

AGENDA NOTE – HRPDC EXECUTIVE COMMITTEE MEETING

ITEM #8-J: Comments on Draft Arlington County MS4 Permit

SUBJECT:

Submit comments on the draft Arlington County Municipal Separate Storm Sewer System (MS4) Permit to Virginia Department of Conservation and Recreation (DCR).

BACKGROUND:

Pursuant to the federal Clean Water Act as amended and the Virginia Stormwater Management Act and attendant regulations, the Virginia Soil and Water Conservation Board is considering the reissuance of a Virginia Stormwater Management Program (VSMP) Individual Permit for Stormwater Discharges from the Municipal Separate Storm Sewer System (MS4) owned and operated by Arlington County.

Given that all Virginia Individual MS4 permits are under administrative continuance, it is understood by the EPA and Virginia DCR that this permit will serve as a template for other Phase I jurisdictions in the Commonwealth. The HRPDC Phase I MS4 Localities are the Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach. As previously discussed, this permit language must also be consistent with language in the proposed general permit for small (Phase II) MS4s.

The draft permit establishes requirements for control of MS4 stormwater discharges through the development, implementation, and enforcement of an MS4 program to reduce the impacts of the stormwater discharges on the receiving streams. The draft permit requires the permittee to evaluate program compliance, the appropriateness of identified BMPs, progress towards achieving the identified measurable goals, and to submit annual reports. The draft permit also requires the operator to address Total Maximum Daily Load (TMDL) Wasteload Allocations, including those associated with the Chesapeake Bay TMDL, assigned to the permittee.

Attachment

RECOMMENDED ACTION:

Authorize the Chairman to sign the attached letter and submit HRPDC's comments on the draft Arlington County MS4 Permit to Virginia DCR.

MEMBER JURISDICTIONS

March 22, 2013

CHESAPEAKE

Mr. David C. Dowling
Policy and Planning Director

FRANKLIN

Department of Conservation and Recreation
203 Governor Street

GLOUCESTER

Suite 203
Richmond, VA 23219

HAMPTON

RE: Comments on the Draft Arlington County MS4 Permit

ISLE OF WIGHT

Dear Mr. Dowling:

JAMES CITY

The following comments on the draft Authorization to Discharge Under the Virginia Stormwater Management Program and the Virginia Stormwater Management Act permit for Arlington County, Virginia (VA0088579) (the “Permit”) are submitted by the Hampton Roads Planning District Commission (“HRPDC”) on behalf of the HRPDC’s Phase I MS4 member jurisdictions (the “MS4 Localities” or “Localities”).¹ The comments are listed in general order of importance, with miscellaneous errors and proposed clarifications included at the end of the comments.

NEWPORT NEWS

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I. Introduction

SOUTHAMPTON

The Localities are commenting on the draft Permit because we understand that the Department of Conservation and Recreation (“DCR”) intends to use it as a template for all Phase I MS4 permits issued in the Commonwealth. Accordingly, we assume that the Localities will be directly affected by those conditions in the final Permit that are not unique to Arlington.

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VIRGINIA BEACH

Further, as you know, we expressed serious concerns about the Bay TMDL provisions in the General Permit for Discharges of Stormwater from Small MS4s (the “General Permit”) when commenting on that permit last fall. Although the General Permit has not been issued, it appears that DCR has not made the changes proposed in our comments because the Bay TMDL section in the draft Permit is virtually identical to the Bay TMDL section in the General Permit. Therefore, we attach our comments on the General Permit and incorporate them by reference (see Attachment).

WILLIAMSBURG

YORK

¹ The HRPDC Phase I MS4 Localities are the Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach.

II. The permit appears to penalize urbanized Localities that were effectively prevented from early adoption of standards more stringent than those adopted by the Soil and Water Conservation Board in 2011.

Section I.D.1.b.1 (g) requires the permittee's Bay TMDL Action Plan to include:

[t]he means and methods to offset the increased loads from new sources initiating construction between July 2009 and June 30, 2014 that disturb greater than one acre 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

Section I.D.1.b.1 (h) requires the Action Plan to include the same means and methods for grandfathered projects constructed after July 1, 2014. Together, these sections appear to penalize urbanized Localities that did not have more stringent standards in place before DCR adopted its standards in the fall of 2011. DCR's stormwater rule adoption process was lengthy and the draft rule included a variety of proposed discharge standards over the years. Given the changing nature of these draft standards, the uncertainty about integration of the Bay TMDL Watershed Implementation Plan ("WIP") requirements and the stormwater regulation, the time necessary to draft and adopt new ordinances, and grandfathering provisions written into the regulation, it is unreasonable to expect that localities would adopt new ordinances and standards until the state's programs were finally in place. In addition, the urbanized Localities had approved standards that had not been questioned by DCR and the Localities could not have been expected to anticipate being held accountable for the difference in load between the new state standards and the Localities' existing local requirements.

As background, DCR's Chesapeake Bay Local Assistance Division established a baseline annual load of phosphorous for Tidewater Virginia and corresponding baseline impervious surface value, or average land cover condition. An analysis of the Chesapeake Bay watershed in Virginia identified the average land cover condition for impervious area as 16 percent. Using these inputs and an average annual rainfall of 43 inches, the baseline existing land use condition pollutant load value for phosphorus was calculated to be 0.45 lb/ac/year. DCR gave localities the option to adopt this value as the pre-developed default for the entire locality or to calculate a watershed or locality-wide pre-developed annual load and corresponding impervious value, and designate a watershed-specific or locality specific average land cover condition. As an example, the locality-wide calculated average impervious area for Norfolk was 53 percent with a locality calculated phosphorus load of 1.23 lbs/ac/year (using the Simple Method). The difference between the pre- and post-development pollutant load represents the increase in pollutant load that must now be controlled by appropriate BMPs under the Permit. Had Norfolk (and other urbanized Localities) been in a position to adopt early stringent standards, the Locality would not now be facing such dramatic load reduction requirements under sections I.D.1.b)1(g) and (h) with their accompanying adverse economic impacts.

Therefore, given the unfair burden that the offset requirement places on urbanized Localities, sections I.D.1.b)1(g) and (h) should be removed from the first permit cycle unless state funding is available to implement projects that can meet the specified offsets.

III. MS4 Localities should not be required to perform inspections and implement programs to identify and control pollutants from facilities for which DEQ has permitting responsibility.

Section I.B.2.h requires the permittee to

implement a program to identify and control pollutants in stormwater discharges to the MS4 from industrial and high risk runoff facilities (e.g., municipal landfills; other treatment, storage or disposal facilities for municipal waste; hazardous waste treatment, storage, disposal and recovery facilities; facilities that are subject to EPCRA Title III, Section 313) and any other industrial or commercial discharges the permittee determines are contributing a substantial pollutant loading to the MS4.

These high risk facilities are required to be permitted by the Department of Environmental Quality ("DEQ"), and therefore, should be DEQ's responsibility. In addition, discharge and effluent limits, housekeeping requirements, and other permit conditions are set by DEQ in the applicable discharge permits. Requiring MS4 Localities to assume responsibility for facilities that are permitted by DEQ is not required by the stormwater management regulations, is arbitrary, and would divert finite local resources from those functions that are most efficiently and effectively performed by the Localities. The Permit should be revised to clearly state that the permittee's responsibility for discharges contributing substantial pollutant loads to the MS4 is limited to identifying those that are unpermitted and reporting them to DEQ. This would result in a more efficient and effective distribution of effort that would lead to greater water quality improvements.

IV. Other Significant Issues

A. The permit could be construed to restrict the permittee's use of vacuum trucks to remove MS4 blockages.

In providing that "[t]he permittee shall collect contaminated flush water associated with storm sewer maintenance and shall dispose of it in accordance with appropriate law and regulation", section I.B.2.i.4 appears to seriously restrict the most commonly used and effective way of removing blockages in the MS4. Vacuum trucks are equipped with high-pressure hoses and use potable water to break up the blockages and vacuum the water and debris from the storm sewer. The water that is vacuumed from the storm sewer (which is made up of stormwater and potable water) is decanted and disposed into the storm drains. The remaining debris in the vacuum tank is processed at a dewatering facility. The water seeping from the debris is also generally discharged into the storm drain. By requiring the permittee to "collect" contaminated flush water, section I.B.2.i.4

appears to prohibit returning any of the flush water to the storm sewer, thereby severely restricting the use of this practice.

If granted permission by the owner and operator of a POTW, the MS4 Localities could dispose of the flush water in the sanitary sewer. However, given the high cost of wastewater treatment capacity, we believe it makes no sense to discharge the flush water to the sanitary sewer system when there is no evidence that returning it to the storm system has any potential to adversely impact water quality. In addition, many localities, such as those in the Hampton Roads region, are operating under consent orders that require them to minimize infiltration and inflow to their sanitary sewer systems. Forcing localities to dispose of the flush water in the sanitary sewer systems would conflict with and undermine Locality efforts pursuant to these orders and decrees. Therefore, we ask that DCR either i) delete section I.B.2.i.4 and add flush water from vacuum trucks to the list of authorized discharges in section I.A.1 of the Permit, or ii) establish appropriate BMPs that Localities may implement prior to discharge of flush water to the storm sewer.

B. It is unfair to subject permittees to non-compliance by requiring the submittal of “approvable” Action Plans.

Section I.D.1.b requires that a permittee “develop and submit to the Department for its review and acceptance an ‘approvable’ phased Chesapeake Bay TMDL Action Plan.” Permittees that make a good faith effort to submit complete and accurate Action Plans should not be deemed to be in non-compliance because DCR does not approve the Plans for reasons that were not reasonably foreseeable by the permittee when preparing its plan. DCR’s concern that it have a remedy should permittees submit plans that are substantially deficient or that fail to correct deficiencies identified by the DCR can be fairly addressed by revising section I.D.1.b to remove the reference to “approvable” plans and adding language to the effect that permittees that fail to submit revised plans correcting deficiencies identified by DCR shall be deemed to be in non-compliance with the permit. .

V. The permit includes several unnecessary or unworkable tracking, recordkeeping, or reporting requirements.

The draft Permit would needlessly divert finite local resources from important program activities by requiring the Localities to undertake unnecessary tracking, recordkeeping and/or reporting activities that are unnecessary, impossible to perform, or for which the agency may already collect the information.

1. Section I.B.2.b requires the permittee to provide a list of projects that qualify for grandfathering under 4 VAC 50-60-48 before the permittee has had an opportunity to identify those projects that qualify for grandfathering. This section should be modified to require the permittee to include a list of grandfathered projects in the annual reports required by the Permit.

2. The second sentence in section I.B.2.f.1 imposes an unreasonable and counterproductive burden on permittees by requiring them to identify those non-stormwater discharges into the MS4 that are authorized by section I.A.1.b. Identifying and reporting on hundreds, if not thousands of such discharges would divert finite local resources from more important and effective program activities with little or no water quality benefit. Further, it is reasonable to assume that authorized non-stormwater discharges that are contributing significant amounts of pollutants to the MS4 will be identified during the inspections and monitoring required by the Permit. Therefore, the second sentence in section I.B.2.b should be deleted.
3. Section I.B.2.k requires that each annual report provide a summary of voluntary retrofits conducted on private property within the permittee's jurisdiction. Although permittees may be involved in the approval of some retrofits on private property, they will not be notified of all or even most of them (e.g., tree planting, replacement of turf with other ground cover, etc.). Therefore, this reporting requirement should be deleted because it will only provide partial data that will not accurately reflect retrofits within the permittee's jurisdiction.
4. Section 1.B.2.a requires that each annual report include a summary of the number of inspections and enforcement actions. If this information can already be tracked by DCR through the e-permitting system, it seems duplicative to require the information in the annual reports.

VI. The permit also contains several miscellaneous errors and provisions for which clarifications or corrections are required.

The following provisions of the Permit include typographical errors or require clarification.

1. Section I.A.4 requires the submittal of both "each fiscal year's budget including its proposed capital and operation and maintenance expenditures necessary to accomplish the activities required by this permit" and a "fiscal analysis." The Permit should clearly explain the difference between these two submittals.
2. It appears that the reference to section I.B.2.i.7 in section I.B.2.b.6 should be to section I.C.4 instead of section I.B.2.i.7.
3. Retrofits and tree plantings will differ from one locality to the next depending on a variety of factors unique to each locality. Therefore, we assume that the retrofitting and tree planting provisions in section I.B.2.c will be applied only to Arlington based on its individual circumstances. If not, the Localities would object to including the same provisions in their permits unless they can be shown to be appropriate based on their individual circumstances.

Mr. David C. Dowling
March 22, 2013
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4. The “specific reporting requirement” in section I.B.2.g should reference “spills” rather than “illicit discharges.”
5. Section I.D.1.b.1(d) references sources existing as of June 30, 2008 in line 240, and yet existing sources are defined in line 216 as those existing as of June 30, 2009. The Fact Sheet (see page 19) lists the applicable date as June 30, 2009. The June 30, 2008 date appears to be a typographical error and should be June 30, 2009 instead.
6. Sections I.D.1.b.2(a) is confusing and should be reworded for clarity. The section currently states: “Implementation of BMPs on unregulated urban lands provided the baseline reduction is subtracted from the total reduction prior to application of the reduction towards meeting the required reductions.” It is unclear which reductions are intended and it would be helpful if DCR would include an example here. Clarification will allow permittees to appropriately consider this element in the development of their Action Plans.
7. Section I.D.1.c.2)(d) lists one of the minimum requirements of the Action Plans and currently states: “Implementation of means and methods sufficient to meet the required reductions of POC loads from existing sources defined in this permit in accordance with the Chesapeake Bay TMDL Action Plan.” Based on the discussion in the Fact Sheet at page 18, it appears that the reference should be to the WIP instead of the Action Plan.
8. Section 1.D.1.d.5.(a) requires tracking and reporting of “temporary credits” or offsets. The term “temporary credits” should be defined to clarify the reporting requirement.

Sincerely,

Thomas G. Shepperd
Chairman

JLT/jcc

Attachment – Letter dated December 19, 2012

Copy: David Johnson, DCR
Ginny Snead, DCR

MEMBER
JURISDICTIONS

December 19, 2012

CHESAPEAKE

Mr. David C. Dowling
Policy and Planning Director
Department of Conservation and Recreation
203 Governor Street
Suite 203
Richmond, VA 23219

FRANKLIN

GLOUCESTER

HAMPTON

RE: Amend and Reissue the General Permit for Discharges of Stormwater
from Small MS4s

ISLE OF WIGHT

Dear Mr. Dowling:

JAMES CITY

NEWPORT NEWS

The following comments on the draft General Permit for Discharges of Stormwater from Small MS4s (the “Permit”) are submitted by the Hampton Roads Planning District Commission (“HRPDC”) on behalf of the HRPDC’s MS4 member jurisdictions (the “MS4 Localities” or “Localities”).¹

NORFOLK

POQUOSON

I. Introduction

PORTSMOUTH

Although the HRPDC and the MS4 Localities appreciate the Department of Conservation and Recreation’s (“DCR’s”) willingness to address many of our concerns during the advisory panel process leading up to publication of the Permit, we continue to have serious concerns with the baseline loading rates in Section I.C. of the Permit. We have expressed these same concerns a number of times during development of the Permit and the

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Phase I and Phase II Watershed Implementation Plans (“WIPs”), and it is disappointing to see not only that the deficiencies remain unaddressed, but also that our concerns appear to have been largely ignored in both the Permit and the draft Fact Sheet accompanying the Permit (the “Fact Sheet”).

WILLIAMSBURG

YORK

¹ The small (Phase II) MS4 jurisdictions are the cities of Poquoson, Suffolk and Williamsburg, and Isle of Wight, James City and York counties. The Phase I MS4 jurisdictions are the cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach.

II. The Baseline Loading Rates are Not Accurate and Their Use in Calculating Baseline Pollutant Loads Will Require the MS4 Localities to Achieve Greater Load Reductions than Necessary to Reach Their Bay TMDL Target Loads.

The baseline loading rates are the starting point for determining the baseline pollutant loads for the localities covered by the Permit, and ultimately for determining the load reductions required of the localities. The higher the baseline loading rates, the higher the calculated baseline pollutant loads and the greater the reductions required of the localities. Accordingly, the importance of including accurate baseline loading rates in the Permit cannot be over-emphasized.

Although not fully explained in the Fact Sheet, we understand that the baseline loading rates in Section I.C. of the Permit were calculated using state-derived estimates of the types, numbers, and efficiencies of stormwater Best Management Practices (“BMPs”) installed on the acreage of developed impervious and pervious land in each river basin as of June 30, 2008. These estimates were then used as inputs to the Chesapeake Bay Watershed Model to produce basin-wide 2009 edge of stream (“EOS”) baseline loading rates for each pollutant of concern (nitrogen, phosphorus, and total suspended solids). We have identified three compounding flaws in the approach used to derive the baseline loading rates.

A. The Rates are Based On Flawed State-Derived Estimates and Do Not Accurately Reflect Locally Documented BMP Implementation Levels.

Although DCR has not provided a meaningful explanation of how it arrived at its BMP estimates, it is apparent that DCR’s BMP estimates are inconsistent with Locality-documented BMP implementation data as of June 30, 2008. As you know, during the Phase II WIP process, DCR shared its BMP data with the HRPDC and the Localities and asked us to check its data against local BMP implementation data. The Localities found significant discrepancies between local and State BMP data and reported this information to DCR in February 2012, but DCR neither corrected its data nor responded to the Localities’ findings.² DCR’s failure to use readily available and updated BMP data prevented it from calculating accurate baseline loading rates.

² As an example, one locality in Hampton Roads contains 3,000 acres of developed land. According to DCR’s 2009 Progress Run, BMPs in this locality treat only 300 acres. Locality ground truthed data indicates, however, that BMPs treat three times as many acres for a total of 900 acres. In this example, the state estimates that approximately 1/10 of the area of the locality is treated by BMPs, when in actuality, closer to 1/3 of the acres in the locality have the benefit of BMP treatment.

B. Even if DCR Had Incorporated Accurate Locality Derived BMP Data in the Permit, the Baseline Loading Rates Would Still be Flawed Because they Reflect Average Rates Over the Entire Basin.

Baseline loading rates derived using BMP implementation data averaged over the entire James River basin fail to account for greater BMP implementation by localities that are subject to the Chesapeake Bay Preservation Act ("CBPA"), and therefore, over-estimate loading rates for these localities. As directed pursuant to the CBPA, the 38 Virginia localities in the tidal portion of the Chesapeake Bay Watershed (including 16 localities within the HRPDC), have been requiring developers to offset nutrient and sediment loads since 1990 by installing stormwater BMPs. The tidal localities receive only partial credit for the resulting lower loading rates because the basin-wide average BMP implementation estimates used by DCR to derive basin-wide baseline loading rates simply offset the higher loading rates of those localities in the non-tidal portion of the basin rather than giving full credit to the localities that actually achieved the reductions.

C. Section I.C. Fails to Provide the Localities with the Opportunity to Take Credit for BMPs Installed After June 30, 2008.

We understand from remarks by DCR staff during the Soil and Water Conservation Board meeting on September 28, 2012 that the failure to provide localities with the opportunity to take credit for BMPs installed after June 30, 2008 was an oversight that DCR intends to correct before the Permit is finalized. While we are pleased that DCR intends to correct this flaw, we are unsure if it intends to provide the public with an opportunity to comment on the amended Section I.C. before the end of the comment period. If not, we urge you to do so. This is an important amendment to the Permit and the public should have an opportunity to comment on the language proposed by DCR.

IV. DCR Has Largely Ignored Earlier Requests from HRPDC and the Localities to Correct the Same Deficiencies in The Baseline Loading Rates Identified in these Comments.

As noted above, HRPDC and the Localities have alerted DCR to the above described deficiencies on more than one occasion in the past. While DCR has responded to a number of our questions related to the baseline loading rates, it has either not responded to others or has provided responses that fail to explain or offer a reasoned explanation and justification for its decisions to develop the baseline loading rates in Section I.C of the Permit using the State basin-wide BMP data and the 2009 Progress Run. Two of the more obvious examples of this are (i) DCR's

failure to even respond to the discrepancies in DCR's and the Localities' BMP implementation data identified by the Localities even though the Localities were responding to a request from DCR, and (ii) DCR's reliance on a directive from the Environmental Protection Agency ("EPA") to use the 2009 Progress Run to derive the baseline loading rates rather than exercising its own judgment and discretion to determine whether some other model run would produce more accurate loading rates.³

Also, we were disappointed to find that the Fact Sheet does not provide a reasoned rationale and justification for using the baseline loading rates in Section I.C of the Permit. Instead, the Fact Sheet does little more than repeat much of what is in the Permit. Like the Permit, the Fact Sheet suggests that the rationale and justification for the baseline loading rates can be found in Virginia's Chesapeake Bay Watershed Implementation Plan (WIP).⁴ However, it is apparent from a review of both the Phase I and Phase II WIPs that they too fail to provide a rationale and justification for the baseline loading rates, and instead, like the Permit, offer only an abbreviated and inadequate explanation of the basis for the rates.

Although courts accord considerable deference to an agency's exercise of its discretion, the agency must exercise that discretion in a way that is not arbitrary and capricious. In short, the agency must provide a reasoned rationale and justification for its action.⁵ It is not enough for an agency to simply identify the basis for its action as DCR has done here. It must also provide a reasoned rationale and justification for its action by explaining why it selected these rates over other rates and why the rates it selected are preferred over those proposed by others such as HRPDC and the Localities. We respectfully submit that DCR's failure to respond to our concerns regarding the discrepancies in the state and Locality BMP data, its total reliance on EPA's directive to use the 2009 Progress Run to produce the baseline loading rates, and its failure to offer a reasoned rationale and justification for using basin-wide average baseline loading rates is arbitrary and capricious and must be corrected before the Permit is finalized.

³ See August 15, 2011, letter from John Carlock (HRPDC) to Joan Salvati (DCR) and August 31, 2011 email response from Noah Hill (DCR) to Jennifer Tribo (HRPDC), copies of which are Attachment A to these comments.

⁴ See Fact Sheet at 20.

⁵ See *Chemical Mfrs. Ass'n. v. Environmental Protection Agency*, 28 F.3d 1259, 1265-66 (D.C. App. 1994); *Virginia Real Estate Comm'n v. Bias*, 226 Va. 264, 269, 308 S.E.2d 123, 125 (1983); *Environmental Defense Fund v. Ramirez*, 15 Va. App. 271, 277, 422 S.E.2d 608, 611-12 (1992); *Johnston-Willis v. Kenley*, 6 Va. App. 231, 241-44, 369 S.E.2d 1, 19-24 (1988); *Atkinson v. Virginia. Alcoholic Beverage Control Comm'n*, 1 Va. App. 172, 176, 336 S.E.2d 527, 529-30 (1985).

V. Use of the 2010 No Action Model Run Would Address the Deficiencies in the Baseline Loading Rates.

DCR can readily correct the above described deficiencies by modifying Section I.C of the Permit to instruct localities to calculate their baseline loads using loading rates from the 2010 No Action Model Run instead of the 2009 Progress Run (the 2010 No Action Model Run reflects pollutant loads without BMPs). Under this approach, localities would also submit data on actual BMP implementation and the resulting pollutant load reductions from these BMPs from 2006 through July 2013 and receive credit for these reductions beyond their calculated baseline loads. This approach would (i) provide for use of the most accurate BMP data in the development of loading rates, (ii) avoid the use of inaccurate basin-wide loading rates because locality-specific information would be used to calculate more accurate locality-specific loading rates, and (iii) permit localities to obtain credit for all BMPs implemented within the locality up to the effective date of the Permit, which would result in more accurate pollutant load and load reduction calculations.

While we understand that EPA has directed DCR to frame statewide strategies in terms of pounds of pollutants removed from the 2009 Progress Run to meet the statewide TMDL targets, we believe that DCR should view this as a reporting requirement without dictating the way in which a state actually measures reductions by sector. If DCR wishes to comply with EPA's request, it should do so by requiring localities to (i) calculate the number of total pounds of pollutants reduced by achieving a five percent reduction from the 2009 Progress Run, and (ii) then express that load reduction as a percent reduction from the 2010 No Action Model Run. This latter calculation may result in load reductions greater than five percent of the load based on the 2009 Progress Run in the first permit year, however, it is balanced by the fact that localities will be able to credit their documented BMPs from 2006 to 2013 towards this percent reduction. Although those localities that have implemented fewer BMPs prior to the effective date of the Permit will need to achieve greater pollutant reductions than those localities that have implemented more BMPs since 1990, this approach will ensure that the burden is shared fairly by all.

VI. Neither the Permit nor the Fact Sheet Refer to Methodologies for Calculating Nutrient Reductions and Guidance for Developing Action Plans.

Virginia's BMP Clearinghouse (which is still under construction) and the Chesapeake Bay Program's guidance are not consistent with respect to methodologies for calculating nutrient reductions and the differences between some of the methods and calculations are not inconsequential. Therefore, in order to develop consistent and effective strategies for pollutant load reduction, localities need to know which BMPs can be included in their Chesapeake Bay TMDL Action Plans ("Action Plans") and the BMP efficiencies that should be assigned to those

BMPs. Localities also need to know the equivalencies that can be used for non-traditional BMPs so that they can use these equivalences to obtain credit for their implementation. Although flexibility is appreciated, localities must have confidence that the methodologies and equivalencies used for their calculations will ensure compliance with their obligations under the Permit.

A related concern involves the absence of any guidance on the content of the Action Plans required by Section I.C.2 of the Permit. Although Section I.C.2 lists the subjects that must be addressed in the Action Plans, neither it nor the Fact Sheet provide localities with any guidance as to DCR's expectations regarding the minimum acceptable content of the Action Plans. Without such guidance, localities are left to assume what is required of them and thereby risk being charged with non-compliance despite their best efforts to submit and implement complete Action Plans.

By the foregoing, we do not mean to suggest that DCR should try to include the methodologies and guidance in the Permit. To the contrary, we do not believe it would be appropriate to include either the methodologies or the guidance as permit conditions given their technical nature and anticipated length and the need for flexibility. Rather, the Fact Sheet should announce DCR's intention to publish a separate document containing the methodologies and guidance before the Permit's effective date and following public notice and the opportunity for comment. The Maryland Department of the Environment has recognized the need to assist Maryland's localities in fulfilling their MS4 permit obligations and has provided guidance for that purpose.⁶ We know of no reason why DCR cannot do the same.

Sincerely,



Thomas G. Shepperd
Chairman

JLT/jc

Attachment

Copy: David Johnson, DCR
Ginny Snead, DCR

⁶ See Maryland Department of the Environment, Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated: Guidance for National Pollutant Discharge Elimination System Stormwater Permits (June 2011 Draft).

MEMBER
JURISDICTIONS

August 15, 2011

CHESAPEAKE

Ms. Joan Salvati, Division Director
Department of Conservation and Recreation
Division of Stormwater Management
Pocahontas Building
900 E. Main Street, 8th Floor
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FRANKLIN

GLOUCESTER

Dear Ms. Salvati:

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NEWPORT NEWS

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The HRPDC is aware that the State has concerns with the data from the 5.3.2 model, and that this has caused a delay in the development of the official ‘tool’ that local governments will be able to use to submit Phase II scenarios to Virginia. However, the Hampton Roads local governments and members of the Regional Phase II WIP Steering Committee have a multitude of issues and questions that need to be addressed in order for local governments to continue developing their Phase II WIP strategies. The answers to most of the questions are not dependent on the model output. Localities are having trouble assessing and correcting the baseline data and estimating the nutrient reductions of proposed actions because the State has not provided information that is critical to make those calculations. Localities are also concerned about how the locality target loads were developed and whether or not they are equitable.

We request a response to the questions and issues, outlined below, prior to our next Steering Committee meeting on September 1, 2011. We also request that you attend the meeting in order to provide the Steering Committee with an update on Virginia’s progress towards Phase II WIP development and to address any concerns of the Committee members.

Critical Information for Developing Phase II Strategies

SOUTHAMPTON

1) What are the loading rates for the different land cover classes? Do these rates vary by physiographic region (coastal plain versus piedmont)? These loading rates are important for localities to have, so they can calculate a reduction from the baseline load for the area treated by a particular BMP.

SUFFOLK

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2) Localities need urban loads broken down into pervious versus impervious, so that they can better estimate load reductions from BMPs applied to specific land cover classes.

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WILLIAMSBURG

3) Is the State working with EPA to reconcile the differences between Virginia’s BMP efficiencies and the Bay Model efficiencies? When will this issue be resolved?

YORK

Concerns about Target Loads

- 1) Localities are concerned that the use of '2009 Progress' model run as the baseline for determining urban stormwater load reductions for all localities creates inequity for localities within the Chesapeake Bay Program Act areas that have been implementing stormwater requirements since 2000. Additionally, the information contained in the '2009 progress' scenario is incomplete. HRPDC suggests that DCR use the '2010 no action' model run to determine the necessary percent load reductions for urban stormwater.
- 2) How are the nutrient reduction goals of each locality influenced by the model effectiveness factors for each segmentshed?
- 3) If the State developed the Phase I WIP load goals using a standard treatment percentage for each BMP for each locality, why are the nutrient and sediment load reductions for localities so disparate?
- 4) How can localities account for the nutrient reductions achieved by the Fertilizer restrictions recently passed by the General Assembly?
 - a. Will there be an input for this in the tool that DCR is developing?
 - b. How will this relate to the Nutrient management plan requirement for localities?
 - i. How can localities account for property owners that do not apply any fertilizer to lawns?
- 5) Virginia's Phase I WIP included a statement that federal properties would be held to a higher implementation level of BMP implementation than non-federal properties. Was this included in the model runs for the Phase I WIP? Will it be included in the model runs for the Phase II WIP?
- 6) What additional programs or implementation levels were required for agriculture? What additional funding has been dedicated to achieving nutrient and sediment reductions from agriculture?

Issues on cataloging and documenting nutrient reductions

- 1) Localities need guidance on how to document pre 2006 BMPs that have not been included in the model, so that they can be included during the recalibration in 2017. Localities also request that the Tool DCR is creating have the ability to estimate the

reductions achieved by these ‘missing’ BMPs, so that localities can account for that nutrient removal during their planning process.

- 2) Localities have not been receiving credit for some management actions that have Model efficiencies because they have not been reported.
 - a. Please list the BMPs that the State is aware of that have not been reported.
 - b. What is the State’s plan to address this during the Phase II process?
- 3) Additional BMPs and efficiencies need to be added to the Model.
 - a. What priorities has the State submitted to EPA?
 - b. What actions is the State taking to establish interim efficiencies for localities to use during the planning process?
- 4) Erosion and Sediment Control
 - a. How were the acres under e and s control determined?
 - b. The BMP loading sheet has a 2025 target for acres under E and S. Does this number refer to the acres that will be under e and s control in the year 2025, or the number of acres that have been controlled during a longer period preceding 2025? If the latter, what is the starting year?
 - c. How is a locality supposed to increase areas under erosion and sediment control when that is a factor of the pace of development?
- 5) How can localities estimate the benefit of tree plantings not associated with reforestation or buffer restoration (ie. Street trees or increased canopy on developed lots)?
- 6) How are septic pumpouts and biosolids applications being tracked?
- 7) The BMP crosswalk spreadsheet indicates that street sweeping can be reported in acres swept or pounds of material collected. Which unit was used for the street sweeping in the load reduction spreadsheets delivered to localities?
- 8) Is the State or EPA concerned about localities assuming urban nutrient management plans and agricultural practices will be implemented indefinitely even though the agreements are only effective for 1-3 year periods?

Ms. Joan Salvati
August 15, 2011
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- 9) How does the TMDL account for air deposition, and is there an opportunity for local/state air emissions reductions programs to have an impact on nutrient reductions locally?
- 10) Are the impacts of extreme storms causing major water quality impacts and should we be considering different BMPs to mitigate these extreme storms?

The HRPDC staff, the region's localities, and members of the Chesapeake Bay TMDL Regional Steering Committee have been working diligently to address the state's expectations of the Phase II WIP effort. At the August 4, 2011 meeting of the Regional Steering Committee, the HRPDC staff sensed a growing frustration on the part of the localities and other stakeholders over the lack of important information and guidance from the state that is critical to moving the process forward. We believe that it is essential that we address these gaps at the September meeting.

We appreciate your participation and assistance in this effort. If you have questions or desire to discuss these concerns further, please call Whitney Katchmark or Jennifer Tribo.

Sincerely,

A handwritten signature in black ink that reads "John M. Carlock". The signature is written in a cursive style with a large initial "J" and "M".

John M. Carlock
Deputy Executive Director

WSK/fh

From: Hill, Noah (DCR) <Noah.Hill@dcr.virginia.gov>
Sent: Wednesday, August 31, 2011 2:16 PM
To: Jennifer Tribo
Cc: Salvati, Joan (DCR)
Subject: FW: Task Completed: Develop Responses to HRPDC Concerns
Attachments: HRPDC Answers.doc; HRPDC_Salvati_Concerns.pdf

Attached are the responses to the question that HRPDC submitted. See you tomorrow.

Noah
Noah M. Hill, Regional Manager
Virginia Department of Conservation and Recreation
Suffolk Regional Office
1548 - A Holland Rd, Suffolk VA 23434
757-925-2392

From: Salvati, Joan (DCR)
Sent: Wednesday, August 31, 2011 8:02 AM
To: Smith, Shawn (DCR); Hill, Noah (DCR)
Subject: Fw: Task Completed: Develop Responses to HRPDC Concerns

From: Davis-Martin, James (DCR)
Sent: Tuesday, August 30, 2011 04:15 PM
To: Salvati, Joan (DCR)
Subject: Task Completed: Develop Responses to HRPDC Concerns

James Davis-Martin
Chesapeake Bay WIP II Project Manager
804-786-1795

Critical Information for Developing Phase II Strategies

1. The loading rates (pounds/acre) can be calculated by dividing the loads (pounds) by the land use (acres). These figures vary by land-river segment, the finest segmentation in the model, so there will be variability based on physiographic region, segmentshed and county.
2. In the revised data set for Phase 5.3.2. the urban loads and BMPs will allow differentiation between regulated and unregulated, pervious and impervious data.
3. The State is working through the Bay Program's Urban Workgroup and Water Quality Goal Implementation Team to resolve the differences. The timeline for completing this important task is not yet clear.

Concerns about Target Loads

1. EPA has dictated using the 2009 Progress model run as the baseline when accounting for new reductions toward meeting the TMDL. We recognize the BMP data in this scenario is imperfect and have asked localities to provide an improved accounting of the BMPs currently on the ground as part of the Phase II Process. The BMP implementation targets used in developing the Phase I WIP and the TMDL were based on consistent statewide treatment of the various landuses with BMPs. There was no distinction made for Bay Act areas in that process. Bay Act localities should actually be advantaged in this process because they have a much longer record of BMP implementation that can be accounted for through the Phase II process, thereby moving them closer to the TMDL implementation levels.
2. The local targets and reduction goals have been provided as edge of stream loads, so the delivery factors that the model uses to adjust loads for in-stream processes through delivery to tidal waters do not influence them.
3. The Phase I process applied a percent treatment for a BMP on the applicable landuse. So, variations in landuses between localities will produce a different mix of BMPs. Additionally, because the loading rates vary by land-river segment, the load reduction per unit of BMP will also vary at that scale.
4. The details of how the model will credit the fertilizer restriction have not been finalized. It is anticipated that it will be accounted for on a state wide basis and will produce a reduced loading rate in the urban pervious landuse that would be evident to localities in future progress runs of the model.
 - a. There will not be an input for this in the initial version of the VAST.
 - b. This is not related to Nutrient Management plan requirements, except that it is possible that a lawn with a nutrient management plan and soil tests that call for application of phosphorus could do so.
 - i. If there is a local program that promotes, tracks and verifies that fertilizer is not being applied to lawns, this should be documented as a Phase II strategy. We could then work with EPA to include a BMP in the model that would give credit similar to the loads from hay without nutrients (unmanaged grass).
5. The Phase I WIP was run on the 5.3.0. model that did not have a breakout of federal lands, so it was not possible to apply the different treatment levels. The Phase II WIP will use the 5.3.2. model which does include the federal landuse breakout, so the higher treatment level could be modeled.
6. The specifics of the Phase I actions identified for agriculture and information on current programs and funding are in the WIP I document, Section 5. <http://www.dcr.virginia.gov/vabaytmdl/documents/vatmdlwip.pdf>

Issues on cataloging and documenting nutrient reductions

1. Localities can provide information on pre-2006 BMPs at any time. The information needed are the specifics of the BMP type, the amount of the BMP (linear feet, acres, systems or acres treated as appropriate), the date the BMP was installed and the location of the BMP. The VAST will not work for estimating the effects of these BMPs as their effects are already accounted for in the Phase 5.3.2 model calibration process. A locality could use the VAST to estimate the loads, but the loads would not be representative of what would be produced through a recalibrated model in 2017.

2. The state reports all BMPs for which we have the necessary information. (What BMP, How Much, Where, and When). Generally, the agricultural BMP data collected through Federal and State cost-share programs is very reliable. New efforts to track voluntarily installed BMPs in agriculture are currently being assessed. The urban and septic BMP data are less reliable. Generally, we have tried to use information reported through existing regulatory programs and permits for these sectors. Unfortunately, this data often lacks one or more of the required elements which results in under reporting. The Phase II process will allow localities to report BMPs on the ground through the VAST. The VAST may also serve as a tool that localities may choose to use to report annual implementation progress in the future, until better tracking systems can be developed.
3. The state is working with EPA to address agricultural nutrient management, the ability to stack other BMPs with continuous no-till, septic denitrification practices with 25% and 75% efficiencies, and a capture/reuse BMP for nurseries. These will be available for Phase II planning using the VAST. Additionally, we are working on the efficiency of stream restoration and the urban BMP efficiency differences discussed earlier. If you have other priorities that you think are critical, please communicate those as part of the Phase II process.
4. Acres under E&S are reported to the state by DCR regional offices that compiled locality data. The E&S practice is an annual practice, so the 2025 acres treated are for that year only. The E&S BMP is applied to the construction landuse in the model. This landuse is changed based on the model's assumptions on growth rates, and may not be representative of current conditions. If the model's construction landuse area is significantly different than what is on the ground, a locality may benefit from reporting E&S as a % of the landuse treated. So if the locality's E&S program has a 95% compliance rate, they could apply the BMP to 95% of the available landuse.
5. Urban tree planting is planting trees on urban pervious areas at a rate that would produce a forest-like condition over time. The tree planting BMP includes any tree plantings on any site except those along rivers and streams. Plantings along rivers and streams are considered riparian buffers and are treated differently. The definition of tree planting does not include reforestation. Reforestation replaces trees removed during timber harvest and does not result in an additional nutrient reduction or an increase in the forest acreage. The intent of urban tree planting is to eventually convert the urban area to forest. If the trees are planted as part of the urban landscape, with no intention to convert the area to forest, then this would not count as urban tree planting.
6. Septic pumpouts are currently only tracked in Chesapeake Bay Act localities as part of the Bay Act Annual Reports from localities. The Department of Health is working to improve the accounting of septic pumpouts in non-Bay Act localities. Virginia is the only Bay state that currently reports biosolids applications into the Bay Model. Biosolids are applied in the model to the localities where the application is made based on the permits. The model treats biosolids similarly to other organic nutrient sources (manures and poultry litter).
7. The spreadsheet reports street sweeping as the acres of streets swept annually.
8. The acres under agricultural Nutrient management plans are reported based on the acres with a current nutrient management plan based on the effective dates in the plans. Urban nutrient management is tracked annually.
9. Yes. Local/State initiatives and programs that exceed the actions required by the national air standards can be reported to the bay program for credit.
10. Yes. Major storm events cause significant water quality impacts. BMPs to address these extreme storms are generally cost prohibitive, but if there are some effective and affordable solutions, they should be considered.