SCWQA

Water Quality Through Sound Science

September 29, 2026

Mr. Andrew Edwards
Water Quality Standards Coordinator
South Carolina Department of Environmental Services
Bureau of Water
2600 Bull Street
Columbia, SC 29201

Re: Triennial Review Comments

Dear Mr. Edwards:

I hope you are doing well.

I am writing on behalf of the South Carolina Water Quality Association (WQA) to share a couple of comments on the Department's proposed triennial review of water quality standards.

The SCWQA comprises public water, sewer, and stormwater utilities statewide. Our members strive to protect public health and the environment in the most affordable and cost-effective manner. Our members serve a majority of sewered population of the State.

We write to provide input on three issues.

First, we support the removal of the 800-count ceiling threshold for daily maximum NPDES bacteria results which can be subject to retesting. While the State's NPDES permit limits for bacteria for publicly-owned treatment works is out-of-step with many other States and EPA regions, we appreciate this modicum of flexibility and look forward to seeing what impact it will have. As we have discussed, we reserve the right to renew our request for monthly/weekly geometric mean limits in the future.

Second, we question why the Department did not correct the reference in Section C.4.b.1 to specify the use of an annual average flow rather than 7Q10 statistic for the permitting of noncarcinogens. DES correctly uses the annual average flow for carcinogens and we fail to see why DES would use a lesser stream statistic for noncarcinogens.

This recommendation is consistent with EPA's Water Quality Standards Handbook, Chapter 5 on General Policies, describes these water quality standards and application concepts at page 13. EPA 820-B-14-004 (2014) (emphasis added):

> "The EPA recommends the harmonic mean flow for implementing human health criteria. The concept of a harmonic mean is a standard statistical data analysis technique. The EPA's model for human health effects assumes that such effects

occur because of a long-term exposure to low concentrations of a toxic pollutant (e.g. two liters of water per day for seventy years). The harmonic mean flow allows for estimating the concentration of toxic pollutant contained in those two liters of water per day when the daily variation in the flow rate is high. Therefore, the EPA recommends use of the harmonic mean flow in computing critical low flows for human health criteria rather than using other averaging techniques.

What Design Stream Flow Should Be Used to Implement Human Health Criteria?

Human health criteria represent ambient pollutant concentrations that are acceptable based on a lifetime (70 years) of exposure. Accordingly, discharges of pollutants should be regulated such that criteria will not be exceeded under stream conditions that represent long-term average conditions . . . With today's Human Health Methodology, EPA is revising its guidance to recommend harmonic mean flow be used to implement both carcinogen and noncarcinogen human health criteria. Harmonic mean flow should be used to implement human health criteria because, by and large, human health criteria are designed to protect an individual over a lifetime of exposure. … Therefore, we have attempted to match the longest stream flow averaging period (using harmonic mean) with the criterion which is protective over a human lifetime.

Accordingly, we urge the Department to modify R.61-68 to specify the use of either an annual average or harmonic mean flow for both carcinogens and noncarcinogens.

Finally, we object to DES's proposal to make the following revisions to both the antidegradation rules and establish hydrologic criteria as shown on pages 18 and 33 (see below). By including flow quantity rather than water quality in the water quality standards regulation, DES opens the door to surrendering its authority over water quantity/flow allocation to the federal government. The Clean Water Act expressly leaves flow quantity to the states. Yet by unnecessarily including stream flow quantity provisions in the water quality regulation, we open the door to the federal government and non-governmental organizations to impose their views of appropriate flow quantities and allocations among users. This is a serious mistake and one that is out-of-Step with almost every other State.

EPA has pointed to this type of provision as a basis for its proposal of flow TMDLs years ago (See EPA's proposed (ultimately, withdrawn) Alamance Flow TMDL (NC). EPA's authority to impose flow-based TMDLs was defeated in Virginia in federal district court. That led EPA to withdraw the Alamance Flow TMDL as well as a similar flow-based TMDL in Springfield, Missouri. However, the flow quantity language which DES is now proposing opens the door to EPA taking another crack at allocating South Carolina's waters.

Accordingly, the SCWQA urges DES to drop the proposed revisions on Pages 18 and 33 (reprinted below).

"Establishing Hydrologic Criteria", *page 18* :

D. ANTIDEGRADATION RULES.

1. Existing water uses and the level of water quality necessary to protect these existing uses shall be maintained and protected regardless of the water classification and consistent with the policies below.

a. A new activity or expansion of an existing activity shall not be allowed in Class ONRW, Class ORW, or Shellfish Harvesting Waters if it would exclude, through establishment of a prohibited area, an existing shellfish harvesting or culture use. A new activity or expansion of an existing activity which will result in a prohibited area may be allowed in Class SA or Class SB waters when determined to be appropriate by the Department and would not remove or impair an existing use.

b. Existing uses and water quality necessary to protect these uses are presently affected or may be affected by instream modifications or water withdrawals. The stream flows necessary to fully protect classified and existing uses and the water quality supporting these uses shall be maintained ~~consistent with riparian rights to reasonable use of water~~.

Page 33:

b. The need for a total mercury effluent limit, for the protection of aquatic life and/or human health, pursuant to R.61-9.122.44(d), shall be based on a reasonable potential analysis of the discharge compared to the mercury standards for ambient waters.

19. The assessment of methylmercury in fish or shellfish for purposes of Section 303(d) listing determinations shall be based on the Department's Fish Consumption Advisories.

20. The stream flows necessary to fully protect existing and classified uses shall be maintained.

Thank you for considering our views on the triennial review proposal. We are available to provide any additional information you may require as well as to discuss these changes at your convenience.

Sincerely,

F. Paul Calamita

F. Paul Calamita
General Counsel

C: SCWQA Members
Mr. Henry Porter
Ms. Ann Clark