

AGENDA NOTE – HRPDC EXECUTIVE COMMITTEE MEETING

ITEM #5: SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4) PERMIT COMMENTS

SUBJECT:

The Virginia Department of Conservation and Recreation has proposed revisions to the Virginia Stormwater Management Program (VSMP) Permit Regulations to reauthorize and amend the General Permit for stormwater discharges from small MS4s. The revisions, located at: (<http://www.townhall.virginia.gov/L/viewstage.cfm?stageid=6358&display=general>), are available for public comment until January 4, 2013. HRPDC staff and legal counsel, Dave Evans of McGuire Woods, have prepared a draft comment letter for the Commission's consideration based on input from the HRPDC Joint Environmental Committee.

BACKGROUND:

This VSMP general permit regulation governs stormwater discharges from small (Phase II) MS4s which include Poquoson, Suffolk, Williamsburg, Isle of Wight County, James City County and York County. The general permit expires on July 8, 2013. The state must reissue the permit to provide coverage for another 5 year permit term. HRPDC staff anticipates that revisions to the small MS4 permit will be incorporated into the Phase I MS4 permits for Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach.

The significant changes in the proposed General Permit include measurable goals for six minimum control measures, requirements to address water quality impairments including the Chesapeake Bay TMDL, and incorporation of the new stormwater management technical criteria. This presentation will highlight concerns with the proposed General Permit. Key issues include:

- Baseline loading rates for Chesapeake Bay TMDL Action Plans are not accurate and do not account for greater BMP implementation in the localities subject to the Chesapeake Bay Preservation Act.
- DCR should use 2010 No Action model run for baseline loading rates.
- DCR should allow localities to take credit for BMPs installed between June 30, 2008 and July 1, 2013.
- DCR should develop guidance for calculating nutrient reductions and documenting new development and identify additional expectations for the Chesapeake Bay Action Plans.

A draft comment letter on the Small MS4 General Permit is included in the agenda. Dave Evans will revise the letter based on DCR's regulatory factsheet, which was published after this agenda was developed. The Joint Environmental Committee will review the final comment letter at its December 6, 2012 meeting.

Ms. Jenny Tribo, Senior Water Resources Planner, will brief the Commission.

Attachment 5 – Draft Small MS4 Permit Comments

Note: Recommended actions are included in Consent Agenda Item #9I.

Comments on the Draft Small MS4 Permit

**Submitted by the Hampton Roads Planning District Commission
on Behalf of its MS4 Member Jurisdictions**

November __, 2012

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

I. Introduction

Although 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 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.

II. The Baseline Loading Rates are Not Accurate and Their Use in Calculating Baseline Pollutant Loads May 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.

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.

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 never provided us with 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 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.

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

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.

portion of the Chesapeake Bay Watershed (including 13 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

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 explanation and basis for its action.⁴ 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 justification for using basin-wide average baseline loading rates is arbitrary and capricious and must be corrected before the Permit is finalized.

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.

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 *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).

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 equivalencies 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.⁵ We know of no reason why DCR cannot do the same.

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⁵ 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).