

Edwards, Andrew

From: Paul Calamita [REDACTED]
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To: Edwards, Andrew
Subject: FW: DHEC Triennial

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Drew,

I hope you are doing well.

As the Department moves forward with the current triennial review, the SC Water Quality Association wants to renew our request for the following two changes to the regulation:

First, we ask that DHEC revise the POTW permit implementation language in the regulation to specify Monthly/Weekly geometric mean limits for bacteria in POTW permits (at least those with design capacities of 1 MGD or greater). We have previously commented on the unnecessary complexity of DHEC's current bacteria permitting approach for POTWs as well as the fact that the permit limits should be expressed as monthly/weekly limits per federal regulation. *40 CFR § 122.45(d)(2)*. Federal regulations require that POTW permits be expressed as monthly/weekly limits unless such limits cannot be calculated. We know that is not the case because many other states – such as North Carolina and Tennessee impose monthly/weekly bacteria limits in their permits for POTWs. Other states follow EPA's criterion – which specifies that the monthly geometric mean is what provides the intended level of swimmer protection – by imposing monthly limits only on their POTWs. Virginia, Maryland, and the District of Columbia are examples of this approach. Notably, the disinfection performance of facilities in VA, MD and DC (Blue Plains Advanced Wastewater Treatment Plant) are just as good as the facilities here in South Carolina who are inappropriately required to meet daily maximum limits. The take away from this is that the disinfection technology is what it is and we don't need daily maximum limits as a way to get better disinfection performance. The technology is what it is. Moving to monthly/weekly average limits is more appropriate, consistent with federal regulation, and fairer to SC POTWs who are properly operating their disinfection systems but the nature of the technology may result in a somewhat elevated, end-of-pipe, value that has not environmental or public health significance.

South Carolina's approach forces POTWs to overapply chlorine (which is the real risk to receiving waters) as well as chemicals to neutralize excess chlorine (such as SO₂ – which in itself can present toxicity concerns). Monthly/weekly average permit limits for bacteria are appropriate and will strike a better environmental balance.

Accordingly, we ask that DHEC revise the POTW permit implementation language in the regulation to specify monthly and weekly geometric mean limits for bacteria in POTW permits (at least for major POTWs).

Second, we propose that DHEC revise the regulation to specify the use of the harmonic mean flow for applying human health criteria. EPA's national human health criteria (carcinogenic and non-carcinogenic) are based upon an assumed exposure period of 70 years (lifetime). Logically, when implementing such criteria, it makes

sense to use a long-term average instream flow value rather than a short-term, drought-based value such as the 7Q10 – South Carolina DHEC’s current practice. Accordingly, the SCWQA proposes that DHEC follow EPA and virtually every other state and revise the WQS regulation to specify the use of the harmonic mean flow (roughly the annual average flow value) when implementing human health criteria in NPDES permits.

We are available to discuss these two requested changes at the Department’s convenience.

Best,
Paul

Paul Calamita
Chairman

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