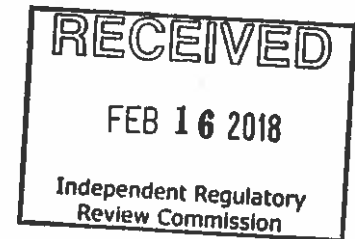


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**American  
Forest & Paper  
Association**



February 16, 2018

(Via e-mail)

Pennsylvania Environmental Quality Board  
Rachel Carson State Office Building  
400 Market Street,  
Harrisburg, PA 17105-2301

**Re: Proposed Rulemaking on the Triennial Review of Water Quality Standards  
(Ch. 93), Environmental Quality Board ("EQB") ("the Proposal")**

To Whom It May Concern:

The American Forest & Paper Association (AF&PA) serves to advance a sustainable U.S. pulp, paper, packaging, tissue and wood products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry's sustainability initiative - *Better Practices, Better Planet 2020*. The forest products industry accounts for approximately four percent of the total U.S. manufacturing GDP, manufactures over \$200 billion in products annually, and employs approximately 900,000 men and women. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 45 states.

AF&PA's sustainability initiative - *Better Practices, Better Planet 2020* - comprises one of the most extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry and is the latest example of our members' proactive commitment to the long-term success of our industry, our communities and our environment. We have long been responsible stewards of our planet's resources. We are proud to report that our members have already achieved the greenhouse gas reduction and workplace safety goals. Our member companies have also collectively made significant progress in each of the following goals: increasing paper recovery for recycling; improving energy efficiency; promoting sustainable forestry practices; and reducing water use. AF&PA and several of our members have a direct interest in this rulemaking because those

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**BETTER PRACTICES  
BETTER PLANET 2020**  
Continuing AF&PA's Commitment to Sustainability

members' facilities' water permits could include limits based on the water quality criteria in the Proposal.

**I. EQB Should Not Adopt the Proposal's Human Health Water Quality Criteria ("HHWQC") Without Undertaking Analysis of its Economic and Other Impacts**

**A. States Are Not Required to Adopt EPA's National HHWQC**

Under Section 304 of the Clean Water Act (CWA), states have the primary responsibility to develop water quality standards, including the water quality criteria that are one of the key components of those standards. This is consistent with the concept of "cooperative federalism," that underlies the CWA, and the statute envisions a process by which states adopt water quality standards to address the water quality needs of its streams, lakes, and other water bodies.

With respect to HHWQC, EPA issues national recommended HHWQC pursuant to Section 304(a) of the CWA, and states use these as the starting point for developing the water quality criteria in their water quality standards. EPA regulations (40 C.F.R. § 131.11(b)) are clear that states have three options when developing their criteria and submitting them to EPA for approval: 1) adopt the EPA national criteria; 2) modify the national criteria to reflect site-specific conditions; or, 3) develop other "scientifically defensible" criteria.

Therefore, states are not required to adopt the national criteria or to use the identical default values that EPA included in the equations to derive those national criteria. The states' criteria must protect the designated use and be based on "sound scientific rationale" (40 C.F.R. § 131.11(a)). This provides states the opportunity to work with key stakeholders and to undertake the analysis needed to appropriately adapt national criteria to the state.

**B. Risk Management Discretion**

EPA's 2000 Human Health Methodology discusses the science and policy considerations inherent in the establishment of HHWQC. For example, in Section 2.2 (Science, Science Policy, and Risk Management), EPA states:

"Risk management is the process of selecting the most appropriate guidance or regulatory actions by integrating the results of risk assessment with engineering data and with social, economic, and political concerns to reach a decision. In this Methodology, the choice of a default fish consumption rate which is protective of 90 percent of the general population is a risk management decision. The choice of an acceptable cancer risk by a State or Tribe is a risk management decision."

The Methodology then goes on to make clear that this discretion applies to other aspects of HHWQC derivation:

"Many of the components in the 2000 Human Health Methodology are an amalgam of science, science policy, and/or risk management. For example, most of the default values chosen by EPA are based on examination of scientific data and application of either science policy or risk management. This includes the default assumption of 2 liters a day of drinking water; the assumption of 70 kilograms for an adult body weight; the use of default percent lipid and particulate organic carbon/dissolved organic carbon (POC/DOC) for developing national BAFs; the default fish consumption rates for the general population and sport and subsistence anglers; and the choice of a default cancer risk level. Some decisions are more grounded in science and science policy (such as the choice of default BAFs) and others are more obviously risk management decisions (such as the determination of default fish consumption rates and cancer risk levels). Throughout the 2000 Human Health Methodology, EPA has identified the kind of decision necessary to develop defaults and what the basis for the decision was."

In short, EQB has the discretion to consider the costs of meeting the criteria and other social costs and benefits of their adoption, as well as other relevant factors. As it undertakes the risk management inherent in establishing its HHWQC, EQB also should recognize the uncertainties and conservative assumptions involved in risk estimates.

C. The National HHWQC Are Unnecessarily Conservative and Based on Unrealistic Default Values.

EPA's national HHWQC use very conservative default values that result in unnecessarily stringent criteria because of "compounded conservatism."<sup>1</sup> For example, the national HHWQC assume that every day, for 70 years, everyone drinks 2.4 liters (about 2.5 quarts) of water per day; this is more water than 90 percent of the people in the U.S. drink. The HHWQC also assume that each person is drinking water directly out of a lake or stream or other surface water — and that the water has not been filtered or treated to remove any pollutants. The HHWQC also assume that everyone is eating 22 grams of locally caught fish every day for 70 years, all of which are contaminated at the resulting criteria level and that none of the pollutants in the fish were lost due to preparation or cooking. Compounded conservatism means that the HHWQC assume that everyone exhibits these and all of the other default characteristics that are used to derive the national HHWQC. It is extremely unlikely that there is a significant portion of the population that exhibits most or all of these characteristics, and it strains credulity to assume that everyone has all of these characteristics. See the attached comments of AF&PA and the Federal Water Quality Coalition on EPA's proposed national HHWQC that discuss these and other issues. Those comments are incorporated by reference.

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<sup>1</sup> See the comments filed today by the National Council for Air and Stream Improvement (NCASI) that discuss in more detail the compounded conservatism embodied in the national HHWQC and a number of other issues. Those comments are incorporated by reference.

**D. The National HHWQC Are Not Necessarily Applicable to Pennsylvania Waters**

As noted above, states may revise the national HHWQC to reflect site-specific conditions. Two values in EPA's HHWQC derivation equation in particular should be revised to reflect Pennsylvania waters. EPA's national HHWQC include a bioaccumulation factor (BAF), instead of a Bioconcentration Factor (BCF). Both Washington and Florida declined to use BAFs when they adopted their own HHWQC, noting that EPA's BAFs were developed based on a model tailored to Great Lakes waters, which EPA has consistently characterized as "unique." Washington also declined to use the national default Relative Source Contribution (RSCs), citing state-specific data of information justifying the departure from the default RSCs.

**E. The Permit Limits Resulting from Adoption of EPA's National HHWQC Can be Extremely Expensive or Impossible to Comply With**

EQB is proposing to adopt the national HHWQC EPA issued in 2015, without additional analysis or modification. Development of the national HHWQC was controversial for a variety of reasons, including consideration of the costs that could be imposed by permit limits based on those criteria. First, many of the national HHWQC are more stringent than the previous national HHWQC, in some cases, many times more stringent. For example, as indicated in the attached spreadsheet, 66 water and organism criteria and 61 organism-only criteria are more stringent than the previous criteria.

Second, a study conducted by HDR for industrial and municipal dischargers on proposed HHWQC for Washington State (attached) indicated that compliance costs for those dischargers could reach hundreds of millions of dollars or more, and that even with the expenditure of these funds for advanced treatment technologies, many of the criteria still could not be achieved. While some of the assumptions underlying the Washington criteria are different than EPA's national HHWQC, certain of the conclusions of the HDR report may still be relevant to Pennsylvania dischargers. The HDR study also documented negative environmental impacts associated with implementing proposed HHWQC for Washington, including increased energy use resulting in increased greenhouse gas emissions, and increased solid waste generation.

Finally, it is our understanding that only one state has adopted the national HHWQC as issued by EPA. Several states that are updating their HHWQC are considering undertaking analyses of many of the issues we raise in our comments and in those attached or referenced.

**II. Conclusion**

EQB should not adopt the national HHWQC as it has proposed. Instead, EQB should take the opportunity provided under EPA regulations to develop more scientifically defensible criteria that are achievable and applicable to Pennsylvania waters. In particular, EQB should undertake analysis to determine the potential technologies needed, and associated costs to Pennsylvania dischargers, of achieving any HHWQC it

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adopts. EQB also should consider using BCFs and RSCs that are applicable to Pennsylvania waters in the development of those criteria.

Thank you for the opportunity to comment on the Proposal. If you have any questions, please contact me at 202/463-2581 or [jerry\\_schwartz@afandpa.org](mailto:jerry_schwartz@afandpa.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry Schwartz", with a stylized flourish at the end.

Jerry Schwartz  
Senior Director  
Energy and Environmental Policy

Attachments