



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

FEB 12 2009

John C. Hall
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Washington, DC 20005

Dear Mr. Hall:

In a letter dated January 14, 2009, you responded to a previous correspondence and asked EPA to answer two questions relating to certain Pennsylvania nutrient TMDLs.

First, you requested clarification on the relationship between the conditional probability peer review process and the TMDLs at issue. As we indicated in our letter of December 24, 2008, we believe the Pennsylvania nutrient TMDLs are appropriately developed and supported by the underlying record. With regard to a peer review process for use of empirical approaches in the context of national nutrient criteria guidance, EPA remains committed to relying on best available science and plans to carefully consider and utilize the advice and guidance that is offered through the peer review process.

Under the Clean Water Act, the development of water quality standards, TMDLs, and permits is an iterative process designed, informed, and clarified by the availability of new information related to the science, technology, monitoring, and environmental conditions being addressed. Data and insights from new research, the peer review of existing science, or new information derived from relevant technical or monitoring activities may appropriately be considered in site-specific contexts to the degree it is relevant and applicable to the issues at hand. In the case of the Pennsylvania TMDLs, results from the peer review of possible national guidance may or may not affect them. EPA remains open to the outcome of the peer review process and is committed to working with both the Commonwealth and interested stakeholders in considering its relevance to these TMDLs. If after the peer review concludes, you, your clients, or the Commonwealth of Pennsylvania believe that certain findings or conclusions of the peer review suggest that the TMDLs or their endpoints need to be revisited, we will consider that issue when the new information becomes available and there has been an opportunity to review and evaluate it.

With regard to your question concerning "weight of evidence," this is an approach that has been used effectively in a variety of scientific and technical disciplines and contexts and has been recognized and supported by the technical literature. In a range of risk assessment contexts, weight of evidence is recognized in EPA's peer reviewed methodologies and serves as the basis for risk characterization. In the nutrient criteria context, weight of evidence is specifically affirmed in EPA's peer reviewed technical guidance manual for rivers and streams. EPA uses "weight of evidence" as a means of evaluating scientific evidence and what it collectively indicates for a particular application. EPA believes the strength of the individual components of a "weight of evidence" analysis, and whether or not convergence adds confidence to that analysis' conclusions, is a very important consideration in evaluating a body of evidence. We regard the application of conditional probability in the case of Pennsylvania TMDLs as confirming and strengthening the conclusions indicated by the weight of evidence approach, not as a substitute for it.

Finally, in an attachment to your January 14th letter, you posed a number of questions about the form and content of the upcoming peer review. In a subsequent letter dated January 22nd, you provided additional ideas that you believe should be considered in setting up the peer review process. While we are still working through a number of issues related to the peer review, we agree that including an opportunity for input from interested stakeholders as part of the overall peer review process is appropriate in this context. In this regard, we plan to request a Science Advisory Board (SAB) review of technical guidance describing application of empirical approaches, including conditional probability, and how they could be used to support development of nutrient endpoints and criteria. The SAB process affords consideration of both written comments and verbal presentations at a meeting to ensure that stakeholder scientific perspectives are considered. We will keep you apprised of further details of the peer review approach as the planning process develops.

I hope this is helpful. If you have any questions, or wish to discuss this further, please contact Jim Curtin in our Office of General Counsel at (202) 564-5482.

Sincerely,



Ephraim King, Director
Office of Science and Technology

cc: Jon Capacasa
Jim Curtin