UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

February 18, 2011

Betsey Wingfield
Bureau Chief
Bureau of Water Protection and Land Reuse
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Dear Ms. Wingfield:

During our review of the revisions to the Water Quality Standards (WQS) submitted by the Connecticut Department of Environmental Protection (DEP) to EPA on January 4, 2011, we identified issues that raised obstacles to approval of certain revisions. Staff from my office and the Office of Regional Counsel have discussed these issues with your staff and DEP's counsel several times. These discussions have resulted in mutually agreeable changes that address EPA's concerns and that EPA would be able to approve (with the exception of the site-specific copper criteria for Indian Lake Creek, discussed further below). The provisions in question and the changes are shown in redline/strikeout format in Attachment A of this letter. In some instances, these changes will result in a return to the previous water quality standards.

EPA would not be able to approve the site-specific copper criteria for Indian Lake Creek on the basis of the information provided. On October 20, 1997, EPA approved Connecticut's adoption of the site-specific copper criteria for 16 waterbodies, based on the supporting documentation DEP submitted by letters of April 12, 1996 and May 28, 1997, including "Derivation of Site-Specific Dissolved Copper Criteria for Selected Freshwater Streams in Connecticut." DEP's analysis indicated that criteria based on the reference site Water Effects Ratios (WERs) were expected to provide conservative protection of designated aquatic life uses when applied to waters where the instream waste concentration (IWC) of treated sewage effluent is 20% or greater under critical low flow (7Q10) conditions.

Connecticut's WQS revisions submitted to EPA on January 4, 2011 included adoption of the site-specific copper criteria for a segment of Indian Lake Creek, on the basis that the IWC for this water body is consistent with the IWC on which the 1997 site-specific criteria were based. However, according to DEP's calculations[1], the IWC under low flow

[1] Calculations provided by email with attached memo of January 19, 2011 from Traci Iott, DEP to Ellen Weitzler, EPA.

Therefore, we encourage DEP to delete this revision and to reflect that deletion in the submission that will incorporate the changes shown on Attachment A.

Finally, we understand that DEP has already corrected two typographical errors and posted those corrections on its website, and is in the process of correcting a typographical error related to beryllium. It would be helpful if the revisions that will be submitted in response to this letter include those three corrections. Also, if there are any other typographical corrections incorporated in that submission, please call them to our attention.

We hope to receive the revisions discussed in this letter as soon as possible so that we may complete our review and approval process. We anticipate approval of the remaining revisions contained in the January 4, 2011 submittal except for the formaldehyde criteria, which are still under review.

Please contact me at 617-918-1561 or Ann Williams (617-918-1097), if you have any questions.

Sincerely,

Stephen J. Silva, Chief
Water Quality Branch

Attachment

ATTACHMENT A

Water Quality Standard 2

2. ~~The water quality necessary to support e~~Existing and designated uses such as propagation of fish, shellfish and wildlife, recreation, public water supply, and agriculture, industrial use and navigation, and the water quality necessary for their protection, are to be maintained and protected.

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Water Quality Standard 8:

8. Water Quality ~~Standards and~~ Criteria do not apply to environmental conditions brought about by natural causes or conditions.

Lake Trophic Categories: Table 1

Mesotrophic - May be Class AA, Class A, or Class B water. Moderately enriched with plant nutrients. Moderate biological productivity characterized by intermittent blooms of algae and/or small areas of macrophyte beds. Good potential for water contact recreation. ~~Good resource for wildlife populations.~~

Eutrophic - May be Class AA, Class A, or Class B water. Highly enriched with plant nutrients. High biological productivity characterized by occasional blooms of algae and/or extensive areas of dense macrophyte beds. Water contact recreation opportunities may be limited. ~~Good potential for fishing opportunities and for wildlife populations.~~

Appendix A Definitions:

Trophic State - Trophic State means the level of biological productivity or amount of plant biomass within a water body at the time of measurement.

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Point Source - Point source means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Surface Water - ~~Surface Water means waters as defined under section 22a-367 and 22a-423 of the Connecticut General Statutes, waters of the United States as defined under 33 CFR Part 328, and wetlands as defined under sections 22a-28 of the Connecticut~~

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~~General Statutes, including vernal or intermittent bodies of water, but excluding groundwater.~~

Surface Water means the waters of Long Island Sound, its harbors, embayments, tidal wetlands and creeks; rivers and streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, federal jurisdictional wetlands, and other natural or artificial, public or private, vernal or intermittent bodies of water, excluding groundwater.

Indicator Bacteria- Indicator bacteria mean a species or group of microbes which are used to conduct microbiologial examinations of water in order to determine its sanitary quality and provide evidence of recent fecal contamination from humans or other warm blooded animals ~~or birds~~.

APPENDIX B

Shellfishing (6)

Direct Consumption ~~Harvest in Approved and recreational and commercial use as determined by the Department ofAgriculture, Bureau of Aquaculture~~

Indirect Consumption ~~Harvest by licensed operations for indirect Consumption as determined by the Department of Agriculture, Bureau of Aquaculture~~

Appendix E Antidegradation Implementation Policy:

V. TIER 2 ANTIDEGRADATION EVALUATION AND IMPLEMENTATION REVIEW

1. The Commissioner shall determine whether the new or increased discharge or activity will result in a significant lowering of water quality in a high quality water or any wetland by utilizing all relevant available data and the best professional judgment of Department staff and considering the discharge or activity both independently and in the context of other discharges and activities in the affected water body and considering any TMDL established for the water body. The Commissioner may determine ~~that~~ only under the following circumstances that a proposed new or increased discharge or activity would not reasonably be expected to significantly lower water quality in high quality waters or wetlands:

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