UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SEP 11 2008

The Honorable John Griffin, Secretary
Maryland Department of Natural Resources
Tawes State Office Building
580 Taylor Avenue
Annapolis, Maryland 21401

Dear Secretary Griffin:

Thank you for your August 22, 2008 letter to Mr. Jon Capacasa regarding the Chesapeake Bay Total Maximum Daily Load (TMDL). The purpose of this letter is to provide the Chesapeake Bay Program's Principals' Staff Committee (PSC) with the U.S. Environmental Protection Agency (EPA) Region III's responses (after consultation with EPA Region II and Headquarters) to the questions posed in your letter.

As you are aware, EPA is establishing a Federal TMDL for the Chesapeake Bay watershed because the water quality goals set forth in the Chesapeake 2000 Agreement will not be met by 2010. This TMDL will satisfy the requirements of both the 1999 Virginia consent decree and the 2000 District of Columbia consent decree. EPA is committed to making this TMDL an effective tool to help accelerate restoration of the Bay consistent with Sections 117 and 303 of the Clean Water Act (CWA). EPA intends for this TMDL to fairly and transparently allocate nutrient and sediment loads and provide accountability for the basin-wide reductions necessary to achieve water quality standards.

EPA recognizes that the Chesapeake Bay TMDL will be the latest tool to build on decades of research, strategies, and voluntary and regulatory actions by Bay Program partners to restore the Bay. Given our ever-increasing scientific understanding, significant past investment of resources and the continuing public and political support for Bay restoration, EPA is committed to establishing a TMDL that is informed by prior and ongoing efforts and will provide a clear roadmap for our joint efforts to save the Bay. The Agency is developing this TMDL with heightened expectations for its level of scientific rigor and its ability to demonstrate that all nutrient and sediment allocations can and will be met. Because of the unprecedented amount of work in the Bay prior to the development of this TMDL, EPA believes that the Bay partners already have significant knowledge regarding needed implementation mechanisms that goes far beyond the usual level of information generally available when developing TMDLs. Therefore, expectations for the Bay TMDL are not applicable to the TMDL program in general.

Two points need to be made on the overall framework of the TMDL. First, while the TMDL is a powerful tool in the restoration of our nation's waters, it alone will not be sufficient to assure appropriate controls for the restoration of the Bay are in place in a timely manner. For this reason, EPA expects to work with the states and the District of Columbia to develop not only this TMDL, but also the necessary implementation plans, commitments, and evaluations of programs to ensure that our partner states and the District of Columbia will together undertake timely and effective pollution controls to restore the Chesapeake Bay. Second, EPA will use the TMDL to promote transparency and accountability in our partners' common quest to accelerate the restoration of the Chesapeake Bay.

Enclosure A provides EPA Region III's responses to the questions that you posed in your August 22, 2008 letter, and Enclosure B provides additional clarification on EPA's expectations for the Chesapeake Bay TMDL. If you have any questions concerning these positions, please contact Mr. Jon M. Capacasa, Director, Water Protection Division, at (215) 814-5422 or Mr. Robert Koroncai, Associate Director, Office of Standards, Assessment and TMDLs, at (215) 814-5730.

Sincerely,

Donald S. Welsh

Donald S. Welsh
Regional Administrator

ENCLOSURE A

RESPONSE TO QUESTIONS DIRECTED TO EPA REGION III

What jurisdictions will be within the formal TMDL, and which will be outside of the TMDL?

The purpose of a TMDL is to provide the pollution budget necessary to achieve applicable state-established and EPA-approved water quality standards. While the TMDL will identify allowable pollutant loadings to assure compliance with state water quality standards in the impaired waters of the Chesapeake Bay and its tidal tributaries, the Bay Program's extensive monitoring, assessment and modeling data have established that about one-half of the nitrogen and more than one-quarter of the phosphorus loads entering the Bay's tidal waters come from sources in upstream states (Pennsylvania, New York and West Virginia). Because these upstream states are significant contributors of nutrients and sediments to these impairments, EPA is including Maryland, Virginia, Delaware, Pennsylvania, New York, West Virginia, and the District of Columbia in the Chesapeake Bay TMDL.

What does it mean for jurisdictions to be outside the TMDL? Specifically, what are the requirements of states that are outside the TMDL?

This question is no longer relevant since EPA will include all Bay watershed states in the TMDL.

What is EPA's definition of "reasonable assurance," both for TMDLs in general and its specific expectations for "reasonable assurance" provisions in the Bay TMDL?

Neither the Clean Water Act nor EPA's regulations provide a definition of "reasonable assurance." The regulations do provide that less stringent wasteload allocations for point sources must be based on practicable load allocations for nonpoint sources and that EPA must find that TMDLs will implement water quality standards in order to approve them. EPA's *Guidelines for Reviewing TMDLs Under Existing Regulations Published in 1992* (2002) provides guidance on when a TMDL must include reasonable assurance provisions:

> When a TMDL is developed for waters impaired by point sources only, the issuance of a National Pollutant Discharge Elimination System (NPDES) permit(s) provides the reasonable assurance that the wasteload allocations contained in the TMDL will be achieved. This is because 40 C.F.R. 122.44(d)(1)(vii)(B) requires that effluent limits in permits be consistent with "the assumptions and requirements of any available wasteload allocation" in an approved TMDL.
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> When a TMDL is developed for waters impaired by both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur, EPA's 1991 TMDL Guidance states that the TMDL should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable. This information is necessary for EPA to determine that the TMDL, including the load and wasteload allocations, has been established at a level necessary to implement water quality standards.

Over the course of approving or establishing more than 30,000 TMDLs, EPA has encountered a broad spectrum of acceptable reasonable assurance demonstrations. In light of some recent court decisions and higher scrutiny of the relationship between TMDLs and NPDES

permits, EPA is engaging in an effort to further refine the concept of reasonable assurance and expects to complete that work in FY 2009. In the meantime, EPA is moving forward with the expectation that this nationally-significant point-nonpoint source TMDL will be supported by documentation showing that nonpoint source control measures for nutrients and sediment in the Bay watershed can and will achieve expected load reductions.

More information on EPA Region III's specific expectations for reasonable assurance in the Bay TMDL is included in response to the following question.

Noting that the Principals' Staff Committee (PSC) has stated for the record that it wants the Bay TMDL to be a model for TMDLs nationwide, what are EPA's expectations for reasonable assurance in the Bay TMDL?

EPA Regions II and III, our partner states and the District are committed to accelerating restoration of the Chesapeake Bay and its tributaries, and EPA Region III believes that reasonable assurance provisions in the Bay TMDL will provide one mechanism to increase the likelihood that actions are taken to reduce nutrient and sediment loads. However, EPA Region III does not believe that implementation of the Bay TMDL depends solely on reasonable assurance or any other single TMDL element. Rather, EPA Region III is committed to working with the States and the District to develop and execute a broader implementation framework that draws on elements in the TMDL itself (including reasonable assurance), as well as additional implementation-related information that will accompany the TMDL. For example, implementation measures and milestones might be addressed in jurisdictions' revised tributary strategies attached to the TMDL or in a separate and more comprehensive TMDL implementation plan endorsed by all the States and the District. Based on input from the PSC Reasonable Assurance Workgroup, EPA expects each of the TMDL states and the District to work with Region III to develop the following information as part of its reasonable assurance and implementation framework:

1. Identify the controls needed to achieve the allocations identified in the proposed TMDL through revised state tributary strategies.

2. Identify the current state and local capacity to achieve the needed controls (i.e. an assessment of current point source permitting/treatment upgrade funding programs and nonpoint source control funding, programmatic capacity, regulations, legislative authorities, etc.).

3. Identify the gaps in current programs to achieve the needed controls (additional incentives, state or local regulatory programs, market-based tools, technical or financial assistance, new legislative authorities required, etc.).

4. A commitment from each state and the District to work to systematically fill the identified gaps to build the program capacity needed to achieve the needed controls. As part of this commitment, the states and the District would agree to meet specific, iterative,

and short-term (1-2 year) milestones demonstrating increased levels of implementation and/or nutrient and sediment load reductions.

5. A commitment to continue efforts underway to expand monitoring, tracking and reporting directed towards assessing the effectiveness of implementation actions and use these data to drive adaptive decision-making and redirect management actions.

6. Agree that if jurisdictions do not meet these commitments, additional measures will be necessary.

EPA Region III believes that this framework will provide information and commitments sufficient to support EPA's expectations for the Bay TMDL. EPA Region III looks forward to continuing to work with the PSC's Reasonable Assurance Workgroup to further develop the details of this approach and determine what aspects of the framework will be within or will accompany the TMDL.

What are the ramifications of failing to provide adequate reasonable assurance?

Rather than focusing at this time on potential failure to provide reasonable assurance, EPA Region III believes that energy should be directed at demonstrating upfront that there is adequate reasonable assurance the TMDL's allocations will be met and accelerating implementation of actions to reduce nutrient and sediment loads to the Bay. The Agency proposes that the creative talents of the Bay partnership be applied to finding policy and management solutions to the nonpoint source challenge such that reasonable assurance can be demonstrated for this TMDL upon its issuance.

We would like to see the Workgroup evaluate several models for assuring that nonpoint source pollution reductions will be achieved. These existing models include but are not limited to;

- The Coastal Zone Management Act approval process for management plans (NOAA and EPA share the specific review approach).

- Clean Air Act conformity determinations to qualify for state or federal funding based upon a state-wide implementation plans that are issued for public review.

- Virginia's 1997 Water Quality Monitoring, Information and Restoration Act which directs the State Water Control Board to "develop and implement a plan to achieve fully supporting status for impaired waters" (Section 62.1-44.19.7).

- Maryland's Smart Growth Model whereby targeted growth areas are identified and investments of state funds are directed only within those targeted areas.

- The incorporation of state nonpoint source management plans by watershed into state water quality management regulations.

EPA Region III suggests that the PSC Reasonable Assurance Workgroup explore how these and other models might satisfy reasonable assurance provisions and accelerate implementation of actions to reduce nutrient and sediment loads to the Bay.

The Clean Water Act acknowledges potential permitting consequences for point sources if the record does not demonstrate that necessary nonpoint source reductions will occur. CWA 301(b)(1)(C) requires that in addition to reflecting technology-based requirements, effluent limits for point sources must contain "any more stringent limitations, including those necessary to meet water quality standards." Chapter 2 of EPA's 1991 TMDL Guidance states:

> Under the CWA, the only federally enforceable controls are those for point sources through the NPDES permitting process. In order to allocate loads among both nonpoint and point sources, there must be reasonable assurances that nonpoint source reduction will in fact be achieved. Where there are not reasonable assurances, under the CWA, the entire load reduction must be assigned to point sources (p. 15).

There is authority under the CWA to require that tighter effluent limitations be applied to point sources where it cannot be demonstrated that water quality standards will be met without such limits. However, EPA acknowledges the large scale public investments (estimated at over $4 billion) that are now being carried out throughout the watershed to upgrade and reduce nutrient discharges from point sources. A stable regulatory environment is a priority need for these facilities and a matter of fiduciary responsibility and public trust. Therefore, EPA considers requiring further point source upgrades to the limits of technology as an option of last resort and is avoidable if the Bay partners use our creative energies to deliver sufficient nonpoint pollutant reduction commitments.

ENCLOSURE B

ADDITIONAL CLARIFICATION FROM EPA REGION III

What is an appropriate schedule for the development of the Chesapeake Bay TMDL?

Under the Virginia Consent Decree, the Chesapeake Bay TMDL must be established by no later than May 1, 2011. The PSC has agreed to an accelerated schedule of December 31, 2010. EPA will commit its best efforts to issue the TMDL by this earlier date, but our first priority is to develop a TMDL that fulfills all necessary legal requirements and is an effective tool to accelerate Bay restoration. To meet the accelerated December 2010 timeframe, EPA will propose a revised, detailed schedule to the Chesapeake Bay Program's Water Quality Steering Committee and the PSC.

How finely will the Chesapeake Bay TMDL allocate loadings to various sources?

EPA Regions II and III will continue to work with our state and District partners and others to develop the total allowable load of nutrients and sediments for the entire Chesapeake Bay and its tidal tributaries. We will also work with our partners to allocate allowable loads to each of the six watershed states and the District by the major tributary basins. The Regions expect that the six states and the District will then refine their tributary strategies to identify controls that are needed to achieve the allocated loading. Before the TMDL is formally completed, EPA Regions II and III intend to use these tributary strategies as the basis of any allocations to point and nonpoint sources in the Chesapeake Bay TMDL.

EPA Region III will strive for a scale of allocation that will yield the highest chance of success in implementing the needed pollution controls. While our partner states and the District are unified by a common goal to restore the Bay, each has a tailored approach to achieve controls necessary for restoration. These approaches are identified in their respective tributary strategies and current water pollution control programs. EPA Region III will tailor the TMDL approach for establishing allocations to the unique nature of each state program. Furthermore, EPA has different expectations for allocations for tidal and non-tidal states.

The tidal states (Maryland, Virginia and Delaware), the District and EPA Region III have agreed that the TMDL should contain detailed load allocations (LAs) and wasteload allocations (WLAs) designed to achieve water quality standards for the impaired waters of the Bay and its tidal tributaries. EPA Region III expects to include individual WLAs and sector LAs in the final Chesapeake Bay TMDL sufficient to achieve and maintain water quality standards in the Bay and its tidal tributaries. Using the Chesapeake Bay airshed, watershed and water quality/sediment transport models, EPA will confirm that the proposed allocations for these tidal water jurisdictions, along with allocations to the other states, will attain water quality standards in the Chesapeake Bay and its tidal tributaries. At a minimum, EPA Region III intends to identify in the TMDL the individual facility point source WLAs and aggregate nonpoint source LAs for each nonpoint source sector. EPA's preference is to further subdivide the load allocations into

smaller geographic units that would facilitate implementation of other point and nonpoint source controls (i.e., conservation district, county, and/or watershed level suballocations). EPA Region III intends to work with the tidal states and DC to derive a scale of point and nonpoint source allocations that works best in each jurisdiction.

For non-tidal states (Pennsylvania, New York and West Virginia), EPA Regions II and III expect that revised tributary strategies prepared by these states will provide necessary transparency and specificity regarding the nature of the controls anticipated by the state to achieve any aggregate allocated loading limits specified by the TMDL. The extensive scientific understanding that has been developed in establishing this TMDL should provide an unprecedented opportunity for EPA and the non-tidal states to finely target specific pollutant controls and track their effectiveness in meeting water quality standards. The Regions expect that this information will inform the respective states' tributary strategies.

At a minimum, EPA Region III intends to establish gross WLAs and gross LAs for each major basin in the non-tidal states in the Bay TMDL. These gross allocations would be based upon the point and nonpoint controls identified in the respective state tributary strategy. EPA recognizes that tributary strategies prepared by our partner states should provide the needed transparency on the planned controls by the state to achieve their aggregate allocated loading. It will be necessary for each non-tidal state to provide, no later than June 2010, a detailed draft tributary strategy containing information on allocations to a level of detail similar to the tidal states. The Bay models will be utilized to confirm that the allocation of loadings is sufficient to attain water quality standards. If ongoing efforts to place point source nutrient controls in NPDES permits are found to be insufficient for a state, or at a state's request, EPA Regions II and III may include WLAs for individual sources within that state in the Bay TMDL. Regardless of how the allocations are established in the TMDL, the EPA Regions expect to include each state tributary strategy as an attachment to the TMDL as part of the record of decision supporting the TMDL allocations.