

Region 2 Assessment of
New York State Department of Environmental Conservation's
MS4 Permit Program for the Chesapeake Bay Watershed

June 10, 2013

Summary: This report includes observations from EPA Region 2's review of the New York State Department of Environmental Conservation's (NYSDEC) Chesapeake Bay Watershed Implementation Plan (WIP), Municipal Separate Storm Sewer Systems (MS4) General Permit, and MS4 enforcement program.

Purpose of Effort: EPA Region 2 drafted this assessment of New York's MS4 program to satisfy the terms of the Chesapeake Bay TMDL settlement agreement revisions of June 28, 2012, regarding restoration of the Chesapeake Bay. The results of this assessment will be considered by EPA Region 2 when reviewing New York's MS4 permits issued subsequent to this assessment. EPA has shared a draft of this assessment with the NYSDEC.

EPA conducts systematic, formal reviews of state National Pollutant Discharge Elimination System (NPDES) programs as part of its oversight responsibilities under the Clean Water Act (CWA). EPA reviewed New York State's NPDES permitting program during federal fiscal year (FY) 2012. EPA's program reviews include an assessment of stormwater programs. EPA also discusses program goals and objectives with authorized states as part of annual CWA section 106 grant negotiations. For the FY 2014 Performance Partnership Grant cycle, EPA Region 2 and New York State discussed the need for New York State to examine opportunities for improving its MS4 General Permit prior to renewal and reissuance of that permit in 2015.

Overview of New York State's MS4 Program in the Chesapeake Bay Watershed: New York State comprises approximately 6% of the total pollutant load to the Chesapeake Bay Watershed. Nitrogen, phosphorus, and sediment are the pollutants of concern that New York contributes to the Bay. Of the 6% total load, stormwater contributes 12% of the nitrogen load, 13% of the phosphorus load, and 30% of the sediment load.

The NYSDEC issued its first MS4 permit in 2003. NYDEC issued the most recent permit, SPDES General Permit GP-0-10-002, in April 2010. It took effect on May 1, 2010 and was modified in October 2011. EPA provided comments on this permit when it was released for public review and the final permit contains most of the recommended actions. The permit was appealed by a coalition of environmental groups, including the Natural Resource Defense Council (NRDC), and on January 10, 2012, the Westchester County Supreme Court issued its ruling. The court annulled the general permit and ordered NYSDEC to reissue it with changes made pursuant to its ruling. The court upheld NRDC's two main concerns with the NYSDEC permit. These concerns are: (1) the NYSDEC MS4 program was too self-regulatory with insufficient oversight from the delegated authority; and (2) the Notice of Intent process had inadequate public review, including public review of the MS4's stormwater management

plan. The portion of the order that annulled the 2010 MS4 permit has since been removed from the court's decision, thus the current 2010 permit will remain in full effect until the matter is fully resolved. Absent further court ordered actions, the current MS4 permit will expire on April 30, 2015.

NYSDEC's MS4 permit covers municipalities which meet the eligibility requirements under the federal regulations and the state has designated municipalities that fall within watersheds that contain water bodies with pollutants of concern for impaired waters to apply for coverage. NYSDEC included additional requirements for these municipalities in the NYSDEC 2010 MS4 permit. There are 26 municipalities in the Chesapeake Bay watershed in New York which are small Phase II MS4s. There are an additional two relatively small urbanized areas: Binghamton and Elmira. Permit coverage for construction and post-construction controls extends beyond urbanized areas to municipal boundaries. New York also has prescriptive requirements for compliance with the New York State Stormwater Management Design Manual, including rigorous green infrastructure requirements.

Watershed Implementation Plan (WIP): New York is an active participant in the Chesapeake Bay restoration partnership. NYSDEC's Final Phase II Watershed Implementation Plan, dated December 20, 2012, and describes how New York plans to achieve necessary sector-specific reductions in nutrients and sediment. In the 2013 WIP progress assessment, EPA determined that New York State's short term goals for nutrient load reductions are being met, but that the 2017 nutrient load milestones may not be met. EPA's review included an evaluation of the approaches and their potential to meet necessary reductions as they relate to discharges associated with agriculture, waste water treatment plants/onsite systems, and stormwater.

Strengths: Through our review of the WIP, EPA found the following strengths of NYSDEC's MS4 permit program for urban/suburban stormwater in the Chesapeake Bay watershed.

Observation 1: New York is using its Chesapeake Bay Regulatory and Accountability Program grant to enhance compliance at construction sites.

Observation 2: New York has shifted 50% of the urban stormwater load from the load allocation to the wasteload allocation. This change enhances reasonable assurance that nutrient and sediment allocations will be achieved and maintained by signaling that substantially more urban stormwater could potentially be subject to NPDES permits issued by the state as necessary to protect water quality.

Observation 3: The New York construction general permit imposes volume-based post-construction controls on a significant portion of all construction projects state-wide.

Observation 4: The WIP documents a variety of funding sources to implement proposed strategies.

Observation 5: The WIP commits to Best Management Practices (BMPs) that address stormwater quality and quantity.

Observation 6: New York adopted a new conservation law in 2012 that significantly reduces residential use of fertilizer containing phosphorus.

Observation 7: New York's 2010 MS4 permit extends coverage beyond required minimum area to municipal boundaries.

Challenges: NYSDEC can strengthen its ability to achieve stormwater load reductions in the Chesapeake Bay watershed by examining opportunities for improvement in the following areas.

Observation 1: The Phase II WIP does not have enough detail to demonstrate how it will achieve the 15% reduction in nitrogen loads from urban lands assumed in the WIP.

Observation 2: Provide a strategy to use residual designation authority (RDA) or other mechanisms to regulate additional discharges from urban lands outside of MS4 jurisdictions.

Observation 3: EPA recommended that New York consider a retrofit program that includes strong performance standards and enforceable requirements.

Observation 4: EPA recommended that New York consider including more controls on state and county roads to reduce loads from impervious surfaces outside MS4 communities as a strategy to reduce additional loads from existing sources in the watershed.

NYSDEC MS4 Permit: The current NYSDEC 2010 MS4 Permit was reviewed by EPA (both at the regional and national level). Region 2 utilized national guidance in the draft *MS4 Permit Improvement Guide* to review the NYSDEC MS4 Permit for completeness. Comments were transmitted to NYSDEC in March 2010.

Strengths: EPA noted the following positive aspects of the NYSDEC's 2010 MS4 Permit.

Observation 1: The NYSDEC MS4 permit requires permittees to utilize BMPs to the "maximum extent practicable" when developing their SWMP.

Observation 2: NYSDEC has made positive changes to its *New York State Stormwater Design Manual*. We expect that the Manual will drive the MS4 permit. We did, however, comment that there needs to be an explicit connection between the permit and the design manual in order to see this implemented.

Observation 3: NYSDEC provides an opportunity for public comment on submitted Notices Of Intent (NOIs). EPA commented that NY should also include a process for the public to request a public hearing for NOIs associated with Phase II MS4s.

Challenges: EPA identified the following issues that NYSDEC would need to address in upcoming renewals of the MS4 permit.

Observation 1: Region 2 advised NYSDEC that certain requirements in the 2010 permit should have built upon the previous permit requirements. Specifically, within the six minimum control measures, NYSDEC could have included more specific and ambitious objectives that built upon the previous permit. This issue also appeared where NYSDEC required the permittee to “develop” and “implement” plans with identical requirements from the previous permit instead of augmenting these requirements.

Observation 2: Region 2 suggested that within the Illicit Discharge Detection Elimination program New York should have minimum control measures that include requirements for education and outreach to address/promote sound management of on-site/decentralized wastewater treatment systems.

Observation 3: Although NYSDEC addresses green infrastructure/low impact development in its MS4 permit and Design Manual, NYSDEC should require such actions within the permit rather than simply “encourage” and “consider” that they are used.

Observation 4: Region 2 recommended that language addressing the control and removal of marine debris should be included in the Pollution Prevention and Good Housekeeping minimum control measure. Floatables controls also needed to be added to the list of requirements in this section.

Observation 5: Region 2 recommended more specificity concerning NYDEC’s requirement to have MS4s “conduct an annual evaluation of its program compliance, the appropriateness of its identified BMPs, and progress towards achieving its identified goals...” including clear and specific deadlines and reporting.

Enforcement Program: EPA maintains oversight of NYSDEC delegated NPDES programs through the Significant Non-Compliance Action Program (SNAP) and has quarterly meetings with New York to discuss these issues. Through the SNAP process, EPA and NYSDEC discuss CWA major permittees that are in significant non-compliance and other facilities of concern, include MS4s with serious compliance problems. EPA also conducts a periodic review of NYSDEC’s CWA Compliance and Enforcement Program through the State Review Framework (SRF) process. Through the SRF, EPA assesses the state’s performance based on data metrics and file reviews against national criteria. EPA uses the *Compliance Monitoring Strategy* (CMS) to oversee NYSDEC’s inspection program. Through the CMS, NYSDEC commits to an annual compliance monitoring schedule which outlines inspection and compliance goals for the entire NPDES program, including MS4s. The enforcement program in EPA Region 2 evaluated the NYSDEC’s NPDES program in October 2012, and a draft report of findings is expected to be released to NYSDEC in the near future.

Observation 1: NYSDEC has two distinct approaches for targeting MS4s in New York; there is a state-wide approach and an approach specific to the Chesapeake Bay. For MS4s state-wide, NYSDEC has committed to doing 65 audits/inspections in 2013 through the CMS process. MS4s are targeted for an audit/inspection through the state’s workplan process and, outside of the Chesapeake Bay watershed, are largely complaint driven. Within the Chesapeake Bay, the target is to inspect/audit 26 MS4s annually,

consistent with the Chesapeake Bay Watershed Implementation Plan/CBRAP (Chesapeake Bay Regulatory Accountability Grant Workplan). NYSDEC sends Chesapeake Bay MS4 inspection and enforcement summary data to EPA Region 2 every six months or annually in accordance with CBRAP reporting requirements.

Observation 2: EPA Region 2's enforcement program has conducted 25 MS4 inspections and audits in New York since 2009 and issued 13 Administrative Orders and two Administrative Penalty Orders. When conducting audits of MS4s, EPA evaluates the regulated entity's compliance with the NYSDEC MS4 permit, reviews the MS4's Stormwater Management Plan (SWMP) and all related documentation, including Annual Reports, and conducts field evaluations of the MS4's implementation of the SWMP and permit requirements. Outside of audits, EPA does not review annual reports or data submitted to NYSDEC.

Observation 3: Challenges faced by NYSDEC in implementing the MS4 program include limited resources and staffing; staying on top of changes in municipal government due to elections; and municipal finance issues.

Conclusion: NYSDEC issued its MS4 General Permit in 2010, prior to the Chesapeake Bay load reductions being established. EPA Region 2 expects NYSDEC to propose a draft MS4 general permit in November 2014 that will include load reductions consistent with the NYSDEC Final Phase II Watershed Implementation Plan and other key EPA recommendations for improving the permit, as appropriate.