



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SECRETARY

November 29, 2010

Mr. Shawn M. Garvin
Regional Administrator
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Mr. Gavin:

Enclosed please find the Phase I Chesapeake Bay Watershed Implementation Plan (WIP) for Pennsylvania. The Commonwealth is committed to helping to restore the Chesapeake Bay and has created a workable, cost-effective plan that will achieve the necessary Nitrogen, Phosphorous and Sediment reduction goals.

Pennsylvania plans to achieve the reductions by building on a foundation of three core elements: Milestone Implementation & Tracking; New Technology & Nutrient Trading; and Enhanced Compliance. This foundation sets the basis for the development of a blue print that combines a variety of approaches that Pennsylvania plans to implement to achieve nutrient reductions which includes:

- Continuing existing programs;
- Initiating and implementing new programs, or increasing the capacity of existing programs;
- Implementing new regulations or laws developed since the 2009 Progress Run; and
- Improving the data that is reported to EPA and included in Watershed Model runs.

As you know, Pennsylvania made a decision to develop the WIP through an open process that solicited significant input from a variety of constituency groups. Over 125 individuals representing a broad range of organizations and interest volunteered to participate on workgroups that provided input throughout the development of this document. The hours of effort from these workgroup members demonstrate the commitment of Pennsylvanians to help protect and restore both local waters, as well as the Chesapeake Bay. The short timeframe allotted for development of the WIP did not allow for full analysis of all the comments provided by the workgroups and received from the public. DEP will work to further these ideas and suggestions. Specifically, we added a section entitled "Unfinished Business" to the WIP as an adaptive management approach to advance new and innovative efforts over time or efforts currently underway but require priority attention to bring them to fruition.

I would like to thank the Environmental Protection Agency (EPA) for the various elements of support that have been provided, such as the participation of EPA staff in workgroup and

advisory committee meetings, as well as the continued discussion related to Reasonable Assurance. EPA's financial support for technical help from TetraTech was also helpful, along with the recent additional funding made available to support implementation of WIP elements.

Although the support from EPA has been helpful, there are a number of issues that will require an on-going dialogue between our agencies to ensure effective implementation of the WIP. Areas where further discussion is needed include:

Data and the Chesapeake Bay Watershed Model

During the development of the WIP, various issues arose that centered around the Chesapeake Bay Watershed Model (Model). An issue of principal concern among Pennsylvania stakeholders with the Phase 5.3 Model is the significant change in the delivery ratios (DRs) for nutrients and sediments. These factors determine what portion of the nutrient and sediments coming from the land into streams and rivers is transported to the Chesapeake Bay. Initial review indicates that in the Phase 5.3 model changes in segment delivery DRs ranged from an increase of 11% transport to a decrease of 82%, when compared to the corresponding land segments in the Phase 4.3 Model. The overall change was approximately a 32% drop in DRs in the Phase 5.3 Model. Such a significant change in DRs has raised concerns among all Pennsylvania sectors.

Other issues with the Phase 5.3 Model include a concern with how reductions associated with Best Management Practices (BMPs) are calculated. These types of problems were noticed following the submittal of WIP scenarios that were run through the Model. Concerns include:

- Work is needed to address how Nutrient Management is handled in the Model. For example, as recommended by EPA, we report zero "standard" nutrient management only because the Model does not credit the practice properly. We were advised to manage this shortcoming of the Model by reporting reductions in two other categories (enhanced nutrient management and decision agricultural practices) in lieu of standard Nutrient Management. We understand that EPA is working on fixing the problem.
- Only one stormwater BMP is allowed on an acre of urban land. This eliminates submitting multiple BMPs implemented in sequence as "treatment trains." This type of multiple implementation is becoming more common in Pennsylvania. Staff has had to develop a 'surrogate' BMP lists in the deck runs to represent the real-world situation for stormwater.
- Enhanced and precision nutrient management are not implemented consistent with the definition of the practices.
- Dirt and gravel road BMPs are not allowed on agricultural land in the Phase 5.3 Model. About 25% of dirt and gravel road BMPs are implemented on agricultural land.
- Continuous No-Till application in the Phase 5.3 Model is inconsistent with how the efficiencies were determined for this practice. In addition, it is not clear why the number of acres that were reported in the various input decks were discounted.
- There are a number of issues with the acres represented in the model and the need for those to be addressed. For example, the acres of animal feeding operations need to be changed to be consistent with the actual acres of confined animal operations that have been permitted. Related is how EPA assigned Pennsylvania CAFO numbers in the

Model. Additionally, barren land use and extractive land use is underestimated in the Model, which underestimates waste allocations attributed to permitted construction activities.

- Additional work is needed to establish BMPs that quantify the reductions associated with advanced technologies. These technologies hold great promise for effectively dealing with manure. While we appreciate EPA's efforts to work with Pennsylvania to develop a "placeholder" approach, it is still just that, a placeholder.

Gross Allocation

Pennsylvania objects to the imposition of "federal backstop measures" in the Bay TMDL, including the establishment of individual wasteload allocations (WLAs) for all significant point sources, aggregate WLAs for other entities regulated by the National Pollutant Discharge Elimination System (NPDES), and aggregate load allocations (LAs) for nonpoint source sectors. Instead, EPA should establish gross WLAs and gross LAs for each major basin in the non-tidal states in the Bay TMDL, consistent with language in EPA Region III's correspondence dated November 4, 2009.

Pennsylvania supports the establishment of gross WLAs and gross LAs for each major basin in the state. As a non-tidal state, individual or aggregate WLAs and LAs should not be required for individual point sources or sectors in the Bay TMDL. It is DEP's position that the following terminology is appropriate for the non-tidal states: Replace the WLA terminology with WTL for Waste Target Load (representing point source target load) and replace the LA terminology with NTL for Nonpoint source Target Load (representing non-point source target load). And, for each major basin, include a row in Table B2 that adds all of the WTLs into an aggregate WLA and adds all of the NTLs into an aggregate LA for placement into the TMDL.

The revised WIP that is being submitted to EPA clearly shows that the Commonwealth gives reasonable assurances that it can meet load allocations at the border. A primary method of the Commonwealth's efforts to provide reasonable assurance is the continued call for a technology project fund of \$100 million annually that would place innovative projects such as manure to energy technologies on the ground. This project would be funded by the Chesapeake Bay states and the federal government and will provide the necessary assurance that the reductions necessary will be made. Pennsylvania will contribute \$15 million per year to this technology development fund. Efforts such as this were not adequately considered in the draft WIP. In addition, my staff has worked closely with staff from EPA to provide in the WIP a new section to address reasonable assurance and to address the comments we received from EPA and the public.

Final Input Deck, Table B2 and WIP

It is our understanding based on the email received on November 22, 2010, from Mr. Jon Capacasa, that we may include in the WIP placeholders for the results from the final Input Deck submission. From our agency's perspective, a WIP scenario consists of a list of BMPs and point source controls to be run through the Model, which results in quantification of

reductions associated with the implementation of those BMPs and controls. This is an important and powerful analytical tool that is necessary to inform decision-making. We appreciate EPA's willingness for us to re-visit this aspect of the WIP and Table B2.

Additionally, based on our discussion, both agencies recognize that the level of effort outlined for implementing the manure to energy technologies outpaces the Model therefore our reasonable level of implementation cannot be fully accounted for in the input deck results. It has cooperatively been agreed to that over the next 12 months DEP will work with EPA to create a BMP efficiency that will better account for the potential reductions. DEP also agrees to verify the reductions with EPA over the identified two-year milestone periods to assure the outlined reductions are occurring. If it is found that the technology projects are not providing the outlined reductions then DEP agrees to work with EPA to access where additional nonpoint source reductions may be generated.

Next Steps

There has been significant public engagement during the development of Pennsylvania's WIP, and it is important that we build upon the dialogue that has already been occurring to put the plan into action and begin to achieve the outlined reductions. It is time to move away from revising plans but instead begin to implement the Pennsylvania plan.

Due to the broad range of program areas addressed in the WIP and the large number of staff persons involved from both agencies, Deputy Secretary for Water Management, John Hines, will continue to be the DEP point of contact. Mr. Hines may be reached by e-mail at johines@state.pa.us or by telephone at 717.783.4693.

Sincerely,



John Hanger
Secretary

Enclosure