

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

AMERICAN FARM BUREAU FEDERATION,
et al.,

Plaintiffs

v.

**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,**

Defendant.

Case No.
11-CV-00067-SHR
(Judge Rambo)

**MEMORANDUM IN SUPPORT OF MUNICIPAL ASSOCIATIONS’
CROSS-MOTION FOR SUMMARY JUDGMENT AND IN OPPOSITION
TO PLAINTIFFS’ MOTION FOR SUMMARY JUDGMENT**

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I. INTRODUCTION

On May 25, 2011, the National Association of Clean Water Agencies (“NACWA”), Maryland Association of Municipal Wastewater Agencies, Inc. (“MAMWA”), and Virginia Association of Municipal Wastewater Agencies, Inc. (“VAMWA”), (collectively, “Municipal Associations”), jointly moved to intervene in this action with respect to Plaintiffs’ claims set forth in their First Amended Complaint (“Complaint”) that (1) “EPA’s Final TMDL exceeds EPA’s statutory authority under the Clean Water Act and otherwise violated the Act and its own regulations in multiple aspects,” Complaint ¶ 77 (First Claim for Relief); and (2) “the Final TMDL is in excess of delegated statutory authority under the Clean Water Act and therefore is *ultra vires*,” Complaint ¶ 93 (Fourth Claim For Relief). The Court granted Municipal Associations’ motion to intervene on October 13, 2011. Accordingly, Municipal Associations now respectfully submit this Memorandum in Support of Municipal Associations’ Cross-Motion for Summary Judgment and in Opposition to Plaintiffs’ Motion for Summary Judgment with respect to the above mentioned claims.¹

¹ Admittedly, there are legitimate concerns regarding the computer models on which the TMDL was based and the adequacy of the public notice and comment process, *see* Pl. Br. at 44-63. NACWA, VAMWA, and MAMWA acknowledge that they filed written comments expressing concern about the modeling during the formal comment period. *See* AR0031187-88, AR0035412, AR0038031-37. VAMWA’s comments also questioned the adequacy of the public comment period,

This Court should uphold EPA’s authority to establish holistic, watershed-wide Total Maximum Daily Loads (“TMDLs”)—for the Chesapeake Bay (the “Bay”) and more generally—including both point and nonpoint sources in both upstream and downstream states. This “watershed approach” is consistent with the Clean Water Act and, here, is absolutely necessary to achieve sufficient reductions in nitrogen and phosphorus (collectively, “nutrient”) loads to meet applicable water quality standards.

Excess nutrient loads are a contributing factor to the impairment of many waterbodies nationwide. In many watersheds, including the 31 states comprising the Mississippi River Basin, referenced in Plaintiffs’ opening brief, *see* Pl. Br. at 42, nonpoint sources are the predominant sources of excess nutrients. Nationally and especially in the Chesapeake Bay watershed, point sources such as the publicly owned treatment works (“POTWs”) owned and operated by the Municipal Associations’ members are leading water quality improvements by making significant reductions in their discharged nutrient loads. For example, from 1985

AR0037993-94. Further, the Virginia Phase I Watershed Implementation Plan expresses the Commonwealth’s “significant concerns with the nearly absolute reliance on management by computer model” that “continues to experience flaws that call its outcome into question,” noting that Virginia is “especially concerned that level of precision expected is far beyond what the model is capable of and fails to consider the economic consequences of its action.” AR0026675. However, these issues are beyond the scope of Municipal Associations’ intervention, which is limited to Plaintiffs’ first and fourth claims for relief. *See* Complaint ¶¶ 77, 93.

to 2004, the municipal and industrial wastewater treatment sector reduced nitrogen loads delivered to the Chesapeake Bay by 33.4% (eliminating 30.4 million pounds per year) and reduced phosphorus loads delivered to the Bay by 53% (eliminating 4.9 million pounds per year). *See* AR0036755. These reductions are especially remarkable considering the 20% increase in the watershed's population between 1985 and 2003. *Id.*

And the point source effort continues. By 2008, nutrient load estimates for wastewater treatment plants had dropped to 45% lower than 1985 levels and 62% lower than “no action levels.” AR0038005. Over the past three years, more nutrient removal technology has been constructed and placed in service at POTWs, and additional upgrades are in progress. The wastewater sector has achieved greater nutrient load reductions than any other source sector. *Id.*

Consistent with the wastewater sector's significant early progress and ongoing upgrades, current allocations for most POTWs have been set at or near so-called “limit-of-technology” or “state-of-the-art” levels in the state Watershed Implementation Plans (“WIPs”), which are reflected in the Bay TMDL. *Id.* As a result, from a technological, financial, and equitable perspective, it is not practical or feasible for the wastewater sector to supply significant additional nutrient reductions in the Bay's nonpoint source-dominated watershed. *Id.*

As even EPA has acknowledged, further pollutant reduction requirements for point sources should be “an option of last resort” given the “large scale public investments (estimated at over \$4 billion [as of 2008]) that are now being carried out throughout the watershed to upgrade and reduce nutrient discharges from point sources.” AR0023299. In light of the amount of resources committed toward these upgrades and the pollutant reduction progress already accomplished by point sources, such as the POTWs owned and operated by members of the Municipal Associations, EPA has determined and agreed that “[a] *stable regulatory environment is a priority need for these facilities and a matter of fiduciary responsibility and public trust.*” *Id.* (emphasis added).

The Chesapeake Bay TMDL could serve as an important precedent for other watersheds, especially where nonpoint sources are significant or predominant sources of excess nutrients. The holistic watershed approach applied in this TMDL is needed because excessive reliance on point source controls is not only inequitable but also insufficient to restore water quality across the nation.

II. ARGUMENT

A. The Holistic “Watershed Approach” Embodied in the TMDL Program is Lawful and Necessary to Restore Water Quality

The Chesapeake Bay and its tidal tributaries are impaired by both point sources and nonpoint sources of nutrients from both upstream states (New York, Pennsylvania, and West Virginia) and downstream states with tidal Chesapeake

Bay waters (Maryland, Virginia, Delaware, and the District of Columbia) in the Bay watershed. Like most waterbodies impaired by nutrients, such as nitrogen and phosphorus from fertilizers widely used in agriculture, the Bay has a watershed-wide water quality problem that requires a watershed-wide solution. This holistic watershed approach is consistent with the Clean Water Act and is essential for restoring the Bay's water quality. This litigation threatens to decimate two central tenets of this essential watershed approach—full and fair contribution by all major source sectors to the clean-up effort and full and coordinated participation by all states in the watershed—as Plaintiffs appear to be seeking to lower expectations for nonpoint source controls and to exclude upstream states from this TMDL for the downstream estuary.

1. Inclusion of Both Nonpoint and Point Source Allocations Was Lawful and Reasonable

Because both point and nonpoint sources contribute nutrients (and sediment) to the Chesapeake Bay and its tidal tributaries, it is necessary for all sources to contribute equitably to pollutant reductions in order to adequately and fairly address the Bay's water quality problems. As the Ninth Circuit has explained, “at least in blended waters [impaired by both point and nonpoint sources], TMDLs must be calculated with regard to nonpoint sources of pollution; otherwise, it would be impossible ‘to implement the applicable water quality standards,’ which do not differentiate sources of pollution.” *Pronsolino v. Nastri*, 291 F.3d 1123,

1139 (9th Cir. 2002) (*quoting* 33 U.S.C. § 1313(d)(1)(C)). This is especially true for a nonpoint source-dominated system like the Chesapeake Bay watershed.

Nonpoint source load allocations are an essential element of the promulgated TMDL equation² generally, and the necessity of that regulation is clearly demonstrated by the Chesapeake Bay situation. Nonpoint sources are the primary sources of the pollutants of concern to the Bay, with agriculture alone accounting for 44% of the nitrogen and phosphorous loads and 65% of the sediment loads delivered to the Bay. AR0000136. Given these significant nonpoint source loads, it was reasonable for EPA to determine a holistic watershed approach addressing nonpoint sources as well as point sources to be “necessary to implement the water quality standards applicable” to the Chesapeake Bay. *See* 33 U.S.C. § 1313(d)(2); *see also* Def. Br. at 34-35.

2. Inclusion of Both Upstream and Downstream States Was Lawful and Reasonable

In establishing a watershed-wide TMDL with allocations for upstream states, EPA did not exceed its statutory authority. First, EPA has the express authority to establish TMDLs as it “determines necessary to implement the water quality standards applicable,” 33 U.S.C. § 1313(d)(2), and no provision of the

² A TMDL is equal to “[t]he sum of the individual [wasteload allocations] for point sources and [load allocations] for nonpoint sources and natural background.” 40 C.F.R. § 130.2.

Clean Water Act or EPA's implementing regulations require EPA to ignore sources contributing to the water quality impairment because they are located outside of the particular state in which the impaired water is located, *see* 33 U.S.C. § 1313(d), 40 C.F.R. § 130.2. Furthermore, given the Supreme Court's conclusion that it was "a reasonable exercise of the [EPA's] substantial statutory discretion" to require that discharges in upstream states be limited in permits to comply with downstream water quality standards, *Arkansas v. Oklahoma*, 503 U.S. 91, 107 (1992), surely the earlier step at issue here—TMDL clean-up plan development—may incorporate reasonable assumptions regarding such discharges in the form of allocations, contrary to the Plaintiffs' assertion (Pl. Br. at 43). *See id.* at 105-107; *see also* 40 C.F.R. §§ 122.4(d), 123.25(a).

Plaintiffs attempt to make much of a seemingly limiting sentence by one EPA regional office (Region 10) regarding the Spokane River TMDL, *see* Pl. Br. at 40, but fail to include the first clause of the sentence, italicized below, that clearly makes the sentence inapplicable to establishment of a TMDL *by EPA*:

When a State establishes a TMDL to address an in-state impairment, EPA interprets the CWA and its regulations to preclude that State from establishing, within the TMDL, load and wasteload allocations for pollutant sources located outside the boundaries of that State.

U.S. EPA Region 10, Review of the Spokane River Dissolved Oxygen (DO) TMDL 16 (May 20, 2010), *available at* <http://www.ecy.wa.gov/programs/>

wq/tmdl/spokaneriver/dissolved_oxygen/SpokDOTmdl-EPAapproval

052010.pdf. If anything, this document actually supports the Bay TMDL’s watershed approach inasmuch as it recognizes that even a single state, when developing a TMDL for an in-state water body with a multistate watershed, “may make a reasonable assumption about anticipated cross-boundary loadings,” including assumptions about upstream load reductions. *Id.* Furthermore, where, as here, it is EPA that establishes the TMDL—and does so with the consent of the upstream states that have primacy under the Clean Water Act, that participated extensively in the Bay TMDL development process, and that did not choose to appeal the Bay TMDL—clearly the TMDL cannot be subject to fault for want of authority. As Professor Houck observed:

while no state has authority to prepare or fail to prepare a TMDL for the Bay, the Chesapeake Bay Agreement states collectively do, and they have called for and agreed to the TMDL and WIP process. ***How else, further, could one ever address the whole?***

Oliver A. Houck, *The Clean Water Act Returns (Again): Part I, TMDLs and the Chesapeake Bay*, 41 ELR 10208, 10227 (2011) (emphasis added).

This entire argument by Plaintiffs is reminiscent of arguments by nonpoint source interests seeking to escape TMDL planning in *Pronsolino*, where the Ninth Circuit noted that TMDLs “must be calculated with regard to nonpoint sources” of pollutants so that it is possible “‘to implement the applicable water quality standards,’ which do not differentiate sources of pollution.” *Pronsolino v. Nastri*,

291 F.3d 1123, 1139 (9th Cir. 2002) (*quoting* 33 U.S.C. § 1313(d)(1)(C)).

Similarly, in waters like the Chesapeake Bay impaired by pollutants from numerous states, TMDLs must be calculated with regard to sources in upstream and downstream states alike for it to be feasible “to implement the applicable water quality standards’ which do not differentiate pollution’s states of origin.”

See id.

EPA and the Bay partnership states recognized that “an equitable approach must be employed to apportion the allowable loading among the jurisdictions.” AR0000212. Leaving aside for the moment Municipal Associations’ concerns about the stringency of municipal allocations, the concept of assigning allocations to states throughout the Bay watershed in relation to the pollutant loads delivered is a fair and reasonable approach. In fact, this application of the watershed approach is based on the guideline adopted by EPA and the Bay states that “[m]ajor river basins that contribute the most to the Bay water quality problems must do the most to resolve those problems (on a pound-per-pound basis).” *Id.* Half of the nitrogen loads delivered to the Bay originate in the upstream states of Pennsylvania, New York, and West Virginia. AR0000108. In fact, of all the Bay states, Pennsylvania is responsible for the largest proportion of nitrogen loads to the Bay, accounting for 44% of the total, *id.*, so the Bay restoration would be doomed to failure without the full participation of Pennsylvania. Upstream states also contribute 34% of the

total phosphorus and 41% of the total sediment delivered to the Bay. AR0000109. Accordingly, it was necessary as well as equitable for EPA to allocate load and wasteload allocations to these upstream states in order to implement the applicable water quality standards for the impaired tidal segments of the Bay and its tributaries. It would be impossible to develop a Bay TMDL that would implement applicable water quality standards, as required by the Clean Water Act, 33 U.S.C. § 1313(d)(2), if the TMDL did not include sources in upstream states. The Clean Water Act does not compel such an absurd result.

Although the watershed-wide Bay TMDL is essentially a water quality planning process, which, by EPA's own admission, is not binding on the states, *see* Def. Br. at 24, Plaintiffs ask the court to vacate it and offer two illogical alternatives to addressing upstream states' contributions to the Bay's water quality problems: (1) object to point source permits, or (2) require revision of upstream states' water quality standards for their local waterbodies to mimic the standards adopted by the states for the Bay. *See* Pl. Br. at 42. One is left to wonder if Plaintiffs' goal is to evade responsibility for their members' fair contributions to the Bay cleanup effort, given the fact that the alternatives they offer to the Bay TMDL are inequitable and would likely lead to years of delay.

B. EPA Cannot—But Has Not—Assumed Authority of the Bay States Over Allocations and Other Implementation Decisions

1. EPA Acted with the Consent of the Bay States

In light of Congress’ explicit policy “to recognize, preserve, and protect the primary responsibilities and rights of the States” under the Clean Water Act, 33 U.S.C. § 1251(b), various “[c]ourts have acknowledged the states’ primacy in controlling water pollution.” *Natural Res. Def. Council, Inc. v. U.S. E.P.A.*, 770 F. Supp. 1093, 1096 (E.D. Va. 1991) (citing *Chevron, U.S.A. Inc. v. Hammond*, 726 F.2d 483, 489 (9th Cir. 1984); *Committee for Consideration of Jones Falls Sewage Syst. v. Train*, 539 F.2d 1006, 1009 (4th Cir.1976)); see also 33 U.S.C. § 1370(2). With respect to TMDLs, the states are assigned the lead role, with EPA exercising limited oversight authority.³ See 33 U.S.C. § 1313(d).

Because it established the Bay TMDL with the consent of the states and without usurping the states’ implementation authority, EPA did not overreach its limited Clean Water Act authority, but rather properly participated in “a partnership between the States and the Federal Government, animated by a shared objective: ‘to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.’” See *Arkansas v. Oklahoma*, 503 U.S. 91, 101, 112 S. Ct.

³ As Plaintiffs explain, EPA’s limited Clean Water Act authority was not, and could not have been, expanded by TMDL development consent decrees or settlement agreements with private parties such as the Chesapeake Bay Foundation in *Fowler v. EPA*, No. 09-005 (D.D.C. May 11, 2010). See Pl. Br. at 31.

1046, 1054, 117 L. Ed. 2d 239 (1992) (*quoting* 33 U.S.C. § 1251(a)). While the states' Clean Water Act primacy would preclude EPA from unilaterally establishing the Bay TMDL—and particularly point source wasteload allocations and nonpoint source load allocations—with no participation of the states, the collaborative process undertaken did not run afoul of that statutory policy. In consenting to EPA's establishment of a watershed-wide TMDL, the states imbued EPA with their collective TMDL authority. *See* AR0000056.

Undeniably, the states played an important role in determining load allocations for nonpoint sources and wasteload allocations for point sources within their own borders through the WIP process. The states' WIPs then provided the basis for the allocations EPA included in the Bay TMDL. In fact, the TMDL's allocations for point sources and nonpoint sources were essentially copied from the states' WIPs.

POTWs, such as Municipal Associations' members, generally supported the wasteload allocations set forth in the state WIPs. For example, the public comments submitted by MAMWA regarding EPA's Draft TMDL and Maryland's Draft Phase I WIP supported the approach to the major municipal wastewater treatment plant sector taken by Maryland's WIP, which included the remarkable commitment to Enhanced Nutrient Removal ("ENR") upgrades at 67 significant wastewater treatment plants, accounting for 95% of Maryland's wastewater flow.

AR0031180-82, *see* AR0025607, AR0025609-10, AR0025698-25701. The associated wasteload allocations are based on extremely low annual average concentrations for total nitrogen of 4.0 mg/l and for total phosphorus of 0.3 mg/l. *Id.* Likewise, VAMWA's comments "support[ed] the embodiment of the Virginia approach to POTW wasteload allocations from Virginia law and regulations into its WIP," which, much like Maryland's approach, is based on very stringent annual average nutrient concentrations. AR0038002.

Importantly, among the non-TMDL concepts also used as a goal with the agreement of the Bay states are the target implementation schedules for completing all pollutant control measures to fully restore the Bay by 2025 and for completing 60% of the requisite measures by 2017. *See* AR0000001, AR0000056. These target dates are neither imposed nor authorized by statute or regulations, but rather were voluntarily used at this time through the collaborative federal/state TMDL development process. These target dates were created by the states' consent, given the states' TMDL primacy established in sections 101 and 303 of Clean Water Act, *see* 33 U.S.C. §§ 1251(b), 1313(d), and the flexibility inherent in those sections as well as Clean Water Act section 117, *see* 33 U.S.C. § 1267. Therefore, the states necessarily retain the discretion to adjust their targeted implementation schedules in a reasonable manner if warranted in the future.

Municipal Associations agree that TMDL implementation is the exclusive prerogative of the states. Municipal Associations take EPA at its word that “each Bay state retains discretion regarding how to implement the TMDL allocations” and incorporate this argument by reference. *See* Def. Br. at 35. Municipal Associations also agree with EPA’s assertion that water quality-based effluent limitations “need not be ‘identical’” to Bay TMDL wasteload allocations. *Id.* at 34. The establishment of the Bay TMDL in no way interferes with states’ lead role in the implementation process, and the states have retained flexibility and discretion with respect to implementation of the Bay TMDL. Virginia highlighted this continued flexibility in its Phase I WIP:

Virginia . . . reserves the right to adjust this [implementation] plan based on new information such as conservation efforts currently implemented but not accounted for in the model, adverse economic impacts on business, funding availability from federal and other sources, and improved scientific methodologies.

We understand that our work will not end with the submission of our Watershed Implementation Plan. We will continue to work with EPA, stakeholders, and the public to ensure that our implementation improves water quality *in a manner that is sensible, fair and cost effective as this process unfolds* over the next 15 years.

AR0026675 (emphasis added).

2. Even if the Court Overturns the Watershed-Wide TMDL, Nonpoint Sources and Upstream States Must Still Do Their Share Under Plaintiffs' State-by-State Approach

Although EPA's establishment of a watershed-wide TMDL with the consent of the Bay states is consistent with the Clean Water Act, a contrary ruling should not reduce the role of upstream states in contributing to a successful Bay cleanup. Regardless of whether discharges to the Bay are controlled under EPA's watershed-wide approach or Plaintiffs' state-by-state approach, the assimilative capacity of the Bay is the same, so the total cap on pollutants should not differ. Even if the Plaintiffs were to prevail, upstream states in the Bay watershed and nonpoint sources located in those states have the same role to play. The science underlying the Bay TMDL would remain applicable to a state-by-state approach. Regardless of the form of the TMDL, point sources can reasonably be required to do only their fair share and cannot be pushed beyond the limits of technology, so nonpoint sources must be required to reduce their nutrient and sediment loads. Thus, if the court determines that a state level process is necessary, the allowable nutrient load delivered at each state line should remain the same.

C. Point Sources Should Not Be Targeted for Further Reductions

1. Further Restrictions on Point Sources in this Nonpoint-Dominated System Would Be Inequitable and Futile

Plaintiffs are quick to point out EPA's authority to object to National Pollutant Discharge Elimination System ("NPDES") discharge permits pursuant to

Clean Water Act section 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(c), and 40 C.F.R. §122.4(d), as if this authority somehow eliminates the requirement of a reasonable, equitable, and fiscally sustainable watershed-wide solution to this watershed-wide problem. *See* Pl. Br. at 42. A simple comparison of the relative contributions of pollutants reaching the Bay from point and nonpoint sources demonstrates that further regulatory action against point sources, whether in the form of a permit objection by EPA or a TMDL “backstop” wasteload allocation reduction, would be futile, punitive, arbitrary, and unreasonable.

Agriculture, the “largest single source of nitrogen, phosphorus, and sediment loading to the Bay,” is responsible for about 44% of nitrogen and phosphorus loads (plus 65% of sediment loads) delivered to the Bay.⁴ AR0000136. POTWs, on the other hand, contributed only 17% of the nitrogen and 16% of the phosphorus entering the Bay. AR0000117. To put these figures into perspective, the Bay TMDL requires total reductions of 25% nitrogen, 24% phosphorus, and 20% sediment from existing loads. AR0000016. Even if the POTWs’ 17% nitrogen contribution and 16% phosphorus contribution were completely eliminated, the requisite 25% nitrogen reduction and 24% phosphorus reduction would not be met. *See* AR0000016, AR0000117; *see also* AR0036803 (reporting the EPA Office of

⁴ The statistics provided for agriculture and POTW contributions to pollution delivered to the Bay are based on the 2009 scenario run through the Phase 5.3 Chesapeake Bay Watershed Model. *See* AR0000108.

Inspector General’s finding that “[a]dditional reductions from the wastewater treatment community, both municipal and industrial, are *not large enough* to compensate for shortfalls from the agricultural and developed land sectors” (emphasis added)). This is a purely theoretical exercise, however, because the municipal wastewater sector’s load cannot be eliminated. POTWs do not generate pollution, but rather provide the essential environmental and public health service of removing pollutants contained in sewage that is collected and conveyed to these facilities for treatment.

Furthermore, even if point source loads were “large enough” to compensate for nonpoint source shortfalls, it would be extremely unfair to impose even lower wasteload allocations and more restrictive water quality based effluent limitations on point sources, such as Municipal Associations’ members. As EPA’s Office of Inspector General reported in reference to the Chesapeake Bay 2000 agreement (but with equal relevance to the Chesapeake Bay TMDL), “[t]he concept of ‘fair and equitable’ nutrient allocations” has underlined the collaborative Chesapeake Bay program, so “[r]esetting nutrient wasteload allocations for municipal or industrial wastewater facilities as a result of other sectors not delivering on their commitments could undermine the agreement achieved by the States amongst themselves and with their nutrient sources.” AR0036802. All sources contributing nutrients to the Bay must “follow[] through in the partnership of

‘shared sacrifice.’” *Id.* This is reflected in the state WIPs that provided the foundation for the Bay TMDL’s allocations. For example, Virginia’s Phase I WIP adopted “equity” as one of its guiding principles; the WIP “seeks to approach each sector with significant but achievable actions in a way that all sectors share in meeting TMDL allocations.” AR0026681.

Despite the large pollutant loads from nonpoint sources, the TMDL imposes more stringent controls on point sources than on nonpoint sources. For example, point source controls are set near the limit of technology or “E3” level (i.e., Chesapeake Bay Program shorthand for the theoretical maximum load reductions that would be achieved “by doing everything everywhere by everybody”). *See* AR0038012 (“[T]reatment at the 4-6 mg/L level [for nitrogen] is about 85% to 95% of the maximum technically feasible reductions.”). Nonpoint source controls, on the other hand, are set at a significantly more relaxed level of 55% to 75% of the E3 nitrogen controls. AR0038037.

The citizen ratepayers of the Municipal Associations’ members are already bearing a huge financial burden to meet the wasteload allocations set forth in the TMDL. In its Phase I WIP, the Commonwealth of Virginia noted that, since 2005, over \$1.5 billion has been invested in nutrient removal facilities at wastewater treatment plants. AR0026687. As of January 1, 2011, all of Virginia’s significant wastewater dischargers are subject to stringent nutrient permit limits under the

watershed general permit pursuant to 9 Va. Admin. Code § 25-820-10 et seq.

AR0026714. These massive investments required for compliance are significantly increasing costs for ratepayers who have already shouldered a 67% increase in average Virginia wastewater rates over the last decade. AR0038007.

Similarly, MAMWA members are currently undertaking an ENR treatment upgrade program to implement the Bay TMDL, above and beyond earlier upgrades to Biological Nutrient Removal (“BNR”) levels. AR0031179. The Maryland Phase I WIP estimates that it will cost \$2.86 billion to implement ENR upgrades to meet limits of 4.0 mg/l total nitrogen and 0.3 mg/l total phosphorous at 67 public major wastewater treatment plants, accounting for 95% of the state’s wastewater flow. AR0025607, AR0025610, AR0025699.

The District of Columbia, likewise, is requiring costly ENR upgrades at the Blue Plains facility, the Bay region’s largest advanced wastewater treatment facility. BNR installed throughout the Blue Plains facility in 2000 already reduced nitrogen concentrations by between 22% and 63%. AR0025448. Further ENR upgrades to 3.89 mg/l total nitrogen limits are expected to be completed in 2015, at a cost of \$977 million. AR0025458.

The wastewater sector is already going *beyond* the knee of the cost curve⁵ to meet current wasteload allocations. Because high levels of nutrient treatment are already in place, at or near the limit of technology, even slight additional pollutant reductions would be expected to be accompanied by sharp increases in capital costs. *See, e.g.*, AR0038048-49. The law of diminishing returns is operating to dramatically reduce the water quality benefit associated with each dollar invested. As the EPA Office of Inspector General concluded, any “addition nutrient reductions from significant municipal wastewater treatment facilities” that could be obtained “are not cost effective or practical.” AR0038005, AR0036801. Recognizing this reality, the Virginia Phase I WIP, for example, “attempts to set high expectations for practices that are likely to be implemented across *all* sectors” instead of requiring practices “that are theoretically possible but are not reasonable to expect given significant technical, legal or financial barriers.” AR0026681 (emphasis added).

In addition to the staggering financial costs discussed above, imposing additional “backstops” on point sources would trigger a number of other negative consequences. For example, any nutrient reductions that could be achieved with treatment beyond ENR levels “would certainly be accompanied by adverse

⁵ The knee of the cost curve is a steep inflection point on a graph of capital cost versus pollutant reductions. *See* AR0038048-49. The cost-to-benefit ratio increases sharply after this point. *See id.*

environmental impacts due to increased chemical production, transportation and use; increased energy production and use; and increased greenhouse gas emissions.” AR0031182. If additional pollutant discharge restrictions are imposed on the wastewater sector, smart growth in existing urban areas will also be curtailed due to capacity restraints, resulting in detrimental impacts to the Bay from added greenfield development and septic system use. AR0031181. Additionally, with wasteload allocations at or near limit-of-technology limits, any additional point source backstops put POTWs at risk of noncompliance simply due to normal operational variability and limited operational history of new technologies. *Id.*

Individual permits for existing point sources “have been squeezed down on a great deal over the past 20 years—in part, in order to avoid having to do something serious about nonpoint sources.” Oliver A. Houck, *The Clean Water Act Returns (Again): Part I, TMDLs and the Chesapeake Bay*, 41 ELR 10208, 10224 (2011). This strategy—targeting point sources with ever-more-expensive pollutant reduction requirements—has run its course. Without commensurate nonpoint source reductions, water quality standards will not be met and will require adjustment. There is simply no way around this fact.

2. Other Options Should Be Exercised Rather than “Backstopping” Against Point Sources

Before considering “backstopping” against already strictly-regulated point sources, EPA should exercise its “strong and diverse authorities to implement controls over nonpoint sources.” *See* Proposed Revisions to the Water Quality Planning and Management Regulation, 64 Fed. Reg. 46,012, 46,034 (Aug. 23, 1999). Point sources should not be required to shoulder pollutant reduction requirements previously assigned to nonpoint sources.

EPA’s authority to achieve reductions from nonpoint sources includes conditioning Clean Water Act section 319 grants to the states on implementing Bay TMDL load allocations. 33 U.S.C. § 1329(h)(1) (“[T]he Administrator shall make grants subject to such terms and conditions as the Administrator considers appropriate.”); Proposed Revisions to the Water Quality Planning and Management Regulation, 64 Fed. Reg. 46,012, 46,034 (Aug. 23, 1999); Revisions to the Water Quality Planning and Management Regulation and Revisions to the National Pollutant Discharge Elimination System Program in Support of Revisions to the Water Quality Planning and Management Regulation, 65 Fed. Reg. 43,586, 43,632 (July 13, 2000).

As Plaintiffs’ point out, Pl. Br. at 11, EPA also has authority under Clean Water Act section 319(g) to convene an interstate management conference to address nonpoint sources, 33 U.S.C. § 1329(g)(1). EPA may convene an interstate

management conference among the jurisdictions in the Bay watershed if water quality standards or TMDL milestones are not being met due to significant interstate pollutant loads from nonpoint sources. *See id.* The purpose of such a conference would be to develop an agreement among the states to reduce pollutant levels from nonpoint sources and improve water quality in the Chesapeake Bay and its tidal tributaries. *See id.*

Finally, if water quality standards still cannot be met through reasonable point and nonpoint source actions, a Use Attainability Analysis (“UAA”) could be conducted to assess the attainability of the Bay’s existing tidal water quality standards. *See* 40 C.F.R. § 131.10(g). The water quality standards underlying the Bay TMDL could be adjusted to more achievable levels if, *inter alia*, “[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or . . . [c]ontrols more stringent than those required by Sections 301(b) and 306 of the [Clean Water] Act would result in substantial and widespread economic and social impact.” 40 C.F.R. § 131.10(g)(3), (6).

Because further restrictions on point sources should be an “option of last resort” given the level of public investment already required to meet wasteload allocations, AR0023299, the above options should be considered and no further regulatory actions taken against point sources.

III. CONCLUSION

The holistic watershed approach embodied in the Bay TMDL with the consent of the Bay states is consistent with the Clean Water Act. Equitable allocations to point and nonpoint sources alike and to upstream and downstream states alike are necessary to control excess nutrients and sediment originating throughout this multistate watershed. Point sources, such as Municipal Associations' members, which have already made significant progress in reducing pollutants to the Bay, should not be targeted with additional "backstop" cuts to wasteload allocations. Instead, reasonable pollutant reductions should be made by all source sectors in the watershed through a watershed approach. For the reasons set forth above, Municipal Associations respectfully request that this Court grant Municipal Associations' Cross-Motion for Summary Judgment and deny Plaintiffs' Motion for Summary Judgment with respect to Plaintiffs' first and fourth claims for relief. *See* Complaint ¶¶ 77, 93.

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to Local Rule 7.8(b)(2) for the Middle District of Pennsylvania, I hereby certify that this Memorandum in Support of Municipal Associations' Cross-Motion for Summary Judgment and in Opposition to Plaintiffs' Motion for Summary Judgment complies with the word-count limit and does not exceed the allotted 7,000 words. *See* Case Management Order (Dkt. No. 65). Certification is reliant on the word count feature of the word-processing system used to prepare this brief.

This Memorandum in Support of Municipal Associations' Cross-Motion for Summary Judgment and in Opposition to Plaintiffs' Motion for Summary Judgment contains 5,906 words.

/s/ Christopher D. Pomeroy
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CERTIFICATE OF SERVICE

I hereby certify that on April 20, 2012, a true and correct copy of the foregoing document was electronically filed and served on the following in accordance with the Rules of the United States District Court for the Middle District of Pennsylvania:

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