR effectiveness.) Thus, because MNR provisions are unchanged and because the 2014 and 2020 upriver remedies perform similarly in their effects downriver, the downriver MNR remedy is not reopened for review by the enhancement of the upriver sediment/floodplain remedy. As with their treatment arguments, the Petitioners fail to address Record material, the clear language of the EAB's decision, and regulatory limitations regarding the scope of the remand. 40 C.F.R. §124.14.

Also, Petitioners have not confronted EPA's 2020 RTC or provided adequate reasons why the Region's response is clearly erroneous. <sup>33</sup> *In re City of Taunton*, 17 E.A.D. 111 (EAB 2017).

## V.C The Region Set Clear and Objective Performance Standards that Govern the MNR Reaches

Even though MNR is not within the scope of the remand, Petitioners contend that the 2020 Permit fails to set response action objectives and Performance Standards for the MNR reaches of the River. Pet. 35-39. Petitioners, however, completely miss the clear MNR-related response action objectives and Performance Standards contained in the 2020 Permit.

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<sup>&</sup>lt;sup>33</sup> 2020 RTC at 80, referencing 2016 RTC at 189-197. The 2016 RTC directly addresses MNR; the Board cited the 2016 RTC in upholding the Region's MNR decision. 17 E.A.D. 539.

The Region clearly established response action objectives for Rest of River. The 2014 Statement of Basis "Description of Cleanup Objectives and Alternatives Considered" section discusses specific cleanup objectives and their connection to Performance Standards and Corrective Measures. 2014 Stmt/Basis at 18. EPA's cleanup objectives were also discussed in EPA's April 13, 2007 Conditional Approval Letter to GE (AR268525), and in GE's RCMS at 1-15.

Additionally, the 2020 Permit contains Performance Standards for MNR. The Downstream Transport and Biota Performance Standards apply to all reaches of Rest of River, including the downriver MNR Reaches. 2020 Permit II.B.1.a.(1) and II.B.1.b.(1).

The Downstream Transport Performance Standard places a clear, quantitative limit on the contributions of PCBs flowing downstream past Woods Pond Dam and Rising Pond Dam following completion of construction-related activities. If the Performance Standard is exceeded, GE is required to "evaluate and identify the potential cause(s) of the exceedance and propose, to EPA for review and approval, additional actions necessary to achieve and maintain the Performance Standard with response actions required for exceedances." 2020 Permit II.B.1.a.(1).

The Short-Term Biota Performance Standard measures the effectiveness of active PCB source control removal and MNR by evaluating changes in fish tissue concentrations in all reaches, including MNR reaches, against a specified numeric fish tissue Performance Standard. 2020 Permit II.B.1.b.(1)(a). If that Standard is exceeded, GE is required to evaluate and propose additional action necessary to achieve the performance standard. *Id.* The Long-term Biota Monitoring Performance Standard requires GE to continue to monitor, even after the Short-Term

Biota Standard has been attained, the reductions in risk and the progress toward even more stringent biota standards. 2020 Permit, II.B.1.b.(1)(b).

The 2020 Permit also includes, unchanged from the 2016 Permit, a specific Performance Standard and Corrective Measure for the MNR Reaches that requires GE to conduct PCB monitoring in affected media, maintain institutional controls, and perform other related activities. 2020 Permit II.B.2.h. To determine if these Performance Standards are met, the 2020 Permit requires GE to perform monitoring of PCB concentrations in affected media. 2020 Permit, II.B.2.h (MNR); II.B.4 (Inspection, Monitoring and Maintenance); II.C. (Operation and Maintenance); II.F (Adaptive Management); II.H.18.b (requiring Permittee to submit an Inspection, Monitoring and Maintenance Plan to monitor the effectiveness of MNR). The EAB upheld these provisions, and they are substantively unchanged since the 2016 Permit. 17 E.A.D. 536-539, 547.

Petitioners incorrectly assert that the Region lacked information about the processes expected to affect PCBs and their consequences. Pet. at 38. Many Record documents discuss extensively the use of MNR and identify the physical processes that affect downriver natural recovery, including the 2014 Statement of Basis and the 2016 RTC.<sup>34</sup>

Finally, Petitioners' recycled claims regarding volatilization fail on multiple grounds.

The EAB evaluated HRI's arguments on volatilization and found no clear error. 17 E.A.D. 537.

The Region has extensively studied and monitored volatilization, but the technical results do not

<sup>34 2014</sup> Stmt/Basis at 7. See also 2016 RTC 189-197. The processes of MNR are also discussed in the CMS-proposal (Att.21), GE's RCRA Facility Investigation Report (AR200656), and in EPA's Final Model Documentation Report (AR258097).

support Petitioners' scenarios. EPA's HHRA concluded that PCB air concentrations do not pose a human health risk to people living near the River. EPA 2005 HHRA at 5-4. See also 2016 RTC at 339; 17 E.A.D. 537–538; Final Model Documentation Report AR258097.

## V.D The Region Appropriately Evaluated MNR with Respect to Timeframes and Conducted Proper Screening of Alternatives

Petitioners contend that the 2020 Permit fails to establish a reasonable timeframe within which MNR is expected to be effective. Contrary to Petitioners' varied assertions, Petitioners have not shown clear error in the timeframes EPA in fact established for MNR.

Although the NCP and relevant guidance do not require specific timeframes for MNR (see for example, EPA's 2014 *Technical Resource Document on Monitored Natural Recovery, Section 5.6*), the 2020 Permit contains specific timelines for two parameters (PCB levels in surface water and biota) cited in the 2014 guidance as measures of MNR. 2014 Guidance at 155. Specifically, Section II.B.1.a defines an exceedance of the Downstream Transport Performance Standard as an exceedance in any three or more years within *any 5-year period following the completion of construction-related activities* (2020 Permit II.B.1.a. (emphasis added)); and the Short-term Biota Performance Standard must be met for the MNR reaches *within 15 years of completion of construction-related activities* of the closest upstream reach subject to active remediation. 2020 Permit II.B.1.b. at 14, 15 (emphasis added).

Contrary to Petitioners' allegation, the Record details the careful screening and detailed analysis of MNR alternatives. For the screening, see CMS-P Section 4.2.3 and CMS-P Supplement Section 2. For the detailed analysis of all alternatives, see the RCMS, 2014 CA, and the 2014 Stmt/Basis.

The Record also clearly demonstrates the reasonableness and effectiveness of the selected remedy to meet specific risk-based objectives and the Region's estimates on timeframes for MNR to meet these objectives, detailing year-by-year expected future fish tissue concentrations. The 2014 Comparative Analysis compares nine remedy alternatives and shows when each alternative is expected to achieve the risk-based cleanup objectives (Interim Media Protection Goals) in Connecticut impoundments. 2014 CA at 11-16. Comparisons of alternatives are found in the 2014 CA showing projected future fish tissue results compared to fish consumption goals for the nine scenarios. 2014 CA, Table 2 on pages 14 and 15 and Attachment 10. As shown in the tables and Attachment 10 to the 2014 Comparative Analysis, the effectiveness and timeliness of MNR in Connecticut relies upon the removal of the PCBs upstream, which act as a source for the downstream contamination.

The Record is clear that the Region has a detailed understanding of the extent of contamination in the MNR river reaches due to modeling and robust biota and sediment sampling.<sup>35</sup> 2016 RTC at 194-197.

Petitioners attempt to muddy the waters regarding MNR by ignoring appropriate sediment-specific guidance documents contained in the Record. The Region used an EPA guidance document specific to contaminated sediments, including MNR: *the Contaminated Sediment Remediation Guidance for Hazardous Waste Sites* (December 2005)("2005 Sediments

Section 4 of the RFI Report presents an analysis of PCB sediment concentrations. AR200656. Section 6 of the RFI Report discusses the spatial and temporal trends in biota PCB concentrations with a primary focus on fish tissue and benthic invertebrates. AR580276. Appendix A.1 of the Final Model Documentation Report contains an evaluation of temporal and spatial trends in water column, sediment, and fish tissue PCB concentrations. AR258097.

Guidance").<sup>36</sup> 2016 RTC II.C.6 at 190 and 191. The Region also consulted two other sediment MNR-specific guidance documents: EPA's 2014 *Technical Resource Document on Monitored Natural Recovery* and the U.S. Department of Defense's 2009 *Monitored Natural Recovery at Contaminated Sediment Sites* technical guidance (ESTCP Project ER-0622). 2016 RTC at 191. Petitioners mistakenly cite to groundwater-related guidance and guidance that concerns contaminants unrelated to PCBs.<sup>37</sup> Also, these guidance documents were not cited or mentioned in the comments and are part of EPA's Motion to Strike.

Finally, the Record shows that the 2020 Permit provisions regarding the sediment and floodplain cleanup have similar results to those in the 2016 Permit. EPA evaluated the 2020 Permit regarding sediment and floodplain removal and concluded it does not materially affect remedy effectiveness in MNR reaches, but it does provide more permanence because there is more reliance on sediment removal and less reliance on capping. SCA at 17- 18 and Tables 4, 9, 10. Contrary to Petitioners' claim, this is not a speculative analysis.

Despite the issue being clearly ascertainable at the time, Petitioners did not raise concerns about the EPA 2005 Sediments Guidance either for the 2016 Permit, or the 2020 Draft Permit. Moreover, the Region cited to that guidance before the Board, and the MNR approach that the Region selected using the 2005 Sediments Guidance was upheld by the Board. The approach has not changed. Petitioners' contentions on the appropriate guidance must fail.

Petitioners' Attachment 13 is for evaluation of Monitored Natural Attenuation ("MNA") for inorganic contaminants in groundwater. PCBs are organic compounds; the Rest of River remedy is a sediment/floodplain remedy. Attachment 15 is for evaluation of Natural Attenuation of chlorinated solvents in groundwater. PCBs are not considered chlorinated solvents. Attachment 17 is for performance monitoring of MNA remedies for Volatile Organic Compounds ("VOCs") in groundwater. PCBs are not VOCs.

#### V.E The Permit Contains Multiple Contingencies Applicable to MNR

Petitioners contend that the 2020 Permit lacks a specific contingent response if MNR is ineffective. Pet. at 44-49.

Petitioners, however, fail to recognize multiple contingencies applicable to MNR. The 2020 Permit requires GE to conduct additional response actions based upon a failure to meet the Biota or Downstream Transport Performance Standards (2020 Permit, II.B.1). Additionally, the Decree provides for: modifications to the Rest of River Statement of Work in particular circumstances (Decree, Para 39.a); the Pre- and Post-Certification Reservations of Rights in the Decree that provide for EPA to order additional response actions based upon particular findings (Decree, Para's 162-163); and periodic EPA reviews of the response actions. <sup>38</sup> Decree, Sec. X.

#### VI. **CONCLUSION**

For all the foregoing reasons, the Petition should be denied.

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Petitioners incorrectly state that only baseline monitoring and a Final Report are required to obtain a Certification of Completion. In actuality, GE must certify to EPA, and EPA must concur, that the Remedial Action has been fully performed and that the Performance Standards, including for MNR, have been attained prior to EPA issuing a Certificate of Completion. Decree, Para. 88.a.

## STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I hereby certify that EPA's Response to the Petition for Review in the matter of General Electric Co., RCRA Appeal No. 21-01, contains less than 14,000 words in accordance with 40 C.F.R. §124.19(d)(3).

	Respectfully submitted,	
Dated: May 5, 2021		
	John W. Kilborn	

## REQUEST FOR ORAL ARGUMENT

In accordance with 40 C.F.R. §124.19(h), El matter.	PA Region 1 requests oral argument in this
Dated: May 5, 2021	John W. Kilborn

### **CERTIFICATE OF SERVICE**

I, John W. Kilborn, hereby certify that on May 5, 2021 true and correct copies of EPA Region 1's Response were served as follows;

## Via the EPA's E-Filing System to:

Clerk of the Board Environmental Appeals Board U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Mail Code 1103M Washington, D.C. 20460-0001

### Via E-Mail to:

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