

**Maryland State Highway Administration's
National Pollutant Discharge Elimination System
Municipal Separate Storm Sewer System
Discharge Permit Number
11-DP-3313 MD0068276
Permit Modification Fact Sheet**

Prepared by Raymond Bahr, Maryland Department of the Environment
raymond.bahr@maryland.gov, 410-537-3545

Completed: June 20, 2019

TABLE OF CONTENTS

1. STORMWATER PERMIT BACKGROUND	2
2. REQUEST FOR PERMIT MODIFICATION TO ALLOW NUTRIENT TRADING	2
3. DETERMINATION ON THE USE OF NUTRIENT TRADING IN MS4 PERMITS	2
4. PERMIT MODIFICATION LANGUAGE	4
5. TRADING REPORTING REQUIREMENTS	4
6. ADMINISTRATIVE PROCESS	5

1. Stormwater Permit Background

When the Chesapeake Bay Total Maximum Daily Load (TMDL) was published in December 2010, each state in the Chesapeake Bay watershed was required to develop a Watershed Implementation Plan (WIP) for how it would achieve the pollution load reductions required by the TMDL.

Maryland's WIP established a State framework for meeting the water quality goals of the Chesapeake Bay by 2025. Much of the urban stormwater goals were to be implemented through Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permits. Specifically, Maryland Department of the Environment's (the Department) NPDES MS4 permits address stormwater concerns related to local and Chesapeake Bay TMDLs via a 20 percent restoration requirement for impervious surfaces that have no treatment.

Maryland State Highway Administration's (SHA) NPDES MS4 Phase I permit that requires the 20 percent impervious surface restoration was issued on October 9, 2015. In a February 13, 2019 letter from the Maryland State Highway Administration, requesting an MS4 permit modification, SHA states that it will be able to complete the restoration of 4,610 impervious acres by the end its permit term on October 14, 2020. This is equal to 100% of SHA's restoration requirement under the current permit.

Restoration control practices implemented by SHA include traditional methods, e.g., ponds, filters, and wetlands, and alternative methods, e.g., street sweeping, tree planting, and stream restoration based on the Department's "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits (MDE, August 2014)" (MS4 Accounting Guidance).

2. Request for Permit Modification to Allow Nutrient Trading

On February 13, 2019, the Maryland State Highway Administration formally requested an NPDES MS4 Phase I permit modification from the Department to use Maryland's newly authorized nutrient trading program as an option to meet its 20 percent impervious surface restoration requirement. Nutrient credits will be determined according to equivalent impervious acre factors established in the Department's MS4 Accounting Guidance.

3. Determination on the Use of Nutrient Trading in MS4 Permits

The Department has determined that Maryland State Highway Administration's MS4 permit may be modified to allow the use of nutrient trading for the following reasons:

- Maryland State Highway Administration's NPDES MS4 Phase I permit was issued on October 9, 2015;
- In accordance with the Code of Federal Regulations (CFR), 40 CFR Section 122.62, the Department may receive new information which justifies applying conditions different

from those in the permit if the information was not available at the time of permit issuance;

- In accordance with 40 CFR Section 122.62, the Department may modify an existing permit when proposed standards and regulations covering the permitted activity may have changed since issuance of the permit;
- In early 2016, the Department convened the Maryland Water Quality Trading Advisory Committee to assist with developing a new phase of Maryland's nutrient trading program. This new phase includes a trading and offset policy document and authorizing regulations that provide the framework for local governments and State and federal agencies with MS4 permits to engage in trading;
- The Maryland Water Quality Trading Advisory Committee met regularly to discuss the logistics of this new phase of the nutrient trading program including development of authorizing regulations, credit verification procedures, and a mechanism for credit accounting;
- A new phase of Maryland's nutrient trading program with authorizing regulations, COMAR 26.08.11, was formally adopted for use on July 16, 2018;
- The U.S. Environmental Protection Agency (EPA) reviewed and did not object to Maryland's trading policy updates and draft MS4 permit modification language;
- The new trading policy allowing MS4s to acquire nutrient credits was not in place at the time Maryland State Highway Administration's NPDES MS4 permit was issued;
- The Department received a request on February 13, 2019 from the Maryland State Highway Administration to modify its current NPDES MS4 Phase I permit to allow the use of nutrient trading as an option to meet its MS4 permit impervious surface restoration requirement as authorized under the new trading policy updates;
- The Maryland State Highway Administration has documented that while it anticipates that it will meet the 20 percent impervious surface restoration requirement, the ability for nutrient trading provides another means for compliance with its MS4 permit;
- The Maryland State Highway Administration has documented that while the capital and operational funds necessary to meet the 20 percent impervious surface restoration requirement are available, the physical capacity for implementing structural BMPs within the permit timeframe is a limiting factor;
- Capacity limitations include:
 - obtaining contracts from and competition for consulting, engineering, and construction firms
 - lengthy individual project permit reviews and approvals
 - delayed Chesapeake Bay Program approval of innovative BMPs for restoration;
- The EPA, the Department, and the courts have determined that the 20 percent impervious surface restoration requirement is an approved effluent limit consistent with and satisfactory for addressing both the Chesapeake Bay and other applicable TMDL wasteload allocations (WLAs);
- Trading for equal amounts of total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS), that would be reduced through the 20 percent impervious surface restoration requirement, would have the same net effect on local and Chesapeake Bay water quality; and

- Providing a nutrient trading option for SHA to use as a means to comply with its MS4 permit can improve restoration cost effectiveness toward local and Bay water quality improvements.

4. Permit Modification Language

- Whereas 40 CFR Part 122.62 allows for NPDES permits to be modified for appropriate cause;
- Whereas Maryland State Highway Administration’s NPDES MS4 Phase I permit allows for a permit modification under Part VII.E.1. Permit Revocation and Modification;
- Whereas Maryland State Highway Administration officially requested a modification of its NPDES MS4 Phase I permit to the Department on February 13, 2019;
- Whereas the Department has determined that the use of nutrient credits by SHA for meeting its MS4 permit’s impervious surface area restoration requirement is acceptable;
- The Department hereby proposes to add a new paragraph that allows for nutrient trading to meet the permit’s impervious surface area restoration requirements in Part IV.E.3; and to rename the original permit’s Part IV.E.3. as Part IV.E.4., and the original permit’s Part IV.E.4. as Part IV.E.5. The new modified language under Part IV.E.3. reads:

Nutrient Trading

The Maryland 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 the Department:

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

5. Trading Reporting Requirements

The Department proposes to allow trading, consistent with regulations authorized by the State, as an additional option for the Maryland State Highway Administration to meet its MS4 permit’s impervious surface restoration requirement. If trading is used by SHA, it must provide additional reporting and verification as follows:

- COMAR 26.08.11.07 -- In the event of a default in a trade contract, expiration of a credit, or suspension or revocation of a credit, the buyer using the credit remains responsible for complying with the permit. In any of these events, SHA must update and inform the Department of its plan to regain compliance with the restoration requirement of the permit;
- Registration of Trades, COMAR 26.08.11.10 -- The permittee must notify the Department about each trade they are involved in by filing a form provided by the Department within 15 days after the trade, after which time the Department will update the Registry to include the registration number;
- Verification and Reporting Requirements, COMAR 26.08.11.11 -- The permittee must notify the Department annually on the status of any trades they have initiated to meet the permit's impervious surface restoration requirement;
- Copies of the contract, the annual Department notification, and any other correspondence with the Department regarding the trade must be summarized in Maryland State Highway Administration's MS4 annual reports;
- Nutrient trading to meet the MS4 permit's 20 percent impervious surface restoration requirement shall be continued annually until a new permit is issued to the Maryland State Highway Administration; and
- It is generally understood that nutrient trading to meet this MS4 permit's 20 percent impervious surface restoration requirement shall be replaced by stormwater management practices and alternative methods during the next permit term as detailed in the Department's MS4 Accounting Guidance.

6. Administrative Process

In accordance with COMAR 26.08.04, the Department will hold an informational meeting and public hearing regarding the tentative determination to modify the Maryland State Highway Administration's MS4 permit on Thursday, July 18, 2019, at 5:00 PM, MDE first floor, 1800 Washington Boulevard, Baltimore, Maryland, 21230. Comments on this tentative determination to modify the Maryland State Highway Administration's MS4 permit will be accepted by Raymond Bahr, Maryland Department of the Environment, Water and Science Administration, 1800 Washington Boulevard, Baltimore, Maryland, 21230, or raymond.bahr@maryland.gov, if received within 90 days of publication of this notice. The 60-day extension of the comment period allowed for by section 1-606 (d) (1) (ii) of the Maryland Environmental Article is being invoked to extend the usual 30-day comment period to 90 days.