

DRAFT Comparison of Proposed Stormwater Program Requirements

COG staff document
11/10/08

A few notes on differences between Montgomery vs. Norfolk draft permits, followed by a comparison table for Montgomery, Norfolk and the District.

I. Montgomery County and City of Norfolk Permit comparisons on the following:

- Requirements for waste load allocations (WLAs) under TMDLs
- Maximum Extent Possible (MEP) definition & applications/uses
- Redevelopment requirements

In General

- Montgomery's is more detailed, e.g. in regard to requirements for monitoring and addressing illicit discharges. It also imposes greater burdens even in core areas – it requires a “systematic” water quality assessment of all watersheds in the county (not just those subject to TMDL WLAs) and development of detailed implementation plans to “maximize” water quality. The Montgomery permit has an entire section or permit conditions for meeting the county's obligations under its voluntary commitment to the 2006 *Potomac River Watershed Trash Treaty*.
- Norfolk's gives the city more time to meet many of its provisions. In the first two years of the permit, in many areas, the city's responsibility is to “establish policies and procedures.” Benchmarks, where they do exist, often apply only in later years. There are no provisions related to trash.

Specific Issues

TMDL wasteload allocation connection

Both permits require development of plans for how to meet TMDL WLAs within either 12 months (Montgomery) or 18 months (Norfolk) of issuance of TMDL or start of permit (where TMDL already exists).

- The Montgomery permit requires the county to develop the implementation plan, which will be similar to the implementation plans that it has to do for all watersheds anyway, although perhaps somewhat more specific and requiring a schedule with benchmarks and cost estimates.
- The Norfolk permit is more vague on how implementation plans will be developed, since it appears to indicate that the state will develop these plans -- in which process “the permittee is encouraged to participate, at a minimum, as a stakeholder.” A number of new requirements, such as specific numeric goals for outfall reconnaissance, would kick in under the TMDL implementation plan section.

It is not completely clear, in either permit, how progress toward meeting WLAs will be measured.

- Montgomery's permit contains fairly specific monitoring requirements (chemical, biological and physical) and notes that the results will be used “to document progress toward meeting any applicable WLAs.” The county appears to have been given the flexibility to determine how to do this. No mention is made of the use of modeling data in this task, but presumably this would be one of the county's options.

- Additional requirements for monitoring outfalls kick in under the TMDL portion of Norfolk’s permit. But the permit also contains a very prescriptive approach to estimating pollutant loads within the 303(d) set of impaired watersheds, which appears to be based on old EMC data (1992 – 2001), state estimates of BMP effectiveness and a “P-LOAD” model developed by the state. It is not clear whether this same method can or must be used in evaluating progress toward meeting WLAs.

Interpretation of “maximum extent practicable”

Both permits use the standard language of “an iterative standard, which evolves over time as urban runoff management knowledge increases.”

- Montgomery’s specifically establishes MEP as a standard for virtually all required implementation activities, whether in or outside TMDL areas. It also notes the required use of an iterative approach in cases where the TMDL WLAs are not being met.
- Norfolk’s permit does not use the actual MEP language as much, but it does include an overall statement specifying that “the permittee shall reduce the pollutant load in stormwater discharges to the maximum extent practicable.”

Redevelopment or restoration standards

Montgomery’s permit has a clear-cut (and ambitious) numerical requirement, but it is open ended on how this requirement can be achieved. Norfolk does not have an actual implementation requirement, but it is fairly prescriptive on how the city should achieve restoration requirement under redevelopment.

- By the end of the permit term, Montgomery is required to complete the implementation of restoration efforts identified under the previous permit cycle as meeting the need to “restore” 10 percent of the county’s “impervious surface area,” and to complete implementation of restoration efforts on an additional 20 percent of such land, to a total of 30 percent. The permit does not specify how to do so.
- The Norfolk permit requirement in this area would apply to “areas of new development and significant redevelopment” and requires development of procedures for determining what mix of structural and non-structural design techniques could maintain or replicate “predevelopment runoff characteristics and site hydrology.” However, these procedures are implemented at the discretion of the permittee; they are not absolute requirements.

II. Table of Draft Stormwater Requirements

	Montgomery County	City of Norfolk	District of Columbia
Type of SWM document:	Draft MS4 permit	Draft MS4 permit	-Existing MS4 permit (2004, amended in 2006). The DC MS4 permit will be up for renewal in 2009; there isn’t a draft yet. <i>and</i> -MS4 Letter Agreement between DC and EPA detailing enhancements to the Stormwater Water Management Plan for 2009

<p>Does this jurisdiction describe how Maximum Extent Practicable (MEP) will be applied with regard to BMP implementation?</p>	<p>Yes, in a general sense.</p>	<p>Yes, in a general sense.</p>	<p>Yes, in a general sense.</p>
<p>Requirements for waste load allocations (WLAs) under TMDLs:</p>	<p>Within <i>one year</i> of permit issuance, the County shall submit a TMDL <i>implementation plan</i> to MDE for each of the TMDLs that includes benchmarks for pollutant load reductions and deadlines. The implementation plans shall include: -Actions and deadlines for achieving load reduction benchmarks. -Description of how ongoing watershed restoration efforts will be modified to address any WLAs -Schedule and cost estimate -Fall back plan if the objectives aren't being met and/or funding is inadequate -Public participation component—allowing for public comment on the plans -Annual assessment and reporting.</p>	<p>1) Within <i>18 months</i> the pollutant identified in the WLA must be addressed through evaluating existing efforts and proposing additional BMPs/ordinances in the MS4 Program Plan. The program plan must include: -A list of current ordinances and legal authorities, BMPs, policies, plans etc. to address the WLA. -A schedule to evaluate the existing program. -Implement a schedule to address the MS4 Program weaknesses—BMPs, policies, etc.—to ensure consistency with the TMDL WLA assumptions. -- Whenever possible source elimination shall be prioritized over load reduction. -A public education component, such as employee training regarding pollution sources. -The City is <i>encouraged to participate, at a minimum, as a stakeholder in implementation plan development</i> to address the TMDLs. 2) Outfall reconnaissance: On an annual basis, Norfolk shall rotate through their outfalls to monitor them for the contributing source of pollution identified in the WLA—i.e., illicit discharge detection and elimination. 3) Develop a schedule for sampling runoff from facilities not covered under a separate VPDES permit, such as parks, maintenance yards,</p>	<p>Within 6 months of the effective date of permit for the Anacostia and 12 months for Rock Creek, implementation plans shall be submitted to EPA which include: -Documentation of all previous and ongoing efforts at achieving the specific load reductions identified in the TMDL WLA and demonstrating additional controls to achieve those reductions. - Performance based benchmarks.</p>

		<p>storage facilities, etc. All collected samples shall be grab samples. For facilities where a WLA pollutant is found in their runoff, there will annual characterizations of their stormwater volume and the quantity of pollutant identified in the WLA.</p> <p>4) Annual Reporting to State</p>	
<p>Watershed restoration requirements:</p>	<p>An additional 20% of the County's impervious area should be restored to the MEP within permit term (in addition to the 10% from previous permit term), using ESD and other techniques.</p>	<p>For Areas of New Development and Significant Redevelopment the City of Norfolk <i>shall develop policies and procedures</i> for structural and non-structural design techniques that will maintain or replicate predevelopment runoff and site hydrology. These policies and procedures should be updated in their MS4 Program Plan and be included in the 2nd year's annual report.</p>	
<p>Monitoring:</p>	<p>The County will use chemical, biological and physical monitoring to assess progress towards watershed restoration goals and any applicable WLAs.</p>	<p>Not elaborated much in draft permit. COG is working to better understand what the monitoring requirements will be.</p>	<p>1) Water quality monitoring will include storm events' flow estimate, rainfall estimate & discharges; dry weather monitoring and wet weather monitoring. 2) Annual outfall discharge monitoring report (submitted to EPA and NOAA Fisheries): Monitor outfalls for the Anacostia, Rock Creek, and Potomac for a series of parameters including pH, temperature, PCBs, volatile organic compounds, and metals three times/year. 3) Grab samples of holding/detention ponds of greater than 24 hours. 4) DC plans to monitor the survival rate of their tree planting program (see "Other Highlights" below), along with an annual estimate of storm capture rates. 5) DC has submitted a pre-proposal for a targeted watershed grant to</p>

			<p>monitor a subwatershed (e.g., portion of Rock Creek) for either the MS4 or CSO stormwater BMP effectiveness. DC will know more about the status of their grant application the end of November.</p>
<p>Other highlights:</p>	<p>-Montgomery Co. is required to establish a program to support and implement regional strategies to reduce trash and increase recycling—i.e., support the TFPWI Goal by 2013.</p> <p>-The County should cooperate with MNCPPC to assist with the Water Resources Element of the comprehensive planning process.</p>		<p>DC’s MS4 Letter Agreement outlines several ambitious stormwater management strategies, much of which is described in the Green Build Out Model and WASA’s hydrodynamic and hydrologic build-out model. Phase I is to work with Casey trees to build up DC’s tree canopy; Phase II is MS4 and CSO monitoring/assessment of stormwater runoff reduction; Phase III is slotted to be a cost/benefit analysis.</p> <p>Highlights from the MS4 Letter Agreement are below:</p> <ol style="list-style-type: none"> 1) DC plans to make best efforts to achieve optimal tree canopy by planting at least 4, 150 trees/year. 2) Construct 17 LID projects by August 2009 3) Work with DDOT to incorporate LID to the extent feasible into all DDOT road reconstruction projects. 4) Green roof feasibility study for DC properties owned by the Office of Property Management, and install green roofs on new buildings constructed by OPM, where feasible. 5) By the end of FY 2009 complete a trash survey/trash removal & reduction plan for the Anacostia River. 6) Promulgate new stormwater regulations, including provisions on LID requirements and erosion control training for construction site

			managers. <i>These new regulations have been drafted and are being reviewed by the District's Attorney General.</i>
--	--	--	--