

EPA EVALUATION OF PENNSYLVANIA'S 2012-2013 and 2014-2015 MILESTONES

The U.S. Environmental Protection Agency (EPA) is providing this evaluation of Pennsylvania's progress towards meeting its 2012-2013 milestones and its sector-specific commitments for the 2014-2015 milestone period.

Pennsylvania has made progress in the agriculture and wastewater sectors to ensure implementation is occurring, even though all its milestone commitments were not achieved. Pennsylvania will need to place additional emphasis on improving implementation in the agriculture and stormwater sectors and the offsets and trading program to stay on track to meet its Watershed Implementation Plan (WIP) and Chesapeake Bay Total Maximum Daily Load (Bay TMDL) commitments by 2025.

Load Reduction Review

According to the data provided by Pennsylvania for the 2013 progress run, Pennsylvania surpassed its 2013 milestone target for phosphorus. Pennsylvania did not achieve the 2013 milestone target for nitrogen and sediment.

Pennsylvania did not meet their milestone target for nitrogen and sediment, in part, because, in its effort to review and correct its data on land retirement and riparian areas previously reported to the Chesapeake Bay Program, Pennsylvania determined that implementation of these Best Management Practices (BMPs) had been over-estimated. EPA supports Pennsylvania's efforts to review and correct previously reported data.

Based on Pennsylvania's anticipated reductions for nitrogen, phosphorus and sediment during the 2014-2015 milestone period, additional nitrogen reductions are needed to ensure that Pennsylvania is on track to meet the 2017 target of having practices in place to achieve 60% of the reductions necessary to obtain water quality standards in the Chesapeake Bay compared to 2009. Pennsylvania is on track with phosphorus and sediment reductions. According to the Chesapeake Bay Program (CBP) partnership's 2013 pollution estimates, Pennsylvania is responsible for 46% of the nitrogen, 26% of the phosphorus and 31% of the sediment load entering the Chesapeake Bay, so it is critical that Pennsylvania's load reductions remain on track.

Pennsylvania needs to improve their tracking, verification and reporting of BMPs in order to ensure the practices implemented are achieving the anticipated pollutant load reductions. Pennsylvania added programmatic milestones to enhance the state's existing BMP tracking, verification and reporting program to be consistent with the CBP partnership's forthcoming verification framework. Pennsylvania also includes programmatic milestones to review and correct its data on BMPs previously reported to CBP across all sectors as part of the new section on BMP tracking and reporting.

EPA continues to have concerns with Pennsylvania's high unexpended balance in their Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant. Pennsylvania is revising the CBRAP grant workplan to expedite using future funds and addresses some of the items identified in this milestone evaluation.

Agriculture – Downgrade to Backstop Actions Level

- Pennsylvania is relying on achieving 75% of its necessary nutrient and sediment reductions from the agricultural sector. Controlling this load is not only essential to achieving Pennsylvania's WIP, but it is essential for the overall Bay restoration.

2012-2013 Milestone Achievements

- Issued the Concentrated Animal Feeding Operation (CAFO) General Permit with additional considerations for winter spreading of manure, effective as of April 1, 2013.
- Developed the Agriculture Complaint Response Policy in September 2012.
- Developed revised delegation agreements with county conservation districts to implement manure management requirements.
- Surpassed the target for conducting outreach to the agricultural community on state regulatory requirements.
- Started to review and correct previously reported implementation data for land retirement and riparian areas.

2012-2013 Milestones Missed

- Did not meet its 2013 milestone targets for nutrients and sediment in agriculture and did not meet its cumulative (2009-2013) agricultural implementation targets for such BMPs as buffers, animal waste management systems, enhanced nutrient application management (0% implementation), cover crops (1% implementation), and carbon sequestration (0% implementation). Pennsylvania is relying heavily on these practices to meet its nutrient and sediment reduction targets. Pennsylvania includes detail on how it will get back on track with some of these practices in the 2014-2015 milestones.
- Did not demonstrate if the goal of 100 inspections per year for each of the three Chesapeake Bay Field Representatives (CBFRs) was met.

2014-2015 Milestones Strengths

- Commits to perform site visits to ensure the farm community is aware of the regulatory requirements. EPA would like to see annual break outs for number of conservation district site visits for each county, inspections and compliance actions by CBRAP staff, in addition to the cumulative numbers.
- Commits to perform 450 compliance inspections and 100 compliance actions in 2014-2015. Pennsylvania needs to fill vacant CBRAP inspector positions in order to meet this milestone and is in the process of filling the positions.
- Commits to perform three additional watershed assessments within the Chesapeake Bay watershed during the next two-year milestone to ensure compliance with state requirements.
- Commits to focus grant funding for BMP implementation for priority practices such as no-till/conservation tillage, cover crops and nutrient management planning.
- Commits to assist EPA to finalize the CAFO program assessment by December 2014.

Key Areas to Address in the 2014-2015 Milestone Period

- Pennsylvania's 2015 numeric milestone commitments for nitrogen is substantially off track towards meeting the interim goal of having practices in place by 2017 that would achieve 60% of the needed reductions. EPA expects increased progress during the 2014-2015

milestone period that will get Pennsylvania back on track to meet the nitrogen target for 2015. Pennsylvania has included a new section on improved tracking and reporting to aid in meeting milestone targets.

- Place equal emphasis on compliance with the regulatory requirements along with and education and outreach to producers in order to ensure 2015 nutrient and sediment reduction targets will be met.
- Report on the Agriculture Compliance Policy and Compliance Inspections to detail the types of non-compliance actions and how they are being resolved, as well as any policy implementation issues. This report will be provided as a CBRAP grant output.
- Develop and implement a plan to acquire and verify poultry litter data on nutrient concentrations and volumes for use in model refinements.
- Develop a tracking system to account for cover crops and manure transport in the annual progress run. Pennsylvania commits to develop a system to track cover crop data in accordance with the Chesapeake Bay Program partnership's definition in order to continue to receive credit for this practice by December 2015.
- Ensure that farms are implementing manure management plans (MMPs) per Chapter 91.36 and that Pennsylvania is using its authority to ensure BMPs are being implemented per those plans.
- Ensure that all farms have a current Erosion and Sediment Control or Conservation Plans per Chapter 102 and that Pennsylvania is using its authority to ensure BMPs are being implemented consistent with those plans.

Urban/Suburban Stormwater – Maintain Backstop Actions Level

2012-2013 Milestone Achievements

- Reissued the Municipal Separate Storm Sewer System (MS4) Phase II General Permit (PAG-13) and the Construction General Permit (PAG-02).
- Conducted municipal workshops regarding the reissued PAG-13 and PAG-02 permits.
- Shared approximately 19 MS4 permit applications and 15 TMDL implementation plans with EPA for review and comment.
- Conducted several workshops with the regulated community on the updated Erosion and Sediment Pollution Control Manual.
- Developed an Annual Report template and posted on Pennsylvania Department of Environmental Protection (PADEP) website.
- Developed an MS4 TMDL Plan/Chesapeake Bay Pollutant Reduction Plan (CBPRP) reporting template with guidance in the form of a frequently asked questions document in August 2013. These documents are posted on PADEP website. Pennsylvania is planning to update these documents in the future and create “model plans” to assist the regulated community.
- Developed Standard Operating Procedures (SOPs) for the Pennsylvania staff review of PAG-13 (Notices of Intent) (NOIs) and individual MS4 permit applications. These documents are available on PADEP's website. Pennsylvania also developed an SOP for staff on MS4 Monitoring and Compliance Activities that has been shared with EPA but is not available on PADEP's website.

2012-2013 Milestones Missed

- The information developed for the MS4 TMDL Plans and the CBPRPs that were posted to the PADEP website lack sufficient detail to ensure consistency with the Bay TMDL allocations and assumptions.
- Instead of more detailed training on the guidance for MS4 TMDL plans and the CBPRPs, information was posted to the PADEP website and an overview was given at workshops.
- Did not complete the development of a needs assessment for a comprehensive tracking system for stormwater BMPs.
- Did not develop a policy for designation of small MS4s. Pennsylvania submitted a draft designation document to EPA within the MS4 Compliance and Monitoring Activities SOP. EPA has offered its agreement with this approach; however, Pennsylvania is planning to publish a formal policy in the future.
- Has not implemented enough infiltration and filtering practices to keep pace with WIP commitments.

2014-2015 Milestones Strengths

- Commits to inspect all MS4s within 5 years. This equates to approximately 180 inspections/year statewide. Pennsylvania should define how many MS4 inspections/year will be conducted in the Chesapeake Bay watershed.
- Commits to hosting workshops for the regulated community on the development of MS4 TMDL Plans and CBPRPs.
- Includes a milestone to report stormwater practices based on the state's performance standard.
- Commits to submit up to 20 CBPRPs to EPA for review.

Key Areas to Address in the 2014-2015 Milestone Period

- Notify localities within new and expanded urbanized areas based on the 2010 Census that they require Phase II MS4 permit coverage by September 30, 2014.
- Include information in the deliverables section of the stormwater training milestone to indicate how many MS4 workshops per year will be conducted and when they will occur. EPA expects at least 10-15 trainings in 2014 and additional trainings as necessary in 2015 as MS4 TMDL Plans/CBPRPs are currently in the process of being submitted.
- Did not meet its stormwater milestone source goals for nutrients and sediment in 2013 and is substantially off track for the planned 2015 targets for nitrogen and marginally off track for sediment. EPA expects increased progress during the 2014-2015 milestone period that will get Pennsylvania back on track to meet the nitrogen and sediment targets for 2015, with a focus on ramping up implementation of the highest priority water quality BMPs such as infiltration and filtration practices. Pennsylvania included a section to improve the tracking and reporting of these BMPs to ensure these practices are being accounted for in annual progress.
- Provide a timeline and defined deliverables for the update of the MS4 TMDL and CBPRP guidance and model plans to assist the regulated community.

- Develop a plan to explain how on the ground activities and implementation practices will achieve the anticipated reductions from the urban sector and make any necessary adjustments of loads during the Phase III WIP development.
- Complete a needs assessment to determine what, if any, upgrades are needed for stormwater BMP tracking and reporting.
- Update the stormwater management BMP manual to assist MS4s in calculating TMDL reductions for the MS4 TMDL Plans and CBPRPs that are in the process of being developed for submittal.
- Provide clarification on whether stormwater BMPs reported to EPA in future progress submissions are a result of new implementation or improved accounting of existing practices.
- Provide a demonstration of trends in nutrient loads associated with urban nutrient management and fertilizer legislation. An example of such a demonstration could include statistics on non-farm fertilizer sales to substantiate reductions in fertilizer application.

Wastewater Treatment Plants and Onsite Systems – Maintain Ongoing Oversight

2012-2013 Milestone Achievements

- Almost all programmatic milestones were achieved in this sector.
- Made good progress in issuing updated permits in compliance with the Bay TMDL. Twenty-six permits for significant dischargers (17 municipals and 9 industrials) were reissued to include permit limits consistent with the Bay TMDL for the first time.
- One hundred forty-seven of the 213 significant dischargers have nutrient permit limits which are currently effective. Pennsylvania indicates in their 2014-2015 milestone that 174 sewage and 10 industrial facilities began compliance before January 1, 2014, although all have not yet completed their first compliance year.

2012-2013 Milestones Missed

- Pennsylvania incorporated into the 2014-2015 milestones issuance of 7 industrial facilities and 1 municipal facility permits that were not reissued by December 31, 2013.

2014-2015 Milestones Strengths

- Commits to continue issuance of permits that are consistent with Bay TMDL wasteload allocations.
- Continue to submit upgrade and compliance schedules into EPA's Integrated Compliance Information System.

Key Areas to Address in the 2014-2015 Milestone Period

- The Phase-3 sewage facility requiring a reissued permit should have cap loads effective by October 1, 2016, as specified in the 2012-2013 milestone.
- As part of the issuance process for the remaining industrial facilities, Pennsylvania should manage the total suspended solids (TSS) allocations in order to be consistent with the assumptions and requirements of the TMDL.

Offsets and Trading – Maintain Enhanced Oversight

2012-2013 Milestone Achievements

- Tracked the pounds of nitrogen and phosphorus traded during this milestone period.

- Worked with PennVEST to host trading auctions.
- Worked with stakeholders to develop a strategy for the expansion and revision of its Nutrient Credit Trading program.
- Committed to reevaluate sector growth periodically and submitted an initial sector growth demonstration in February 2013 in response to EPA's trading and offset 2012 program assessment findings. Provided a response to the common recommendations that EPA made in its 2012 trading and offset program assessment in November 2013.
- Worked with a stakeholder workgroup that included EPA representation to develop a stormwater offset program. Draft guidance document is under Pennsylvania internal review.

2012-2013 Milestones Missed

- Did not develop a final stormwater offset program.
- The Agriculture trading baseline has not been updated to be consistent with the Bay TMDL. The projected completion date for a final revised baseline is 2018 in the submitted milestones which does not align with the trading program revisions schedule submitted to EPA in April 2014. As the current Pennsylvania Trading regulations do not meet the Bay TMDL baseline, EPA has begun to object to permits with the trading language and will offer alternate language to address the concern. EPA expects the Plan of Action for updating the Agriculture baseline to be finalized during the 2014-2015 period.

2014-2015 Milestones Strengths

- Will work with PennVEST and others to advance implementation of manure technologies and to quantify their nutrient reduction benefits through December 31, 2015.
- Will work with PennVEST to implement the Nutrient Credit Clearinghouse Auction by December 31, 2015.
- Committed to develop a stormwater management offsetting program by December 31, 2014.

Key Areas to Address in the 2014-2015 Milestone Period

- Establish adequate systems in place that could determine whether sector loads are increasing or not. EPA expects that Pennsylvania in Fiscal Year 2014 must, at a minimum, either:
 1. Begin making improvements to an existing tracking and accountability system so that it is operational by December 31, 2015; or
 2. Begin developing a new system that is operational by December 31, 2015.
- Provide measurable deliverables for the trading programmatic milestones.
- Pennsylvania carried forward the milestones to develop a strategy for addressing the trading program review and the development of a stormwater management offset program. Since these milestones were not met in 2012-2013, EPA expects Pennsylvania to include additional steps to detail how these milestones will be met during 2014-2015.

Potential Federal Actions and Assistance

- EPA will downgrade the agriculture sector from enhanced oversight into the backstop category because final agriculture programmatic and numeric milestones demonstrate that Pennsylvania is not on track to have practices in place by 2017 that will achieve 60% of the necessary reductions compared to 2009. If Pennsylvania makes substantial improvements in

implementation of pollution reduction practices in the agriculture sector, EPA may upgrade this sector back to enhanced oversight in the interim evaluation.

- EPA will negotiate the CBRAP workplan to include specific outputs and deadlines related to
 - Verification, inspections and implementation of priority agricultural practices;
 - Conducting MS4 inspections; and
 - Conducting a gap analysis of urban reductions.
 - Missed deadlines may affect future grant awards.
- EPA will work with Pennsylvania to ensure EPA grants are used in a timely and effective way to address high priority needs.
- EPA will work with Pennsylvania to ensure local government grants and other resources address key milestone needs such as trainings for localities on Chesapeake Bay Pollutant Reduction Plans.
- EPA will assist Pennsylvania with the development a tracking system for agriculture and stormwater BMPs and reporting data to the Chesapeake Bay Program using the National Environmental Information Exchange Network (NEIEN).
- EPA will assist and participate in the MS4 stormwater trainings.
- EPA will continue to coordinate with Pennsylvania on enforcement activities within the MS4 program.
- EPA will continue to work with Pennsylvania to ensure the trading program meets the baseline assumptions for the Bay TMDL.
- EPA is supporting jurisdictions' development or enhancement of trading and offset programs, tracking systems and BMP verification programs through technical assistance and grant resources.
- When evaluating 2014-2015 milestone progress, EPA will assess whether statewide and sector load reductions are on track to have practices in place by 2017 that will achieve 60% of necessary reductions compared to 2009.
- If load reductions remain off track EPA, may consider seeking additional pollutant reductions from the wastewater sector.
- EPA will work with federal partners to provide leadership and coordinate with the jurisdictions on WIP and milestone implementation to reduce pollution from federal lands and meet the Bay TMDL, consistent with the Chesapeake Bay Executive Order 13508 Strategy.