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October 22, 2010

Promoting and protecting the health of the public and the environment

Tom Zeaser Director of Engineering City of North Augusta P.O. Box 6400 North Augusta, SC 29861

NPDES Permit # SCR030000

Certification No. # SCR030304

City of North Augusta

Aiken County

Small Municipal Separate Storm Sewer System (SMS4) Reg:

July 16, 2010

Dear Mr. Zeaser:

Enclosed please find the results of the referenced MS4 program audit conducted by the South Carolina Department of Health and Environmental Control. The audit was conducted on July 16, 2010.

The Permittee, the City of North Augusta is maintaining compliance with the MS4 permit. Based on the findings of the inspection, a rating of Satisfactory has been assigned to the implementation of your storm water management program. No response is required to this inspection.

If you have any questions concerning the inspection report, please feel free to call me at (803) 898-4306.

Sincerely,

Mark Fogarty

Storm Water Compliance Manager Pollution Source Compliance Section

Bureau of Water

mailto:fogartme@dhec.sc.gov

enclosure

David Caddell, Stormwater Manager, City of North Augusta cc:

Tanya Strickland, Environmental Coordinator, City of North Augusta Scott Simons, Environmental Engineer, DHEC, EQC5 Aiken

Jennifer Hughes, Director, EQC 5 Aiken

Arturo Ovalles, SCDHEC, BOW

EPA Region 4



South Carolina Department of Health and Environmental Control

NPDES Compliance Inspection Report

	NPDES Permit No.: Certification No.:	SCR030000 SCR030304		
Inspection Type:	MS4 Audit	Date of Inspection:	7/16/2010	
Entry Time:	1000	Exit Time:	1245	
Permit Effective Date:	9/24/2007	Permit Expiration Date	: 2/28/2011	
Name and Location of Facility: City of North Augusta Operations Office, 61 Clay Pit Road North Augusta, SC 29841 Name and Title of On-Site Representative: David Caddell, Stormwater Manager, City of North Augusta Tanya Strickland, Environmental Coordinator, City of North Augusta * Areas Evaluated During Inspection				
Permit Records/Reports Facility Site Review Effluent/Receiving Water Collection System	Flow Measuremer Self-Monitoring Compliance Sche Laboratory * Other: MS4	Sludge Handling/Disposal		
Name of Inspectors:	Mark Fogarty	District/Section:	Columbia BOW	
District/Section Reviewer:	Brian Us	Date:	10/22/10	
Signature of PSC Reviewer	Mark Fogat	Date:	10/22/2010	

Small Municipal Separate Storm Sewer System (SMS4) Audit Report City of North Augusta NPDES Permit #SCR030000 Certification # SCR030304

Introduction

On July 9, personnel from the South Carolina Department of Health and Environmental Control (DHEC or Department) conducted an audit of the storm water management program of the City of North Augusta (the Permittee). The MS4 was conducted at the City of North Augusta Operations Office located at 61 Clay Pit Road in North Augusta, SC. The following representatives participated in the audit:

David Caddell,	
Stormwater Manager, City of North Augusta	803-441-4295
Tanya Strickland,	
Environmental Coordinator, City of North Augusta	803-441-4246
Mark Fogarty,	
Storm Water Compliance Manager, DHEC, Columbia	803-898-4306
Scott Simons,	
Environmental Engineer, DHEC, EQC5 Aiken	803-641-7670

The audit began with staff introductions and an explanation of the SMS4 duties of each representative. According to guidance from the United States Environmental Protection Agency (EPA), an audit of each SMS4 must occur during the permit cycle by the permitting authority. The audit will be used for a variety of goals such as determination of compliance status, assistance with permit renewal, assessing pollutants of concern, or other purposes.

The permittee is authorized to discharge storm water under South Carolina's National Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Regulated Small MS4s, Permit No. SCR030000. The City of North Augusta certification number, SCR030304 went into effect on September 24, 2007. Coverage will expire on February 28, 2011.

The audit consisted of interviews with the MS4 representatives and a review of documents and procedures that demonstrate the extent of effort the MS4 is making toward implementing the minimum measures required by the permit. A review of the Storm Water Management Program (SWMP), 6 Minimum Control Measures (MCMs), and a Construction Plan Review Quality Assessment are listed below along with a brief summary of the group's discussion about each one.

Storm Water Management Program Review

Permit SCR030000 states that "You must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from your SMS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

According to the City of North Augusta's permit schedule, a SWMP must be fully developed by September 24, 2008. Initial review of the ordinances indicated that the City has upgraded its authority to implement and enforce the necessary components of Permit SCR030000. It appears the City has a very strong ordinance.

Minimum Control Measure 1

Public Education and Outreach on Stormwater Impacts

The Permit requires the MS4 to implement a public education program to distribute educational materials or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

To meet these concerns, the City of North Augusta has targeted for public education the following efforts:

- 1. Provide stormwater stencil and/or curb markers to volunteer groups and provide guidance for the use of these materials.
- 2. Meet with representatives of public/private schools to establish a partnership with the city to create a stormwater education program.
- 3. Evaluate school implementation of environmental programs relating to stormwater.
- 4. Implement a program for volunteer groups to assist with protecting streams
- 5. Conduct annual Household Hazardous Materials Collection Events

Demographics represent that the MS4 area consists of 80% - 85% homeowners, their families, including the general public, students, and professionals.

According to the Permittee, the evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP implemented as part of the contract with the Coastal Waccamaw Stormwater Education Consortium (CWSEC). This will include measuring the degree of social change as a result of the education and outreach efforts. The Permittee appears to be fully implementing this minimum measure. No deficiencies were noted.

Minimum Control Measure 2 Public Involvement/Participation

According to Part 4.2.2.2 of the Permit, the Permittee must document the program development process and the implementation of a storm water public education and outreach program. Such documentation may be included in the permit application, SWMP, or annual report submitted pursuant to Section 5 of this permit. If this information is not included in these items, the Permittee must submit a rationale statement that addresses the public involvement/participation program and the individual BMPs, selection of the measurable goals for each of the BMPs, evaluation of the success of this minimum measure, and responsible persons for the program.

According to Part 4.2.2.2.1, the Permittee must develop a plan to involve the public in the development and submittal of the SWMP. The Permittee has invited representatives from local governments, citizens, businesses and organizations to be involved in the development of its storm water management ordinance, land development manual and public education strategy. **No deficiencies were noted in this section.**

The Permittee does have a plan to actively involve the public or its targeted audiences (pet owners, septic tank owners, land developers, etc.) in the development and implementation of the stormwater program (PERMIT REQUIREMENT 4.2.2.2.2 and 4.2.2.2.3). A plan is in place to get the public involved in the decision process for such things as individual BMPs, integrating Low Impact Development in construction plan review, stream buffer widths, etc. The Permittee is doing a great job involving the public in the development of their SWMP. **No deficiencies were noted in this section.**

According to the Permittee, the evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. This will include the use of measuring the degree of social change as a result of the education and outreach efforts.

The Permittee appears to be fully implementing this minimum measure. **No deficiencies were noted.**

Minimum Control Measure 3 Illicit Discharge Detection and Elimination

The MS4 must identify all the outfalls within its geographical limits along with the name and location of the receiving waters. The major outfalls must be listed on the map. According to the Federal Code of Regulations 40 CFR 122.26(b)(5), a major municipal separate storm sewer outfall (or "major outfall") is one that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive

storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

According to Part 4.2.3.1.2, the Permittee is required to develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls. Within three years of permit coverage, the MS4 must develop a storm sewer map showing the location of all outfalls along with the name and location of the receiving waters. The purpose of the map is to locate and eliminate illicit discharges to the Permittee's storm drain system. The Permittee has identified and mapped each of its outfalls. The Permittee has procedures for illicit discharge investigations. However, none have been necessary. No deficiencies were noted.

According to Part 4.2.3.1.3, the Permittee is required to the extent allowable under State, Tribal or local law, to effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the Permittee's storm sewer system and implement appropriate enforcement procedures and actions. The Permittee has developed ordinances to give the MS4 the authority to require responsible parties (RPs) to eliminate pollution. However, no enforcement actions have been needed.

No deficiencies were noted.

Minimum Control Measure 4

Construction Site Storm Water Runoff Control

According to Part 4.2.4.1, within eighteen months from the effective date of this permit, the Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to its regulated SMS4 from construction activities that result in a land disturbance of one acre or more. Reduction of pollutants in storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Regarding this element of the MS4, the City of North Augusta has developed its own Stormwater Management Ordinance which contains requirements for sediment/erosion control practices at construction sites, post-construction water quality and quantity control, and enforcement for related violations. The ordinance provides the Permittee with the authority to impose penalties to enforce compliance with the sediment/erosion control requirements for construction sites. **No deficiencies were noted in this section.**

The Permittee has a fully functioning Construction Site Storm Water Runoff Control program. The program is staffed accordingly and program goals were established

early enough to provide adequate guidance to staff. No deficiencies were noted in this section.

A. Construction Plan Review

The permit directs the MS4 to develop and implement a program to reduce erosion and sedimentation at construction sites so that sediment is retained on-site to achieve the "effective prohibition" and MEP standards called for in the Clean Water Act and to be consistent with the South Carolina Pollution Control Act. The City of North Augusta conducts Plan Reviews, and must ensure proper training of its construction plan reviewers and ensures that the Plan Review process is done in accordance with the NPDES Construction General Permit and SC 72-300.

B. Construction Site Inspection and Enforcement of Controls

According to EPA guidance, construction site inspections should be prioritized to ensure that sites with the greatest threat to water quality are considered high priority and inspected more often. The permit states that the MS4 is to implement procedures for site inspections and establish progressive goals. The MS4's focus must be on water quality. At the time of this audit, the City of North Augusta is routinely inspecting active construction sites for compliance. The Permittee has taken a proactive approach to active construction sites. No deficiencies were noted in this section.

Minimum Control Measure 5 Post-Construction Storm Water Management in New Development and Redevelopment

The permit calls for strategies that include a combination of structural and non-structural BMPs appropriate for the community. These BMPs should provide the Permittee with the means to permit, develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects. In addition, the Permittee must develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for their community. Lastly, the Permittee must use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law. **No deficiencies were noted in this section.**

Minimum Control Measure 6 Pollution Prevention/Good Housekeeping for Municipal Operations

According to Part 4.2.6.1.1 and 4.2.6.1.2, the Permittee is required to develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations as an integral part of the SWMP. Using training materials that are available from SCDHEC, EPA, or other organizations, include in your program employee training to prevent and reduce storm water pollution from activities such as park and open space

Special Conditions

The permit requires the MS4 to be consistent with Total Maximum Daily Load (TMDL) Allocations, where applicable. The MS4 must determine if its storm water runoff discharges into water bodies with established TMDLs and then strive to meet its pollutant percent reduction goal. In permit terms, this means the MS4 program must be designed to reduce the discharge of pollutants to the maximum extent practicable therefore a strong effort is needed in each of the minimum measures. The permit requires documentation of all efforts made toward complying with this special condition. More information about TMDL responsibilities may be found at: http://www.scdhec.gov/environment/water/tmdl/lndex.htm

The City of North Augusta is working to meet the requirements of the adopted TMDLs, as well as not further degrade the impaired waters. Fecal coliform bacteria is the contaminant of concern for all the adopted TMDLs and the majority of impaired waters. Two Total Maximum Daily Load streams (TMDL) are located within the City boundaries, which are identified as Pretty Run and Norse Creeks.

The Permittee is conducting an education and outreach campaign targeting this basin addressing animal waste and confinement near the stream, septic tank maintenance, and general education about the conditions and ways to improve conditions in Pretty Run creek. The following are BMP requirements:

- Continue to investigate all issues along the stream and quickly address any complaints, impacts, or suspected inputs to the system.
- Continue education and outreach to the community and target those communities that border the creek.
- Investigate areas where structural BMPs can be implemented to improve conditions in the creek.

No deficiencies were noted in this section.

Construction Plan Review Quality Assessment

For this MS4 audit, the City of North Augusta provided the set of plans for Wando Woodlands Section 2A. These plans were reviewed by Mr. Scott Simons, Environmental Engineer, DHEC, EQC5 Aiken. His comments are as follows:

Review questions/comments given by City personnel were good. I have a few items that I would consider suggestions and a couple that are more technically related that weren't clear.

1. Suggest including a plan view detail of the detention pond with dimensions to ensure forebay berm, filter ring, etc orientation. Fairly clear for filter ring, but would definitely

help for fore bay berm configuration and mainly helps the inspector by providing as much objective information as possible.

- 2. For areas on this project that will not drain to the sedimentation pond, an interim sedimentation plan should be included to help ensure success of the plan. This area(s) should be clearly identified on the plans.
- 3. Point of analysis (discharge points) for pre and post basins do not appear to be clearly indicated on required maps. Maps provided do not allow for easy determination for configuration/directions of flow for pre & post.
- 4. Distance to property lines should be indicated at each outfall.
- 5. Appears the micro pool within the detention basin drains by infiltration. This volume is also used for water quality. Does not appear any data was supplied to verify infiltration rates for the soil or discussion of ground water levels. Special provisions are required as outlined in Regulation 72-307.C (11) any time infiltration is utilized.

Summary

This conclusion reminds the Permittee that General Permit SCR030000 is consistent with EPA's intent to incrementally establish measurable pollution reduction goals, develop Best Management Practices, and then evaluate and refine those BMPs. The intent is for the City of North Augusta to systematically modify the program if and when water quality considerations warrant greater attention in specific components of their stormwater management program. According to EPA guidance, the SCDHEC should conduct an in-depth audit of the SMS4 program at least once every five (5) years.

Based on the findings of the inspection, a rating of **Satisfactory** has been assigned to the implementation of your storm water management program.