United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

March 30, 2007

Susan Svirsky
US EPA - OSRR
1 Congress Street
Boston, MA 02114

Dear Ms. Svirsky,

Thank you for the opportunity to review the Housatonic River - Rest of River Corrective Measures Study Proposal – as prepared by QEA, LLC and Arcadis BBL for General Electric (GE), February 2007. We understand that this document functions as a Draft Work Plan for the Corrective Measures Study and as such is subject to informal review, in this case by the public and cooperating agencies, with subsequent review by EPA. As Natural Resource Trustees, we are providing brief informal summary comments related to proposed remedial options and natural resource issues.

Table 2-2: It would be beneficial to present data in a separate table or figure of sediment PCB levels behind each dam in Reach 7, in light of potential remedial options for this area.

Section 2-9: As mentioned, an integral characteristic of the Housatonic River includes erosion equilibrium. We are interested to know if modeling has the capacity to predict future erosion reduction due to bank and riverbed stabilization and what this will mean for the ecological equilibrium of the river system.

Section 2-11:Figure 2-3: It would be helpful to provide the acreage for the 1 ppm PCB isopleth and other concentration benchmarks within each section/subsection of the river/floodplain.

Section 2.4.2: As stated, backwaters and Woods Pond receive high flow sediment fallout. PCB concentrations are still elevated in the 0-6”stratum, inferring continual PCB load contribution. This would infer that upstream source control is a key mechanism for reduction of this long-term issue and should be targeted in remedial options.

Section 2.4.3: We suggest that the CT 2006 SMB YOY data be expedited so that inclusion in the CMS current conditions can be consistent with MA data. It would be beneficial to provide a table depicting YOY data for all species, reaches and years collected. **Figure 2-12**: It would be additionally useful to look at data for all years to convey PCB level trends and not average concentrations. We understand

that the bulk of the contaminant load exists within the PSA, specifically, and in MA, in general. However, there should be a more even presentation of CT data and remedial issues than is apparent.

Section 2.4.4: EPA generated TEQ IMPGs for fish in the ERA. As stated, 90% of the fish tissue had congener-specific PCBs and dioxins/furans analysis. It is further stated that there is good correlation between TEQs and higher PCB concentrations in fish. We suggest that this relationship be retained in model predictions for remedial alternatives analysis and meeting TEQ IMPGs.

Section 2.5: It would be helpful to support the statements concerning fish uptake dynamics in Reaches 5, 6, and 8 with more information.

Section 3.1: The balancing act in remedial actions between long-term/short-term impacts and active remediation/MNR is to try to predict the longevity of the contaminant exposure to biota via MNR versus the amount of time the community will take to recover from a more aggressive remedial action. In this case, PCBs are still bioavailable decades after PCB production has halted. Granted much of the upper river PCB sources are being dealt with and we expect to see some positive effects of that emanating downriver. However, ROR PCB sources are also significant and there is historic precedent to show that they will remain as ongoing sources of PCB uptake and redistribution throughout the river for decades to come. This will far exceed the recovery time for most communities impacted by remedial actions. We support aggressive and comprehensive remediation of PCBs in the river, backwaters and floodplains, with potential exceptions for sensitive habitats on a case by case basis.

Section 3.2.4: It would be beneficial to explain the scope of area averaging for media and biota.

Section 3.3.2.1/Appendix B: It is unclear how the site-specific biota-sediment accumulation factor of 1.8 was derived and why median values are being used, including for BAFs, instead of arithmetic mean values. It is unclear if all available data collected during the ERA has been used to determine BSAFs/BAFs. **Table B-5**: Order of magnitude differences between Station 15 and the median BAF suggest that areas may be exhibiting much higher BAFs than are being completely represented. It is unclear if there is other data to support Station 15 uptake dynamics or suggest that Station 15 data is uncharacteristic of other floodplain soils.

Section 4.5.5.2: The dissimilarities presented between thermal desorption and thermal destruction are not sufficient enough to preclude thermal destruction from further consideration. We recommend that further detailed comparison of cost per unit, environmental impacts, and end product disposition may provide for a more informed decision.

Section 4.5.8: Beneficial reuse would potentially be possible with initial thermal destruction processing and should be considered if thermal destruction is re-incorporated as a remedial option.

Section 4.5.9: It would be helpful to summarize all Section 4 technologies that will be carried forward and those that were rejected.

Section 5.2: It would be helpful if there was some rationale provided for the excavation depths and PCB concentration action limits presented in the sediment alternatives. As presented, it is difficult to ascertain why these criteria are being used.

Section 5.2.2.3:**Tributary PCBs**: Atmospheric contaminant inputs can vary greatly, even within watersheds. Therefore, we suggest caution should be used when attempting to characterize tributary PCB contributions, especially if there are no regionally local PCB deposition data.

Section 5.2.2.4:5-27: The values selected for PCB release during dredging appear arbitrary based on the literature ranges provided. Further discussion relative to literature ranges, potential dredging options and site-specific sediment type would be beneficial and may help support a less arbitrary value.

Section 5.2.2.5: **Fish tissue**: We suggest further evaluation of the large discrepancy in GE versus EPA reconstructed whole-body/fillet PCB concentrations.

Section 5.3.1: It is inappropriate to use species-specific suitable habitat area for the entire PSA to attain area average concentrations for comparison to IMPGs for shrews or waterfowl. More appropriate would be to use smaller units for area averaging, similar to home range requirements. Otherwise, numerous exceedances of IMPGs may be attained throughout the PSA and result in less than comprehensive protection of guild biota represented by the individual indicator species, especially those with limited home ranges. Further discussion on this is warranted.

Section 5.3.2.3: It is unclear as to how EPA intended for the IMPGs to be interpreted relative to protection of individual indicator species. For instance, as presented in Appendix C, remediation of vernal pools in excess of IMPGs, for the protection of amphibians, is partially negated based on GE model runs. Further discussion on this is warranted.

In summary, GE's CMS Proposal presents a variety of remedial options with some re-analysis of EPA data to set the stage for the CMS. It would be helpful in the CMS to provide the public with a clear view of how cleanup will impact all resources, unrestrained by modeling complexities. It is also important to show which cleanup criteria, human health or ecological, determines remedial action and final media concentrations. We look to EPA to ably oversee application of the fate and transport modeling for prediction of remedial outcomes and adherence to IMPGs. After the EPA's review of this CMS Proposal, we look forward to the issuance of the CMS and the next steps in the remedial process for ROR.

For further comments or questions concerning our comments, please contact Kenneth Munney at 603-223-2541, ext.19 or Kenneth_Munney @fws.gov .

Sincerely,

Kenneth Munney
New England Field Office