



MARYLAND DEPARTMENT OF THE ENVIRONMENT

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FACT SHEET

NPDES Permit Number:	MD0068276
MDE Permit Number:	11-DP-3313
Public Comment Period Expiration Date:	February 2, 2015
Contact:	Raymond Bahr 410-537-3543

The Maryland Department of the Environment, Water Management Administration (MDE/WMA) proposes to issue a National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer System discharges to:

Maryland State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202
(410) 545-8407

Introduction

MDE proposes to renew the Maryland State Highway Administration's (SHA) 2005 permit authorizing the discharge of stormwater from all municipal separate storm sewer system outfalls owned or operated by SHA. This fact sheet provides basic information about the requirements in SHA's draft permit. Contact information and procedures for submitting comments can be found at the end of the fact sheet.

The permit establishes conditions and prohibitions regarding the discharge of stormwater. It also relies on well-established State programs and an adaptive management approach to make continual improvements to the quality of SHA's stormwater runoff. Maryland has a long history of developing statewide programs to reduce stormwater pollution, focusing on protecting and restoring the water quality of Chesapeake Bay and its tributaries.

Examples include Maryland's Erosion and Sediment Control Law (1970), which aimed to control runoff from construction sites, and the Stormwater Management Law (1982) that required appropriate best management practices (BMPs) in order to maintain pre-development runoff conditions. Over the years, both programs have undergone significant revisions and enhancements, the most recent being the Stormwater Management Act of 2007 (Act) and the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. These laws and regulations require that environmental site design (ESD) be implemented to the maximum extent practicable (MEP), effectively mimicking forest



hydrology on all new development and redevelopment projects. These and other stand-alone State programs are incorporated by reference in the permit.

Permit Authority

According to 40 Code of Federal Regulations (CFR) §122.26, owners of large and medium municipal separate storm sewer systems must obtain an NPDES Permit. The permit is a joint federal and State permit and subject to federal and State regulations. The Clean Water Act (CWA), federal regulations, and numerous guidelines and policies of the United States Environmental Protection Agency (EPA) provide the federal permit requirements. The Annotated Code of Maryland, Environment Article, Code of Maryland Regulations (COMAR), and policies and guidelines of MDE provide the State permitting requirements.

Permit History

SHA is classified as a large municipality and owns and operates a storm sewer system. SHA's initial permit was issued on January 8, 1999 and reissued on October 21, 2005. This proposed permit action is to issue the "next-term" NPDES permit to SHA to regulate the discharge of stormwater runoff from its storm drain system.

The draft permit represents another step forward for SHA's NPDES municipal stormwater program. In 1999, SHA's initial permit laid the foundation for a comprehensive approach to controlling runoff. This was done by inventorying and mapping storm drain system infrastructure; identifying sources of pollution; monitoring storm events to evaluate chemical, biological, and physical stream responses; and enhancing existing and establishing new management programs. During the second permit, SHA evaluated urban runoff and water quality; prioritized watersheds in order to perform more detailed analyses and guide management implementation; and began to restore existing impervious area.

Conditions of the draft permit require SHA to possess the legal authority to control storm drain system pollutants, continue mapping its storm sewer system, monitor stormwater discharges, and develop and implement comprehensive management programs. New requirements under the permit include impervious area treatment goals, litter reduction strategies, and implementing ESD technologies for new and redevelopment projects to the MEP. SHA will also be required to develop and implement plans to address stormwater waste load allocations (WLAs) established under EPA approved total maximum daily load (TMDL) estimates. Penalties for failure to comply with the terms of the permit are provided.

Regulated Permit Area

EPA defines "municipal separate storm sewer system" as "...a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body...having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes...; (ii) Designed or used for collecting or conveying storm water;" [CFR 122.26(b)(8)]. Under this definition, anywhere that a regulated jurisdiction "owns or



operates” infrastructure that conveys runoff is covered under this NPDES municipal separate stormwater system permit.

This permit covers all stormwater discharges from the municipal separate storm sewer system owned or operated by SHA in Anne Arundel, Baltimore, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, Prince George's, and Washington Counties; Phase II MS4s located within other federally regulated MS4 jurisdictions; and the municipality of Salisbury. For the purposes of determining applicable restoration requirements as well as TMDL loads, SHA owned or operated storm drain systems within the above-listed Phase I and Phase II municipalities shall be considered the regulated permit area. Although newly designated as Phase II jurisdictions, all permit conditions shall also be expanded to Cecil and Washington Counties. Subsequently, any impervious acres associated with these areas will be included in SHA's assessment of impervious acres and the 20% requirement for restoration.

Watershed Restoration Area

In prior permits SHA was required to implement 25 significant stormwater management retrofit projects for impervious areas with poor or no runoff control infrastructure. To achieve greater progress toward meeting Chesapeake Bay TMDL requirements, this permit requires SHA to commence and complete restoration efforts for 20% of impervious areas that are not already restored to the MEP. Additionally, because of the linear nature of highways, SHA shall coordinate restoration activities with surrounding counties and aid in the implementation of comprehensive watershed management plans. Examples of restoration projects include wetlands creation, stream restoration, street sweeping, reforestation, or any other practices that can be shown to provide significant water quality benefits.

SHA's Stormwater System

SHA maintains all State roads and U.S. interstates within Maryland excluding those associated with toll facilities or located in Baltimore City. The State system includes approximately 6,000 centerline miles, 16,064 lane miles, and more than 2,400 bridges. This network of highways spans numerous physiographic regions and services urban, suburban, and rural jurisdictions. Headquartered in Baltimore, SHA's Administrative offices set statewide policies, conduct major traffic studies, and provide technical assistance to seven engineering districts that handle most of the day-to-day responsibilities.

All of Maryland's 23 counties fall into one of SHA's seven engineering districts. However, only those districts servicing Maryland's urban jurisdictions with populations greater than 100,000 come under the purview of the NPDES municipal stormwater program. For example, districts 1, 2, and 6 encompass Maryland's Eastern Shore and the western part of the State where populations are considered rural. Conversely, districts 3, 4, 5, and 7 are located in central Maryland and cover more urbanized areas. These urban districts will play a vital role in SHA's NPDES stormwater permit because they are within jurisdictions having populations greater than 100,000 and are required to have NPDES municipal stormwater permits.

Stormwater from SHA's infrastructure is discharged into various water bodies across the State and ultimately the Chesapeake Bay. Monitoring data indicate that a number of stream segments in these



basins are impaired by sediment, nutrients, metals, and bacteria and require the development of TMDL analyses and EPA approval. A TMDL establishes the maximum amount of an impairing substance or stressor that a water body can assimilate while still meeting water quality standards and allocates that load among pollution contributors. Each TMDL includes WLAs for point source discharges (e.g., stormwater, public treatment works, industrial discharges, etc.), load allocations (LA) for nonpoint source discharges (e.g., forest, agriculture, etc.), and a 5% margin of safety. More information regarding approved TMDLs for SHA can be found at:

<http://mde.maryland.gov/programs/Water/TMDL/Pages/Programs/WaterPrograms/TMDL/index.aspx>

Maryland's NPDES Municipal Stormwater Permit Requirements

The goals of Maryland's NPDES municipal stormwater permit program are to control stormwater pollutant discharges by implementing to the MEP the BMPs and programs required by this draft permit, show a reduction of pollutants pursuant to EPA approved TMDLs, and improve water quality. Compliance with the conditions in the permit will reduce pollutant discharges from SHA's storm drain system. The permit requires implementation plans and measurable and steady reductions in pollutants to meet WLAs through an adaptive management process. Where EPA approved TMDLs and stormwater WLAs have been established, an iterative approach is required to identify the additional or alternative stormwater controls that will need to be implemented in order to achieve WLAs.

SHA will be required to regularly review and refine its BMPs to reduce pollutants to the MEP and show a net reduction in pollutant loadings over the five-year permit term. SHA will evaluate and document progress toward meeting stormwater WLAs on an annual basis. This assessment will include a description of specific efforts undertaken to achieve compliance with EPA approved TMDLs.

Management Programs

Stormwater Management

This draft permit requires SHA to implement a stormwater program in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland

(<http://www.michie.com/maryland/lpext.dll?f=templates&fn=main-h.htm&cp=mdcode>)

and COMAR 26.17.02 (<http://www.dsd.state.md.us/comar/SearchTitle.aspx?scope=26>).

Requirements of this program include stream channel protection, water quality treatment, and the incorporation of ESD to the MEP for all new development and redevelopment projects in the State, with the goal of maintaining predevelopment runoff characteristics. Maryland's standard for determining the pre-development characteristics is "woods in good condition" and equates to the management of all rain events up to approximately 2.7 inches in depth.

Additional stormwater activities to be implemented by SHA include complying with the Stormwater Management Act of 2007 (Act), maintaining construction inspection information for all ESD treatment practices and structural stormwater management facilities, and conducting preventative maintenance inspections on at least a triennial basis. Maintenance procedures, including triennial inspection policies, are described in COMAR 26.17.02.11. By following the State's stormwater management program, SHA will be in compliance with this permit condition and with the requirements under 40 CFR for post-construction stormwater management. Additionally, adherence with the State's program should result in little or no additional pollutant loading from new development in a given watershed.

Erosion and Sediment Control

The permit also requires SHA to implement an erosion and sediment control program in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland (<http://www.michie.com/maryland/lpext.dll?f=templates&fn=main-h.htm&cp=mdcode>) and COMAR 26.17.01 (<http://www.dsd.state.md.us/comar/SearchTitle.aspx?scope=26>). By reference, this requires SHA to ensure that all projects disturbing more than 5,000 square feet have an approved erosion and sediment control plan; to regularly inspect all active projects; to maintain an effective enforcement program; and to have procedures to respond to complaints and violations regarding erosion and sediment control issues. Also, the permit requires program improvements identified in any MDE evaluation of SHA's erosion and sediment control program. While Maryland has had a model erosion and sediment control program for over 40 years, incorporation of the program by reference in this permit will further ensure compliance with State requirements and improve runoff conditions.

Illicit Discharge Detection and Elimination

The permit requires SHA to ensure that all non-stormwater discharges to and from its storm sewer system, when found, are either permitted by MDE or eliminated. This can be accomplished by maintaining a robust inspection and oversight program, including the ability to take appropriate action when illicit discharges do occur. As part of this program, SHA is required to monitor a minimum of 150 storm drain outfalls each year for illicit discharges. SHA is also required to develop and maintain procedures for investigating complaints, and referring illicit discharges to surrounding local jurisdictions and MDE for enforcement when appropriate.

Litter and Floatables

An additional management program has been included in the permit requiring SHA to support and implement strategies to reduce litter and increase recycling. This section of the permit requires SHA to address problems associated with litter and floatables in waterways that adversely affect water quality. Increases in litter discharges to receiving waters have become a growing concern both nationally and within Maryland and cannot be ignored. SHA needs to evaluate current litter control problems associated with discharges from its storm drain system and develop and implement a public outreach and education program as needed.

Property Management and Maintenance

This program requires SHA to ensure that a Notice of Intent be submitted and a pollution prevention plan developed for all SHA-owned facilities requiring coverage under the General Discharge Permit for Stormwater Associated with Industrial Activities. All SHA facilities requiring NPDES General Permit coverage have received it and pollution prevention plans have been developed. These plans include an assessment of the property, focusing on activities that may contaminate stormwater runoff, and the implementation of BMPs to eliminate or treat any non-stormwater discharges.

The permit requires SHA to continue its efforts to reduce pollutants associated with the maintenance of SHA properties. Inlet cleaning, street sweeping, and litter pickup programs are all activities currently undertaken by SHA along its roadways. Additionally, SHA is required to reduce the use of pesticides, herbicides, and fertilizers along roadways and on SHA-owned properties while also evaluating various applications of deicing materials. The permit language has been changed from the previous permit so



that this program applies to all SHA property (e.g., park and rides, welcome centers, etc.), not just roads and streets.

Public Education

SHA implements a diverse public outreach program that focuses on pollution prevention that includes participating in numerous public and community events and disseminating information regarding pollution prevention activities. A requirement to implement a program that includes information about stormwater runoff, water conservation, litter reduction and recycling and provides a mechanism for reporting suspected illicit discharges and spills is included in the draft permit.

Total Maximum Daily Loads

Watershed Assessments

SHA shall coordinate watershed assessments with surrounding Phase I and Phase II NPDES jurisdictions and annually provide a coordinated TMDL implementation plan, opportunities for public participation, and TMDL compliance status. The plan shall include identification of water quality improvement opportunities and a schedule for BMP and programmatic implementation to meet stormwater WLAs included in EPA approved TMDLs.

Assessment of controls is critical to determine the effectiveness of the NPDES stormwater management program. Therefore, chemical, biological, and physical monitoring will be required to document progress toward improving water quality and meeting applicable stormwater WLAs developed under EPA approved TMDLs. Similarly, program activity measures (e.g., number of illicit discharges found and eliminated, pounds of material removed from storm drain inlets) will be used to measure program implementation and progress toward meeting water restoration goals.

Restoration Plans and Guidance

While the previous permit required SHA to restore impervious surface area, there was no guidance nor were there any standards for evaluating these efforts. The proposed permit includes enhanced restoration goals and explicit criteria for achieving those goals. The recently published MDE document “Accounting for Stormwater Wasteload Allocations and Impervious Areas Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits” standardizes procedures for the reporting of traditional, new, and alternative BMPs and the impervious area they control. This document also provides information on how to calculate impervious surface and stormwater baseline loads and BMP pollutant removal efficiencies for showing progress toward meeting stormwater WLAs for NPDES accounting purposes. MDE will use this document to measure program implementation and progress toward meeting water restoration goals.

Public Participation

SHA will allow for public participation during the development of watershed assessments and coordinated TMDL implementation plan. As part of this permit condition, SHA must provide notice of its procedures for the public to obtain information and offer comment on the assessments and plans. A minimum 30 day comment period is required prior to finalizing the TMDL implementation plan.

TMDL Compliance

This draft permit requires SHA to submit an annual TMDL assessment report evaluating the effectiveness of SHA's coordinated TMDL implementation plan and progress made in achieving compliance with EPA approved TMDLs. Included in the report will be estimated pollutant load reductions from all completed structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives. If necessary, a plan will also be included for implementing additional watershed restoration actions that can be enforced when benchmarks, deadlines, and applicable stormwater WLAs are not being met or when projected funding is inadequate.

Assessment and Reporting

MDE has previously approved the Montgomery County Seneca Creek watershed as a suitable monitoring location. SHA shall continue to monitor this watershed to determine the effectiveness of stormwater management practices for stream channel protection. Additionally, chemical, biological, and physical monitoring is required to assess the cumulative effects of watershed restoration activities. The permit also requires the continued submittal of an annual report to MDE detailing the status of the various permit conditions and an evaluation of the effectiveness of the specific program components SHA has selected and implemented.

Special Programmatic Conditions

A Chesapeake Bay TMDL has been developed by the EPA for the six Bay States (Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia) and the District of Columbia. The TMDL describes the level of effort that is necessary for meeting water quality criteria and restoring Chesapeake Bay. Urban stormwater is defined in the CWA as a point source discharge and will subsequently be a part of Maryland's WLA and permits will play a significant role in regulating pollutants from the urban sector. Therefore, NPDES stormwater permits issued to SHA and other municipalities will require coordination with Maryland's WIP and be used as the regulatory backbone for controlling urban pollutants toward meeting the Chesapeake Bay TMDL by 2025.

Enforcement and Penalties

This draft permit regulates the discharge of stormwater through SHA's municipal separate storm sewer system. It also requires SHA to take all reasonable steps to minimize or prevent discharges that are in violation of permit conditions. Failure to comply with a permit is a violation of the CWA and is grounds for enforcement action; penalty assessment; permit termination, revocation, or modification; or denial of a permit renewal application.

EPA affirmed in the preamble to its Municipal Separate Storm Sewer System Phase II Stormwater Rule (FR Vol. 64, No. 235, 68731) that water quality-based controls, which implemented through the iterative process defined herein as the terms and conditions in this draft permit, are appropriate for the control of the discharge of pollutants from SHA's municipal separate storm sewer system and will result in reasonable progress toward attainment of water quality standards. Successive iterations of the mix of BMPs and measurable goals will be driven by the objective of assuring maintenance of water quality standards.



Summary

This permit represents another step forward for SHA's NPDES municipal stormwater program. SHA's first and second generation permits laid the foundation for a comprehensive approach to controlling runoff. This was done by inventorying and mapping storm drain system infrastructure; identifying sources of pollution; monitoring storm events to judge chemical, biological, and physical stream responses; and enhancing existing, and restoring existing impervious area.

This third generation draft permit requires an additional twenty percent of SHA's impervious area to be restored, strategies for reducing litter to be developed, and that a coordinated TMDL implementation plan be carried out in order to meet stormwater WLAs established for impaired waters. All of these requirements are in addition to existing SHA management programs and ongoing monitoring efforts and will go a long way toward making the State's NPDES municipal program arguably one of the best in the country.

Public Review and Participation Opportunities

Upon issuance, the tentative determination will be available on MDE's website at:

http://www.mde.state.md.us/programs/water/stormwatermanagementprogram/pages/programs/waterprograms/sedimentandstormwater/storm_gen_permit.aspx

Copies of the document may also be procured at a cost of \$0.36 per page. Written requests for copies should be directed to Mr. Raymond Bahr, Maryland Department of the Environment, Water Management Administration, Sediment, Stormwater, and Dam Safety Program, 1800 Washington Blvd., Ste. 440, Baltimore, Maryland 21230-1708. Additional information on stormwater management in Maryland can also be found on MDE's website or by calling Mr. Bahr at 410-537-3543 or 1-800-633-6101.

Once tentative determination is issued, the public will have 20 calendar days to request a hearing and 30 days to provide written comments. If no hearing request is made nor comments received, the tentative determination will become final. If requested, a public hearing will be held, and MDE will provide at least one month of notification regarding the meeting to all interested parties. Comments and written testimony received at the hearing will be used by MDE in developing the final determination, which will be published and circulated to any interested parties. A party submitting a petition for judicial review shall file the petition within 30 days after publication of a notice of final determination.