



COMMONWEALTH of VIRGINIA

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EXCERPT FROM THE PROCEEDINGS OF THE STATE WATER CONTROL BOARD AT ITS MEETING ON SEPTEMBER 20, 2018

MINUTE 12 — Request to Proceed to Public Comment and Hearing on Proposed Amendments to the Water Quality Standards Regulation (9VAC25-260): Numeric Chlorophyll-*a* Criteria for the Tidal James River and their Assessment Methodology

Mr. John Kennedy, Director of the Office of Ecology, began the presentation to the Board regarding proposed amendments to water quality criteria for numeric chlorophyll criteria in the tidal James River and the assessment method used to test compliance. The James River chlorophyll criteria are found in Virginia's Water Quality Standards Regulation at 9 VAC 25-260-310 (bb). It was first noted that a minor correction was needed in Attachment 2 of the Board materials. Use of the term "Spring" was inadvertently repeated for the second set of seasonal mean criteria, while it should read "Summer". The Board was informed that this change has been made in the Regulation Information System so the text of the proposal that will be available on-line is correct.

Background information was given on the original criteria adoption in 2005 and the subsequent need for the study when nutrient reductions, predicted as necessary to attain the criteria, appeared in EPA's 2010 Chesapeake Bay TMDL that were more stringent than those used as the basis for the standards. Specifics of the 2011 General Assembly's appropriation of funds and a directive for the purpose of the study were also presented. The existing standards and locations for their application were shown, along with a summary of the major tasks accomplished under the study workplan. Findings from the study's Scientific Advisory Panel, peer review by the EPA-Chesapeake Bay Program's Scientific Technical Advisory Committee, and use of a Regulatory Advisory Panel for the rulemaking were also explained.

Dr. Tish Robertson then led the Board through a technical presentation on the proposed criteria changes beginning with the purpose of the study, which principally included: an evaluation of the protectiveness of the existing criteria for aquatic life; to develop revised criteria that were scientifically defensible, if deemed necessary; and, improvements to the assessment methodology to address identified weaknesses. Descriptions were given of the expanded monitoring that was done, laboratory toxicity tests performed, and findings from the Science Advisory Panel, all of which led to the conclusion that there was sufficient cause to update the chlorophyll criteria and reformulate the assessment methodology.

The proposed numeric criteria were presented, consisting of two sets of chlorophyll concentrations that applied across five salinity regions: (1) seasonal (spring and summer) geometric mean values; (2) short-duration criteria which are higher magnitude and only apply in the summer. It was explained that the justification for the proposed seasonal mean values was protection against elevated pH and harmful algae blooms (HABs), or to prevent increased phytoplankton biomass where harmful effects could not be verified scientifically. The basis for the short-duration criteria is additional protection against toxic harmful algal blooms. Changes to the assessment methodology were summarized, including the allowable exceedance frequencies and other factors making the process more tailored to James River chlorophyll, as well as ensuring that data will be analyzed in a manner consistent with how the proposed criteria were developed.

The Board was informed about the water quality modeling aspect of the study and status of scenario runs being performed under contract with VIMS to test varying degrees of treatment stringency, geographical and seasonal application, and sensitivity to TN vs. TP reductions. Results will allow DEQ to estimate the total nitrogen and total phosphorous waste load allocations for point sources needed to achieve the proposed criteria. Modeling results will be presented to the Regulatory Advisory Panel, probably by late October, so that affected permittees will understand the treatment implications of the proposed criteria and potential impact on point source waste load allocations. The Board was also informed that certification of their authority to adopt the proposed amendments had been received from the Office of the Attorney General.

Several clarifying questions from the Board were addressed, including: the scope of the enhanced monitoring; reasons why algal-related effects were not observed in some areas of the river; and, timing for release and discussion of the water quality modeling results.

Decision:

Based upon the information provided to the Board and the staff recommendations, the Board by a unanimous vote approved the following actions:

1. Authorize staff to proceed to public comment with proposed amendments to the James River chlorophyll criteria in the W.Q. Standards Regulation, 9 VAC 25-260-310 (bb), as presented today, with the correction noted in Attachment 2 of the Board materials.
2. Convene public hearing(s) on the proposed amendments with a Board member serving as hearing officer.



Jutta Schneider, Director
Division of Water Planning



Date