

Wastewater Treatment Recommendations for

PENNSYLVANIA

Pennsylvania is working alongside neighboring states to clean up our local waters that flow to the Chesapeake Bay. This effort is Pennsylvania's Phase 3 Chesapeake Bay Watershed Implementation Plan (Phase 3 WIP).

The path to success for Pennsylvania's Phase 3 WIP starts locally, and wastewater management is an important part of the solution. By building on the past success in the sector, wastewater managers can continue to improve water quality in local streams and rivers and in the Chesapeake Bay by implementing the practices summarized in this document.



Pennsylvania's Phase 3 WIP Wastewater Findings and Action Steps

Over \$1.4 billion has been invested in Pennsylvania's wastewater sector. These investments were necessary due to federal cleanup obligations. The largest municipal sewage treatment plants in the basin have made nutrient reductions. This sector has met federal obligations for reductions ahead of schedule. Given that this sector continues to meet federal obligations, major additional nutrient reduction opportunities are limited. Pennsylvania has conducted further research on its wastewater sector and developed several priority initiatives for consideration.

CONTINUE CURRENT TREATMENT COURSE

Given the ongoing reduction success, one priority initiative is to continue the current treatment course described in the Phase 3 WIP. The ongoing tracking of the 190 publicly-owned treatment works and their waste load allocations is described in the Phase 2 WIP Wastewater Supplement that will continue to be updated on a regular basis.

PLANT OPTIMIZATION PROGRAM

DEP's treatment plant optimization program helps troubled facilities get into compliance with permitting requirements. DEP will further investigate the feasibility of how this program could be expanded to help facilities optimize their process for nutrient removal by establishing a facility nutrient removal optimization program. The existing DEP optimization program does not have the capacity to run such a program, and expansion of the program would include a section dedicated to statewide implementation. Varying degrees of implementation could be considered to make the effort slightly less costly; however, the reduction in proposed DEP staffing would shift the burden to the facility to hire operations consultants.

MUNICIPALITIES IMPLEMENT ONSITE SEPTIC SYSTEM INSPECTION AND PUMPING PROGRAMS

Properly operated and maintained systems provide better protection of local groundwater resources as well as a reduction to the total nitrogen loading to the Chesapeake Bay. If all municipalities with on-lot systems would implement sewage management programs that include inspection of the on-lot system and pumping of septic tanks 55,000 pounds of total nitrogen reduction could be realized.

Sewage management programs that incorporate septic system inspection and pumping are recommended. On-lot system oversight is the responsibility of municipalities per the Pennsylvania Sewage Facilities Act.

To facilitate the implementation of this recommendation, DEP proposes to develop a GIS-based online monitoring and reporting program that municipalities can use to report on-lot system operation and maintenance and permitting information for Chesapeake Bay reporting.





Action Steps

Pennsylvania will take the following action steps to support nutrient and sediment pollution reduction efforts in the wastewater sector:

Reporting and Tracking Progress.

• Develop a GIS based online monitoring and reporting program that municipalities can use to report on-lot system operation and maintenance and permitting information.

For more information or to get involved in local planning efforts, please visit www.dep.pa.gov/chesapeakebay/phase3. Produced and distributed by the PA Department of Environmental Protection through a U.S. Environmental Protection Agency Chesapeake Bay grant.