Attachment 4:

Excerpts from EPA Response to Comments (October, 2016), A.R. 593922

Response to Comments

on

Draft Permit Modification and Statement of Basis
for EPA's Proposed Remedial Action for the Housatonic River "Rest of River"
GE-Pittsfield/Housatonic River Site

SDMS: 593922

U.S. Environmental Protection Agency
Region 1 (EPA New England)

5 Post Office Square, Suite 100
Boston, MA 02109-3912

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I. Introduction

I.A Purpose of this Document

This document, which accompanies the Final Modification to the Reissued RCRA Permit (Final Permit Modification), satisfies the requirements set forth in the law, regulations, and Consent Decree governing this matter, *United States, et al., v. General Electric Company*, CA No. 99-30225 (D. Mass) (entered Oct. 27, 2000) (the Decree) for a response to comments pursuant to 40 C.F.R. § 124.17. This document is also consistent with 40 C.F.R. § 300.430(f)(3)(F). Namely, this document specifies which provisions of the Draft Permit Modification have been changed in the Final Permit Modification, the reasons for the changes, and briefly describes and responds to all significant comments on the Draft Permit Modification raised during the public comment period or in the public hearing.[1]

In EPA's responses, EPA uses the term "commenter" to refer to the commenter except for purposes of comments from General Electric Company (GE), entities of the Commonwealth of Massachusetts, and the State of Connecticut. Those three entities are parties to the Decree, and all have a formal role in the remedy selection process. In light of that role, EPA believes it would assist the reader in understanding and readability if comments from those parties are identified by name, rather than the term "commenter." Within the Commonwealth, EPA received comments from the Executive Office of Energy and Environmental Affairs (EEA), the Department of Public Health, and the Fisheries and Wildlife Board. For purposes of this document, the terms "Massachusetts" or "the Commonwealth" refer to EEA, while the other entities are referred to individually by name.

In this Response to Comments, EPA briefly describes and responds to all significant comments raised during the public comment period, or during the September 2014 public hearing on the Draft Permit Modification and Statement of Basis for EPA's Proposed Remedial Action for the Housatonic River "Rest of River" (Statement of Basis). To the extent that a commenter included an introductory passage describing the comments to be made, and then followed up with more specific comments in the body of their comment letter, EPA has responded to the more detailed comments provided unless the introductory description included different information to be considered. For example, in GE's October 27, 2014 comment letter, GE provides an Executive Summary (Pages ES-1 through 10), background (pages 1-8), and an overview of comments on disposal (pages 9-11). The points made generally in the Executive Summary and overview are discussed further in GE's detailed comments in that same letter. In that situation, EPA has responded herein to the more detailed comments provided by GE in its letter.

[1] Whenever the Permit, Decree or any other original document is paraphrased or summarized in this response to comments the original meaning in the original document is not changed.

conditions determined using updated environmental data collected post issuance of the permit as well as attainment of other Performance Standards such as the Downstream Transport performance standard and attainment of State-specific fish tissue performance standards (currently identified as benchmarks but should be changed to performance standards).

EPA Response 445: EPA concurs that in general, to be consistent with the Permit, there should be a distinction between Performance Standards and Correctives Measures. Therefore, in the Final Permit Modification, EPA clearly delineates the Performance Standards from the Corrective Measures necessary to meet the Performance Standards, and a definition of Corrective Measures was included.

In the Final Permit Modification, footnote #9 is now in reference to a Corrective Measure. The amount of bank excavation (and other activities) will be based on the requirements to achieve the applicable Performance Standards.

See Response to Comments Section III.B.1 for issues related to the Downstream Transport and Biota Performance Standards.

III.B General Performance Standards

III.B.1 Downstream Transport and Biota Performance Standards

III.B.1.a Downstream Performance Standard

Comment 403: EPA has projected that the proposed remediation will decrease the annual mass of PCBs transported downstream by 89%, but this will still leave an unacceptable 11% of the current downstream transport to continue unabated for hundreds of years into the future. This is not a satisfactory outcome; the remediation should reduce downstream transport to zero.

EPA Response 403: As discussed in response to other comments, EPA based its remedy selection on an evaluation of all the remedy selection criteria, including three General Standards for Corrective Measures – Overall Protection of Human Health and the Environment, Control of Sources of Releases, and Compliance with ARARs, as well as an evaluation and balancing of six Selection Decision Factors – Long-Term Reliability and Effectiveness, Attainment of IMPGs, Reduction of Toxicity, Mobility or Volume of Wastes, Short-term Effectiveness, Implementability, and Cost. Based on this analysis, EPA selected a balanced remedy that significantly reduces, but does not eliminate, the downstream transport of PCBs. For example, the remedy is expected to reduce the downstream transport of PCBs over Woods Pond and Rising Pond by 89% compared to existing conditions. EPA's rationale for the extent of remediation in the Final Permit Modification is documented in its Statement of Basis and Comparative Analysis, as supplemented by this Response to Comments. EPA continues to believe that the remedy in the Final Permit Modification is appropriate and significantly controls sources and reduces the downstream transport of PCBs.

Furthermore, reducing downstream transport to zero would be extremely difficult. EPA evaluated 9 alternative remediation combinations in the Comparative Analysis, including a combination alternative that would remove 2,902,000 cubic yards of contaminated sediment and

soil. Even with that level of removal – over three times the removal of the selected remedy – the estimated downstream transport reduction is not 100%. Comparative Analysis, Tables 3 and 15.

Comment 428: Connecticut strongly supports the provisions of the permit which are designed to decrease downstream transport of PCBs. Connecticut views these provisions as the key to attaining all other goals for the river.

EPA Response 428: EPA acknowledges Connecticut's support of these provisions.

Comment 447: The remedy must maintain the requirements to control transport of PCBs downstream into Connecticut and the adaptive management provisions that allows for adjustments to the remedy in order to achieve these goals. The draft permit should be modified to indicate that an exceedance of the Downstream Transport Performance Standard would be addressed with the authority under paragraph 39a of the Consent Decree and CERCLA.

EPA Response 447: First, the Final Permit Modification remedy does maintain the requirements to control transport of PCBs downstream into Connecticut (e.g., removal of an estimated 990,000 cubic yards of contaminated sediment and soil, containment measures such as Engineered Caps, and the Downstream Transport Performance Standards). Comparative Analysis at Table 3; Final Permit Modification Sections II.B.2.i, and II.B.1.a, respectively. Second, the remedy also maintains the Adaptive Management provisions. Final Permit Modification, Section II.F. Third, the Decree requires GE to achieve and maintain Performance Standards, including the Downstream Transport Performance Standard, and the Decree includes a number of possible avenues for EPA to ensure Performance Standards are achieved and maintained and the remedy remains protective of human health and the environment. Paragraph 39.a is one such potential avenue for an EPA response. However, given that the Decree provisions apply to the Rest of River response action, it is unnecessary to reference one specific Decree standard in the Permit.

Comment 482: EPA's Downstream Transport Performance Standards are designed to fail. The measurement of flow rates is limited to periods of low flow and averaged over periods of time. This hides the effects of episodic hard rain and high flow conditions that transport PCBs out of the unremediated Core Areas and back into the River.

EPA Response 482: EPA disagrees that flow rates specified in the Downstream Transport Performance Standard are limited to low flow and that the standard is inappropriate. As demonstrated in the Administrative Record, the standards are set for average daily flows that capture 98% of the flows. (Memo from Edward Garland, HDR, to Scott Campbell, Performance Standard Flow Based Annual Average PCB Flux Methodology, April 25, 2014). The appropriateness of the Standard is addressed more specifically in Responses 662, 663, and 664.

Comment 662: GE asserts the following: The Downstream Transport Performance Standard in the draft Permit specifies particular annual average values for PCB flux over Woods Pond Dam and Rising Pond Dam. Exceedance of this standard would occur if the annual average PCB flux is greater than the standard (at either Woods Pond Dam or Rising Pond Dam) in three or more years within any five-year period after completion of the remedial construction activities. The annual average flux values specified by this proposed standard were simply derived from model

predictions of the annual average PCB fluxes that would occur at these dams in the future under the proposed remedy. These flux values were not based on an analysis of risk, and EPA has made no showing that the specified PCB flux values are tied to reductions in risk or are otherwise justified under the Permit's remedy selection criteria. As such, they are arbitrary.

EPA Response 662: The Downstream Transport Performance Standard is fully justified under the Permit's remedy selection criteria, and therefore is not in the least arbitrary.

The nine Permit criteria used for remedy selection are specified as three General Standards - 1) Overall Protection of Human Health and the Environment, 2) Control of Sources of Releases, and 3) Compliance with ARARs; and six Selection Decision Factors. The General Standards are considered "threshold criteria," and alternatives that do not meet these threshold criteria do not warrant further consideration. (See the *Advanced Notice of Proposed Rulemaking (ANPR): Corrective Action for Releases From Solid Waste Management Units at Hazardous Waste Management Facilities*, Federal Register, Vol. 61, No. 85, Wednesday, May 1, 1996) As defined in the Final Permit Modification, a Performance Standard means cleanup standards, design standards and other measures and requirements necessary to protect human health and the environment. EPA developed the Downstream Transport Performance Standard to ensure that the Corrective Measures meet the General Standards and that PCB transport downstream does not exceed what is expected following implementation of the remedy. Downstream transport of excessive concentrations of PCBs would endanger human health and the environment, would represent a lack of control of sources of releases, and could also impair attainment of water quality ARARs, thus not meeting the General Standards. The Performance Standard requires that, if exceeded, GE 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. This provides a mechanism to ensure that the General Standards are met following implementation of the Corrective Measures and that the remedy remains protective of human health and the environment.

Overall Protection of Human Health and the Environment
Currently there is a consumption advisory for people eating fish in both the MA and CT portions of the Housatonic River and for other wildlife from the river in MA, as well as unacceptable risks to ecological receptors, due to PCBs from the GE facility. These advisories and risks are primarily driven by biota tissue concentrations which in turn are affected by the concentration of PCBs in water and sediment. The Corrective Measures specified in the Final Permit Modification are expected to reduce fish and other biota tissue concentrations, resulting in the reduction of these risks. However, the remedy is not expected to fully eliminate these risks in the near-term, and an excess flux of PCBs downstream will impact the expected risk reductions, and hamper any further risk reductions to concentrations that achieve the Long-Term Biota Standard and/or acceptable concentrations for risks to ecological receptors.

Control of Sources of Releases
The Final Permit Modification specifies that the evaluation of Control of Sources of Releases includes, but is not limited to, the extent to which the alternative "would mitigate the effects of a flood that could cause contaminated sediment to become available for human or ecological exposure." The Downstream Transport Performance Standard will be used to monitor the

effectiveness of the Corrective Measures specified in the Final Permit Modification in controlling exposure to contaminated sediment following flood events, as well as under other flow conditions. It also provides a mechanism to evaluate the cause of downstream transport of contaminated sediment if in fact downstream sediment transport occurs, resulting in human or ecological exposures.

Water Quality ARARs

Chemical-specific ARARs include Federal and State water quality criteria for PCBs. These criteria are the freshwater chronic aquatic life criterion of 0.014 microgram per liter (ug/L) and the human health criterion (based on consumption of water and/or organisms) of 0.000064 ug/L. It is expected that, when the Corrective Measures are implemented and maintained, the criteria for freshwater aquatic life will be achieved in MA and CT.

The criteria for consumption of water and/or organisms is not expected to be achieved in any of the river reaches in MA, however, it is expected that the Corrective Measures would restore water quality consistent with this criterion in 50% or more of the CT reaches. Because this criterion is not expected to be met in MA, EPA is waiving it under both Federal and State ARARs as technically impracticable in MA. The control of the excessive flux of PCBs (as monitored and, if necessary, addressed by the Downstream Transport Performance Standard) is critical in achieving the expected compliance with water quality ARARs.

Nothing in the Permit or Decree prescribes the particular quantitative method by which EPA is to set Performance Standards measuring the effectiveness of the remedy. To the contrary, the Decree requires EPA to develop the model, subject to multiple stages of Peer Review, and including comments from GE, as a first step in evaluating alternatives for cleaning up the River (see Decree, ¶¶ 22.g. h. and i.). The Decree also requires EPA to set Performance Standards, and does not preclude EPA, in its expert judgment, from using the Peer-Reviewed model simulations to establish Performance Standards in the absence of any other means to predict future performance of the Corrective Measures.

Specifically, a more stringent Performance Standard for general downstream transport was initially proposed by EPA in its August 2012 response to the National Remedy Review Board comments: namely achieving and maintaining a maximum of 2.0 kg/year PCB flux rate (mass per time) over Woods and Rising Pond Dams. This initial more stringent proposal was based upon the model work, but was ultimately adjusted after EPA and its consultant, HDR evaluated comments received by GE during the 2012/2013 Technical Discussions. In particular, during the Technical Discussions, EPA, CT DEEP, and GE worked together to craft the structure of the Downstream Transport Performance Standard presented in the Draft Permit Modification and now included in the Final Permit Modification. As a result, the approach set forth in the Final Permit Modification now accounts for variation in average annual flows and applies an uncertainty factor to predicted results. Had EPA relied on the absolute values of the model predictions, the Downstream Transport Standard would be more stringent.

Second, the Downstream Transport Performance Standard is clearly justified under the Permit's remedy selection criteria. In addition to the risk/protectiveness basis, one of the three General Standards for the remedy selection in the Permit is to reduce the bioavailability of PCBs through "control of sources of releases," Permit II.G.1.b, p. 20. Here the Downstream Transport

Performance Standard measures the effectiveness of the remedy in achieving this objective by measuring the levels of PCBs transported downstream. PCBs traveling downstream are an uncontrolled source. They are bioavailable to human and ecological receptors and could cause recontamination of the floodplains. As defined in the Final Permit Modification, a Performance Standard means cleanup standards, design standards and other measures and requirements necessary to protect human health and the environment. Permit, Definition 16. The Downstream Transport Performance Standard is related to risk reduction because it measures the effectiveness of the remedy in achieving source control objectives. Contrary to GE's argument, this Standard includes a clear human health or environmental risk-based justification.

Comment 663: GE asserts the following: The Downstream Transport Performance Standard is based on the assumption that the specified flux values can and will be achieved by the proposed remedy. That assumption, in turn, is based on the assumption that EPA's model accurately predicts future PCB fluxes. In fact, however, EPA's model was not designed and is not appropriately used for prediction of such absolute values, as recognized by EPA in its Model Calibration Responsiveness Summary. Although model results are useful for comparisons among remedial alternatives, they are not sufficiently accurate, and should not be used, to establish absolute numerical standards, as EPA has proposed for the Downstream Transport Performance Standard. EPA's use of the model results accounts for variability in flow in this application does not otherwise account for model uncertainty in any way, which further contributes to the arbitrariness of that proposed standard.

EPA Response 663: EPA disagrees. To the extent that EPA relies on the model results, EPA also accounts for model uncertainty in a number of ways. EPA recognizes that there is uncertainty in the model predictions due to a number of factors, including future boundary conditions, atmospheric inputs, the magnitude and spatial distribution of PCBs in unremediated areas, and the assumptions incorporated into the remediation scenarios of the model for elements such as releases of PCBs during dredging and the incorporation of dredging residuals into a cap. The approach followed to develop the Downstream Transport Performance Standard accordingly includes several mechanisms to provide a margin of safety against incorrectly identifying an exceedance of the standard. One is the use of a 95% prediction limit, which means that only 2.5% of the annual average PCB fluxes would be expected to exceed the 95% prediction curve around the regression of annual fluxes versus annual flows (2.5% above the upper prediction limit and 2.5% below the lower prediction limit). As GE states, this is to account for uncertainty based on annual variability in the PCB load due to the variability in flow. In addition, it accounts for the variability in annual PCB loads for years with the same annual average flow. Also, the standard for each flow-bin is set at the upper end of the flow range, so that the margin of safety for annual average flows less than the upper limit of the flow range is greater. For up to half of the flow range, the standard is equivalent to more than a 99% prediction limit, meaning that a single annual average flux would be expected to be above the standard once in more than 99 years.

An additional factor accounts for model uncertainty through the condition defined for the occurrence of the Performance Standard exceedance, which is annual average fluxes greater than the standard in 3 or more years in a 5-year period. Statistically, annual average fluxes would be expected to be above the upper prediction limit no more than once in 40 years (2.5% above the upper prediction limit), however values above the standard would not be classified as an

exceedance unless there were three in 5 years (60%). The combination of the specification of the standard for each flow bin at the upper end of the flow range and the criteria for assessing an occurrence of an exceedance provide account for uncertainty in the model predictions. Lastly, the standard flux only applies on days with daily average flow less than or equal to a 98% cutoff flow (excluding the highest 2% of daily flows), thereby eliminating the uncertainty with measuring and predicting PCB flux at these high flow events. Taken together, all of these elements of the Downstream Transport Performance Standard consider model uncertainty, including, but not limited to, annual variability in flow.

With respect to the model design, EPA recognizes that uncertainty in factors, including future boundary conditions (as stated in the Model Calibration Responsiveness Summary, EPA, January, 2006) result in uncertainty in the predictions of absolute concentrations. By considering these uncertainties in developing the flux standard, EPA is acknowledging and accounting for the uncertainty in predicted absolute values for flux values. Had EPA relied on the absolute value of the model prediction, the flux standard would be much more stringent.

Comment 664: GE asserts the following: There is no known precedent at any of the major contaminated sediment sites in the country for a performance standard such as the flux standard proposed by EPA, which establishes a numerical standard for future, post-remediation conditions – as opposed to a goal or remedial action objective (RAO) for such conditions – with specified consequences (other than continued monitoring) if that standard is not met. Indeed, the consequences specified by the Region for an exceedance of this standard are problematic.

EPA Response 664: While this type of standard may not be common, EPA regulations or policies do not prohibit having Performance Standards that are appropriate given the site-specific circumstances and the other components of the remedy. In this instance the combination of different remedy components including the Downstream Transport Performance Standard is best suited under the Permit criteria. The Permit criteria include the General Standard of Control of Sources of Releases, for which this Performance Standard is directly applicable. The remedy includes significant elements of containment and MNR, as well as avoidance of remediation for certain Core Areas, all in lieu of PCB removal. Given those elements, it is reasonable to have the remedy include another component that can ensure that the emphasis on containment, MNR and Core Areas (as opposed to a greater emphasis on PCB excavation) continues to yield an effective remedy that is protective and controls sources of releases.

Comment 665: GE asserts the following: The proposed requirement that, in the event of an exceedance of the Downstream Transport Performance Standard, GE must determine the cause is overbroad. Given the many factors that could potentially lead to an exceedance of the specified flux values at Woods Pond Dam and/or Rising Pond Dam, it may well not be possible to determine the cause. The most that could be done is to evaluate potential causes to determine whether a cause or causes can be identified.

EPA Response 665: GE expresses concern about being able to identify the cause of an exceedance, and states that the most that could be done is to evaluate potential causes to determine whether a cause or causes can be identified. The Final Permit Modification provision for the Downstream Transport Performance Standard addresses both those concerns. Specifically, EPA notes that the specific language of that Performance Standard (Section

II.B.1.a.(1)) was revised to allow GE to identify "potential" causes, and also allows for consideration that there is more than one cause. Providing GE, as Permittee, the opportunity to identify potential cause(s) is a reasonable approach to implementation. The specific language of Permit Section II.B.1.a.(1) is as follows:

> In the event that this Downstream Transport Performance Standard is exceeded, the Permittee shall 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.

Moreover, if there were any disagreement between GE and EPA as to whether GE had satisfied that provision, the Decree contains a Dispute Resolution provision for disagreements on this and other deliverables related to the cleanup. Note that this provision is very similar to that for the Biota Performance Standard, so a very similar rationale applies. See EPA Response 674, 675.

Comment 666: GE asserts the following: The Downstream Transport Performance Standard would provide that, in the event of an exceedance, EPA "may consider modifications to the Rest of River remedy in accordance with its authority under the CD and CERCLA." EPA's authority under the CD to require GE to conduct additional response actions beyond the actions required by the initially selected remedy is limited to the situation in which the CD covenant reopeners are met – i.e., where EPA determines that the exceedance constitutes new information or conditions and that that new information or conditions, together with other relevant information, indicate that the selected remedy is no longer protective of human health or the environment.

EPA Response 666: EPA disagrees with GE's views on EPA's ability to require additional response actions under the Decree. EPA and GE agree that EPA's authorities include use of the Pre- and Post-Certification Reservations of Rights, or "reopeners", under Paragraphs 162-163 of the Decree. Additionally, though, EPA has the ability pursuant to its oversight authorities under the Decree to require actions in EPA's response to any GE submittal under the Decree. See Decree Section XV. Moreover, the Decree affords EPA the ability to require modifications of the Rest of River SOW if necessary to achieve and maintain Performance Standards or to carry out and maintain the effectiveness of a response action. See Decree Paragraph 39. Note also that the Final Permit Modification has modified the provision for EPA's determination on an exceedance. The Draft Permit Modification provided that EPA would determine any additional actions necessary to achieve and maintain the Performance Standards "in accordance with the CD and CERCLA," and the Final Permit Modification provides that EPA's determination would be "in accordance with the CD".

Comment 667: GE asserts the following: The proposed Downstream Transport Performance Standard conflicts with the CD and Permit requirements that the remedy decision must specify the particular remedial actions required, rather than giving the Region a blank check to determine such actions in the future. Paragraph 22.n of the CD provides that EPA's proposal must specify not only the Performance Standards but also the specific corrective measures that it determines are necessary to meet the Performance Standards, rather than giving the Region the discretion to develop and mandate additional corrective measures later, which would not have been evaluated under the Permit's remedy selection criteria. Additionally, CD Paragraph 22.p provides that the final permit modification will obligate GE "to perform the selected Rest of River Remedial

Action and O&M," thus indicating that that remedial action will be known and quantifiable at that time. Similarly, Special Condition II.J of the Permit states that the final permit modification "will set forth the selected Performance Standards and corrective measures for the Rest of River area" – again showing that the corrective measures are to be specified in that decision. These provisions demonstrate that, while the Rest of River Remedial Action was expected to include Performance Standards, the parties intended that those Performance Standards would be ones whose achievement would be ascertainable and attainable by doing certain specified work, rather than leaving the required work for a later EPA determination. This was intended to provide GE with certainty and finality at the time of the Rest of River remedy selection.

EPA Response 667: EPA disagrees with GE's assertions that additional response actions, when necessary, must all be defined in the Final Permit Modification. It is undisputed that EPA has authority to issue Performance Standards, as it is intended that the Final Permit Modification include Performance Standards. Decree ¶¶ 23, 24; Permit II.J. And it is undisputed that there are consequences under the Decree for failure to achieve and maintain Performance Standards. For example, in such cases, the Decree specifically provides for modification of the Rest of River SOW to include modified work to achieve and maintain Performance Standards, Decree ¶ 39.a, or to seek additional response action if certain covenant reservation, or "reopener" conditions are met. Decree ¶¶ 162, 163. Thus, even though the Permit calls for EPA to set forth "the appropriate corrective measures necessary to meet the Performance Standards," Permit II.J. (emphasis added), the controlling Decree recognizes that it will not always be possible or *appropriate* to identify all Corrective Measures necessary to meet and maintain the Performance Standards at the time of the Final Permit Modification. Decree ¶39.a. Indeed, the Decree specifically recognizes that there is no "warranty or representation of any kind" that compliance with the selected Corrective Measures will achieve Performance Standards. Decree ¶ 40.

GE argues that certain provisions of the Decree and Permit imply that together they were "intended to provide GE with certainty and finality at the time of the Rest of River remedy selection." In fact, no provision of the Decree or Permit explicitly or implicitly provides the certainty and finality now demanded by the GE. Indeed, the Decree directly contradicts such a strained interpretation by explicitly providing for additional response actions to achieve and maintain Performance Standards:

> if EPA determines that modification to the work specified in the ... the Rest of the River SOW, ... is necessary to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of a particular Removal or Remedial Action, EPA may require that such modification [of the work] be incorporated in the ... the Rest of the River SOW.

Decree ¶39.a (emphasis added).

Comment 668: GE asserts the following: An open-ended Downstream Transport Performance Standard that allowed EPA to require GE to conduct additional, unspecified response actions if the standard was exceeded would prevent EPA itself, as well as GE, other stakeholders, and the public, from conducting a meaningful evaluation of the proposed remedy under the applicable Permit criteria. Unless one knows the full extent of remediation actions necessary to meet the Performance Standards, one cannot apply the Permit criteria. For example, a requirement for

significantly more removal to meet a Performance Standard could materially change the analysis of impacts (and thus overall protectiveness) and costs. Thus, such an approach is inconsistent with the Permit requirement to fully consider the above criteria in evaluating remedial alternatives and selecting a remedy.

EPA Response 668: EPA disagrees with the GE's views. EPA performed a very thorough, meaningful evaluation of the proposed remedy, and the alternatives, under the applicable Permit criteria. The scope of EPA's evaluation included potential cleanup approaches for sediments in Reach 5A, 5B, 5C, bank soils in Reach 5A and 5B, alternative approaches for Woods Pond, Reach 7, Rising Pond, Reaches 9-16, Floodplains and Vernal Pools. Overall, see the Comparative Analysis, Section 2, which demonstrates that EPA performed its thorough evaluation of the overall remedy, and nothing in the Decree or Permit requires EPA to perform that type evaluation on all potential, future activities that might be needed to achieve or maintain protection of human health and the environment, or an effective remedy. Moreover, if GE's claims that no additional new or modified work can be required for the Rest of River because any such work would not have been subject to the "nine criteria analysis required"[4] for other Corrective Measures at the time of the permit modification were correct, it would render superfluous individual Decree provisions, such as Decree Paragraph 39.a and the Decree's Operation and Maintenance (O&M) provisions (Decree, Paragraph 4 definition of O&M includes "all activities required to maintain the effectiveness of the Remedial Action for the Rest of the River as required under an Operation and Maintenance Plan developed for the Rest of the River Remedial Action)." Decree ¶ 4. In the Final Permit Modification, the O&M program requires "other response actions necessary to achieve and maintain compliance with Performance Standards." Final Permit Modification, II.C. Under GE's formulation, neither modified work pursuant to Paragraph 39.a nor O&M work could ever be required because such work can never be subject to the allegedly relevant analysis -- it is unknowable at the time of remedy selection what modified work or O&M will be necessary to achieve and maintain Performance Standards. (Additionally, as to the GE's concerns about the "nine criteria analysis" applying during Paragraph 39.a. modification of work, any disagreement need not be resolved today. This question should be resolved during dispute resolution under the Decree, if and when EPA ever determines that modification of the work is necessary under Decree Paragraph 39.a., and if and when GE disputes that determination. It is well settled that contractual terms should not be interpreted to render any provisions superfluous, and GE's argument is incorrect. In addition, not all components of the remedy require the level of analysis demanded by GE. In short, the Decree reinforces that future potential adjustments may be needed, and neither the Decree nor the Permit requires that all work required for the Rest of River Remedial Action be subject to a fixed analysis at the time the Final Permit Modification is issued.

Comment 669: GE asserts the following: The proposed Downstream Transport Performance Standard would constitute a "contingency remedy" under EPA guidance, because it would be contingent on a future event (i.e., an exceedance of the standard). EPA guidance requires that a

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[4] Note that while the "nine criteria" are significant to remedy selection, the Decree and Permit provide that EPA may select the remedy based upon the CMS (which includes an evaluation of the alternatives under the nine criteria) and the information in the Administrative Record. Decree ¶ 22.p; Permit II. J.

contingency remedy (as well as the selected remedy) be evaluated fully against the remedy selection criteria, and indicates that if that is not done at the time of initial remedy selection, it will need to be done to invoke the contingency at a later point in time. For any additional response actions that might be required in response to an exceedance of the Downstream Transport Standard, EPA's proposal has not evaluated the Permit's remedy selection criteria, and it does not propose that that be done in the future. As such, it would conflict with EPA guidance as well as the Permit.

EPA Response 669: GE argues that any additional work required by an exceedance of a Performance Standard would constitute a "contingency remedy" that has not been fairly evaluated under the relevant criteria. EPA does not agree that this is a contingent remedy. While CERCLA guidance is relevant, it is not controlling. The process for selecting a remedy here is pursuant to the RCRA permitting process as set forth in the Decree. Moreover, the Decree itself contains several permissible conditional response action obligations. For example, the Decree authorizes Performance Standards for a Conditional Solution, including as may be identified for the Rest of River: for example, when a property owner declines a land use restriction offer from GE, then GE may need to undertake additional cleanup if the land use changes. Decree ¶ 34. Similarly, in certain circumstances when necessary to carry out the effectiveness of the response action or when the selected remedy fails to achieve and maintain Performance Standards, the Decree also obligates GE to undertake additional response actions to ensure the effectiveness of the remedy or to achieve and maintain those Performance Standards. Decree ¶39.a. Those additional response actions contribute to the effectiveness of the cleanup, but necessarily cannot be defined at the time of the remedy decision. Likewise, in certain emergency situations, GE must "take all appropriate action to prevent, abate, or minimize" the release or threat of release. Decree ¶91. Thus, the Decree contemplates that not all work, contingent or otherwise, required for the Rest of River, such as O&M, can or need be subject to a fixed analysis at the time of the Final Permit Modification. Thus, the requirement here to undertake additional work in response to failure to maintain and achieve Performance Standards is no different than failure to meet and achieve any other Performance Standard, and does not constitute an impermissible contingent remedy.

Additionally, a determination on whether an EPA-ordered additional response action is permissible is not currently ripe. Under the Permit, an exceedance cannot occur until three or more years after the completion of construction-related activities. (Final Permit Modification, II.B.1.a.(1)). Then if GE proposes to EPA additional actions necessary to achieve and maintain the Performance Standard, and EPA disapproves of GE's proposal, GE has its rights pursuant to the Decree's Dispute Resolution provisions to dispute EPA's determination. See Decree, Section XXIV.

Comment 670: GE asserts the following: The proposed approach to the Downstream Transport Performance Standard would also allow an impermissible end run around the covenants in the CD. Those covenants prohibit the United States from seeking to require GE to conduct additional response actions beyond those specified and required under the CD, unless the reopener conditions are met (i.e., that new information or conditions are discovered that indicate that the selected remedial action is not protective of human health or the environment) (CD ¶¶ 161, 162, 163). While the CD provides that EPA will conduct periodic reviews of the Rest of River remedial action and may select further response actions in the course of those reviews

(CD ¶¶ 43.c, 44), it also provides that GE is obligated to perform such actions ***only*** if the covenant reopener conditions are satisfied (CD ¶ 46). An approach that would allow EPA to require GE to conduct additional response actions (not specified in the remedy decision) in the future without satisfying the reopener conditions would violate the covenants.

EPA Response 670: In claiming that these Performance Standards violate the Decree's covenants, GE ignores the provisions of Paragraph 39.a, and the general obligation to achieve and maintain Performance Standards, including but not limited to through the inspection and Operation and Maintenance provisions. GE only points to the Decree's provisions regarding reopener conditions or five year review, Decree ¶¶ 43.c, 44, 46, 161-3, while ignoring the separate authority to require additional response actions to achieve and maintain Performance Standards set forth in Paragraph 39.a of the Decree, and in the Operation and Maintenance requirements of the Decree. Decree, Paragraph 4 definition; Paragraph 22. As a result, GE is wrong to claim that EPA's attempt to require GE to conduct additional response actions (not specified in the remedy decision) in the future without satisfying the reopener conditions would violate the Decree." That is exactly what Paragraph 39.a. and the separate inspection and Operation and Maintenance provisions allow. Paragraph 39 represents an obligation separate from the covenant reopeners in Paragraph 162-163, an obligation that recognizes that during the course of designing and implementing a particular response action, EPA may determine that a modification to the specified work may be needed to be undertaken to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of a remedy. Paragraph 39 reflects the recognition that modifications or adjustments to the remedy approach may be necessary during design/implementation, and that depending on the extensiveness of the modification, EPA may require GE to perform them through modification of the Rest of River SOW or Work Plans. In short, these Performance Standards, like any other Performance Standard, are not a violation of the Decree's covenants.

Comment 671: GE asserts the following: Paragraph 39.a of the CD is consistent with the conclusion expressed in Comment 670. That provision states that, if EPA determines that modification to the Rest of River work "is necessary to achieve and maintain the Performance Standards . . . , EPA may require that such modification be incorporated in [the relevant work plans]; provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the response action for which the modification is required and does not modify the Performance Standards" (except with agreement of the parties and approval of the Court) (emphases added by GE). Given the requirement that the Rest of River remedy decision must specify not only the Performance Standards but the actions necessary to meet them, EPA's authority under Paragraph 39.a to require modifications of the Rest of River work does not extend to requiring additional remediation actions later to meet the Downstream Transport Performance Standard, because that would not be "consistent with the scope of the [Rest of River] response action." Rather, any such requirement would be barred by the U.S. covenants in Paragraph 161. In addition, to the extent that such additional remediation actions would modify any other Performance Standard for the Rest of River Remedial Action or the Performance Standards for any of the upstream Removal Actions under the CD, that would be precluded by the provision of Paragraph 39.a that modifications thereunder cannot modify the Performance Standards.

EPA Response 671: EPA disagrees with GE's conclusions on Paragraph 39. Achievement of the Downstream Transport Performance Standards is part of the response action; thus, additional actions to achieve and maintain those Performance Standards are consistent with the scope of the response action. There could be additional remediation actions that are consistent with the scope of the response action that do not modify Performance Standards. Precluding any additional response actions at this point would render Paragraph 39.a. meaningless. In addition, see Response 670 above.

Comment 672: GE asserts the following: An open-ended Downstream Transport Performance Standard that allowed EPA to require GE to conduct additional, unspecified response actions if the standard was exceeded could deprive GE of its ability to obtain a timely Certification of Completion of the Rest of River Remedial Action, with the certainty it provides. Under Paragraph 88 of the CD, once GE concludes that it has completed the Rest of River Remedial Action, it is to submit a written report requesting EPA to certify that the Remedial Action is complete. EPA must respond, either by agreeing (and issuing the Certification) or by telling GE the specific activities that GE must undertake to complete the work and achieve the Performance Standards. The CD draws a bright line between completion of the Remedial Action and operation and maintenance (O&M). The Certification of Completion for the Remedial Action issues when the Remedial Action is done, ***excluding*** O&M. However, if the Downstream Transport Standard were interpreted to allow EPA to require GE to conduct additional response actions to address an exceedance (without meeting the reopener conditions), EPA could, at the completion of the prescribed remediation activities, decline to issue a Certification of Completion on the ground that further remediation might be required in the event of a future exceedance of the standard. The result would be an infinite do-loop in which GE is deprived of the certainty that it has undertaken the tasks necessary to complete the Remedial Action. This is inconsistent with the intent of the parties in negotiating the CD.

EPA Response 672: GE claims that these Performance Standards conflict with the Certification of Completion provisions of the Decree. Decree ¶ 88. However, these Performance Standards function like any other Performance Standard. If at the time of completion of Remedial Action for the Rest of River, the Performance Standards have been attained and there is no violation of the Performance Standard, GE is entitled to a Certification of Completion. However, the Certification of Completion would not eliminate the ongoing applicability of the Performance Standard. The ongoing obligation of maintaining any Performance Standard continues through O&M following Certification of Completion.

Comment 741: GE asserts as follows: EPA has not conducted an evaluation of the proposed PCB Downstream Transport Performance Standard against potential alternative standards. Further, if that standard were interpreted to allow the Region to require additional response actions in the event of an exceedance (without going through the CD covenant reopeners), it cannot have evaluated (or allowed others to evaluate) those additional response actions (or alternatives to them) under the Permit criteria, since such actions are currently undefined; and it has not provided for such evaluation to be conducted in the future.

EPA Response 741: In response to EPA not conducting an evaluation against potential alternative standards, there is no requirement in the Permit or Decree to that requires all Performance Standards be evaluated against "other potential standards." Also, this downstream

transport, or flux, standard was developed with input that GE provided during the technical discussions held between GE, EPA and the States from August 2012 to December 2013 and revisions to the draft standard were made during those discussions. For example, see the April 25, 2014 Memorandum from Edward Garland, HDR, to Scott Campbell, Weston [both contractors to the EPA/Corps of Engineers]. Furthermore, see Responses 662 and 664 above.

With regard to requiring potential response actions in the event of an exceedance of the standard, see Reponses 668 and 669 above.

Comment 439, 456: CT DEEP recommended specific operational requirements and engineering controls to be included in the Permit. These include the following:

Emplacement of activated carbon is required in several sections of the permit. The addition of activated carbon must be managed in such a manner as to prevent downstream transport of the activated carbon under any flow conditions.

Anchored silt screens should be placed around the dredge during work and at the outlets of Woods Pond and Rising Pond to minimize transport of sediment downstream.

EPA Response 439, 456: The Decree and Final Permit Modification both provide that GE will propose Work Plans for the implementation of the response action. (Decree, Para. 22.x, y; Final Permit Modification, II.H). Operational details and engineering controls will be included in these Work Plans, which will be subject to EPA review and approval.

Comment 318: The technique for measurement of PCB flux at Woods Pond and Rising Pond dams should be described. How results are to be measured is an important consideration of a specification.

EPA Response 318: Based in part on this comment, the Final Permit Modification includes a description of how flux will be measured at Woods Pond and Rising Pond. Permit at II.B.1.a.(2).

Comment 448: A work plan should be required to establish the details associated with measuring and assessing compliance with the Downstream Transport Performance Standard. Development of this work plan should be added to Section II.B.11 of the permit, and require EPA and Connecticut review and approval.

EPA Response 448: Section II.B.11.e. of the Draft Permit Modification (Section II.H.5. of the Final Permit Modification) includes the requirement for the submittal of a Plan for Measuring Compliance with Performance Standards. This plan is the mechanism for a proposal for measuring and assessing compliance with the Downstream Transport Performance Standard. Connecticut's role in reviewing and commenting on submittals is discussed in Response to Comments Section VIII.B.

III.B.1.b Biota Performance Standards

Comments 228, 262, 407: One of the expected outcomes of the remediation, as discussed on p. 11 of the Statement of Basis, is a reduction in PCB concentrations in biota what will allow increased human consumption of fish and other biota taken from the river, within a short time

after remediation is completed. Why is this the goal? Even with capping, fish tissue will take a while to decrease, so why not specify a longer-term solution and a complete remediation? EPA selects the fish tissue concentration associated the average (CTE) non-cancer risk as the Performance Standard. Why is this used as the Performance Standard rather than the concentration associated with the MRE (sic)? With regard to fish consumption, it is not clear why Massachusetts residents are limited to 7 fish meals per year from the river while Connecticut residents are judged on 365 meals per year.

EPA Response 228, 262, 407: The Short-Term Biota Performance Standard sets an average PCB concentration of 1.5 mg/kg in fish fillets to be achieved within 15 years of completion of remedial activities in the applicable reach of the River. If the Short-Term Biota Performance Standard is exceeded in two consecutive monitoring periods after that 15-year period, GE must identify the potential cause(s) of the exceedance and propose additional actions necessary to achieve and maintain the relevant Standard, and EPA will determine any such additional actions in accordance with the Decree.

EPA took care in establishing the Short Term Biota Performance Standard (the "Short Term" standard) to be an achievable measure of the remedy's performance and progress. Consumption of PCB-contaminated fish is a major unacceptable risk to human health in the river; thus, it is important to use PCB concentrations in fish tissue as a basis for measuring risk reduction. Based on computer modeling, this Short-Term standard is expected to be readily achieved within the prescribed timeframes. It was selected based on the probabilistic risk assessment central tendency exposure (CTE) adult exposure Hazard Index (HI) of one. Conversely, the Long-Term Biota Monitoring Performance Standards were based upon more conservative exposure assumptions (or in this case, assumptions regarding the amount of fish or duck tissue consumed), using the probabilistic risk assessment Reasonable Maximum Exposure (RME) 1×10^{-5} cancer risk for fish in Massachusetts and duck breast in Massachusetts and Connecticut and, at the request of CT DEEP, a calculation assuming 365 fish meals per year and a 1×10^{-6} cancer risk for fish tissue in Connecticut. See Section II.B.1.b.(1)(b) footnote 3. Because it is anticipated that the Short-Term Biota Performance Standard will be achieved in the short-term, EPA established the complementary Long-Term Biota Monitoring Performance Standard to measure the remedy's long-term success at achieving additional risk reduction and measuring progress towards long-term risk reduction goals in Massachusetts and Connecticut.

The Short-Term standard should not be misconstrued as the ultimate goal for risk reduction from consumption of fish. The goal is to achieve a PCB concentration of 0.064 mg/kg in Massachusetts and 0.00018 mg/kg in Connecticut, or at a minimum, monitor progress towards those goals. The selected remedy is expected to achieve significantly more progress towards this goal beyond just achieving the Short-Term standard. Furthermore, the added reduction can be very significant for purposes of whether, and if so, at what level, a consumption advisory needs to be maintained by the Massachusetts Department of Public Health, which is currently set at 1 mg/kg, or their Connecticut counterparts, who may use the more stringent 0.00018 mg/kg standard in setting advisories.

For instance, for Woods Pond, the projected fish tissue concentration is approximately 1.0 mg/kg 15 years after remediation, approximately one-third lower that the Short-Term standard. Therefore, by applying the Biota Short Term Performance Standard in a given reach 15 years

after remediation is completed, EPA accounts for uncertainties in remedy performance, including those associated with model predictions of performance.

As the River, and biota that inhabit and feed from the River, begin to recover after implementation of the remedy, PCBs in fish tissue are expected to decrease, first, in compliance with the Short-Term standard, and then further over time. Fish tissue concentrations will be monitored over time and, depending on their concentrations, may allow for easing of biota consumption advisories and for increased human consumption. Thus, the CTE-based Short-Term standard, which assumes approximately seven fish meals per year from the river, is just one check of the remedy's expected performance and progress. Continued reductions in fish tissue concentrations will allow for consumption of many additional fish meals without unacceptable risk, but this performance may be achieved at different rates in different parts of the river and some reaches of the river may never be able to achieve "unlimited" fish consumption (or the RME-based standards), thus requiring continued advisories and institutional controls.

The Final Permit Modification was revised to clarify that the Connecticut-specific fish tissue concentration of 0.00018 mg/kg (and the accompanying duck breast and Massachusetts-based fish tissue standards) is included in the Long-Term Biota Monitoring Performance Standard and that GE is required to continue to monitor the progress towards achieving these fish tissue concentrations. Final Permit Modification, at II.B.1.b.(2). The Final Permit Modification also requires GE to cooperate with the states regarding all biota consumption advisories issued by the EPA, Massachusetts, and/or Connecticut until such time that the advisories are discontinued. Permit at II.B.6.a. However, EPA believes it is inappropriate to set achievement of 0.00018 mg/kg in fish tissue in Connecticut as a Performance Standard, in part, because none of the modelling for the remedial alternatives evaluated indicated that this was feasible.

Regarding the question as to why EPA has not selected a longer-term solution and "complete remediation," EPA considered a wide range of cleanup options, including those with larger volumes of contamination being removed from the river and less reliance on capping (e.g., Alternative SED8 in the Comparative Analysis). As discussed in response to other comments, EPA based its remedy selection on an evaluation of all the remedy selection criteria. Based on this analysis, EPA selected a balanced remedy that significantly reduces fish consumption risks. EPA's rationale for the extent of remediation in the Final Permit Modification is documented in its Statement of Basis and Comparative Analysis, as supplemented by this Response to Comments. EPA continues to believe that the remedy in the Final Permit Modification is appropriate and significantly reduces the risks associated with fish consumption. For a "complete remediation" option as described by commenter, the closest alternative evaluated was the SED 8 alternative. While the SED 8 alternative does remove more PCBs than other alternatives, and reduces the downstream transport of PCBs more fully than other alternatives, it also had higher costs, and higher short-term impacts than other alternatives. In light of EPA's evaluation of all nine criteria pursuant to the Permit, EPA determined that the selected remedy was the best suited remedy.

Comments 72, 193: The Plan sets a Performance Standard for PCBs in biota of 1.5 mg/kg (ppm) in fish tissues in 15 years and 0.064 mg/kg for the "long term" in MA. These values are too high and do not protect against cancer or non-cancer effects, according to EPA guidance. Fish tissue PCB levels of 0.012 mg/kg or less are necessary to reduce cancer risk to acceptable levels for one

fish meal a week. The Biota Performance Standard in the Permit is woefully inadequate. EPA guidance lists PCB levels in fish that are protective for cancer or non-cancer effects, associated with a range of fish consumption rates. The Permit indicates that a fish tissue PCB concentration of 1.5 mg/kg (ppm) shall be achieved within 15 years (Permit page 13, section 2 a), but EPA recommendations for PCB levels are orders of magnitude lower than 1.5 mg/kg for any level of fish consumption (see table below taken from EPA guidance: EPA-823-F-99-019 September 1999). PCB levels in fish need to be less than 0.006 mg/Kg in order to allow one meal a week without an increased cancer risk. The EPA plan will not support safe fish consumption for the anticipated future in MA or CT. The proposed fish tissue concentration performance standard of 1.5 mg/kg (to be achieved in 15 years following remediation) will not be protective of human health at anything above a minimal consumption rate, nor will it protect individuals with PCBs already in their body.

EPA Response 72, 193: As part of the Decree process, GE developed, and EPA approved numerous site-specific IMPGs for fish tissue concentrations, including the least stringent IMPG of 5.7 mg/kg (CTE, 10^{-4} excess cancer risk, probabilistic risk assessment) to 0.0019 mg/kg (RME, 10^{-6} excess cancer risk, deterministic risk assessment). The Permit does not require EPA to select the most stringent IMPG as a Performance Standard. As discussed in Response 228 *et al.*, the Short-Term standard should not be misconstrued as the ultimate goal for risk reduction from consumption of fish. The Short-term Biota Performance Standard, 1.5 mg/kg, based on the probabilistic risk assessment CTE adult exposure Hazard Index (HI) = 1, was set at the *minimum* acceptable outcome of the remediation, while the Final Permit Modification makes clear that the goal is Long-Term Biota Monitoring Standard of 0.064 mg/kg[5] in Massachusetts and 0.00018 mg/kg in CT.[6]

As described in the Statement of Basis, EPA expects the selected remedy to reduce PCB concentrations in biota, allowing increased human consumption of fish and other biota taken from the river within a short time after remediation is completed, and to greatly reduce the downstream transport of PCBs. This should result in further reductions in PCB levels in fish in both Massachusetts and Connecticut, which, over time, should allow the consumption of additional fish meals or increased consumption of other biota. EPA included the Short-Term Biota Performance Standard in the Final Permit Modification to provide a measure of this aspect of remedy performance. EPA modified the language from the Draft Permit Modification to better explain and differentiate between the Short-Term and Long-Term standards.

As shown in Attachment 10 to the Comparative Analysis, the remedy achieves the Short-Term Biota Standard in all Reaches (except 5B, where the modeling excludes the impact of a sediment amendment on fish tissue concentrations) and also achieves several other IMPGs, thus showing significant risk reduction. Furthermore, as also shown in Attachment 10, none of the remedies evaluated, including Combination Alternative 6 which requires the removal of all sediment with PCBs greater than 1 mg/kg (an estimated 2,252,000 cubic yards), comes anywhere near achieving fish tissue concentrations of 0.006 mg/kg in Massachusetts. In fact, the model predicts

[5] Based on the probabilistic RME and 1 x 10^{-5} cancer risk.

[6] Based on CT DEEP consumption calculation assuming 365 fish meals per year and a 1 x 10^{-6} cancer risk.

the most aggressive remedy, Combination 6, achieves fish tissue concentrations ranging from 0.10 and 0.35 mg/kg in Massachusetts; which are between one and two orders of magnitude higher than 0.006 mg/kg. Clearly, it is not practical to achieve this fish tissue concentration.

In reviewing the alternatives, based on the information above, the Administrative Record and Permit criteria, EPA selected a remedy that includes multiple Performance Standards related to reduce unacceptable risks from contaminated biota. Relevant remedy components include the many PCB removal and containment components of the remedy that will reduce bioavailability of PCBs, and the establishment of the Short-term Biota Performance Standards and Long-Term Biota Monitoring Performance Standards. EPA believes that that combination of actions, within the selected remedy, is best suited in light of the Permit criteria.

Comments 440, 449: Connecticut asserts as follows: The Connecticut-specific fish tissue values, currently identified as benchmarks by EPA, need to be continued as part of the proposed remedy and provided the full status as a Performance Measure so that attainment of fish tissue levels consistent with Connecticut's goal to eliminate the need to limit consumption based on PCB contamination can be realized and that the adaptive management components of the remedy be applied and enforced, as needed, to attain these goals. The draft RCRA Permit incorporates the Connecticut fish tissue value as a Long-Term Biota Benchmark. "Performance Standards" are defined for the Rest of the River as "the cleanup standards ....set forth in...the final modification of the Reissued RCRA Permit to select the Rest of the River Remedial Action, or the Rest of the River SOW." As such, the Performance Standards establish the enforceable conditions and compel additional actions if necessary to meet the Performance Standard. The Long-Term Biota Value for Connecticut should be identified as a Performance Standard.

EPA Response 440, 449: To address these concerns, in Section II.B.1.b of the Final Permit Modification, EPA further clarified the basis for, the relationship between, and the use of what are now termed the Short-Term Biota Performance Standard and the Long-Term Biota Monitoring Performance Standard. This change also addressed the concern that a "Benchmark" may not have the same meaning or effect of a "Performance Standard." See also Response 228 *et al.*

EPA generally agrees with Connecticut on applying and enforcing, if needed, adaptive management principles as the cleanup goes forward. However, with respect to doing so to attain fish tissue levels consistent with the Connecticut –specific fish tissue values, EPA has established those as Monitoring Performance Standards, not for active remediation, for the reasons cited in Response 228 *et al.* above in this Section. EPA will ensure the Monitoring Performance Standards are complied with, and will evaluate the monitoring information received in the context of the remedy going forward.

Comment 450: The permit triggers additional investigations and potential remedy modifications if the Biota Performance Standards are exceeded in two consecutive monitoring periods after the 15-year initial period. This provision should be modified to also require such additional investigations and potential modifications if the Biota Performance Standards are exceeded in any three years within a five year period.

EPA Response 450: EPA does not believe this revision is necessary and that the current Performance Standard is sufficient to protect against unacceptable risks to human health and the environment.

Comments 581, 582: GE asserts the following: EPA acknowledges that none of the remedial alternatives evaluated, including its proposed remedy, would achieve the fish consumption IMPGs based on EPA's Reasonable Maximum Exposure (RME) assumptions, which would allow unrestricted fish consumption in the Massachusetts portion of the River within the model projection period (over 50 years). As a result, under all alternatives, fish consumption advisories would need to remain in place indefinitely to protect human health from the asserted risks due to fish consumption. To support its proposed remedy, EPA relies on the predicted attainment of a fish consumption IMPG based on its Central Tendency Exposure (CTE) assumptions derived from a probabilistic risk analysis method set forth in the HHRA. EPA's model predictions indicate that its proposed remedy would achieve the probabilistic CTE IMPG based on a non-cancer hazard index (HI) of 1 for adults (1.5 mg/kg in fish fillets) in all Massachusetts reaches except one (Reach 5B) within the 52-year model projection period. However, attainment of that CTE IMPG would not avoid the need for continued fish consumption advisories.

EPA Response 581, 582: EPA has acknowledged that under all alternatives, Institutional Controls (including but not limited to fish consumption advisories) would likely be needed for a period of time following remediation as part of the actions to protect human health. However, the selection of the remedy is based on which alternative is best suited to meet the General Standards for Corrective Measures in consideration of the Selection Decision Factors, including a balancing of those factors against each other. EPA has concluded, as supported by the Administrative Record, including without limitation the Comparative Analysis, that the selected remedy best satisfies this analysis. Furthermore, although this risk level (CTE, HI =1) is included as a Performance Standard that must be met, the Final Permit Modification clearly states that the goal is to achieve an PCB concentration of 0.064 mg/kg in Massachusetts (the RME for a 1 x 10^{-5} cancer risk) and 0.00018 mg/kg in Connecticut. See also Response 228 *et al.* above.

Comment 583: GE asserts the following: A less extensive remedy would also achieve the same probabilistic CTE IMPG for fish consumption in Massachusetts. For example, Alternative SED 5 would achieve the HI = 1 CTE IMPG in all Massachusetts reaches except one within the model projection period – and in fact would achieve other CTE IMPGs (i.e., those based on a 10^{-5} cancer risk and a non-cancer hazard index of 1 for children) in more reaches than the proposed alternative. Alternatives involving less removal in Woods Pond, the Reach 7 impoundments, Rising Pond, and the backwaters would result in comparable reductions in fish tissue concentrations and comparable attainment of the probabilistic CTE IMPG as the proposed remedy.

EPA Response 583: As provided in the Administrative Record, including without limitation the Comparative Analysis, EPA believes that the selected remedy is best suited to meet the Permit General Standards in consideration of the Permit decision factors, including a balancing of those factors against each other.

In addition, the alternative cited by GE, SED 5, relies in part on thin-layer capping in Backwaters and Reach 8 and MNR in the Reach 7 Impoundments. The use of thin-layer capping provides a high level of uncertainty in performance and is not likely to perform as well as the model predicts. Response to Comments Section III.C.7 also discusses how GE's evaluation in its Revised CMS, including the evaluation of SED 5, overstates the long-term effectiveness of thin-layer capping. In addition, as discussed in the Comparative Analysis, remediation with excavation and Engineered Capping can be designed with no net loss of flood storage capacity (p. 5 and Attachment 14, p 10), whereas, thin-layer capping, which is placed on top of existing sediment, cannot be implemented without a loss of flood storage capacity. Response to Comments Section III.C.7 also discusses the effectiveness of MNR in the Reach 7 Impoundments.

Comment 673: GE asserts the following: The Biota Performance Standard consisting of an average PCB concentration of 1.5 mg/kg (wet weight) in fish fillets (skin off) in each reach of the river and the backwaters is based on the fish consumption IMPG that was developed using a probabilistic risk analysis, CTE exposure assumptions, and potential non-cancer impacts to adults. EPA assumes that the proposed remedy can achieve this standard based on model predictions. However, the EPA model was not designed to be used, and cannot be reliably used, for the prediction of such absolute numerical values.

EPA Response 673: EPA disagrees. The use of the Short-Term Biota Performance Standard ("Short-Term Biota Standard") is appropriate because its structure and numerical value reflect the uncertainties of modeling.

EPA did consider the uncertainty of the model in developing the Short-Term Biota Standard. The Final Permit Modification does not require that the Short-Term Biota Standard become effective until 15 years after the completion of remediation activities in a particular reach. If EPA were to consider the model to be predictive of absolute concentrations as GE claims, then EPA would have had the Short-Term Biota Standards become effective much sooner than the 15 year period. For example, in Reach 5A, the model predicts that the remedy would achieve the Short-Term Biota Standard approximately 8 years after the remediation in Reach 5A was complete. Yet the Short-Term Biota Standard takes effect 15 years after remediation, when the modelled concentration is approximately 0.6 mg/kg, 60 percent lower than the standard of 1.5 mg/kg. Similarly, for Woods Pond, the projected fish tissue concentration is approximately 1.0 mg/kg 15 years after remediation, approximately one-third lower that the Standard. Therefore, by setting the Short-Term Biota Standard 15 years after remediation is completed in a given reach, EPA is accounting for uncertainties in the remedy performance, including those associated with model predictions of performance.

Comments 674, 675: GE asserts the following: The establishment of a numerical Biota Performance Standard with consequences should the standard not be achieved raises similar issues to those discussed in Comments 662 – 672 with respect to the consequences of exceeding the Downstream Transport Performance Standard. The requirement that, in the event of an exceedance of the Biota Standard, GE must determine the cause is overbroad, because many factors can affect fish tissue concentrations and thus it may well not be possible to determine the cause of an exceedance. Further, as with the Downstream Transport Standard, in the event of an exceedance, EPA's authority under the CD to require GE to conduct additional response actions

beyond those prescribed by the selected remedy is limited to the situation in which EPA determines that the covenant reopener conditions are met. To the extent that the standard were interpreted to allow EPA to require GE to conduct such additional response actions without going through the covenant reopeners, it would be beyond EPA's authority for the same reasons discussed for the Downstream Transport Standard. (674) In addition to proposing the Biota Performance Standard, the Draft Permit includes Long-Term Biota Benchmarks, consisting of reach-wide average PCB concentrations for fish fillets in Massachusetts (0.064 mg/kg), fish fillets in Connecticut (0.00018 mg/kg), and duck breasts in all areas along the river (0.075 mg/kg). The Draft Permit states that GE "shall evaluate progress toward achieving these benchmarks" through a long-term monitoring program. There is no requirement – or provision that EPA may require – that GE implement any additional response actions (other than continued monitoring) based on these benchmarks or on a comparison of PCB concentrations in fish fillets or duck breasts to those benchmarks, including a determination that monitoring is not demonstrating continued progress toward achieving those benchmarks. To avoid any future question, EPA should clarify that no such additional response actions will be required on the basis of these long-term benchmarks. (675)

EPA Response 674, 675: With respect to GE's concern about being able to identify the cause of an exceedance of this Performance Standard, EPA disagrees with GE's assertion that the requirement is overbroad. EPA notes that the specific language of that Performance Standard (Section II.B.1.b.(1)(a)) was modified in the Final Permit Modification to require GE to identify "potential" causes, and also allows for consideration that there is more than one cause. Providing GE, as Permittee, the opportunity to identify potential cause(s) is a reasonable approach to implementation. The specific language is as follows:

> In the event that the Short-Term Biota Performance Standard is exceeded in any two consecutive monitoring periods after the 15 year period [from completion of construction]..., the Permittee shall 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.

Moreover, if there were any disagreement between GE and EPA as to whether GE had satisfied that provision, the Decree contains a Dispute Resolution provision for disagreements on this and other deliverables related to the cleanup. Note that this provision, and the GE's concern, is similar to the Downstream Transport Performance Standard on this issue. See Response 665.

Second, as with the discussion on the Downstream Transport Performance Standard, EPA disagrees that EPA's authorities to respond to an exceedance are as limited as GE suggests. See Response 666 above for that discussion.

Third, GE asks for clarification that with respect to the Long-Term Biota Benchmarks of the Draft Permit Modification (which is now the "Long-Term Biota Monitoring Performance Standard" in the Final Permit Modification) that no additional response actions will be required on the basis of these long-term standards. EPA responds more specifically to that comment at Response 440, 449. As discussed in that Response, EPA further clarified the basis for the relationship between, and the use of what are now termed, the Short-Term Biota Performance Standard and the Long-Term Biota Monitoring Performance Standard.

Comment 676: GE asserts the following: There is no justification for EPA's establishment of the long-term benchmark of 0.00018 mg/kg for fish fillets in Connecticut. That benchmark is not and cannot be an ARAR, since it was not promulgated after notice-and-comment rulemaking. It is based on an assumed cancer risk of 1×10^{-6} for an adult and the assumption that an adult eats a meal of Housatonic River fish 7 days per week every day of the year for 64 years. This translates to a consumption rate of 227 grams of Housatonic fish per day. The assumption that people would eat a meal of Housatonic fish every day of their lives for 64 years is patently unreasonable. This is true even for subsistence anglers, although EPA found no evidence of such subsistence fishing populations in Connecticut. In fact, in prior comments on the HHRA, CT DEP (now CT DEEP) argued that, for subsistence anglers, based on a 1999 study, the HHRA should use consumption rates of 43.1 grams/day for lower income populations and 59.2 grams/day for Southeast Asian populations; and EPA, in its Responsiveness Summary to Public Comments on New Information for HHRA, found even those rates unsupported. Further, this benchmark is an order of magnitude more stringent than EPA's (and Connecticut's) water quality criterion of 0.000064 µg/L, which is based on human consumption of fish and would equate to a fish PCB concentration of approximately 0.002 mg/kg. The fact that CT DEEP has developed this benchmark and requested the EPA Region to include it in the Draft Permit is no justification for doing so in the absence of a determination by EPA that there is a health basis for this benchmark. EPA has not determined, and has no basis for determining, that a far stricter fish tissue benchmark is justified to protect health in Connecticut than in Massachusetts.

EPA Response 676: As to GE's concern about the Long-Term Biota Monitoring Performance Standard being an ARAR, EPA has not identified it as an ARAR. EPA has identified it as a Monitoring Performance Standard. As such it fits within the Final Permit Modification's definition of a Performance Standard, including cleanup standards, and other measures and requirements necessary to protect human health and the environment. Final Permit Modification, Definition 21. Here, EPA is measuring the effectiveness of the remedy in reducing the bioaccumulation of PCB levels, as part of the Permit's General Standards of overall protectiveness of human health and the environment, and controlling sources of releases. EPA Response 440, 449 provides, EPA will ensure that the monitoring required pursuant to the Long-Term Biota Monitoring Performance Standard is performed pursuant to the Final Permit Modification. As to GE's concern about the basis for the Connecticut Long-Term Biota Monitoring Performance Standard, it is, indeed, a risk-based value based on exposure assumptions provided by CT DEEP and incorporated into the Final Permit Modification. The rationale for this concentration was provided by CT DEEP. See Fish Consumption Advisories, Calculated Risk-Based Levels (Default Fish Ingestion Rates and Exposure Assumptions for Human Health Risk Assessments Attached, EPA, October 28, 2011).

While the Long-Term Biota Monitoring Performance Standard does not, in itself, require completion of further response actions beyond the monitoring delineated pursuant to the Final Permit Modification, it does allow EPA to better assess the effectiveness of the remedy. Finally, the Long-Term Biota Monitoring Performance Standard is one component of the chosen remedy that is best suited to meet the General Standards for Corrective Measures in consideration of the Selection Decision Factors, including a balancing of those factors against each other.

Comment 742: GE asserts that the deficiencies discussed in Comment 741 with regard to the Downstream Transport Performance Standard also apply to the proposed Biota Performance

Standards. [Comment 741 is: EPA has not conducted an evaluation of the proposed PCB Downstream Transport Performance Standard against potential alternative standards. Further, if that standard were interpreted to allow the Region to require additional response actions in the event of an exceedance (without going through the CD covenant reopeners), it cannot have evaluated (or allowed others to evaluate) those additional response actions (or alternatives to them) under the Permit criteria, since such actions are currently undefined; and it has not provided for such evaluation to be conducted in the future.]

EPA Response 742: With regard to the evaluation of the Standard, see Response 741. Note that this standard was also discussed with GE, EPA and the States during technical discussions that were held from August 2012 to December 2013.

With regard to requiring potential response actions in the event of an exceedance of the standard, see Reponses 668, 669, 674, 675 above.

III.B.2 Restoration Performance Standards

III.B.2.a Overall Impacts to the Ecosystem from Remediation Activities and Effectiveness of Ecological Restoration

Comment 21.a: I am speaking for the Massachusetts Fisheries and Wildlife Board. The Division of Fisheries and Wildlife, which is supervised by the Board, is the largest landowner in the affected area of the Housatonic.

Our Board recognizes that the PCB contamination poses a public health risk that must be addressed. We are also aware that no silver bullet that applies to every area contaminated with PCBs. Each area in the nation where PCB contamination exists has required development of a unique approach that cannot be simply copied for any other contaminated areas.

The plan presented by EPA has been crafted to responsibly address the public health risks while responsibly maintaining the natural and recreational values of this section of the Housatonic River. It has been a difficult balancing act, but it has our full support.

EPA Response 21.a: EPA acknowledges the support of the Massachusetts Fisheries and Wildlife Board. See also Response 21 in Section II.B of this Response to Comments.

Comment 455: Connecticut supports habitat restoration in areas which will be disturbed by remedial actions.

Comment 492: The Massachusetts Executive Office of Energy and Environmental Affairs commented as follows: The Proposed Cleanup Plan properly requires the development and implementation of a restoration program that results in the restoration of impacts caused by the corrective measures to the full range of wildlife species and habitats. The Commonwealth looks forward to working closely with both EPA and GE during the development and implementation of this critical component of the Proposed Cleanup Plan, with the objective of fully restoring the existing ecological resources of the PSA impacted by the corrective measures. In addition, the Commonwealth appreciates that EPA has made clear in the Proposed Cleanup Plan that nothing in the restoration provisions "shall be construed or deemed to satisfy the separate net benefit

only require negotiation with the project proponent, it is still unauthorized, since EPA does not have the authority to attempt to govern GE's discussions with third parties on claims for payment.

EPA Response 624: Based in part on this comment, EPA revised the Reach 7 Performance Standards in the Final Permit Modification to clarify GE's obligations. First, Section II.B.2.f.(1)(a) through (d) of the Final Permit Modification specifies the initial remediation requirements for the Reach 7 Impoundments assuming the dams remain in place. Section II.B.2.f.(1)(e) of the Final Permit Modification allows that GE, in lieu of implementing the remedy required by Section II.B.2.f.(1)(a) through (d), *may* propose to EPA for review and approval that GE coordinate with any entity the response actions necessary to address the PCB contamination behind the Impoundments. Therefore, there is no absolute requirement for GE to conduct negotiations with third parties. In addition, there is no absolute requirement that GE perform inspection, monitoring and maintenance requirements on dams they do not own. GE can elect, as part of the Performance Standards for the Reach 7 Impoundments, to remove the PCB-contaminated sediments in the Impoundments, thus eliminating the inspection, monitoring and maintenance requirements.

However, depending on the approach that GE implements, if risks remain, then the inspection, monitoring and maintenance requirements are required to ensure protectiveness. Similarly, in response to GE's concern that the Draft Permit Modification required GE to make direct payments to third parties, the Final Permit Modification was changed to require GE to implement response actions related to inspecting, monitoring and maintaining the Reach 7 dams that remain in place, as opposed to mandating cash payments. These requirements are in Section II.B.2.j. of the Final Permit Modification. They address risks posed by PCB contamination and represent a rational approach to ensuring protectiveness. Also see Section III.G of this Response to Comments for Legally Permissible Work or Projects.

Comment 636: GE asserts the following: With regard to the potential for failure or removal of the Reach 7 dams, it is important to recognize that these dams are subject to detailed regulatory requirements and oversight, either by the Federal Energy Regulatory Commission (FERC) under the FERC regulations (18 CFR Subchapter B) or by the Massachusetts Office of Dam Safety under the Massachusetts Dam safety Standards (302 CMR 10.00). These regulations require maintenance and inspection of the dams, as appropriate, as well as review and approval by the relevant governmental authority of any plans for dam modification or removal. In addition, any modification or removal of one of these dams would require review and approval by other agencies, such as a water quality certification from MassDEP, a dredge and fill permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act, etc. Thus, dam failure would be addressed by the regulatory dam maintenance requirements, and potential dam removal would be addressed through the regulatory requirements that would apply to such a project. Such possibilities, therefore, do not provide an adequate basis for selecting the proposed remedy over the less intrusive alternatives.

EPA Response 636: The Final Permit Modification presents no significant interference or conflict with existing regulatory requirements on dam owners. GE's responsibilities under the Final Permit Modification are in connection with minimizing releases of the PCBs that are located behind the dams. As discussed above, the Final Permit Modification was changed to

require GE to implement additional response actions related to inspecting, monitoring and maintaining the Reach 7 dams that remain in place, and to conduct certain response actions should dams be removed in the future. These requirements are in Section II.B.2.j. of the Final Permit Modification and represent a rational approach to ensuring protectiveness. These requirements are not meant to relieve the dam owner of its statutory obligations. If GE believes that the dam owner is currently performing inspections of the dam in a frequency and a manner that will ensure minimization of releases of PCBs located behind the dam, and if GE receives approval from EPA that the activities by the dam owner are adequate to minimize releases of PCBs located behind the dams, then GE does not have to perform duplicative inspection, maintenance and monitoring activities at that dam. See Final Permit Section II.B.2.j.(2)(b). EPA also modified the Final Permit Modification based in part on this comment, to clarify that if GE uses best efforts to fulfill these obligations but cannot fulfill them, GE may submit to EPA for review and approval a plan that includes, without limitation, the reasons why GE cannot fulfill the obligations, any proposed actions GE will take to remediate the PCB contamination behind the dams, any further actions to be taken to obtain agreement from the dam owner, and whether the Engineered Caps will remain effective without GE having fulfilled its obligations regarding dam inspection, monitoring and maintenance.

If, however, the activities performed by the dam owner are not sufficient to minimize releases of PCBs behind the dams, it is appropriate to require GE to maintain responsibility to ensure that the release of PCBs is minimized. It is EPA's responsibility to protect human health and the environment. EPA does not and cannot rely solely upon the regulatory dam requirements to ensure protectiveness of the remedy.

These requirements are clearly necessary to protect human health and the environment. First, EPA's concern toward minimizing releases of PCBs from dams is not theoretical, but based in recent history on this same stretch of the Housatonic. In 1992, releases of contaminated sediment occurred when water behind the Rising Pond Dam was released to facilitate repairs to the dam. According to the Connecticut Department of Environmental Protection's Bureau of Water Management, no apparent measures were employed to contain PCB contaminated sediment in Rising Pond during this work.[14] Following the dam repair, benthic and fish tissue samples collected and analyzed for PCBs downstream of Rising Pond showed an increase in PCB concentrations.[15] Additionally, per Connecticut DEP, GE informed CT DEP that March 1993 data collected at a downstream location during high flow events in April, May and June 1992 exhibited atypically high PCB levels.[16]

The protectiveness of the Engineered Cap called for in the Final Permit is dependent on ensuring the integrity of the dams to minimize PCB releases. Were there to be a significant dam breach or

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[14] Connecticut Bureau of Water Management Interdepartmental Message from Charles Fredette (Supervising Sanitary Engineer) to Michael Harder (Director) Regarding Summary of 1992 CT DEP Housatonic PCB Monitoring Re: Rising Dam, Great Barrington, MA. May 18, 1993. ("Fredette Memorandum").

[15] Connecticut Post, "Higher level of PCBs in Housatonic feared," May 23, 1993.

[16] Fredette Memorandum.

failure, the Engineered Cap would also fail to be effective in isolating the PCBs. It is not logical to construct Engineered Caps behind a dam and then not ensure that the dams are properly inspected, monitored and maintained. In effect, the dams are part of the Engineered Cap. Thus, if GE opts to rely on a dam to isolate and contain PCB-contaminated sediment, instead of removing such sediment, then, to ensure a protective remedy, GE must assume responsibility for the minimization of releases from PCB-contaminated sediment impounded by dams.

If EPA had required that GE remediate all PCB-contaminated sediment behind the dams, then the emphasis on protecting Engineered Caps and controlling releases from the dams would not be as important. Moreover, GE has the flexibility in the Final Permit Modification to propose to excavate more sediment as a way of eliminating the need for an Engineered Cap behind a dam. If GE does not choose that approach, GE must construct the Engineered Cap to maintain the protectiveness of the remedy.

With regard to the dam removal requirement, the requirement was modified such that the Final Permit Modification limits GE's obligations to response actions related to Legally Permissible Future Project or Work, including dam removal (as opposed to mandatory cash payments to third parties), sufficient to allow for such Project or Work to be conducted in a manner that maintains Performance Standards and/or maintains the effectiveness of the Rest of River Remedial Action. As described in Section II.B.2.j of the Final Permit Modification, GE may reach an agreement with another party and seek approval from EPA for another party to implement some or all of these obligations.

EPA responses to GE's proposal for potential less intrusive remedies are discussed in Response 538, 625.

Comments 538, 625: GE asserts the following: EPA has attempted to justify its proposed remedy for the Reach 7 impoundments on the grounds that it will "result in achieving cleanup levels in fish tissue, and reducing direct contact risks, ecological risks, and downstream transport of contaminants." None of those grounds provides an adequate justification for the proposed remedy.

Projections using EPA's model indicate that EPA's proposed remedy for the Reach 7 impoundments cannot be justified on the basis of reducing fish PCB concentrations in those impoundments or downstream. To illustrate this point, we have compared the model-predicted fish fillet PCB concentrations resulting from the Region's proposed remedy at the end of the model projection period with those resulting from an alternative that assumes monitored natural recovery (MNR) in those impoundments and another alternative involving implementation of thin-layer capping (TLC) (i.e., placement of a layer of 6 inches of clean material on top of the existing sediments, with no removal) in those impoundments, assuming comparable remediation in other reaches. The following table presents the predicted fish fillet concentrations in the Reach 7 impoundments themselves at the end of the model projection period (i.e., 52 years) for these alternatives (compared to current conditions):

public health as the remedy design and implementation proceeds. The Final Permit Modification does include provisions for monitoring and reporting systems, including corrective actions.

Comment 392.a: The Board of Health request that the results of all air and water monitoring be provided directly to the Board at a minimum in monthly reports, and that that any elevated PCB levels and corrective action be reported immediately.

EPA Response 392.a: As Response 114 *et al.* and 391 above state, EPA will provide significant opportunities for input, including for the Pittsfield Board of Health. As for the results of all air and water monitoring, the City of Pittsfield does receive the monthly Site reports GE is required to submit pursuant to the Decree. In addition, the Final Permit Modification requires GE to submit a Community Health and Safety Plan and Design Work Plans. These plans will include requirements for action levels to be set, corrective action requirements, and notification procedures.

Comment 463: Connecticut requests the ability to review and comment on any work plan which impacts attainment of the Performance Standards/Benchmarks for Downstream Transport and Biota as well as attainment of Connecticut Water Quality Standards, Criteria and Designated Uses.

EPA Response 463: The role of the Commonwealth of Massachusetts and the State of Connecticut in the review of GE submittals for Rest of River is described in Section XV of the Decree. Specifically, the Decree states that EPA will provide the Commonwealth and Connecticut a reasonable opportunity for review and comment prior to EPA approving, approving with conditions, modifying, or disapproving of any of GE's submittals. EPA intends to coordinate closely with the Commonwealth of Massachusetts and the State of Connecticut in implementing the Final Permit Modification/Remedial Action.

VIII.C Other Stakeholder Roles

Comments 2.b, 53: Although the Plan requires that GE provide the detailed information for EPA approval as part of the design process, there will be no formal opportunity for landowners and other interested parties to review and comment on these documents. Such review opportunities should be provided.

EPA Response 2.b, 53: While the Decree does not call for a formal reasonable opportunity for review and comment by landowners and interested parties on remedy design submittals, EPA is committed to involvement by stakeholders as the cleanup design progresses. During remedial design, EPA plans to engage with the communities and stakeholders to ensure that their input is included in the design process.

Comment 61: The process is political and does not properly involve the communities that will be affected by the remediation.

EPA Response 61: EPA is implementing the process pursuant to the Decree and Permit, to address the risks posed by the PCBs in the Rest of River. As part of its obligation, as explained further in Response 2.b, 53 above, EPA plans to provide opportunities for involvement for the communities that will be affected by the remediation.