



MAMWA Comments on 2016 Triennial Review Notice November 2016

On July 8, MDE published a notice that it would be moving forward with the 2016 Triennial Review of Water Quality Standards (WQS). MDE did not propose specific changes to the existing regulations; instead, MDE requested that interested persons “present recommendations, voice concerns, and provide input” on several general topics. MDE stated that it would review public comments, propose specific changes this fall, and finalize any changes by the end of the year.

On September 9, 2016, MAMWA submitted comments on three topics: adoption of more stringent ammonia criteria, adoption of new recreational criteria, and the need for a variance procedure (all discussed in more detail below).

In terms of current status, MDE’s Science Services Administration is considering MAMWA’s comments, and will meet with MDE management in the next few weeks to discuss future action. It is unclear whether MDE will decide to propose adoption of EPA’s 2013 ammonia or 2012 recreational criteria during this Triennial Review period or, if MDE proposes such criteria, whether it will adopt them depending on what comments may be received. Of course, we will keep the Membership posted on these important issues.

Here is an overview of the comments MAMWA filed in early September:

Ammonia Criteria

MDE is considering adopting EPA’s 2013 ammonia criteria during this Triennial Review. The 2013 criteria are substantially more stringent because EPA added freshwater mussel species and other organisms that are particularly sensitive to ammonia to the database. The criteria are also more highly dependent than the current criteria on temperature and pH and may result in water quality wasteload allocations and permit limits approximately one-half of current levels. Ammonia is the most significant potential issue in the 2016 Triennial Review, with the highest potential for a very costly outcome.

In comments, MAMWA explained that adoption of revised ammonia criteria could have significant impacts on the state’s WWTPs. MAMWA urged the Department, if it decided to move forward with the new criteria during this Triennial Review, to convene a workgroup to review impacts and, if warranted based on these additional considerations, to recommend implementation options that would be workable for all WWTPs.

As a reference, MAMWA shared that VAMWA, MAMWA’s sister association, commissioned a brief cost study on implementing new proposed Virginia ammonia criteria



and estimated capital costs of \$512 million plus \$34 million in annual operations and maintenance. Costs could be particularly burdensome for very small domestic wastewater treatment facilities (those less than 0.1 MGD), including approximately 80 schools, highway rest areas, and other very minor facilities.

Recreational Criteria (Bacteria)

MDE is considering adopting EPA's 2012 recreational water quality criteria, which were updated pursuant to the Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000.

In comments, MAMWA requested that if MDE adopts the 2012 EPA recreational water quality criteria, it continue to use geometric mean to assess compliance with discharge permits. In addition, MAMWA recommended that MDE use the Statistical Threshold Value (STV) cautiously for assessing water quality and determining impairments. MDE should: (i) only use the STV if there are adequate samples to support a reasonable calculation; (ii) use the "Ten Percent Rule" (TPR) in making impairment decisions; and (iii) establish a 90-day period as the duration for bacteria indicator criteria in the WQS.

As background, for e-coli, EPA's 2012 criteria include a 126 (freshwater) count geometric mean in any 30-day interval, and a 410 re-characterized as the STV. The key change is that the new criteria require states to adopt and use both the geometric mean and STV values. Previously, EPA recommended the adoption of the geometric mean value only and left any use of the single-value number up to the states (albeit cautioning states that the single-value was not to be used in NPDES permits as a never-to-be-exceeded (daily max value)).

Maryland's existing bacteria criteria are expressed as both a geometric mean and a single sample maximum (SSM) with categories that range in stringency depending on the frequency of full body contact. In its Notice, MDE suggests that adopting EPA's 2012 criteria will have minimal impacts on the state: "Although they are based on different definitions of illness and different rates of illness, these recommended criteria provide a protection level similar to the current codified criteria."

Based on a preliminary review of the EPA 2012 criteria (using Recommendation 1, which MDE is intending to adopt) and the current state WQS, we can see that the geo mean, which is used in assessing bacteria impairments, is nearly the same. In addition, MDE's existing assessment document does not reference SSM. MDE plans to revise the assessment document to incorporate STV, but will likely be requiring a minimum number of samples to make an assessment based on the STV numbers scientifically reasonable.



This is important because assessments can lead to impairment listings, which lead to TMDLs. Waters should not be listed as impaired for bacteria without a reasonable basis.

On the permit side, we are not aware of any instances where MDE is using SSM in a discharge permit as a bacteria effluent limit. It will be important to ensure that this permitting approach is maintained.

Variance Procedure

MAMWA recommended that MDE adopt regulations laying out a process for an individual discharger to request a variance from existing WQS.

Currently, there are two references to variances in the state regulations: (1) WQS restoration variances for specific segments of the Chesapeake Bay (COMAR 26.08.02.03-3(C)(8)) and (2) a permit-related “variance petition” (COMAR 26.08.04.11(C)(10)). Although the regulations envision that a person can file for a temporary variance from existing standards and pay a fee for MDE to evaluate the request, the regulations are silent as to the process for filing.

MAMWA explained that it would be helpful to have a process for individual dischargers that have challenges meeting standards during heavy rainfall. MAMWA raised this issue during the last triennial review, but the SSA made no changes, and suggested that MAMWA work with SSA and the Water Management Administration to “explore options.”