



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

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## **FACT SHEET**

<b>NPDES Permit Number:</b>	<b>MD0068322</b>
<b>MDE Permit Number:</b>	<b>11-DP-3318</b>
<b>Public Comment Expiration Date:</b>	<b>July 4, 2014</b>
<b>Contact:</b>	<b>Brian Clevenger 410-537-3543</b>

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 (MS4) discharges to:

**HOWARD COUNTY, MARYLAND**  
**3430 Courthouse Drive**  
**Ellicott City, MD 21043**  
**410-313-6413**

### **Introduction**

MDE proposes to renew Howard County's 2005 permit authorizing the discharge of stormwater from all MS4 outfalls owned or operated by Howard County. This fact sheet provides basic information about the requirements in the County'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 the County'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, passed in 1970, to control runoff from construction sites and the Stormwater Management Law, passed in 1982, that required appropriate best management practices (BMPs) in order to maintain after development, as nearly as possible, the pre-development runoff conditions. Over the years, both programs have undergone significant revisions and enhancements, including the Stormwater Management Act of 2007 (Act). In addition to other innovative provisions included in a 2000 revision to the State's stormwater program, the Act required environmental site design (ESD) to the maximum extent practicable



(MEP) 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 MS4s must obtain an NPDES Permit. This permit is a joint federal and State permit and therefore 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**

Howard County is classified as a medium municipality and owns and operates a storm sewer system. The County's initial permit was issued on April 17, 1995 and reissued on June 15, 2000 and June 20, 2005. This proposed permit action is to issue a "fourth-generation" NPDES permit to Howard County to regulate the discharge of stormwater runoff from its storm drain system.

This permit represents another step forward for Howard County's NPDES municipal stormwater program. In 1995, the County'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 judge chemical, biological, and physical stream responses; and establishing new management programs while enhancing existing ones. During subsequent permits, the County evaluated jurisdiction-wide water quality, prioritized watersheds in order to perform more detailed analyses and guide management implementation, and began to restore existing impervious area.

Conditions of this permit require the County 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 increasing impervious area treatment goals, supporting litter reduction strategies, and implementing ESD technologies for new and redevelopment projects to the MEP. The County will also be required to develop and implement plans to address 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.

In the preamble to the original NPDES stormwater regulations (November 16, 1990), EPA included an extensive “comment and answer” discussion regarding permit area. Much of the discourse revolved around the demarcation of urban and rural areas and how it relates to municipal storm drain systems. “EPA recognizes that some of the counties addressed by today’s rule have, in addition to areas with unincorporated urbanized populations, areas that are essentially rural or uninhabited” and “it is the intent of EPA that management plans and other components of the programs focus on the urbanized and developing areas of the county.” Congress did not define “municipal separate storm sewer system” within the CWA, thus enabling “States or EPA Regions to define a system that best suits their various political and geographical conditions.”

Maryland has historically considered the entire geographic area within the political boundaries of a Phase I NPDES municipal stormwater jurisdiction as the regulated “permit area.” Since the inception of the NPDES municipal stormwater program, MDE has considered permit coverage to be jurisdiction-wide. This approach considered the fact that specific permit provisions, such as erosion and sediment control and stormwater management programs, are administered under State statute and as county-wide requirements. As an example, private development requires approval from the Howard Soil Conservation District (SCD) for erosion and sediment control and the County for stormwater management, and is subsequently inspected, maintained, and enforced under local authority. Most jurisdictions also own or operate a comprehensive road system throughout the entire locality that generates stormwater discharges. In this context, the entire jurisdiction can be viewed as the regulated permit area. Finally, as part of its preamble discussing this issue, EPA suggested that permit coverage may include areas where jurisdictions have control over land use decisions. Therefore, MDE defines regulated permit area as jurisdiction-wide and considers all provisions of this permit to apply to the geographic area of the County.

### **Watershed Restoration Area**

To achieve adequate progress toward meeting water quality standards and to reduce pollutants to the MEP within the County’s urban watersheds, this permit requires the County to commence and complete restoration efforts for 20 percent of the impervious area that is not already restored to the MEP. Similar permit conditions to restore 10 percent of the impervious surface area under prior permits have resulted in each Phase I jurisdiction determining what their direct responsibilities are regarding regulated permit area. Additionally, these same permitted jurisdictions are in the process of determining how Chesapeake Bay TMDLs and stormwater WLAs are to be met. MDE believes that some definitive statement regarding the regulated permit area is appropriate given the increased focus on the NPDES municipal stormwater permit program and its role for helping to restore the Chesapeake Bay and to meet TMDLs and stormwater WLAs.

Any federal, State, municipal, or industrial properties that are defined in CFR as MS4s or industrial stormwater dischargers must obtain separate NPDES general stormwater permit coverage from MDE and will be subject to their own watershed restoration requirements in separate, future

permits. For the purposes of determining applicable watershed restoration requirements as well as TMDL loads, these areas shall be subtracted from the County's regulated permit area. Subsequently, any impervious acres associated with these other stormwater permits should not be included in the County's assessment of impervious acres and the twenty percent requirement for restoration.

### **Stormwater System in Howard County**

Howard County has experienced rapid growth in the past two decades, seeing an increase in population from 187,328 in 1990 to 247,842 in 2000 according to the United States Department of Commerce's Census information. Since 2000, the number of County residents has increased by about 17%, with the 2010 population estimated at 289,039. This pace of growth and ensuing development presents many challenges. Significant pollutant reductions will be needed to maintain water quality in many of the County's waterways.

Howard County covers an area of 254 square miles and has approximately 368 "major" outfalls. Major outfalls are defined by federal regulations as:

- An outfall pipe with an internal diameter of 36 inches or greater; or
- A discharge from other than a round pipe that drains fifty acres or more; or
- An outfall pipe with an internal diameter of 12 inches or greater that drains an area that includes land zoned for industrial use.

Stormwater from these outfalls is discharged into the Patapsco and Patuxent River basins, two of Maryland's ten major Chesapeake Bay tributary basins. A number of stream segments in these basins are impacted by nutrients (nitrogen and phosphorus), sediment, bacteria, and methylmercury. TMDLs have been approved and WLAs established for portions of the Patapsco River, Lower North Branch; Patuxent River, Upper; Patuxent River, Upper (Cash Lake); Little Patuxent River (Centennial Lake); Little Patuxent River, Rocky Gorge Dam; Triadelphia Reservoir; Patuxent River Tidal Fresh; and Patapsco River Mesohaline. A WLA is that part of an impairing pollutant's total allowable discharge that is attributed to regulated point sources including stormwater. MDE's TMDL website provides more information on impaired waterways in Maryland 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 Howard County'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 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.

Howard County 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. The County will evaluate and document progress toward meeting WLAs within its jurisdiction 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 Howard County 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>). The law and regulations require that ESD be used to the MEP to address runoff impacts associated with new development. Maryland's stormwater regulations define ESD as "...using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources." Under this definition, ESD includes conserving natural features, minimizing impervious surfaces, slowing down runoff to promote infiltration and evapotranspiration, and using other approved nonstructural practices or innovative technologies.

The criteria for sizing ESD practices are based on capturing and retaining enough rainfall so that the runoff leaving a site is reduced to a level equivalent to a wooded site in good condition. The goal is to provide enough treatment using ESD practices to address groundwater recharge, water quality, and stream channel protection requirements by replicating woods in good condition for the 1-year rainfall event, or approximately 2.7 inches of rainfall. Managing the 1-year rainfall event on a site is equivalent to treating 98% of Maryland's average annual rainfall.

All jurisdictions in the State, including Howard County, are required to maintain and implement a stormwater management ordinance that is in compliance with the requirements of Maryland's stormwater program. These requirements include ensuring the proper construction and maintenance of all stormwater management features through timely inspections of new ESD practices and structural stormwater management facilities as well as triennial inspections of completed ESD treatment systems and structural facilities. Maintenance procedures, including triennial inspection policies, are described in COMAR 26.17.02.11.

By following the conditions in its approved ordinance, including mimicking natural hydrologic runoff characteristics, designing new projects to meet the "woods in good condition" criteria, and implementing ESD to the MEP, the County 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 the County to implement an erosion and sediment control program in accordance with 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 the County 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. Additionally, MDE regularly reviews the County's program and has minimum standards for the design and content of erosion and sediment control plans. While Maryland has had a model erosion and sediment control program for over forty years, incorporation of the program by reference in this permit will further ensure compliance with State requirements and improved runoff conditions.

### **Illicit Discharge Detection and Elimination**

The draft permit requires Howard County 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, Howard County is required to monitor 100 major outfalls each year, looking for illicit discharges. The County is also required to develop and maintain procedures for investigating complaints and handling enforcement actions. Additionally, routine surveys of commercial and industrial areas are required.

### **Litter and Floatables**

An additional management program has been included in the permit requiring Howard County to document all litter control problems and identify potential sources and ways of elimination. The County shall develop and implement a public education and outreach program with specific performance goals to reduce littering and increase recycling.

### **Property Management and Maintenance**

This program requires Howard County to ensure that a Notice of Intent (NOI) be submitted and a pollution prevention plan developed for all County-owned facilities requiring coverage under the General Discharge Permit for Stormwater Associated with Industrial Activities. Currently, all County facilities requiring an NOI have received this coverage and have developed pollution prevention plans. 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.

As a condition of the permit, the County will continue its efforts to reduce pollutants associated with the maintenance of County properties. Inlet cleaning, street sweeping, and litter pickup programs are all activities currently undertaken by Howard County along its roadways. Additionally, the County is required to reduce the use of pesticides, herbicides, and fertilizers, and evaluate various applications of deicing materials. The permit language has been changed from the previous permit so that this program applies to all County property (e.g., parks), not just roads and streets.



### **Public Education**

Public education has been an ongoing requirement of previous permits and is included currently. Howard County is an active member of local watershed groups, coordinates local clean-up days, and participates in public educational opportunities at local schools and community events. The County must continue to implement a program that provides information about stormwater runoff, water conservation, trash reduction and recycling, lawn care management, and provides a mechanism for reporting suspected illicit discharges and spills.

### **Total Maximum Daily Loads (TMDLs)**

#### **Watershed Assessments**

Howard County will identify and link sources of pollutants in stormwater runoff to specific water quality impacts on a watershed basis. The permit requires the County to conduct a systematic assessment of water quality for each watershed. These watershed assessments are to include detailed water quality analyses, identification of water quality improvement opportunities, and development and implementation of restoration plans to control stormwater discharges.

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 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**

This draft permit requires the County to submit a restoration plan for each EPA approved stormwater WLA. These plans will include a detailed schedule for implementing stormwater water quality projects, enhanced stormwater management programs, and alternative stormwater management initiatives necessary for meeting applicable stormwater WLAs. As described in the permit and in Maryland's Watershed Implementation Plan (Plan), the restoration plans will also involve developing an ongoing, iterative process for the implementation of projects and programs.

The permit and the Plan require the additional restoration of twenty percent of the County's impervious surface area not already restored to the MEP. Restoration of impervious area to the MEP means implementing specific programs and water quality improvement projects to meet WLAs and water quality standards. The recently published MDE document "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits" standardizes procedures for reporting 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.

## **Environmental Site Design and Green Infrastructure**

There are many stormwater design strategies that seek to replicate natural hydrology. Sometimes known as better site design, low impact development, green infrastructure, or sustainable site design, these strategies all espouse similar techniques. In each, a combination of planning techniques, alternative cover, and small-scale treatment practices is used to address impacts associated with development. For new development, as mentioned above, Maryland requires that ESD be implemented to the MEP based on the 1-year rainfall event, which ensures that 98% of the average annual rainfall is treated by green infrastructure.

ESD figures prominently in Maryland's restoration guidance. Successful stormwater restoration in an existing urban development requires designers to strive to manage the largest volume of runoff possible. Maryland has set a high bar by establishing 1-inch of rainfall as the permit's restoration criteria, an amount that captures approximately 90% of the average annual rainfall. ESD practices may be used to meet this credit and include permeable pavement, reinforced turf, disconnection of impervious surfaces, sheetflow to conservation areas, rainwater harvesting, submerged gravel wetlands, landscape infiltration and berms, dry wells, micro-bioretenment, rain gardens, bio-swales, and enhanced filters.

All restoration and retrofit opportunities, including structural controls, shall meet the criteria found in the *2000 Maryland Stormwater Design Manual*, which includes the incorporation of green infrastructure features. These include the use of pre-treatment vegetation, wetland pockets and pools, flow reduction techniques, native plants, meadows, trees, permeable soils, and the creation of sinuous flow paths. These green techniques mimic the natural hydrologic process, soak up and store runoff, and improve water quality. Structural BMPs (e.g., dry ponds, extended detention dry ponds) that do not meet minimum water quality treatment standards described in *2000 Maryland Stormwater Design Manual* cannot be used to meet permit restoration requirements. Structural and nonstructural stormwater retrofit credits can be applied individually or pro-rated and applied across an entire watershed.

In order to meet the significant restoration requirements associated with the recently approved Chesapeake Bay TMDL, the guidance also expands the list of stormwater BMPs with a suite of alternative water quality practices. Derived from approved Chesapeake Bay Program practices and efficiencies, these alternatives include the removal of impervious surfaces, grass and forested buffers, tree planting, reforestation, street sweeping, storm drain vacuuming, and stream restoration. The expanded list of BMPs enables local governments to weigh the cost associated with implementing different practices and choose the most efficient option for meeting pollutant load reductions. To ensure that an effective mix of BMPs that are best-suited to local and Chesapeake Bay TMDLs are implemented under this permit, all TMDL implementation plans will be required to undergo public review, comment, and MDE approval.

## **Public Participation**

Howard County will allow for public participation during the development of its watershed assessments and restoration plans. As part of this permit condition, the County 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 any assessments or plans.



## **Comprehensive Monitoring**

Howard County's permit will require comprehensive monitoring to effectively characterize stormwater runoff; quantify specific BMP and small watershed restoration implementation; discover illicit discharges to the County's storm drain system; assess the water quality of all County watersheds; track the progress toward meeting EPA approved stormwater WLAs; and survey the effectiveness of Maryland's new stormwater law requiring ESD to the MEP, particularly as it relates to stream channel protection. Chemical, biological, and physical monitoring will be required in the County's permit to support the intent of the CWA to maintain and restore the chemical, physical, and biological health of receiving water bodies. Below is a summary of these efforts.

### **Small Watershed Monitoring**

The Chesapeake Bay Program has determined that intensive monitoring of small watersheds where restoration efforts are being implemented is necessary to inform successful adaptive management. To support this initiative, Howard County's permit will require intensive monitoring to occur in the Wilde Lake and Red Hill Branch watersheds where the cumulative effects of watershed restoration activities can be assessed. The permit will require that chemical, biological, and physical monitoring be used to assess small watershed restoration efforts, document BMP effectiveness, and calibrate water quality models. The minimum criteria for chemical, biological, and physical monitoring are as follows:

**Chemical Monitoring:** Eight storm events shall be monitored per year in the selected watershed. Discrete samples of stormwater flow representative of each storm event shall be collected at the monitoring stations for developing event mean concentrations (EMC) for the following pollutants:

Biochemical Oxygen Demand (BOD <sub>5</sub> )	Total Lead
Total Kjeldahl Nitrogen (TKN)	Total Copper
Nitrate plus Nitrite	Total Zinc
Total Suspended Solids	Total Phosphorus
Total Petroleum Hydrocarbons (TPH)	Hardness
E. coli or enterococcus	

**Biological Monitoring:** Benthic macroinvertebrate samples will be required to be gathered each Spring for gauging the biological response to stormwater discharges. A stream habitat assessment will also be required using techniques defined by the EPA such as the Rapid Bioassessment Protocols (RBP), Maryland Biological Stream Survey (MBSS), or other similar method approved by MDE.

**Physical Monitoring:** A geomorphologic stream assessment will be required and include an annual comparison of permanently monumented stream channel cross-sections and the stream profile. A hydrologic and/or hydraulic model will be required in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

**Continuous Flow Measurements:** Flow measurements will be required at the monitoring locations and will be used to estimate annual and seasonal pollutant loads and reductions, and for the

calibration of watershed assessment models. Additionally, the County will be required to provide a combined analysis of the chemical, biological, and physical monitoring results for the approved watershed.

### **Illicit Discharge Detection Sampling**

Howard County shall continue to implement an inspection and enforcement program to ensure that all discharges to and from the MS4 that are not composed entirely of stormwater are either permitted by MDE or eliminated. Permit requirements include the field screening of at least 100 outfalls annually. Each outfall having a discharge shall be sampled using a chemical test kit. Additionally, visual surveys of commercial and industrial areas shall be used to methodically identify, investigate, and eliminate illegal connections to the County's storm drain system.

### **Watershed Restoration Monitoring and Water Quality Analyses**

Howard County's permit will require it to systematically assess all watersheds within the County and use this analysis to develop detailed restoration plans for meeting stormwater WLAs. Assessments are to be performed at an appropriate watershed scale (e.g., Maryland's hierarchical eight or twelve-digit sub-basins) and are to be based on EPA's approved TMDL analysis or an equivalent and comparable County water quality analysis. Watershed assessments by the County shall:

- Determine current water quality conditions
- Include the results of a visual watershed inspection
- Identify and rank water quality problems
- Prioritize all structural and nonstructural water quality improvement projects
- Specify pollutant load reduction benchmarks and deadlines that demonstrate progress toward meeting all applicable stormwater WLAs

This permit will require the County to evaluate the implementation of watershed restoration plans and track the progress toward meeting benchmarks, deadlines, and all applicable stormwater WLAs. Complete descriptions of the analytical methodology for any monitoring or modeling are required. To support this effort, the County will be required to provide the estimated net change in pollutant loads from all completed structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives. Additionally, the County will provide a description of a plan for implementing additional watershed restoration actions that can be enforced when benchmarks, deadlines, and applicable stormwater WLAs are not being met.

### **Maryland's Stormwater Management Program Monitoring**

Howard County shall continue physical stream monitoring in the Rumsey Run (tributary to Red Hill Branch) watershed to assess the implementation of the latest version of the *2000 Maryland Stormwater Design Manual*. Physical stream monitoring protocols shall include an annual stream profile and survey of permanently monumented cross-sections in Rumsey Run (tributary to Red Hill Branch) to evaluate channel stability. A comparison will be required of the annual stream profile and survey of the permanently monumented cross-sections with baseline conditions for assessing

areas of aggradation and degradation. Finally, a hydrologic and/or hydraulic model will be required in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

### **Annual Monitoring Data Submittal**

Howard County will be required to describe in detail all of its monitoring activities in each annual report. The permit will require the following annual data submittal: monitoring site locations; chemical monitoring results; TMDL pollutant load reductions; biological, habitat, and physical monitoring; illicit discharge detection and elimination sampling; and a narrative summary describing the results and analyses of data, including monitoring data that is accumulated throughout the reporting year. MDE has developed reporting database structures for the submittal of monitoring and program implementation data that appear as “Attachment A” in Howard County’s draft permit.

### **Special Programmatic Conditions**

Howard County will be required to comply with the Chesapeake Bay TMDL. The County will also continue to work toward the completion of the State’s Water Resources Element as required by the Maryland Economic Growth, Resource Protection and Planning Act of 1992 (Article 66B, Annotated Code of Maryland). The projects and programs proposed under this draft permit, as well those implemented during the County’s previous stormwater permits and as part of the other State and local regulations, all work toward meeting both of these conditions.

### **Enforcement and Penalties**

The permit regulates the discharge of stormwater through Howard County’s MS4. It also requires the County to take all reasonable steps to minimize or prevent discharges that are in violation of permit conditions. Failure to comply with a permit condition 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, when 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 the County’s MS4 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 Howard County's NPDES municipal stormwater program. The County'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 judge chemical, biological, and

physical stream responses; and enhancing existing, and establishing new management programs. The second and third permits, along with other Phase I permits in the State, built one of the most progressive municipal stormwater programs in the Mid-Atlantic Region. The County evaluated jurisdiction-wide water quality, prioritized watersheds in order to perform more detailed analyses to guide management implementation, and began to restore existing impervious area.

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

### **Public Review and Participation Opportunities**

Upon advertisement, 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](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 36¢ per page. Written requests for copies should be directed to Mr. Brian Clevenger, Maryland Department of the Environment, Water Management Administration, Sediment, Stormwater and Dam Safety Program, 1800 Washington Boulevard, Suite 440, Baltimore, Maryland 21230-1708. Additional information on stormwater management in Maryland can also be found on MDE's website or by calling Mr. Clevenger at 410-537-3543 or 1-800-633-6101.

Once tentative determination is issued, the public will have 20 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 be final. If requested, a public hearing will be held within one month of notification. MDE will prepare a written response to comments and written testimony received at the hearing prior to issuing a final determination. Final determination will be issued as soon as possible after the hearing, upon which the public has 15 days to request a judicial review.