



October 25, 2016

Andrew Edwards  
Bureau of Water Quality  
South Carolina Department of Health and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Re: Public Comments to Proposed Amendments  
to R. 61-68, Appendix, Human Health Criterion

Dear Mr. Edwards:

The South Carolina Department of Health and Environmental Control (“DHEC”) proposes to amend water quality standards in regulation R. 61-68, Appendix, for the State of South Carolina (“Revised WQS”). South Carolina State Register, Vol. 40, Issue No. 29, p. 74 (September 23, 2016.) The Revised WQS incorporate by reference certain numeric human health criteria for ninety-four (94) chemical pollutants published by the United States Environmental Protection Agency (“EPA”) at 80 Federal Register 36986 (June 29, 2015) (“EPA Criterion”). Despite the lack of water quality studies, the Revised WQS will be 1,000 times more stringent than existing water quality standards. Cf. e.g., 80 Federal Register at 36987, Table 1, 1, 2, 4 Trichlorobenzene (Revised WQS of 0.071 ug/L) and S.C. Codes Ann. R. 61-68, Appendix, No. 92, 1, 2, 4 Trichlorobenzene (current WQS of 35 ug/L and MCL of 70 ug/L).

WITHOUT PROPER STUDIES BY DHEC OR EPA INTO HUMAN HEALTH CRITERION AND ECONOMIC EFFECTS ON INDUSTRY, THE REVISED WQS VIOLATE APPLICABLE LAW AND INTENT OF EPA

Proposed Revised WQS cannot be incorporated by reference into South Carolina water quality standards. The State did not perform required studies on each chemical pollutant listed in the Revised WQS, and no consideration is given to economic impacts or technological feasibility of the Revised WQS. DHEC seeks to enforce as a regulation “information” intended only as a “consideration” by EPA.

Revised WQS are authorized by the South Carolina Pollution Control Act (PCA), S.C. Code Ann. §§48-1-10 to 350, and the South Carolina Administrative Procedures Act (APA), S.C. Code

Ann. §§1-23-10 to 380, in South Carolina. Existing water quality standards state “[t]hese regulations [are] promulgated pursuant to authority of the [PCA]”, S.C. Code Ann. R61-68.A.1, and the APA provides the procedures for proposing and adopting any State regulation, S.C. Code Ann. §1-23-110 to 150, 380.

Because the Revised WQS do not satisfy requirements of the PCA and APA, they must be held in abeyance or otherwise vacated until DHEC complies with statutory requirements.

### **Comment No. 1: Revised WQS Violate PCA Because Proper Studies Have Not Been Performed by the State**

The PCA requires DHEC (not EPA or another agency) perform a proper study for each water quality standard and human health criterion before a Revised WQS can be adopted for streams or groundwater in this State:

In order to attain the objectives of this chapter, [DHEC] after proper study . . . shall adopt rules and regulations and classification standards.

S.C. Code Ann. § 48-1-60 (emphasis added). The Revised WQS are to be regulations and will comprise water quality standards for each stream. The EPA Criterion, which DHEC seeks to incorporate into State regulations, are not regulations or standards; they are merely technical information for “consideration” by DHEC when performing DHEC’s required studies of water quality in State law. 80 Federal Register at 36987, Col. 2 (“EPA’s recommended criteria provide technical information for states to consider in adopting water quality standards. . . .”). According to the PCA, individual studies for each EPA Criterion are necessary because the human health effects of each chemical pollutant are different and may affect water quality in a variable way:

It is recognized, due to variable factors, no single standard of quality and purity of the environment is applicable to all ambient air, land, or waters of the State.

Id. (emphasis added). Therefore, absent specific and “proper study” of each human health criterion in the Revised WQS by DHEC, the agency may not incorporate the Revised WQS into State regulations or “classification standards” for waters of the State.

The water quality studies required by PCA are specific. “In adopting the classification of waters and the standards of purity and quality, consideration must be given [to the following for each individual pollutant for which a Revised WQS is considered]”:

1. Health effects of the chemical on the waters of the State, given the size, depth, surface area, volume, direction, flow, gradient and temperature of each stream;
2. Suitability of the area for receiving the specific chemical pollutants;

3. Effects the pollutants may have on use of the streams.

S.C. Code Ann. § 48-1-80. To date, DHEC has done none of this<sup>1</sup>.

The Revised WQS have not been the subject of any studies related to waters of the State into which the pollutants may be released:

1. DHEC performed no studies prior to proposing adoption of the Revised WQS for any pollutants covered by the regulations and merely proposes to incorporate by reference the Revised WQS given by EPA in the June 29, 2016, Federal Register;
2. EPA did not perform any studies at all in developing the new Revised WQS and simply “updated the human health criteria using externally peer-reviewed information sources”, 80 Federal Register at 36989, Col. 1;
3. EPA developed the Revised WQS from unidentified “science documents” related to certain toxicity values and bioaccumulation, which DHEC has not reviewed or questioned and is not related to the factors required by PCA, §48-1-80(1) to (4); and
4. Generic information cited by EPA to develop the Revised WQS is limited to “scientific judgments,” “health toxicity values,” and “bioaccumulation factors,” and no proper studies related to characteristics of waters and alleged toxicants were performed. 80 Federal Register 36987, Col. 2.

Therefore, the Revised WQS violate the PCA as proposed.

**Comment No. 2: Revised WQS Violate PCA and APA Because No Consideration is Given to Economic Impact**

In order to be consistent with State law, Revised WQS must also take into account economic impact of the Revised WQS on industry in the State. The Revised WQS do not do that.

Under the PCA, all water classification regulations must be “consistent with . . . maximum employment [and] industrial development of the State.” S.C. Code Ann. § 48-1-20. In formulating Revised WQS into regulations, “consideration shall be given to \* \* \* encouraging the

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<sup>1</sup> To the extent DHEC asserts these factors are part of an applicant’s permit review process, the position contradicts the PCA. The PCA expressly requires the studies during the regulatory process, not during permitting.

most appropriate use of the lands . . . for . . . industrial purposes [and] uses which have been made or may be made . . . for industrial consumption. . . .” S.C. Code Ann. § 48-1-80(2),(3).

As written, Revised WQS violate this requirement:

[Revised WQS] criteria do not reflect consideration of economic impacts or the technological feasibility of meeting pollutant concentrations in ambient water.

80 Federal Register 36987, Vol. 2 (emphasis added). Since DHEC is not conducting separate analysis of the listed EPA Criterion, no DHEC evaluation of the economic impacts has been or may be conducted. Given the Revised WQS reduce acceptable discharge levels of chemical pollutants by 1,000 times and the regulated community subject to the regulation is that same industry protected by the PCA, the economic impact on industry is verifiable, but not accounted for in the Revised WQS.

Moreover, the APA mandates the agency determine “substantial economic impact” of the Revised WQS on State industry through preparation of preliminary and final assessment reports. S.C. Code Ann. § 1-23-115(B). Because the Revised WQS incorporate the EPA guidance verbatim into regulations and the EPA human health Criterion do not include economic impact analysis, DHEC is foreclosed from completing a preliminary or final assessment report without review and evaluation of the original EPA Criterion sources, which it has not done.

Finally, DHEC may not claim the economic analysis occurs through a preliminary or final assessment required by the General Assembly. The PCA is quite specific: regardless of an economic assessment under the APA, no regulation may adopt water standards, which do not allow for continued use of waters of the State for industrial purposes. Restricting wastewater discharge levels by 1,000 times will do just that.

### **Comment No. 3: Not Intended for States to Incorporate by Reference**

EPA’s published water quality criteria are suggestions, not requirements. EPA makes clear its recommended criteria should not be incorporated by reference or substituted for a State’s analysis because EPA did not account for local and regional information about the waters of the State.

EPA states in the Federal Register Notice, its recommended criteria only provide information for “consider[ation] [by DHEC]...in adopting water quality standards.” 80 Federal Register 36987, Col. 2. “EPA’s recommended criteria do not substitute for the CWA or [State] regulations themselves . . . [and] do not impose legally binding requirements.” Id. at 36987, Col. 3. Rather, a State must adopt water quality criteria protective of their designated uses. EPA Office of Water Office of Science and Technology, EPA 822-R-15-001, EPA Response to Scientific Views from the Public on Draft Updated National Recommended Water Quality Criteria for the

Protection of Human Health, § 5.1.1, p. 34 (June 2015). “Criteria must be based on a sound scientific rationale and contain sufficient parameters or constituents to protect the designated uses” for each waterbody of a given state. Id.

To that end, EPA stated in a telephone conference recently, the Revised WQS are proposed merely for the State to determine if further research or studies are necessary for any or all of the ninety four (94) chemicals with revised criterion. States have discretion to adopt criteria on a case-by-case basis, which differ from EPA’s guidance. Id. at § 5.3.1, p. 37. EPA’s recommended Criterion are general in nature and based “solely on data and scientific judgments,” but do not account for local and regional data nor “reflect consideration of economic impacts or technological feasibility.” Id.

Therefore, South Carolina must analyze the recommended criteria with respect to its own waters of the State and their applicable uses, including accounting for local or regional data prior to adopting any proposed numerical limit. The General Assembly provided funding and authority to perform these specific studies. S. C. Code Ann. §48-1-50(6), (20), (21).

#### REQUESTED DECISION

Because the Revised WQS severely restricts existing human health criteria necessary to obtain a permit to operate industry in South Carolina, it is requested Revised WQS be held in abeyance or vacated pending completion of proper studies required by State law.

Submitted this \_\_\_\_ day of October, 2016.



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