



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



March 30, 2007

Ms. Susan Svirsky
Rest of River Project Manager
c/o Weston Solutions
10 Lyman Street
Pittsfield, MA 01201

Dear Ms. Svirsky:

The Connecticut Department of Environmental Protection (CTDEP) appreciates the opportunity to provide comments on the Corrective Measures Study Proposal for the GE/Housatonic River Site, Rest of River dated February 2007. This document provides a conceptual outline that General Electric and its contractors will follow to determine potential remedial activities that may be proposed for the Rest of River portion of the Housatonic River. Connecticut shares EPA's goals of restoring the Housatonic River to a condition that allows attainment of Water Quality Standards and designated uses for the river. This document is an important step towards achieving this goal.

CT DEP supports a risk-based approach to identifying acceptable environmental concentrations of PCBs and establishing appropriate remedial actions. However, the current document has several key deficiencies that must be corrected in order to properly evaluate remedial actions that may need to occur within Connecticut.

Comments have been appended to this letter for your consideration. We appreciate the opportunity to provide comments at this time and look forward to working with EPA to resolve the water quality impairments within the Housatonic River. Please contact Ms. Traci Iott at (860) 424-3082 or Ms. Susan Peterson at (860) 424-3854 with any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Wingfield".

Betsey Wingfield
Bureau Chief
Bureau of Water Protection and Land Reuse

Comments have additionally been transmitted via:

FAX: Attention: Ms Susan Svirsky FAX # (413) 442-4447
EMAIL: svirsky.susan@epa.gov

Review of Corrective Measures Study
Proposal - Rest of River

Traci Iott
Supervising Environmental Analyst
CT DEP
Bureau of Water Protection and Land Reuse

March 30, 2007

5 Pages

Background

Polychlorinated biphenyls (PCBs) were released into the Housatonic River from the General Electric (GE) facility located in Pittsfield Massachusetts. These PCBs were subsequently distributed throughout the river, including portions within Connecticut (CT). As a result, fish consumption advisories have been in place for the CT portion of the river since 1977. This very large study area has been divided into several portions. The Housatonic River within CT is included in the Rest of the River portion of the Site that extends from the confluence of the East and West Branches of the Housatonic River two miles below the GE facility in MA, to the confluence of the Housatonic River with Long Island Sound in the Stratford/Milford Area. Because of the presence of PCBs downstream of the Derby Dam from sources other than GE, the practical limit of the study area within CT has been set at the Derby Dam.

As part of the regulatory process, the Corrective Measures Study Proposal (CMSP) has been prepared for the Rest of River portion of the Site. EPA is currently accepting public comment, through March 30, 2007, on the Corrective Measures Study Proposal for the Rest of River portion of the Housatonic River prepared by Arcadis BBL and Quantitative Environmental Analysis LLC on behalf of the General Electric Company. This document provides a conceptual outline that GE and its contractors will follow to determine potential remedial activities that may be proposed for the Rest of River portion of the Housatonic River.

Inadequate Environmental Characterization with Connecticut

The CMSP must be revised to include environmental sampling within the Connecticut (CT) portion of the Rest of River. The current characterization of PCBs within abiotic and biotic media in CT is limited and prevents a complete evaluation of areas that may require remediation. The data used for the development of the Human Health and Ecological Risk Assessments were sufficient to provide a limited assessment of risks within CT. However, the inadequacies in the dataset, both regarding the number and type of samples collected, prevent a definitive characterization regarding risks within all reaches of the river, sufficient to develop a remedial action plan for the CT portion of the river at this time.

The study area within the CT portion of the river encompasses approximately 72 river miles. The level of sampling data available is equivalent to one sample for every 2.5 miles of river. Additionally the current dataset is inadequate for determining if the sediment samples were obtained from depositional areas, or were from areas less likely to accumulate PCBs. This is inadequate to accurately define the nature and extent of contamination within Connecticut and identify localized areas of elevated PCB concentrations. So, while many samples may have contributed to the existing risk assessments, the dataset it is not sufficient to definitively quantify the nature and extent of contamination within CT and form the basis for remedial decisions.

Sediment Behind Dams

Surficial sediment data is used within the risk assessments and the CMSP. There are several problems with this approach that must be considered as the remediation process moves forward. First, by restricting the evaluation of risk to the consideration of surficial sediments, GE is assuming that the river is static; that in the future there are no opportunities for deeper sediments to become mobilized and influence the concentrations of PCBs available within biologically active sediment horizons. Consideration of surficial sediments may address current risks, but will not necessarily address potential future risks. There is limited data available for deeper sediments, mostly from samples collected in association with the dams on the river. However, this limited data set does identify higher concentrations of PCBs at depth within some areas. Some of these concentrations exceed the MATC values used by EPA, indicating that risk to various populations may occur if the deeper sediments were made available.

Secondly, the current dataset is inadequate for determining if there are additional depositional areas in the river with elevated PCB levels. It was not possible to sample all major depositional areas within CT, and so, the CMSP cannot adequately evaluate potential remedial options within CT until a definitive characterization of PCBs within all portions of the river within CT has been accomplished.

Additionally, the issue of potential future exposures is tied directly to the level of PCBs in deeper sediment layers in depositional areas and behind dams on the river. Future uses of the river in Connecticut may include a variety of activities that could mobilize the deeper sediments; potentially reintroducing elevated PCB levels into surficial sediment horizons. These concentrations could then affect exposures from both direct contact as well as from fish and waterfowl consumption. In order to adequately identify remedial actions needed to address PCBs within the Connecticut portion of the river, potential future mobilization of PCBs in bedded sediments must be evaluated. This will require the collection and evaluation of a more robust data set for sediment PCB concentrations.

Biological Sampling

The CMSP must include provisions to monitor benthic, fish and waterfowl communities within the Housatonic River in CT. This monitoring is needed for waterfowl to determine the potential need for remedial actions necessary to address this exposure pathway. Currently, there are limited data for fish and benthic invertebrates. However, there is no data available for waterfowl. Waterfowl have accumulated PCBs within Massachusetts. Additionally, CT DEP has data from one duck collected within the Housatonic River basin that had elevated PCB levels.

On-going biological sampling for each of these communities is also needed to monitor PCBs over time. This is particularly true as remedial work occurs in Massachusetts, to insure the releases of PCBs during the remedial process are not mobilized down river to Connecticut.

Evaluation of Remedial Needs to Address Fish Consumption Exposures

The CMSP must assess what actions need to be taken to restore the Housatonic River to a condition where CT Water Quality Standards and Designated Uses are achieved. On a practical level, it is necessary to identify what remedial actions are needed to allow a sufficient reduction in PCB concentrations in fish that will support lifting the fish consumption advisory for the river. It is important to note that the Connecticut Department of Public Health (CTDPH) has the responsibility to establish or remove fish tissue advisories for Connecticut waters. There may be a difference between the remedial goals developed under the EPA risk assessment process and those employed by the CTDPH to evaluate the need for fish consumption advisories due to PCBs. Remedial goals established to insure restoration of the fishery should be based on the health guidance that is at least as stringent as that established by CTDPH.

The CMSP also needs to explicitly consider the need for remedial actions to address fish consumption practices of groups of people who may be more highly exposed due to their fishing practices. These groups include subsistence fishing populations and members of Schaghticoke Tribal Nation and Schaghticoke Indian Tribe.

Source Control

Currently, there are active discharges of PCBs from the GE facility in Pittsfield under both wet and dry conditions. These discharges must be eliminated and the sources of PCBs remediated. Storm water represents a significant pathway for the mass transfer of PCBs from the facility to the river. The CMSP must include actions necessary to identify and eliminate the source of PCBs in the storm water. Given that the Housatonic River in both Massachusetts and Connecticut has been substantially impacted by past and present releases from this facility, it is our position that remediation of these sources must be addressed in the CMSP to allow attainment of water quality standards and goals within Massachusetts and Connecticut.

Water Quality Standards & Listing on CT Impaired Waters List

The Housatonic River is listed on CT's Impaired Waters List. Actions evaluated under the CMSP must identify those options that will permit the attainment of CT Water Quality Standards and Goals for the river, including future elimination of the fish consumption advisory, in order to permit the removal of the water from this list. As previously mentioned, the fish consumption advice provided to CT DEP by the Connecticut Department of Public Health must be used to guide remedial actions so as to allow for the eventual restoration of the fishery within Connecticut.

Considerations for the Future

The CMSP must be revised to include a process by which additional characterization and remediation of PCBs, as needed, will occur in the future as new information becomes available or new projects are initiated. For example, at some point a new project, possibly a new road project, maintenance of a dam, or installation of a fish ladder or a fishing pier, will be proposed within the Housatonic River somewhere in Connecticut. It is unlikely that there is sufficient information currently available to quantify the PCB concentrations within the proposed project area or determine if remediation of PCBs is needed within the project area.. The CMSP must include a process to characterize and remediate PCBs as needed within the project area to accommodate these types of projects without exacerbating risks from PCB contamination.