MAMSA COMMENTS ON PROPOSED WATER QUALITY TRADING REGULATIONS

JANUARY 8, 2018

I. INTRODUCTION

The Maryland Municipal Stormwater Association (MAMSA) is an association of proactive local governments and leading stormwater consulting firms that work for clean water and safe infrastructure in Maryland based on sound science and good public policy. MAMSA supports clean water, safe and vibrant communities, and a strong State economy by seeking to align clean water goals, smart stormwater management practices, and affordable programs, practices and infrastructure.

Many of MAMSA's Members are regulated municipal separate storm sewer systems (MS4s) with coverage for their stormwater discharges under individual Phase I MS4 permits or the Small MS4 General Permit (GP). The current Phase I MS4 permits require restoration of 20% of impervious surface area not already restored to the maximum extent practicable, and the proposed GP includes a similar term that requires restoration of twenty percent of existing developed lands with little or no stormwater management no later than 2025.[1] A carefully developed trading program could offer MS4s a lower-cost opportunity for permit compliance. Therefore, MAMSA has a strong interest in the State's proposed nutrient and sediment trading program.

MAMSA has reviewed MDE's December 8, 2017 Notice of Proposed Action, proposing to add a new COMAR chapter, 26.08.11. (Maryland Water Quality Trading Program). MDE's goal is to establish a trading program that "provides greater flexibility and reduces the cost of achieving the total maximum daily load (TMDL) established for the Chesapeake Bay while being protective of local water quality." *Md. Register* at p. 1189.

MAMSA supports nutrient and sediment trading. Trading programs in other states allow dischargers to exchange nutrient credits voluntarily in order to reduce pollutants at a lower cost to local citizens. The Chesapeake Bay Program as a whole, EPA, other Bay Watershed states, the Chesapeake Bay Commission, and numerous other stakeholders also support trading as an implementation option.

MAMSA is very disappointed that just one month before issuing the Proposed Regulations, MDE has proposed to change the basic rules for calculating how a wastewater treatment plant (WWTP) generates credits. MDE's Proposed Regulations only allow WWTPs to generate credits for total nitrogen (TN) based on performance below the limit-of-technology (at or below 3 mg/l for nitrogen). Earlier versions of the regulations would have allowed WWTP trading at or below 4 mg/l for nitrogen. Many of the State's WWTPs will either be unable to or uninterested

[1] Four of the Phase I MS4 permittees have appealed their permits, in part because of the restoration term. These appeals are pending with the Court of Special Appeals and two circuit courts.

in generating credits below 3 mg/l. This will artificially increase the cost of the (underfunded) Bay restoration, and impose those costs on the public.

MAMSA cannot support the Proposed Regulations in their current form.

This approach for WWTPs will drive up costs, and may put MS4s at risk for permit noncompliance. MS4s need available, cost-effective credits so they can do their part for Bay clean-up without endangering the financial health of the cities, towns, and counties that own these regulated stormwater systems. Maryland's localities should not be forced to choose between funding public safety needs and education and Bay restoration because the State is restricting, without any justification, the temporary use of wastewater-generated credits that citizens are paying for with their BRF fees. MAMSA notes that stakeholders who have objected to allowing WWTPs to provide these needed credits based on performance below 4 mg/l TN have proposed no reasonable alternatives to help MS4s address Bay restoration at a reasonable cost.

Maryland's taxpayers have funded the enhanced nutrient removal (ENR) plant improvements that have generated nutrient reductions below 4 mg/l for TN. Taxpayers, therefore, should enjoy the benefits of those reductions and not be forced instead to purchase credits at a higher cost, leaving unused nitrogen credits on the table. MDE's proposed approach runs counter to the notion of cost-effectiveness and is closer to double-charging the State's citizens for Bay clean-up.

MAMSA's full comments in opposition to the Proposed Regulations follow.

II. COMMENTS

A. MDE Should Set The Performance-Based Benchmark for WWTPs at 4 mg/l TN

The State's Water Quality Trading Advisory Committee (WQTAC) discussed how to set the parameters for wastewater trading. MAMSA and its sister wastewater association, the Maryland Association of Municipal Wastewater Agencies (MAMWA), advocated in February, 2016, for trading rules that would allow wastewater plants to trade both flow fraction credits and performance fraction credits.

After discussions with the WQTAC, MDE decided that it would only allow WWTPs to generate credits based on performance. This decision already makes the Proposed Regulations very conservative in limiting credit generation to performance fraction credits. Then, approximately one month before publication of the Proposed Regulations, MDE decided it would only allow WWTPs to generate credits based on performance below 3 mg/l TN.

Some trading opponents have argued that flow credits and credits above 3 mg/l TN are "paper credits," based on the mistaken belief that these credits are not actual reductions that will benefit the Bay.[2] As explained below, this is not true. Moreover, there is no need for MDE to set

[2] Another argument is that State BRF funds should not be used to generate credits. Not only is this incorrect factually – typically ENR upgrades are only partially funded by BRF dollars with the remainder from local funds—

performance-based baselines so low; other programs allow WWTP trading below established WLAs.

MAMSA requests that MDE reconsider its decision to set the performance-based benchmark at 3 mg/l for TN for the following reasons:

3 mg/l Is Lower than WWTP Bay TMDL WLAs and the State's Cap Load Strategy

MDE's decision to set the WWTP benchmark at 3 mg/l for TN means the State is requiring WWTPs to go below the current limit-of-technology in order to participate in trading. This will likely result in most, if not all, of the State's WWTPs being shut out of this important and beneficial program. MDE's Proposed Regulations are inconsistent with Bay TMDL allocations and the State's long-held cap strategy for WWTPs.

The State's significant WWTPs have a Bay TMDL wasteload allocation (WLA) based on the State's cap load strategy, which establishes loading caps based on an annual average concentration of 4 mg/l for TN and design capacity. The resulting WLAs, which are incorporated into the appendices of the 2010 Bay TMDL, along with other sector reductions, result in an assimilative capacity for the Watershed that complies with all applicable water quality standards. In addition, MDE uses 4 mg/l for TN for WWTP permitting. As explained below, 4 mg/l is even lower than the concentration assumed by EPA and the Bay Partnership as a part of its mid-point assessment (MPA) of the implementation of the Bay TMDL. MDE has no basis for reducing the WWTP performance-based benchmark below a level that is fully protective of water quality, particularly when MDE has removed the option for generating flow credits.

In contrast, treating below 3 mg/l for TN is below the current limit-of-technology for ENR WWTPs. Even the Chesapeake Bay Program (CBP) recognizes that treating below 3 mg/l for TN is unrealistic, and has reaffirmed as a part of the mid-point assessment (MPA) that 3 mg/l TN is "E3" for WWTPs. E3 stands for "Everything by Everyone, Everywhere," and represents the maximum amount of treatment that could be accomplished by dischargers to the Chesapeake Bay free of financial and/or operational limitations. E3 does not represent a realistic level of reduction; it can only be accomplished with unlimited budgets and no limits on imposing advanced treatment across the entire Watershed. CBP's state-basin allocations are not based on E3. Instead, they are based on an assumption that WWTPs will reduce TN to between 4.5 and 8.0 mg/l (depending on where the discharger is located in the Bay Watershed). As noted above, reductions set at this level, along with reductions from other sectors, will ultimately result in the Bay meeting needed water quality criteria.

If 4.5 mg/l TN is acceptable to EPA for MPA purposes, and 4 mg/l is acceptable to MDE for permitting purposes, and both are fully protective of water quality, it is hard to understand why MDE would impose an artificially low 3 mg/l TN as the performance-based benchmark in the Proposed Regulations. There is no justification or basis for 3 mg/l as the appropriate benchmark.

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but, it hypothesizes that the State's citizens served by MS4s would rather pay millions of dollars for less cost-effective stormwater BMPs than allow for a temporary use of more cost-effective wastewater nutrient credits. This makes no sense financially.

This concentration is well below what all Bay stakeholders have agreed is the controllable level of nitrogen for the wastewater sector.

Contrary to the concerns expressed by other stakeholders, WWTPs that operate below 4 mg/l TN will not be "gaming the system" or creating "paper credits." They will be operating below their permit requirements and Bay water quality (TMDL) requirements, which they are not obligated to do, in order to provide needed cost-effective credits to other sectors (MS4s) that are struggling with Bay-related compliance. This is behavior that should be encouraged, not prohibited.

More importantly, MS4s need as many options as possible to address the restoration terms in their permits. Reducing the credits available from willing WWTPs unnecessarily restricts a cost-effective option that MS4s could use that would result in real nutrient reductions to the Bay.

Most WWTPs Cannot Sufficiently, Consistently, and Reliably Operate Below 3 mg/l TN; WWTPs May Not Participate

MDE has stated that it chose 3 mg/l TN because recent discharge monitoring reports (DMRs) suggest WWTPs would have a few hundred thousand TN credits available to trade below that concentration level.

The fact that some facilities may have achieved 3 mg/L TN does not mean that most facilities could achieve sub-3 mg/l values under long-term operational conditions because of process variability (variability due to weather and other factors outside a WWTP's control), flow availability (the need to accommodate smart growth over a long period of time), and operational realities (the need to maintain an operating buffer to keep a margin of safety below permit limits).

MAMSA is concerned that WWTPs will not be interested in participating in a voluntary program if it means pushing their plants below the limits of technology, promising part of their necessary future flow capacity, and/or risking permit non-compliance. This may mean MS4s will have to consider purchases of more expensive credits from third-parties and aggregators.

3 mg/l TN is More Stringent than Required by EPA or Other Trading Programs

EPA and many Bay stakeholders strongly support nutrient trading. In the Bay TMDL, EPA stated that it "supports implementation of the Bay TMDL through such programs, as long as they are established and implemented in a manner consistent with the CWA, its implementing regulations, and EPA's 2003 Water Quality Trading Policy [footnote omitted] (USEPA 2003e) and 2007 Water Quality Trading Toolkit for NPDES Permit Writers [footnote omitted] (USEPA 2007d)."[3]

EPA's policy is to set wastewater baselines based on individual wasteload allocations as expressed in NPDES permits ("where a TMDL has been approved or established by EPA, the applicable point source waste load allocation or nonpoint source load allocation would establish the baselines for generating credits.")[4] WLAs for the State's significant WWTPs were set in the

[3] Chesapeake Bay TMDL at p. 10-3.
[4] United States Environmental Protection Agency, Office of Water, Water Quality Trading Policy (Jan. 13, 2003).

Bay TMDL based on 4 mg/l and design flow; the Proposed Regulations are significantly more stringent than EPA would otherwise require in a trading program.

In Virginia, the State allows point sources to generate credits based on the "difference between (i) the WLA for a permitted facility specified as an annual mass load of total nitrogen, and (ii) the monitored annual mass load of total nitrogen discharged by that facility, where clause (ii) is less than clause (i), and where the difference is adjusted by the applicable delivery factor and expressed as pounds per year of delivered total nitrogen load."[5] Maryland's Proposed Regulations are more stringent than a nearby Bay jurisdiction that has had great success in establishing a point source trading program.[6]

For all of the reasons above, MAMSA requests that MDE revise the Proposed Regulations to allow WWTPs to generate TN credits at performance levels at or below 4 mg/l TN.

B. MDE Should Clarify Baseline Requirements

Section .05(A) states that "All baselines shall be consistent with the 2010 Chesapeake Bay TMDL and any local TMDL, as may be amended from time to time." There are three problems with this text.

First, MS4s are currently working to comply with restoration requirements in their permits based on the 2010 Chesapeake Bay TMDL and the Maryland Phase I and II WIPs. If the Bay TMDL is amended as a part of the MPA, MAMSA is concerned that the text above suggests that the baseline for MS4s could change in a way that would be harmful to permittees, likely by moving MS4s even farther away from the day that they can generate nutrient and sediment credits.

Second, the baseline should not be based on "any local TMDL" for MS4s; rather, the baseline for MS4s should be set based on the requirements for addressing particular local nutrient and/or sediment TMDLs expressed by the MS4 permit. Once the MS4 has complied with its permit, baseline should be met.

Third, the baseline for an MS4 established in the Bay TMDL and the baseline for a local nutrient and/or sediment TMDL may not be the same; if they are not, it would be impossible for a baseline to be consistent with both. And, this text contradicts the text in .05(D) which states that a stormwater point source will have a baseline based on the restoration requirement of the current permit, which MDE has argued is based on the State's Phase I and II WIPs.

C. MDE Should Revise Use of Credits by Point Sources

Section .09(C) states that MDE will prorate credits from a BMP "for use in the year the credits are certified," and that credits are not valid for use until the following January 1. The meaning of this text is unclear. If the trading program is based on the premise that a buyer will purchase credits from a BMP based on its needs at the end of a calendar year, the restriction on prorating

[5] Va. Code §62.1-44.19:13.
[6] The USDA's Natural Resources Conservation Service praised Virginia's trading program in an article entitled *Stoking Demand for Nutrient Credits in Virginia: Good News for Farmers and for the Chesapeake Bay* (available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/emkts/?cid=nrcseprd354814).

the amount of credits seems unnecessary. A BMP that is not installed until June, for example, will generate 6 months of credit—there is no need for prorating in this scenario. MAMSA suggests MDE revise this section to clarify its intent on this point.

Section .09(F)(2) states that permits may include conditions on "When, and from what source, certified credits may be acquired by the permittee."

By crafting this language, MDE has given itself discretion to limit an MS4's use of an otherwise lawful program in the future. MAMSA submits that once a credit is certified, an MS4 should be permitted to purchase it pursuant to the regulations without any restrictions on when and from whom the credit originates.

MAMSA suggests deleting this language.

D. MDE Should Revise Its Overly Stringent Prohibitions

Section .08(E) gives MDE the discretion to prohibit certain entities from engaging in trading, including, *inter alia*, a permittee who is not in compliance with permit terms and any person who has previously violated the Environment Article of the Maryland Code or any related regulation.

MAMSA does not object to MDE banning bad actors from the trading program. However, there is a distinction between violating a part of the trading regulations and violating a totally unrelated section of a permit, the Code, or regulations. Such a severe approach is overly broad and runs counter to MDE's expressed interest in having a vibrant, voluntary, market-based trading program.

MAMSA recommends fine-tuning this text to tie trading prohibitions to related infractions. Suggested edits follow:

F. Prohibitions. At its discretion, the Department may prohibit the following persons from generating credits:

(1) A permittee in noncompliance with permit terms directly related to the discharge of nutrients or sediment or the reporting thereof;

(2) A nonregulated source or owner of an on-site sewage disposal system that is not in compliance with COMAR 26.04.03, 26.17.01, 26.17.02, 26.17.04, 26.23 or 26.24, if applicable;

(3) An agricultural operation that is not in compliance with COMAR 15.20.12; or

(4) A person who has previously violated ~~any provision of the Environment Article or~~ any regulation adopted under the Environment Article in COMAR 26.08.11.01-.14.

If MDE will not agree to these changes, MAMSA trusts that MDE will use its discretion wisely and not prohibit trading for unrelated or minor non-compliance with the regulations.

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