

MARYLAND DEPARTMENT OF THE ENVIRONMENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

MUNICIPAL SEPARATE STORM SEWER SYSTEM DISCHARGE PERMIT

PART I. IDENTIFICATION

A. **Permit Number:** 11-DP-3313 (MD0068276)

B. **Permit Area**

This permit covers stormwater discharges from the municipal separate storm sewer system (MS4) owned or operated by the Maryland State Highway Administration (SHA) located in all Maryland Phase I and Phase II jurisdictions including, but not limited to, Anne Arundel, Baltimore, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, Prince George's, and Washington counties, and regulated State and federal entities.

C. **Effective Date:** October 9, 2015

D. **Modified Date:** November 8, 2019

E. **Expiration Date:** October 8, 2020

PART II. DEFINITIONS

Terms used in this permit are defined in relevant chapters of Title 40 of the Code of Federal Regulations (CFR) Parts 122-124 or the Code of Maryland Regulations (COMAR) 26.08.01, 26.17.01, and 26.17.02. Terms not defined in CFR or COMAR shall have the meanings attributed by common use.

PART III. WATER QUALITY

The permittee must manage, implement, and enforce a stormwater management program (SWMP) in accordance with the Clean Water Act (CWA) and corresponding stormwater National Pollutant Discharge Elimination System (NPDES) regulations, 40 CFR Part 122, to meet the following requirements:

1. Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with Maryland's receiving water quality standards;
2. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with Title 33 of the U.S. Code (USC) § 1342(p)(3)(B)(iii); 40 CFR § 122.44(k)(2) and (3); and

3. Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with all the conditions contained in PARTs IV through VII of this permit shall constitute compliance with § 402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with Maryland's receiving water quality standards and any EPA approved stormwater WLAs for this permit term.

PART IV. STANDARD PERMIT CONDITIONS

A. Permit Administration

SHA shall designate an individual to act as a liaison with the Maryland Department of the Environment (MDE) for the implementation of this permit. SHA shall provide the coordinator's name, title, address, phone number, and email address. Additionally, SHA shall in its annual reports submit to MDE an organizational chart detailing personnel and groups responsible for major NPDES program tasks in this permit. MDE shall be notified of any changes in personnel or organization relative to NPDES program tasks.

B. Legal Authority

SHA shall carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions according to 40 CFR 122.26, including the prohibition on illicit discharges to the MS4 owned or operated by SHA. In cases where violations are discovered from adjacent land uses, SHA will contact the appropriate jurisdiction with legal authority over the adjacent land uses and report the violations. All inspections, violations, jurisdiction contacts, and resolution schedules will be included in SHA's annual report.

C. Source Identification

Sources of pollutants in stormwater runoff within the permit area shall continue to be identified and linked to specific water quality impacts on a watershed basis. Data collected as a result of source identification shall be shared with surrounding NPDES counties and used for watershed restoration planning. The source identification process shall be used to aid in the development of watershed restoration plans. The following information shall be submitted annually for all SHA stormwater infrastructure within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit:

1. Storm drain system: all infrastructure, major outfalls, inlets, and associated drainage areas delineated;
2. Industrial and commercial sources: industrial and commercial land uses and sites that the SHA has determined have the potential to contribute significant pollutants to SHA storm drain systems;

3. Urban best management practices (BMPs): stormwater management facility data including outfall locations and delineated drainage areas;
4. Impervious surfaces: SHA-owned and private land use (if within SHA BMP drainage area) delineated, controlled and uncontrolled impervious areas based on, at a minimum, Maryland's hierarchical eight-digit sub-basins;
5. Monitoring locations: locations established for chemical, biological, and physical monitoring of watershed restoration efforts and the *2000 Maryland Stormwater Design Manual*; and
6. Water quality improvement projects: projects proposed, under construction, and completed with associated drainage areas delineated, when applicable.

D. Management Programs

The following management programs shall be implemented in areas served by SHA's MS4. These management programs are designed to control stormwater discharges to the maximum extent practicable (MEP) and shall be maintained for the term of this permit. Additionally, these programs shall be integrated with other permit requirements to promote a comprehensive adaptive approach toward solving water quality problems. SHA shall make needed program improvements identified as a result of periodic evaluations by MDE.

1. Stormwater Management

An acceptable stormwater management program shall continue to be maintained in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland. Activities to be undertaken by SHA shall include, but not be limited to:

- a. Implementing the stormwater management design policies, principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual* for SHA projects. This includes:
 - i. Complying with the Stormwater Management Act of 2007 (Act) by implementing environmental site design (ESD) to the MEP for new and redevelopment projects;
 - ii. Tracking the progress toward satisfying the requirements of the Act and identifying and reporting annually the problems and modifications necessary to implement ESD to the MEP; and
 - iii. Reporting annually the modifications that have been or need to be made to plan review and approval processes to comply with the requirements of the Act.
- b. Maintaining programmatic and implementation information including, but not limited to:

- i. Number of Concept, Site Development, and Final plans received. Plans that are re-submitted as a result of a revision or in response to comments should not be considered as a separate project;
- ii. Number of redevelopment projects received;
- iii. Number of stormwater exemptions issued; and
- iv. Number and type of waivers received and issued, including those for quantity control, quality control, or both. Multiple requests for waivers may be received for a single project and each should be counted separately, whether part of the same project or plan. The total number of waivers requested and granted for qualitative and quantitative control shall be documented.

Stormwater program data shall be recorded on MDE's annual report database and submitted as required in PART V of this permit.

- c. Maintaining construction inspection information according to COMAR 26.17.02 for all ESD treatment practices and structural stormwater management facilities including the number of inspections conducted and any enforcement actions.
- d. Conducting preventative maintenance inspections, according to COMAR 26.17.02, of all ESD treatment systems and structural stormwater management facilities at least on a triennial basis. Documentation identifying the ESD systems and structural stormwater management facilities inspected, the number of maintenance inspections and follow-up inspections, actions used to ensure that stormwater controls are adequately maintained, cooperation with MDE regarding enforcement, and any other relevant information shall be submitted in SHA's annual reports.

2. Erosion and Sediment Control

An acceptable erosion and sediment control program shall continue to be maintained and implemented in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. Activities to be undertaken by SHA shall include, but not be limited to:

- a. Implementing program improvements identified in any MDE evaluation of SHA's erosion and sediment control program;
- b. Ensure that construction site operators have received training regarding erosion and sediment control compliance and hold a valid Responsible Personnel Certification as required by MDE;
- c. Recording program activity on MDE's annual report database and submitted as required in PART V of this permit; and

- d. Ensuring that all applicable construction projects obtain a notice of intent (NOI) for stormwater associated with construction activity.

3. Illicit Discharge Detection and Elimination

SHA 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. Activities shall include, but not be limited to:

- a. Field screening at least 150 outfalls annually. Each outfall having a dry weather discharge shall be sampled using a chemical test kit. Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to SHA's storm drain system;
- b. Conducting annual visual surveys of commercial and industrial areas as identified in PART IV.C.2. above for discovering, documenting, and eliminating pollutant sources. Areas surveyed shall be reported annually;
- c. Maintaining a program to address and, if necessary, respond to illegal discharges, dumping, and spills;
- d. Using appropriate procedures for investigating and reporting illicit discharges, illegal dumping, and spills to local or State authorities as applicable for control or clean-up. Significant discharges shall be reported to MDE for enforcement and/or permitting;
- e. Coordinate with surrounding jurisdictions when illicit connections originate from beyond SHA's rights-of-way; and
- f. Reporting illicit discharge detection and elimination activities as specified in PART V of this permit.

4. Trash and Litter

This section of the permit requires SHA to address problems associated with litter and floatables in waterways that adversely affect water quality. Increases in trash 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.

- a. SHA shall document litter control problems on its properties, ways of eliminating litter, and opportunities for overall improvement.

- b. Within one year of permit issuance, as part of the public education program described in Part IV.D.6., SHA shall develop and implement a public education and outreach program with specific performance goals to reduce littering. This shall include:
 - i. Educating the transportation community on the importance of reducing, reusing, and recycling;
 - ii. Disseminating information by using signs, articles, and other media outlets; and
 - iii. Promoting educational programs for SHA employees, consultants, contractors, traveling/trucking public, vacationers and commuters, etc.
- c. Evaluating annually the effectiveness of the education program.
- d. Submit annually, a report that details progress toward implementing the public education and outreach program and trash reduction strategies. The report shall describe the status of public outreach efforts including resources (e.g., personnel and financial) expended and the effectiveness of all program components.

5. Property Management and Maintenance

- a. SHA shall ensure that an NOI has been submitted to MDE and a pollution prevention plan developed for each SHA-owned facility requiring NPDES stormwater general permit coverage. The status of pollution prevention plan development and implementation for each SHA-owned municipal facility shall be reviewed, documented, and submitted to MDE annually.
- b. SHA shall continue to implement a program to reduce pollutants associated with maintenance activities at SHA-owned facilities including garages, roadways parking lots, rest areas, and park and rides. The maintenance program, shall include, but not be limited to, these activities:
 - i. Street sweeping;
 - ii. Inlet inspection and cleaning;
 - iii. Minimize the use of pesticides, herbicides, fertilizers, and other pollutants associated with vegetation management through increased use of integrated pest management;
 - iv. Minimize to the MEP the use of winter weather deicing materials through research, continual testing and improvement of materials, equipment calibration, employee training, and effective decision-making; and
 - v. Ensuring that all SHA staff receives adequate training in pollution prevention and good housekeeping practices.

SHA shall report annually on the changes in any maintenance practices and the overall pollutant reductions resulting from the maintenance program. Within one year of permit issuance, an alternative maintenance program may be submitted for MDE approval indicating the activities to be undertaken and associated pollutant reductions.

6. Public Education

SHA shall continue to implement a public education and outreach program to reduce stormwater pollutants. Outreach efforts may be integrated with other aspects of SHA's activities. These efforts are to be documented and summarized in each annual report. SHA shall continue to implement a public outreach and education campaign with specific performance goals and deadlines to:

- a. Maintain a compliance hotline or similar mechanism for public reporting of water quality complaints, including suspected illicit discharges, illegal dumping, and spills.
- b. Provide information to the transportation community about the benefits of:
 - i. Stormwater management implementation and facility maintenance;
 - ii. Proper erosion and sediment control practices;
 - iii. Increasing proper disposal of vehicle fluids such as brake fluid or motor oil (not in inlets or catch basins);
 - iv. Refraining from and reporting roadside dumping;
 - v. Proper litter and trash disposal;
 - vi. Decreasing vehicle idling;
 - vii. Utilizing alternative modes of transportation (bus, train, walking, biking, carpooling);
 - viii. Car care and washing; and
 - ix. Proper pet waste management at rest areas and welcome centers.
- c. Provide information regarding the following water quality issues to the regulated community when requested:
 - i. NPDES permitting requirements;
 - ii. Pollution prevention plan development;
 - iii. Proper housekeeping; and
 - iv. Spill prevention and response.

E. Restoration Plans and Total Maximum Daily Loads

In compliance with §402(p)(3)(B)(iii) of the CWA, MS4 permits must require stormwater controls to reduce the discharge of pollutants to the MEP. By regulation at 40 CFR §122.44, BMPs and programs implemented pursuant to this permit must be consistent with applicable WLAs developed under EPA approved TMDLs.

In pursuit of these goals, SHA shall coordinate watershed assessments with surrounding jurisdictions and annually report on restoration plans, opportunities for public participation, and TMDL compliance status to MDE. As required below, watershed assessments and restoration plans shall include a thorough discussion of water quality analysis findings based on coordination

with surrounding jurisdictions, TMDL documents and other resources when available, identification of water quality improvement opportunities, and a schedule for BMP and programmatic implementation to meet stormwater WLAs included in EPA approved TMDLs. SHA shall address both specific WLAs and target loads when SHA is part of larger aggregate loads. A list of EPA approved TMDLs for SHA in the permit area is included in Attachment B of the permit.

1. Watershed Assessments

- a. SHA shall coordinate watershed assessments with surrounding jurisdictions, which shall include, but not be limited to the evaluation of available State and county watershed assessments, SHA data, visual watershed inspections targeting SHA rights-of-way and facilities, and approved stormwater WLAs to:
 - i. Determine current water quality conditions;
 - ii. Include the results of visual inspections targeting SHA rights-of-way and facilities conducted in areas identified as priority for restoration;
 - iii. Identify and rank water quality problems for restoration associated with SHA rights-of-way and facilities;
 - iv. Using the watershed assessments established under section a. above to achieve water quality goals by identifying all structural and nonstructural water quality improvement projects to be implemented; and
 - v. Specify pollutant load reduction benchmarks and deadlines that demonstrate progress toward meeting all applicable stormwater WLAs.

2. Restoration Plans

- a. Within one year of permit issuance, SHA shall submit an impervious surface area assessment consistent with the methods described in the MDE document “Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits” (MDE, August 2014 or subsequent versions). Upon approval by MDE, this impervious surface area assessment shall serve as the baseline for the restoration efforts required in this permit.

By the end of this permit term, SHA shall commence and complete the implementation of restoration efforts for twenty percent of SHA’s impervious surface area consistent with the methodology described in the MDE document cited in PART IV.E.2.a. that has not already been restored to the MEP. Equivalent acres restored of impervious surfaces, through new retrofits or the retrofit of pre-2002 structural BMPs, shall be based upon the treatment of the WQ_v criteria and associated list of practices defined in the *2000 Maryland Stormwater Design Manual*. For alternate BMPs, the basis for calculation of equivalent impervious acres restored is based upon the pollutant loads from forested cover.

- b. Within one year of permit issuance, a coordinated TMDL implementation plan shall be submitted to MDE for approval that addresses all EPA approved stormwater WLAs (prior to the effective date of the permit) and requirements of Part VI.A., Chesapeake Bay Restoration by 2025 for SHA's storm sewer system. Both specific WLAs and aggregate WLAs which SHA is a part of shall be addressed in the TMDL implementation plans. Any subsequent stormwater WLAs for SHA's storm sewer system shall be addressed by the coordinated TMDL implementation plan within one year of EPA approval. Upon approval by MDE, this implementation plan will be enforceable under this permit. As part of the coordinated TMDL implementation plan, SHA shall:
 - i. Include the final date for meeting applicable WLAs and a detailed schedule for implementing all structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives necessary for meeting applicable WLAs;
 - ii. Provide detailed cost estimates for individual projects, programs, controls, and plan implementation;
 - iii. Evaluate and track the implementation of the coordinated implementation plan through monitoring or modeling to document the progress toward meeting established benchmarks, deadlines, and stormwater WLAs; and
 - iv. Develop an ongoing, iterative process that continuously implements structural and nonstructural restoration projects, program enhancements, new and additional programs, and alternative BMPs where EPA approved TMDL stormwater WLAs are not being met according to the benchmarks and deadlines established as part of the SHA's watershed assessments.

3. Nutrient Trading

The Maryland Department of Transportation State Highway Administration may acquire total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS) credits, in accordance with the requirements of the Maryland Water Quality Trading and Offset Program, COMAR 26.08.11, to meet its 20 percent impervious surface area restoration requirement in this permit. The basis for an equivalent impervious acre restored through trading is the difference in pollutant loads between urban and forest stormwater runoff according to MDE's "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits" (MDE, 2014, or the most recent version). On an annual basis, until reissuance of this permit, the permittee shall report to MDE:

- a. The cumulative impervious acres restored achieved through the installation of BMPs during the permit compliance period;
- b. The equivalent impervious acres restored achieved through credit acquisition during the permit compliance period; and

- c. Documentation required to verify credits acquired and to be used for impervious surface restoration during the permit compliance period.

4. Public Participation

SHA shall provide opportunity to the public regarding the development of its coordinated TMDL implementation plan by allowing for public participation, soliciting input, and incorporating any relevant ideas and program improvements that can aid in achieving TMDLs and water quality standards according to the actions below. SHA shall provide:

- a. Notice in a regional newspaper and SHA's website outlining how the public may obtain information on the development of the coordinated TMDL implementation plan and opportunities for comment;
- b. Procedures for providing copies of the coordinated TMDL implementation plan to interested parties upon request;
- c. A minimum 30 day comment period before finalizing the coordinated TMDL implementation plan; and
- d. A summary in each annual report of how SHA addressed or will address any material comment received from the public.

5. TMDL Compliance

SHA shall evaluate and document its progress toward meeting all applicable stormwater WLAs included in EPA approved TMDLs. An annual TMDL assessment report with tables shall be submitted to MDE. This assessment shall include complete descriptions of the analytical methodology used to evaluate the effectiveness of SHA's restoration plans and how these plans are working toward achieving compliance with EPA approved TMDLs. SHA shall further provide:

- a. Estimated net change in pollutant load reductions from all completed structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives;
- b. A comparison of the net change in pollutant load reductions detailed above with the established benchmarks, deadlines, and applicable stormwater WLAs;
- c. Itemized costs for completed projects, programs, and initiatives to meet established pollutant reduction benchmarks and deadlines;
- d. Cost estimates for completing all projects, programs, and alternatives necessary for meeting applicable stormwater WLAs; and

- e. 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 or when projected funding is inadequate.

F. Assessment of Controls

SHA and ten other municipalities in Maryland have been conducting discharge characterization monitoring since the early 1990s. From this expansive monitoring, a statewide database has been developed that includes hundreds of storms across numerous land uses. Analyses of this dataset and other research performed nationally effectively characterize stormwater runoff in Maryland for NPDES municipal stormwater purposes. To build on the existing information and to better track progress toward meeting TMDLs, better data are needed on ESD performance and BMP efficiencies and effectiveness.

Assessment of controls is critical for determining the effectiveness of the NPDES stormwater management program and progress toward improving water quality. SHA shall use chemical, biological, and physical monitoring to assess watershed restoration efforts, document BMP effectiveness, or calibrate water quality models for showing progress toward meeting any applicable WLAs developed under EPA approved TMDLs identified above. Additionally, SHA shall propose a stream monitoring site to assess the implementation of the latest version of the *2000 Maryland Stormwater Design Manual*. Specific monitoring requirements are described below.

1. Watershed Restoration Assessment

SHA shall continue monitoring in the Montgomery County Seneca Creek watershed, or, select and submit for MDE’s approval a new watershed restoration project for monitoring. Monitoring activities shall occur where the cumulative effects of watershed restoration activities can be assessed. One outfall and an associated in-stream station, or other locations based on a study design approved by MDE, shall be monitored. The minimum criteria for chemical, biological, and physical monitoring are as follows:

a. Chemical Monitoring:

- i. Twelve (12) storm events shall be monitored per year at each monitoring location with at least three occurring per quarter. Quarters shall be based on the calendar year. If extended dry weather periods occur, baseflow samples shall be taken at least once per month at the monitoring stations if flow is observed;
- ii. Discrete samples of stormwater flow shall be collected at the monitoring stations using automated or manual sampling methods. Measurements of pH and water temperature shall be taken;
- iii. At least three (3) samples determined to be representative of each storm event shall be submitted to a laboratory for analysis according to methods listed under 40 CFR Part 136 and event mean concentrations (EMC) shall be calculated for:

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|---|------------------|
| Biochemical Oxygen Demand (BOD ₅) | 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 | |

- iv. Continuous flow measurements shall be recorded at the in-stream monitoring station or other practical locations based on the approved study design. Data collected shall be used to estimate annual and seasonal pollutant loads and reductions, and for the calibration of watershed assessment models. Pollutant load estimates shall be reported according to any EPA approved TMDLs with stormwater WLAs.

b. Biological Monitoring:

- i. Benthic macroinvertebrate samples shall be gathered each Spring between the outfall and in-stream stations or other practical locations based on an MDE approved study design; and
- ii. SHA shall use the EPA Rapid Bioassessment Protocols (RBP), Maryland Biological Stream Survey (MBSS), or other similar method approved by MDE.

c. Physical Monitoring:

- i. A geomorphologic stream assessment shall be conducted between the outfall and in-stream monitoring locations or in a reasonable area based on the approved study design. This assessment shall include an annual comparison of permanently monumented stream channel cross-sections and the stream profile;
- ii. A stream habitat assessment shall be conducted using techniques defined by the EPA's RBP, MBSS, or other similar method approved by MDE; and
- iii. A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HEC-RAS, HSPF, SWMM, etc.) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

d. Annual Data Submittal: SHA shall describe in detail its monitoring activities for the previous year and include the following:

- i. EMCs submitted on MDE's long-term monitoring database as specified in PART V below;
- ii. Chemical, biological, and physical monitoring results and a combined analysis for the approved monitoring locations; and

- iii. Any requests and accompanying justifications for proposed modifications to the monitoring program.

2. Stormwater Management Assessment

SHA shall select a site to monitor, develop a monitoring plan, and submit for MDE's approval within 1 year of permit issuance for determining the effectiveness of stormwater management practices for stream channel protection as implemented under the latest stormwater regulations. Physical stream monitoring protocols shall include:

- a. An annual stream profile and survey of permanently monumented cross-sections at the approved monitoring site to evaluate channel stability in conjunction with surrounding and on-going development;
- b. A comparison of the annual stream profile and survey of the permanently monumented cross-sections with baseline conditions for assessing areas of aggradation and degradation; and
- c. A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HEC-RAS, HSPF, SWMM, etc.) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

G. Program Funding

1. Annually, a fiscal analysis of the capital, operation, and maintenance expenditures necessary to comply with all conditions of this permit shall be submitted as required in PART V below.
2. Adequate program funding to comply with all conditions of this permit shall be maintained. Lack of funding does not constitute a justification for noncompliance with the terms of this permit.

PART V. PROGRAM REVIEW AND ANNUAL PROGRESS REPORTING

A. Annual Reporting

1. Annual progress reports, required under 40 CFR 122.42(c), will facilitate the long-term assessment of SHA's NPDES stormwater program. SHA shall submit annual reports on or before the anniversary date of this permit and post these reports on SHA's website. All information, data, and analyses shall be based on the State fiscal year and include:
 - a. The status of implementing the components of the stormwater management program that are established as permit conditions including:

- i. Source Identification;
 - ii. Stormwater Management;
 - iii. Erosion and Sediment Control;
 - iv. Illicit Discharge Detection and Elimination;
 - v. Trash and Litter;
 - vi. Property Management and Maintenance;
 - vii. Public Education;
 - viii. Watershed Assessment;
 - ix. Restoration Plans;
 - x. TMDL Compliance;
 - xi. Assessment of Controls; and
 - xii. Program Funding.
 - b. A narrative summary describing the results and analyses of data, including monitoring data that is accumulated throughout the reporting year;
 - c. Expenditures for the reporting period and the proposed budget for the upcoming year;
 - d. A summary describing public education programs;
 - e. The identification of water quality improvements and documentation of attainment and/or progress toward attainment of benchmarks and applicable WLAs developed under EPA approved TMDLs; and
 - f. The identification of any proposed changes to SHA's program when WLAs are not being met.
2. To enable MDE to evaluate the effectiveness of permit requirements, the following information shall be submitted in a format consistent with Attachment A:
- a. Storm drain system mapping (PART IV.C.1.);
 - b. Urban BMP locations (PART IV.C.3.);
 - c. Impervious surfaces (PART IV.C.4.);
 - d. Water quality improvement project locations (PART IV.C.6.);
 - e. Monitoring site locations (PART IV.C.5.);
 - f. Chemical monitoring results (PART IV.F.1.);

- g. Pollutant load reductions (PART IV.E.4. and IV.F.1);
 - h. Biological and habitat monitoring (PART IV.F.1.);
 - i. Illicit discharge detection and elimination activities (PART IV.D.3.);
 - j. Erosion and sediment control and stormwater program information (PART IV.D.1. and IV.D.2.); and
 - k. Fiscal analyses - cost for NPDES related implementation (PART IV.G.).
3. Because this permit uses an iterative approach to implementation, SHA must evaluate the effectiveness of its programs in each annual report. Program modifications shall be made within 12 months if SHA's annual report does not demonstrate compliance with this permit and show progress toward meeting stormwater WLAs developed under EPA approved TMDLs.

B. Program Review

In order to assess the effectiveness of SHA's NPDES program for eliminating non-stormwater discharges through the illicit connection program and reducing the discharge of pollutants to protect water quality, MDE will review program implementation, annual reports, and periodic data submittal. Procedures for the review of erosion and sediment control and stormwater management programs exist in Maryland's sediment control and stormwater management laws. Additional evaluations may be conducted at MDE's discretion to determine compliance with permit conditions.

C. Reapplication for NPDES Stormwater Discharge Permit

This permit is effective for no more than five years, unless administratively continued by MDE. Continuation or reissuance of this permit beyond this permit term will require SHA to reapply for NPDES stormwater discharge permit coverage in its fourth year annual report. Failure to reapply for coverage constitutes a violation of this permit.

As part of this reapplication process, SHA shall submit to MDE an executive summary of its NPDES stormwater management program that specifically describes how SHA has thoroughly evaluated its storm drain system and progressed in implementing water quality improvements. This application shall be used to gauge the effectiveness of SHA's NPDES stormwater program and will provide guidance for developing future permit conditions. At a minimum, the application summary shall include:

- 1. SHA's NPDES stormwater program goals;
- 2. Program summaries for the permit term regarding:

- a. Illicit discharge detection and elimination results;
 - b. Restoration plan status including SHA totals for impervious acres, impervious acres controlled by stormwater management, the current status of water quality improvement projects and acres managed, and documentation of progress toward meeting stormwater WLAs developed under EPA approved TMDLs and compliance with Part VI.A.;
 - c. Pollutant load reductions as a result of this permit and an evaluation of whether applicable TMDLs are being achieved;
 - d. Impervious acres compared to the baseline and twenty percent restoration requirement in PART IV.E.2.a.; and
 - e. Other relevant data and information for describing applicable SHA programs;
3. Program operation and capital improvement costs for the permit term; and
 4. Descriptions of any proposed permit condition changes based on analyses of the successes and failures of SHA's efforts to comply with the conditions of this permit.

PART VI. SPECIAL PROGRAMMATIC CONDITIONS

A. Chesapeake Bay Restoration by 2025

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 will be necessary for meeting water quality criteria and restoring the Chesapeake Bay. This permit is requiring compliance with the Chesapeake Bay TMDL through the use of a strategy that calls for the restoration of twenty percent of previously developed impervious land with little or no controls within this five year permit term as described in Maryland's Watershed Implementation Plan. The TMDL is an aggregate of nonpoint sources or the load allocations (LA), and point sources or WLAs, and a margin of safety. The State is required to issue NPDES permits to point source discharges that are consistent with the assumptions of any applicable TMDL, including those approved subsequent to permit issuance.

Urban stormwater is defined in the CWA as a point source discharge and will subsequently be a part of Maryland's Chesapeake Bay WLA. The NPDES stormwater permits can play a significant role in regulating pollutants from Maryland's urban sector and in the development of Chesapeake Bay Watershed Implementation Plans. Therefore, Maryland's NPDES stormwater permits issued to SHA and other municipalities will require coordination with MDE's Watershed Implementation Plan and be used as the regulatory backbone for controlling urban pollutants toward meeting the Chesapeake Bay TMDL by 2025.

PART VII. ENFORCEMENT AND PENALTIES

A. Discharge Prohibitions and Receiving Water Limitations

SHA shall prohibit non-stormwater discharges through its MS4. NPDES permitted non-stormwater discharges are exempt from this prohibition. Discharges from the following will not be considered a source of pollutants when properly managed: water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensation; irrigation waters; springs; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; de-chlorinated swimming pool discharges (not including filter backwash); street wash water; and fire fighting activities.

Consistent with § 402(p)(3)(B)(iii) of the CWA, the SHA shall take all reasonable steps to minimize or prevent the contamination or other alteration of the physical, chemical, or biological properties of any waters of the State, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of the State, that will render the waters harmful to:

1. Public health, safety, or welfare;
2. Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial use;
3. Livestock, wild animals, or birds; and
4. Fish or other aquatic life.

B. Duty to Mitigate

SHA shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

C. Duty to Comply

SHA shall be responsible for complying with all conditions of this permit. Other entities may be used to meet various permit obligations provided that both SHA and the other entity agree contractually. Regardless of any arrangement entered into however, SHA remains responsible for permit compliance. In no case may this responsibility or permit compliance liability be transferred to another entity.

Failure to comply with a permit provision constitutes a violation of the CWA and is grounds for enforcement action; permit termination, revocation, or modification; or denial of a permit renewal application. SHA shall comply at all times with the provisions of the Environment

Article, Title 4, Subtitles 1, 2, and 4; Title 7, Subtitle 2; and Title 9, Subtitle 3 of the Annotated Code of Maryland.

SHA shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by SHA to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.

D. Sanctions

1. Penalties Under the CWA - Civil and Criminal

Section 309(d) of the CWA, 33 USC §1319(d) provides that any person who violates any permit condition is subject to a civil penalty not to exceed \$25,000 per day for each violation. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, 40 CFR Part 19, any person who violates any NPDES permit condition or limitation after December 6, 2013, is liable for an administrative penalty not to exceed \$37,500 per day for each such violation. Section 309(g)(2) of the CWA, 33 USC §1319(g)(2) provides that any person who violates any permit condition is subject to an administrative penalty not to exceed \$10,000 per day for each violation, not to exceed \$125,000. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, 40 CFR Part 19, any person who violates any NPDES permit condition or limitation after December 6, 2013, is liable for an administrative penalty not to exceed \$16,000 per day for each such violation, up to a total penalty of \$187,500. Pursuant to Section 309(c) of the CWA, 33 USC §1319(c), any person who negligently violates any permit condition is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. If a person has been convicted of negligent violations of the CWA previously, the criminal penalties may be increased to \$50,000 per day of violation, or imprisonment of not more than two years, or both. Any person who knowingly violates any permit condition is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. If a person has been convicted of knowing violations of the CWA previously, the criminal penalties may be increased to \$100,000 per day of violation, or imprisonment of not more than six years, or both.

2. Penalties Under the State's Environment Article - Civil and Criminal

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve SHA from civil or criminal responsibilities and/or penalties for a violation of Title 4, Title 7, and Title 9 of the Environment Article, Annotated Code of Maryland, or any federal, local, or other State law or regulation. Section 9-342 of the Environment Article provides that a person who violates any condition of this permit is liable to a civil penalty of up to \$10,000 per violation, to be collected in a civil action brought by MDE, and with each day a violation continues being a separate violation. Section 9-342 further authorizes the MDE to impose upon any person who violates a permit condition, administrative civil penalties of up to \$10,000 per violation, up to \$100,000.

Section 9-343 of the Environment Article provides that any person who violates a permit condition is subject to a criminal penalty not exceeding \$25,000 or imprisonment not exceeding one year, or both for a first offense. For a second offense, Section 9-343 provides for a fine not exceeding \$50,000 and up to two years imprisonment.

The Environment Article, §9-343, Annotated Code of Maryland, provides that any person who tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$50,000 per violation, or by imprisonment for not more than two years per violation, or both.

The Environment Article, §9-343, Annotated Code of Maryland, provides that any person who knowingly makes any false statement, representation, or certification in any records or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$50,000 per violation, or by imprisonment for not more than two years per violation, or both.

E. Permit Revocation and Modification

1. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by SHA for a permit modification or a notification of planned changes or anticipated noncompliance does not stay any permit condition. A permit may be modified by MDE upon written request by SHA and after notice and opportunity for a public hearing in accordance with and for the reasons set forth in COMAR 26.08.04.10.

After notice and opportunity for a hearing and in accordance with COMAR 26.08.04.10, MDE may modify, suspend, or revoke and reissue this permit in whole or in part during its term for causes including, but not limited to the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary reduction or elimination of the authorized discharge;
- d. A determination that the permitted discharge poses a threat to human health or welfare or to the environment and can only be regulated to acceptable levels by permit modification or termination;

- e. To incorporate additional controls that are necessary to ensure that the permit requirements are consistent with any applicable TMDL WLA allocated to the discharge of pollutants from the MS4; or
- f. As specified in 40 C.F.R §§122.62, 122.63, 122.64, and 124.5.

2. **Duty to Provide Information**

SHA shall furnish to MDE, within a reasonable time, any information that MDE may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; or to determine compliance with this permit. SHA shall also furnish to MDE, upon request, copies of records required to be kept by this permit.

F. Inspection and Entry

SHA shall allow an authorized representative of the State or EPA, upon the presentation of credentials and other documents as may be required by law, to:

- 1. Enter the permittee's premises where a regulatory activity is located or conducted or where records must be kept under the conditions of this permit;
- 2. Have access to and obtain copies at reasonable times of any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times, without prior notice, any construction site, facility, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

G. Monitoring and Recordkeeping

Unless otherwise specified by this permit, all monitoring and records of monitoring shall be in accordance with 40 CFR Part 122.41(j).

H. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State, or local law or regulations.

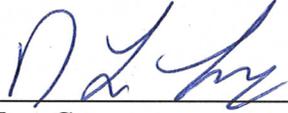
I. Severability

The provisions of this permit are severable. If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the

application of any provision of this permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

J. Signature of Authorized Administrator and Jurisdiction

Each application, report, or other information required under this permit to be submitted to MDE shall be signed as required by COMAR 26.08.04.01-1. Signatories shall be a principal executive officer, ranking elected official, or other duly authorized employee.



D. Lee Currey
Director
Water and Science Administration



Date