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

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

New York completed all but one of its 2012-2013 programmatic milestones and achieved its 2012-2013 load targets for nitrogen and phosphorus. New York slightly exceeded its 2013 sediment milestone, but the 2013 loads and 2015 milestone commitment for sediment are 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.

The biggest contributor to New York's nutrient and sediment load is the agriculture sector. Using its Agricultural Environmental Management (AEM) program and with the support of the Upper Susquehanna Coalition (USC), New York has achieved steady nutrient and sediment reductions in agriculture. The next largest controllable sector in New York is wastewater. New York is about to issue permits for all but one of its significant dischargers. These permits include nitrogen and phosphorus limits consistent with its Phase II Watershed Implementation Plan (WIP) and require significant phosphorus reductions. However, planned nitrogen reductions in wastewater are relatively small (the average final nitrogen concentration for its significant dischargers is about 8.7 mg/l).

New York will need to maintain it efforts in the agriculture sector and place additional emphasis on improving capacity, implementation and reporting in its wastewater and stormwater sectors to stay on track to meets its WIP and Chesapeake Bay Total Maximum Daily Load (TMDL) commitments. Recommendations for additional and/or more specific milestones that will support nutrient reductions as well as improve Best Management Practice (BMP) reporting and verification are provided below.

Load Reduction Review

EPA considered two 2017 targets when evaluating if New York's 2015 milestones are on track with expected load reductions. New York committed to one set of targets in its Phase II WIP (the WIP targets), and the second set is the Chesapeake Bay Program (CBP) partnership's target of having all practices in place to achieve 60% of the reductions necessary to obtain water quality standards in the Chesapeake Bay (the 2017 target).

Overall, New York's WIP targets are about 3 percent higher than the CBP partnership's 2017 targets, and most of this gap is in the wastewater sector. New York needs to close this gap in future milestones or in its Phase III WIP. Based on New York's anticipated reductions for phosphorus and sediment during the 2014-2015 milestone period, New York is on track to meet or surpass both its WIP and 2017 targets. However, significant additional nitrogen reductions are needed to ensure that New York meets both its WIP and 2017 targets.

New York needs to improve their tracking, verification and reporting of BMPs in order to ensure the practices implemented are achieving the anticipated pollutant load reductions. To ensure the most accurate estimates of load reductions, EPA encourages New York to add programmatic

milestones related to enhancing the state's existing BMP tracking, verification and reporting program that is consistent with the CBP partnership's forthcoming verification framework and guidance and to begin implementing the state's enhanced program in 2015 upon review and approval. EPA recognizes New York's efforts to accurately report agricultural BMPs to date and strongly encourages the state to add programmatic milestones to complete its review and correction of data on BMPs previously reported to CBP across all sectors, including wastewater, by fall 2015 as part of CBP's midpoint assessment in 2017 of the Bay TMDL.

Agriculture – Maintain Ongoing Oversight

2012-2013 Milestone Achievements

- Completed most of if its 2013 programmatic milestones. Highlights include:
  - Implementing two rounds of New York State Agricultural Non-point Source Abatement and Control Program (AgNPS) funding to support implementation of BMPs.
  - Completing AEM on-line application to provide a uniform approach to BMP reporting across the watershed. AgNPS and AEM base program funding totaled over $11 million for the milestone period.

2012-2013 Milestones Missed

- New York did not release amended drafts of the Federal or State Concentrated Animal Feeding Operation (CAFO) general permits for notice and public comment in 2013. However, New York revised its state CAFO regulations and general permit that raised the threshold for state CAFO status from 200 to 300 animals.

2014-2015 Milestones Strengths

- Extensive outreach to the farm community provided by the USC and Cornell University staff. These organizations provide the farm community with dozens of workshops and meetings to increase the understanding and use of state-of-the-art conservation practices.
- Funds the Dairy Acceleration Program that specifically targets farms with 200-299 dairy cows that are no longer part of New York's CAFO program.
- New York has already exceeded its 2017 target for total animal waste management systems.
- Commits to develop a plan to verify annual practices, like cover crops, as part of annual reporting of voluntary practices.
- Agrees to apply nutrient management BMPs to pasture land. This is a step towards addressing pasture management, but concerted effort to address implementation BMPs at the field level is still needed to accomplish significant nutrient and sediment reductions.

Key Areas to Address in 2014-2015 Milestone Period

- Issue draft Clean Water Act CAFO general permit and State CAFO general permit as well as revise state CAFO regulations in 2014.

Urban/Suburban Stormwater – Maintain Ongoing Oversight

2012-2013 Milestone Achievements

- New York completed all if its 2013 programmatic milestones.

2012-2013 Milestones Missed

- None.

2014-2015 Milestones Strengths

- Commits to report out on post-construction BMPs in 2014 and 2015.
- Commits to develop a low cost Green Infrastructure Guide for municipalities by December 31, 2014.
- Commits to evaluate the availability of information on non-farm fertilizer.

Key Areas to Address in 2014-2015 Milestone Period

- Both the Municipal Separate Storm Sewer Systems (MS4) and Construction general permits will be up for renewal in 2015. EPA expects to meet with the New York State Department of Environmental Conservation (NYSDEC) in 2014 to discuss how the general permits will comply with the assumptions and allocations of the Bay TMDL, including whether special provisions for the Chesapeake Bay watershed are necessary.
- Implement urban and suburban stormwater BMPs.
- Encourage demonstration of trends in nutrient loads associated with urban nutrient management. An example of such a demonstration could include statistics on non-farm fertilizer sales to substantiate reductions in fertilizer application.
- Encourage New York to develop a Chesapeake Bay watershed outreach and technical assistance plan for MS4s in 2014 and report progress on plan implementation in 2015.

Wastewater Treatment Plants and Onsite Systems – Maintain Enhanced Oversight

2012-2013 Milestone Achievements

- New York completed all of its 2013 programmatic milestones.
- New York issued draft permits that referenced wasteload allocations (WLAs) for 28 of its 30 significant wastewater treatment facilities. The draft Chobani Inc. permit was issued in January, 2014.

2012-2013 Milestones missed

- None.

Key Areas to Address in 2014-2015 Milestone Period

New York's 2014-2015 numeric milestones for wastewater are not on track for nitrogen because New York's WIP commitments for nitrogen reductions in this sector are less aggressive than those achieved or planned by the other jurisdictions. Additionally, current nitrogen loads from WWTPs are not expected to decrease until reconstruction of the Binghamton/Johnson City wastewater treatment plant (BJC WWTP) is completed in 2017 (in accordance with the plant's Administrative Order on Consent). The BJC WWTP load comprises about 30-40% of the total WWTP load and current concentration of nitrogen from this plant averages about 21 mg/l. After reconstruction is complete in 2017, the BJC plant is expected achieve nitrogen concentrations below 6 mg/l.

The draft permits for all significant WWTPs, except BJC, are part of an aggregate permit with nitrogen effluent limits that have effective dates starting in 2015. By 2017, all of the significant

WWTPs will have and, on aggregate, will meet permitted nitrogen levels that are consistent with the WIP 2017 targets. EPA expects New York to take the following actions in 2014-2015:

- Finalize permits for significant dischargers in 2014.
- Work with EPA to identify opportunistic reductions of nitrogen and phosphorus at WWTPs.
- Submit WWTP upgrade schedules and nutrient loadings into EPA's Integrated Compliance Information System.

Offsets and Trading – Maintain Ongoing Oversight

2012-2013 Milestone Achievements

- New York provided two quantitative sector analyses using CBP and U.S. Department of Agriculture (USDA) data to document that the small additional loads expected in the urban stormwater will be more than compensated for by load reductions resulting from predicted decreases in the numbers of farm animals and acreage.
- New York responded to EPA's comments on its first sector analysis and used CBP modeling projections as the basis for this analysis.

2012-2013 Milestones Missed

- None.

2014-2015 Milestones Strengths

- New York's 2014-2015 milestones do not address trading and offsets.

Key Areas to Address in 2014-2015 Milestone Period

- Encourage New York to start collecting data now that can be used evaluate trends in sector loads during the mid-point assessment, when New York has committed to reevaluate its sector analysis.
- Report annually on whether available data and information indicate that New York's loads are growing. If this information indicates no overall growth, EPA expects that New York will include a statement each year in its Chesapeake Bay Regulatory and Accountability Program (CBRAP) work plan indicating that it does not have new data or information that contradicts its 2013 no-growth demonstration.
- If New York cannot make this statement or other evidence indicates that New York's loads are growing, EPA expects that in Fiscal Year 2015, New York must, at a minimum:
  - Begin making improvements to an existing tracking and accountability system so that it is operational by December 31, 2015; or
  - Begin developing a new system that is operational by December 31, 2015.
  - Expect any tracking and accountability narrative to describe what readily available data New York will submit to help determine how sector loads are changing over time. New York should also discuss any data concerns or limitations regarding comparability to other datasets in this narrative.

Potential Federal Actions and Assistance

- Based on New York's 2012-2013 milestones and 2014-2015 draft milestones, no change in the level of oversight is recommended.

- EPA is prepared to provide technical assistance to evaluate whether wastewater treatment plants can further reduce nutrients using low-cost strategies. This information could inform New York's Phase III WIP, when EPA expects New York to commit to load reductions that will achieve water quality standards in the Chesapeake Bay.
- When evaluating 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.
- EPA is supporting jurisdictions' development or enhancement of trading and offset programs, tracking systems and BMP verification programs through technical assistance and grant resources.
- 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.