



North Carolina Department of Environment and Natural Resources

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Governor

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MEMORANDUM

TO: ENVIRONMENTAL REVIEW COMMISSION
The Honorable Brent Jackson, Chairman
The Honorable Ruth Samuelson, Co-Chairman
The Honorable Mike Hager, Co-Chairman

FROM: Benne Hutson *BCH*
Chairman, Environmental Management Commission

SUBJECT: Annual Stormwater Management Program Report

DATE: October 1, 2014

Pursuant to G.S. 143-214.7(e), the Environmental Management Commission is required to report annually to the Environmental Review Commission on the implementation of the Stormwater Management Programs. The attached report satisfies this reporting requirement.

If you have any questions or need additional information, please contact Neal Robbins by phone at (919) 707-8618 or via e-mail at neal.robbs@ncdenr.gov.

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2014 Stormwater Management Program Annual Report

In Accordance With G.S. 143-214.7(e)

Executive Summary

G.S. 143-214.7(e) requires the Environmental Management Commission (the "EMC") to annually report to the Environmental Review Commission on the implementation of the stormwater management rules and programs. The Department of Environment and Natural Resources implements a number of stormwater management programs to protect surface waters from the impacts of runoff from developed and developing areas across the state. The Department has continued with ongoing efforts to provide updated technical guidance materials on stormwater management design practices with updates to its guidance manual. Updates have been finalized for the use of disconnected impervious surfaces and rainwater harvesting for reuse. Technical guidance permit application tools are also now available for the voluntary use of low impact development stormwater control measures.

Over the past year, the Department has worked with a number of interested parties to form technical review workgroups to help develop more effective guidance materials. These include an ongoing workgroup charged with developing minimum design criteria for stormwater control measures. Work also continues in the day-to-day administration of stormwater permitting programs for post-construction stormwater runoff from new development activities along with federally-mandated point source stormwater permitting for industrial activities and municipalities. By the end of 2014, seven general permits covering more than 1,000 industrial facilities will be renewed to include updated permit requirements. This process has included an electronic renewal component to help save time for permittees and costs for Department printing and mailing. The EMC has a number of ongoing rulemaking efforts to address required changes in recent legislation, including the development of stormwater control requirements for oil and gas exploration activities.

Background

The Environmental Management Commission (EMC), through the North Carolina Department of Environment and Natural Resources (DENR), implements state and federal programs to control the water quality impacts of stormwater runoff from development activities and urban and developing areas. These programs include the federal National Pollutant Discharge Elimination System (NPDES) program for stormwater discharges that requires permits for point source discharges of stormwater from industrial activities and from certain municipal areas in urbanizing and developing areas. This program is a requirement of the federal Clean Water Act. In addition, the EMC and DENR implement state stormwater permitting programs that are designed to control stormwater runoff from new development and redevelopment activities occurring near sensitive areas (Water Supply Watersheds, High Quality and Outstanding Resource Waters, Nutrient Sensitive Waters, and Coastal Waters) and post-construction activities adjacent to regulated municipal NPDES areas. These state stormwater programs may be implemented at the state level or on the local level by cities and counties.

The administration of the stormwater programs was transferred from DENR's Division of Water Resources to DENR's Division of Energy, Mineral and Land Resources (DEMLR) in August 2013. DEMLR continues to work in conjunction with the Division of Water Resources in the administration and implementation of the stormwater programs. These programs are designed for the protection of surface waters and their uses and involve the authorities of each of these divisions.

State Stormwater Programs

DENR continues to implement various post-construction state stormwater programs across the state as noted above. More information on the state stormwater programs can be found at: <http://portal.ncdenr.org/web/lr/state-stormwater>. More than 13,000 projects are covered under state permits in this program. In FY13-14, 836 permit approvals were issued at the state level. In addition, nearly 400 local governments implement post-construction programs and are responsible for stormwater requirements for projects in their jurisdictional areas. The DEMLR has oversight of these local programs through a number of regulatory requirements (some of which are noted in other sections of this report). DEMLR continues to provide technical assistance and outreach to local programs and the regulated community on these programs.

The post-construction stormwater programs often require the use of engineered stormwater controls. DEMLR continues to provide technical guidance on stormwater control measures through its Stormwater Best Management Practices (BMP) Manual that is available online at: <http://portal.ncdenr.org/web/lr/bmp-manual>. In the 2013 Annual Report, we outlined a number of ongoing efforts associated with updates to this technical guidance document. The Technical Review Workgroup (TRW), a stakeholder group formed in conjunction with the Professional Engineers of NC, completed a nearly yearlong meeting process in January 2014. This group's efforts resulted in four documents that provide technical guidance on specific stormwater implementation issues that have assisted DEMLR and the regulated community in their day-to-day responsibilities. A number of the members of the TRW continue to work with DEMLR as part of another stakeholder team formed in response to legislative requirements in SL2013-82 to develop minimum design criteria for stormwater control measures. This group's efforts are discussed later in this report.

DEMLR staff participated extensively in a federal grant that produced implementation guidance and tools for the implementation of Low Impact Development (LID) alternatives for stormwater control. A stakeholder workgroup guided this process with a number of key outputs. These efforts created a voluntary framework where developers and engineers use innovative low impact designs that work to match the previous hydrology on development sites. The process has also produced an interactive spreadsheet tool (Stormwater-EZ) that allows for the evaluation of a LID design to assure that it will meet the state stormwater requirements. This tool allows for the electronic development of application forms for submittal of post-construction permit applications for LID as well as for conventional projects. The tool is designed so that it can be used in all areas of the state and provides an efficient process for permit application development. Information on the LID process and the new tools has been presented statewide at training workshops administered by NC State University and in March at a very successful statewide conference.

Another development from the LID process is updates to the stormwater BMP manual that provide more flexibility for designers and more alternatives for stormwater infiltration, rainwater collection and reuse. Information is now available in the technical manual for directing stormwater from built-upon areas to natural and vegetated areas (disconnected impervious surfaces); specific guidance on control measures at airport developments and rainwater harvesting; and the purpose of reuse rather than discharge.

Federal Stormwater NPDES Programs

Municipal Separate Storm Sewer System NPDES Permits

Previous reports have outlined ongoing activities associated with implementation of the federal municipal separate storm sewer systems (MS4) NPDES stormwater program. Permits under this program currently regulate 115 local governmental entities across the state. DEMLR and the EMC are required to continue to review other potential entities for designation into this program. No additional municipalities have been designated through these procedures over the past year. At the federal level, EPA has released information on the most recent census data. Federal regulations automatically designate local governments located in

federally-designated urbanized areas. In North Carolina, this will potentially impact a number of municipalities across the state making them subject to the MS4 permitting requirements.

DEMLR provides outreach and information to these local government entities in various meeting opportunities. This outreach is provided, in part, through an ongoing audit program DEMLR implements to assess portions of the permitted communities each year. This audit process for MS4s is coordinated with audits for other existing programs like the Water Supply Protection program. The Water Supply Protection Program requires local implementation of program requirements for approximately 280 local government entities across the state to protect surface waters used for drinking water supplies. DEMLR works with nearly 400 local governments that are responsible for their local stormwater management programs across the state. Over the last few years, DEMLR has implemented some audit options to more effectively use limited staff resources to stay in contact with the local programs. These procedures have allowed DEMLR to focus on key component areas of a local program each year and spend time with entities to more effectively carry out our audit procedures. These efforts have been successful and well received by the local governments.

Industrial Stormwater NPDES Permits

In the industrial stormwater NPDES permitting program, DEMLR has current permit coverage for approximately 4,000 industrial facilities across the state. DEMLR has reissued four general stormwater permits through September 2014 covering more than 400 facilities statewide. Three additional renewals covering nearing 600 facilities will be reissued by the end of 2014. The renewals made several procedural changes to promote stormwater pollution prevention and the development of more effective tools to help permit holders and DEMLR comply with federal regulations. These permits and associated technical guidance information can be found at <http://portal.ncdenr.org/web/lr/npdes-stormwater#tab-3>.

DEMLR has continued to utilize an electronic renewal process as outlined in last year's report. This effort has been very successful and has made the renewal process easier for the applicants and saved mailing costs for renewal letters and permits. The process does not yet allow the permittee's data corrections or renewal request to go directly into our permitting database, so there are still significant administrative work efforts on DEMLR's end of the process. The Environmental Protection Agency is finalizing rules that will require electronic submittal of all application information and permit data and reports within the next few years. DEMLR will need additional resources to allow it to establish a system that meets these requirements. In the long run, this will be a benefit to the program, but upfront there will be a need for funds to establish the necessary electronic procedures.

In response to issues related to the coal-fired power facilities, DEMLR has devoted a significant amount of resources into review and response to this effort. DEMLR is currently working with ongoing Department efforts to review permitting and compliance efforts needed to assure that proper stormwater NPDES permit coverage is in place for all regulated facilities and that these efforts are coordinated with similar efforts in other DENR program areas.

Response to Legislative Changes

The stormwater program continues to work to implement legislative changes that affect the program. DEMLR staff has made a significant effort over the year to address issues related to the stormwater rules definition of built-upon area. DEMLR staff has provided information for legislative review efforts in the handling of gravel and crushed stone surfaces including presentations and field trips on the technical aspects of the differences between and uses of these materials and their impacts on stormwater runoff. DEMLR staff has worked with the EMC in the development of temporary and permanent rules to address the issues raised in S.L. 2013-413 and again in S.L. 2014-120. Final permanent rule approval by the EMC is anticipated at their November 2014 meeting.

S.L. 2013-82 directed DENR to develop Minimum Design Criteria (MDC) for permits issued in the stormwater permitting programs. This S.L. requires consultation with a technical working group in establishing the MDCs. DEMLR staff has been meeting monthly beginning in March 2014 with the MDC workgroup to review the various management measures used for stormwater control across the state. This team is made up of industry experts, engineers, environmental consultants, local government representatives, university faculty and other interested stakeholders. DEMLR staff and team members are devoting significant time and effort to develop the MDC information by February 2015 and work on rule development required for the implementation of a fast track stormwater permitting process. A separate report on this process was submitted on September 1, 2014. Complete information on the process can be found at: <http://portal.ncdenr.org/web/lr/state-stormwater/mdc-team>.

The EMC was directed in S.L. 2012-143 to adopt rules for stormwater control for sites where oil and gas exploration and development activities are conducted. DEMLR has worked with the EMC in the development of draft rules, which have gone to public hearing and public comment. DEMLR is currently working with the hearing officer for these rules to respond to comments and bring a final set of proposed rules to the EMC for their review. EMC review is anticipated at their November 2014 meeting.

Other recent legislation also impacts the stormwater programs and DEMLR staff will continue to coordinate the response to these efforts. S.L. 2014-1 allows the use of Department of Transportation (DOT) management practices for linear roads that will be passed into the DOT maintenance system; S.L. 2014-90 sets definitions for development and redevelopment; and S.L. 2014-120 includes a number of regulatory reform components that DEMLR will continue to assess and implement.

Rule Making Efforts – Federal

DEMLR continues to monitor potential rule changes to federal stormwater regulations. EPA has released proposed rules to require electronic submission of applications and reports under various federal programs, including the NPDES stormwater programs. These changes will potentially require extensive efforts at the state level to come into compliance. It will also require the regulated community to adjust to electronic submittal. It is likely that over time these changes will result in cost savings, but the initial efforts to make electronic procedures available will take resources at the state level. EPA has gone through multiple comment periods on these proposed changes and has been working to address state and regulated community comments. DEMLR will continue to evaluate the process and respond to necessary changes once the rules are finalized.

Technical Assistance and Outreach

DEMLR continues to provide technical assistance and outreach in all of its stormwater management program areas. A few major areas of technical assistance/outreach are:

- ♦ Maintenance of the Stormwater BMP Manual and technical assistance on the materials. The MDC process discussed above will result in significant review of and updates to this guidance document.
- ♦ Outreach and education through visits to schools, meetings with local governments and various councils of government, exhibits at festivals and fairs, workshops for the regulated community and the use of its outreach and education Listserv. More information about the DEMLR's stormwater awareness outreach and education efforts can be found at: <http://www.ncstormwater.org>. The program has experienced some decline in these outreach activities due to loss of resources in this important program area.
- ♦ Partnership with N.C. State University to offer regular stormwater workshop opportunities, including regular BMP Reviewer Certification workshops for local governments. The workshop includes training on stormwater management, regulatory issues and review of BMP design, implementation, maintenance and inspection. Of significant note this year are stormwater workshops on the implementation of LID practices noted in this report.