



October 24, 2016

(Via e-mail)

Andrew J. Edwards
Water Quality Standards Coordinator
S.C. Dept. of Health & Environmental Control
2600 Bull Street
Columbia, SC 29201

Re: Proposed Revisions to Section 61-68, Water Classifications and Standards, Department of Health and Environmental Control (“DHEC”) (“the Proposal”)

Dear Mr. Edwards:

The American Forest & Paper Association (AF&PA) appreciates the opportunity to comment on the Proposal. AF&PA serves to advance a sustainable U.S. pulp, paper, packaging, 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 4 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 47 states.

AF&PA’s sustainability initiative - *Better Practices, Better Planet 2020* - 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. Our member companies have collectively made significant progress in each of the following goals, which comprise one of the most extensive quantifiable sets of sustainability goals for a U.S. manufacturing industry: increasing paper recovery for recycling; improving energy efficiency; reducing greenhouse gas emissions; promoting sustainable forestry practices; improving workplace safety; and reducing water use. AF&PA and several of our members have a direct interest in this rulemaking because those members’ facilities’ water permits could include limits based on the water quality criteria in the Proposal.

I. DHEC 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. 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.”¹ 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

¹ 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.

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.

C. The National HHWQC Are Not Necessarily Applicable to South Carolina 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 South Carolina 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 or information justifying the departure from the default RSCs.

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

DHEC is proposing to adopt the national HHWQC EPA issued in 2015, without additional analysis or modification. Adoption of HHWQC has been controversial in a number of states 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 2015 HHWQC are more stringent than the previous national HHWQC, in some cases, many times more stringent. For example, as indicated in the attached, 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 could still not be achieved. While some of the assumptions underlying the Washington criteria are different than EPA's national HHWQC that DHEC has proposed to adopt, certain of the conclusions of the HDR report are still relevant to this rulemaking. For instance, the HDR report stated in the Executive Summary that the same PCB criterion DHEC is proposing to adopt is unachievable, even with extremely expensive, advanced treatment technologies:

"Advanced wastewater treatment technologies may enhance toxics removal rates; however, they will not be capable of compliance with HHWQC-based effluent limits for PCBs. The lowest levels achieved based on the literature review were between <0.00001 and 0.00004 micrograms per liter (µg/L), as compared to a HHWQC of .0000064 µg/L."

The HDR study also documented negative environmental impacts associated with implementing proposed HHWQC for Washington, including increased energy use and resulting increased greenhouse gas emissions, and increased solid waste generation.

II. DHEC Should not Adopt Flow Criteria

We note that U.S. EPA is encouraging DHEC to adopt criteria for flow. As indicated in the NCASI comments filed today, there are significant uncertainties associated with developing flow criteria that call into question the scientific defensibility of such criteria. Moreover, EPA did not address [the Virginia Department of Transportation case](#) that held that flow is not a pollutant under the Clean Water Act, and that EPA has no authority to regulate flow as a surrogate for sediment.

III. Conclusion

DHEC should not adopt the national HHWQC as it has proposed. Instead, DHEC should take the opportunity provided under EPA regulations to develop more scientifically defensible criteria that are achievable and applicable to South Carolina waters. In particular, DHEC should undertake analysis to determine the potential technologies needed, and associated costs to South Carolina dischargers, of achieving any HHWQC it adopts. DHEC also should consider using BCFs and RSCs that are applicable to South Carolina waters in the development of those criteria. Finally, DHEC should not adopt flow 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.

Sincerely,



Jerry Schwartz
Senior Director
Energy and Environmental Policy

Attachments