APPENDIX 21

Chesapeake Bay TMDL Action Plan Elements

The following is a summary of the required Chesapeake Bay TMDL Action Plan components as provided in the latest DEQ guidance document (Guidance Memo 14-2012, revised 3/19/2015). Following each requirement is a summary of the means of compliance.

1. Current Program and Existing Legal Authority (General Permit Section I.C.2.a.(1))

A review of the current MS4 program implemented as a requirement of this state permit including a review of the existing legal authorities and the operator’s ability to ensure compliance with this special condition; Localities should include by reference the components of their current MS4 program, or other relevant legal authorities, that will be used to meet the Special Condition. This should include a list of the relevant existing legal authorities (i.e. ordinances, permits, orders, contracts, inter-jurisdictional agreements, and/or other enforceable mechanisms).

- As the sole land owner of the MS4 service area, the College of William & Mary (university) has the legal authority to ensure compliance with the Chesapeake Bay TMDL. The university owns all of the BMPs on its property, conducts all BMP inspections, and performs all required BMP maintenance. The university issues all contracts for design and construction on its property, reviews all design documents, and issues all construction permits through the university’s Code Review process.

2. New or Modified Legal Authority (General Permit Section I.C.2.a.(2))

The identification of any new or modified legal authorities such as ordinances, state and other permits, orders, specific contract language, and interjurisdictional agreements implemented or needing to be implemented to meet the requirements of this special condition;

New or modified legal authorities that were or will be developed to comply with the Special Condition should be listed. The list should include either (1) why the legal authority was or will be developed or (2) why the existing legal authority needs to be modified. If no new legal authorities are required for permit compliance than a statement as such should be made in place of a list.
• The university’s existing legal authorities are sufficient and no new legal authorities are required.

3. Means and Methods to Address Discharges from New Sources (General Permit Section I.C.2.a.(3))

The means and methods that will be utilized to address discharges into the MS4 from new sources; “New Sources” means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009. This Special Condition requirement applies to all new sources that would otherwise require post-development stormwater runoff control, as described in GP Section II.B.54.a. If the new source disturbs one acre or greater as a result of the utilization of an average land cover condition greater than 16% impervious cover for the design of post-development stormwater management facilities, the permittee should see Part VI.6, Part VI.7, and Appendix II of this guidance. Additional offsets may be necessary. If the new source does not utilize an average impervious land cover condition greater than 16% for the design of post development stormwater management facilities no additional offsets are required under the Special Condition beyond those for existing development. Similarly, if a new source disturbs less than 1 acre, no additional offsets are required under the Special Condition beyond those for existing development. The permittee may fulfill this requirement with a short narrative describing the programmatic tools the permittee uses to address new sources, such as adherence with the VSMP regulations for the implementation of post-development stormwater management facilities or description of more stringent local requirements if applicable.

• “New Sources” at the university met VSMP regulations for the implementation of post-development stormwater management facilities through the water quality credit system. The university has always utilized an average land cover condition of 16% for project compliance, therefore there is no need to offset project using higher impervious thresholds.

4. Estimated Existing Source Loads and Calculated Total Pollutant of Concern (POC) Required Reductions (General Permit Section I.C.2.a.(4) and (General Permit Section I.C.2.a.(5))

An estimate of the annual POC loads discharged from the existing sources as of June 30, 2009, based on the 2009 progress run. The operator shall utilize the applicable [Table/Tables] in this
section based on the river basin to which the MS4 discharges by multiplying the total existing acres served by the MS4 on June 30, 2009, and the 2009 Edge of Stream (EOS) loading rate; A determination of the total pollutant load reductions necessary to reduce the annual POC loads from existing sources utilizing the applicable [Table/Tables] in this section based on the river basin to which the MS4 discharges. This shall be calculated by multiplying the total existing acres served by the MS4 by the first permit cycle required reduction in loading rate. For the purposes of this determination, the operator shall utilize those existing acres identified by the 2000 U.S. Census Bureau urbanized area and served by the MS4. The POC loads and required reductions should be calculated using the tools described in this guidance document. The permittee should, at a minimum, provide a summary describing how pervious and impervious surface for the MS4 was estimated (e.g. the GIS resources that were used). The Department will need this information to verify that the method used is acceptable. Please see Part II.2 for additional guidance concerning the delineation of these areas. Completed calculation tables from the permit should be submitted.

- The means and methods to comply with the Chesapeake Bay TMDL are included in this report, see section “Chesapeake Bay TMDL WLA Calculations.”

5. Means and Methods to Meet the Required Reductions and Schedule (General Permit Section I.C.2.a.(6))

The means and methods, such as management practices and retrofit programs that will be utilized to meet the required reductions included in subdivision 2 a (5) of this subsection, and a schedule to achieve those reductions. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions; This section should describe list the management practices and retrofit programs (including improvements from redevelopment) that have or will be implemented between July 1, 2009 and the end of the first permit cycle to achieve the 5.0% reductions required for existing development. The permittee should support its plan with calculations that show how the reductions will be met. Any credit trading that is used to meet reductions should also be described here. Permittees are encouraged to submit this information in an electronic spreadsheet with a summary page that serves as a ledger showing:

- the total reductions required;

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• each practice that will be implemented;

• the approximate location of the project, and; the load that will be reduced by each project.

Permittees should not submit full plans and specs for individual BMPs as part of the Action Plan. However, these plans should be available to the Department upon request. The schedule should include estimates of when new management practices will be initiated, when BMP construction will begin, and when BMP installation is expected to be completed. These estimates can be provided as the annual benchmarks required by the permit. For BMPs that have already been implemented at the time the Action Plan is submitted, the permittee should indicate when they were installed.

• The means and methods to comply with the Chesapeake Bay TMDL, including anticipated schedule, are included in this report, see section “Recommended MS4 Compliance Plan.”

6. Means and methods to offset increased loads from new sources initiating construction between July 1, 2009 and June 30, 2014 (General Permit Section I.C.2.a.(7))

The means and methods to offset the increased loads from new sources initiating construction between July 1, 2009, and June 30, 2014, that disturb one acre or greater as a result of the utilization of an average land cover condition greater than 16% impervious cover for the design of post-development stormwater management facilities. The operator shall utilize the [applicable table] in this section to develop the equivalent pollutant load for nitrogen and total suspended solids. The operator shall offset 5.0% of the calculated increased load from these new sources during the permit cycle.

Permittees may account for these additional offsets on a site by site basis, but the Department recommends taking an aggregate approach to demonstrate compliance with this Special Condition requirement. At a minimum permittees should provide (1) the total additional POC loads created by “new sources” and (2) the 5.0% of those loads permittees must offset during by the end of this permit cycle. The BMPs that will be implemented to address them should also be included. See Appendix II of this guidance for more information.
• The university has always used the 16% impervious cover default, therefore there is no need to offset project using higher impervious thresholds.

7. Means and methods to offset increased loads from grandfathered projects that begin construction after July 1, 2014 (General Permit Section I.C.2.a.(8))

The means and methods to offset the increased loads from projects as grandfathered in accordance with 9VAC25-870-48, that disturb one acre or greater that begin construction after July 1, 2014, where the project utilizes an average land cover condition greater than 16% impervious cover in the design of postdevelopment stormwater management facilities. The operator shall utilize Table 4 in this section to develop the equivalent pollutant load for nitrogen and total suspended solids.

Increases in the POC load from grandfathered projects initiating construction after July 1, 2014, must be offset prior to completion of the project, in accordance with GP Section I.C.3.c. Permittees should include an estimate of the number of acres impacted by grandfathered projects, which will be used to estimate the pollutant loadings created by these projects. This estimate can be provided as an aggregate. The best available data should be used, but where data is unavailable permittees should use their best professional judgment. The strategies that will be used to address this type of development, including any nutrient trading, should also be included.

• There were two grandfathered project that began construction after July 1, 2014: Integrated Science Center – Phase 3 and Zable Stadium Improvements. Both these projects used a land cover condition of 16% impervious cover to calculate the required pollutant removal, therefore there is no additional load added to the Chesapeake Bay TMDL WLA.

8. A list of future projects, and associated acreage that qualify as grandfathered (General Permit Section I.C.2.a.(10))

A list of future projects and associated acreage that qualify as grandfathered in accordance with 9VAC25-870-48

To fulfill this requirement, permittees should list projects that have been approved or have an obligation of locality, state, or federal funding prior to July 1, 2012, but have not received
coverage under the General Permit for Discharges of Stormwater from Construction Activities prior to July 1, 2014. This permit requirement applies solely to new development, not redevelopment projects.

- Future projects and estimated associated acreage are listed in this report, see section “Proposed development.” None of these projects are considered to be new development under the regulations and none of these projects are anticipated to qualify as grandfathered.

9. An estimate of the expected cost to implement the necessary reductions (General Permit Section I.C.2.a.(11))

An estimate of the expected costs to implement the requirements of this special condition during the state permit cycle;

This estimate should cover the expected cost to the permittee. Permittees should have a strategy in place to achieve the (1) 5.0% reductions for the existing sources, (2) 5.0% reductions for the new sources that disturb one acre or greater and have an average impervious land cover condition greater than 16% for the design of post-development stormwater management facilities, and (3) any offsets for grandfathered projects that disturb one acre or greater and have an average impervious land cover condition greater than 16% for the design of post-development stormwater management facilities for this permit cycle. Permittees should also begin to plan for the full reductions that will be required by the end of three permit cycles. Permittees are encouraged to be as detailed as possible as this information will be reviewed by the state when it reevaluates the amount of funding that will be available to aid localities with their programs.

- Estimated costs to implement the requirements of the Chesapeake Bay TMDL for the three permit cycles are included in this report, see section “Recommended MS4 Compliance Plan.”

10.a Public Comments on Draft Action Plan (GENERAL PERMIT REQUIREMENTS) (General Permit Section I.C.2.a.(12))
An opportunity for receipt and consideration of public comment regarding the draft Chesapeake Bay TMDL Action Plan. The public comment process and period should be described, including how the process was advertised to the public.

- (This response will need to be updated after this action has been completed):

- The Action Plan will be made available for public comment by posting on the university’s website shortly after June 30, 2015. Comments will be solicited in a 30 day comment period by advertisements in the university newspaper (the Flat Hat) and local newspapers. After comments are received, they will be reviewed by Facilities. Comments and responses will be recorded. The Action Plan will be revised to reflect comments deemed appropriate by Facilities.