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Via U.S. First Class Mail and E-mail

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Comments on Draft MS4 Permit No. 11-DP-3314 / MD0068284 for Prince George's County, Maryland

These comments are submitted on behalf of Anacostia Riverkeeper, Anacostia Watershed Society, Baltimore Harbor Waterkeeper / Blue Water Baltimore, DC Environmental Network, Mattawoman Watershed Society, Natural Resources Defense Council, Patuxent Riverkeeper, and Potomac Riverkeeper. Members of these groups use and enjoy waterways in Prince George's County and downstream in the District of Columbia that are degraded due, in part, to discharges from the County's municipal separate storm sewer system ("MS4").¹

The proposed permit includes several areas of improvement over the existing permit, and we strongly support this trend. However, several aspects of the permit must be further strengthened to meet legal requirements. The Maryland Department of the Environment ("MDE") must address the following legal requirements, at a minimum:

1. The final permit must expressly and clearly prohibit discharges that cause or contribute to violations of water quality standards ("WQS"). It must also include an enforceable mechanism to ensure that the necessary pollution reductions occur, on schedule.
2. Implementation plans for total maximum daily loads ("TMDLs") are an appropriate mechanism for assessing progress and enforcing compliance with TMDL wasteload allocations ("WLAs"). The minimum requirements for TMDL implementation plans must therefore be set forth clearly in the permit.
3. Plans and schedules that are required under the permit meet the legal definition of "effluent limitations," even when developed in the first instance by the County and submitted to MDE for approval. As such, they must be incorporated as enforceable permit terms through a major permit modification process.

¹ Baltimore Harbor Waterkeeper is a program of Blue Water Baltimore and is concerned about the Prince George's County permit due to the impact that it will have to the Chesapeake Bay and to the extent that it is used as a template for the MS4 permits in Baltimore's watersheds.

4. The final permit must require a program of representative monitoring that is sufficient to assess progress, determine compliance or non-compliance with TMDL wasteload allocations, and inform valid adaptive management responses. We propose that the permit require the County to develop a monitoring program, to be approved by MDE and incorporated into the permit through a major permit modification process.

There can be no serious doubt about the fact that the Prince George's MS4 contributes to violations of Maryland's water quality standards, particularly given the fact that MDE has developed and EPA has approved wasteload allocations for the MS4 in TMDLs for impaired waters. *See* Proposed Permit Att. B. In addition, we submit the attached statement of Mr. Gabriel Horchler, which demonstrates that stormwater from the Prince George's County MS4 has direct adverse impacts upon County residents who use and enjoy the Anacostia River and other waters impacted by the MS4. We have also reviewed and agree with the comments prepared by the Mattawoman Watershed Society, and those prepared by the Natural Resources Defense Fund, and hereby incorporate those comments by reference.

I. WATER QUALITY STANDARDS

A. Legal Standard for Stormwater Discharges

The fundamental goal of the Clean Water Act ("CWA") is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To that end, all discharge permits issued under the Act must achieve limitations "necessary to meet water quality standards," as required by CWA section 301(b)(1)(c), 33 U.S.C. § 1311 (b)(1)(C). Consistent with this, CWA regulations prohibit the issuance of a National Pollutant Discharge Elimination System ("NPDES") permit "when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States." 40 C.F.R. 122.4(d) (emphasis added).² Accordingly, all point source permits must contain limitations "necessary to... [a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality. 40 C.F.R. § 122.44(d)(1).³ The CWA regulations further detail this mandatory condition for NPDES permits: "When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant." 40 C.F.R. § 122.44(d)(1)(iii).

² This provision and all other federal CWA regulations cited in these comments are applicable to Maryland's NPDES program under 40 C.F.R. § 123.25.

³ *See Gov't of the Dist. of Columbia, MS4 System*, 10 E.A.D. 323, 335 and 342-43 (2002) ("remanding the Permit to the Region to provide and/or develop support for its conclusion that the permit will 'ensure' compliance with the District's water quality standards") (emphasis in the original); *see also Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166 (9th Cir. 1999) (confirming that permitting authorities have authority to require strict compliance with water quality standards in NPDES permits for municipal separate stormwater systems).

Consistent with these federal laws, Maryland regulations allow MDE to issue or re-issue a NPDES permit only “upon a determination that... [t]he discharge or proposed discharge specified in the application is or will be in compliance with all applicable requirements of... [e]ffluent limitations [and] [s]urface and ground water quality standards...” Md. Code Regs. § 26.08.04.02.A(1) (emphasis added). Discharge permits issued by MDE “must comply with effluent limitations, receiving water quality standards, ground water quality standards established by the state, and federal and state law.” *Nw. Land Corp. v. Maryland Dept. of Env't*, 104 Md. App. 471, 479, 656 A.2d 804, 808 (1995), citing Md. Code Regs. § 26.08.04.02.A(1)(a)-(d).

CWA section 402(p)(3)(B)(iii) requires MS4 permits to also include “controls to reduce the discharge of pollutants to the maximum extent practicable...,” commonly called the “MEP” standard. 33 U.S.C. § 1342(p)(3)(B)(iii). The fundamental requirement to meet water quality standards under CWA section 301 was not altered by the amendments that added section 402(p) to the CWA. The legislative history in the 1987 Conference Report for those amendments confirmed that “all municipal separate storm sewers are subject to the requirements of sections 301 and 402 of the Act.”⁴ In its 1999 stormwater rulemaking implementing section 402(p), EPA again confirmed that under its existing regulations, “[40 C.F.R.] Sec. 122.44(d) is a general requirement that each NPDES permit shall include conditions to meet water quality standards.” See EPA, “National Pollutant Discharge Elimination System—Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges,” 64 Fed. Reg. at 68722, at 68770 (Dec. 8, 1999).

Thus, even where the permit requires implementation of best management practices (“BMPs”) as part of stormwater management programs and implementation plans, the BMPs encompassed in those programs and plans must be demonstrated to ensure compliance with water quality standards. The EPA Environmental Appeals Board confirmed this principle, holding that even if permit limitations are in the form of required BMPs, the permitting authority must “show that the selected BMPs will be adequate to ensure compliance with water quality standards.” See *In re: Gov’t of the Dist. of Columbia, Mun. Separate Storm Sewer Sys.*, 10 E.A.D. 323, at 323-324, 335 and 342-43 (2002). See also *Bldg. Indus. Ass’n of San Diego Cnty. v. State Water Res. Control Bd.*, 124 Cal. App. 4th 866, at 880 (Cal. Ct. App. 2004) (rejecting arguments that “under federal law the ‘maximum extent practicable’ standard is the ‘exclusive’ measure that may be applied to municipal storm sewer discharges and [that] a regulatory agency may not require a Municipality to comply with a state water quality standard if the required controls exceed a ‘maximum extent practicable’ standard”).

B. Legal Standard for Non-Stormwater – Illicit Discharges

⁴ H.R. Rep. No. 99-1004 (1987) (Conf. re.) reprinted in 1978 U.S.C.C.A.N. 5, 38, stating:

With respect to municipal separate stormwater discharges, the conference substitute temporarily prohibits the Environmental Protection Agency and States from requiring permits for certain municipal separate storm sewers for discharges composed entirely of stormwater, in order to provide a sufficient period of time to develop and implement methods for managing and controlling discharges from municipal storm sewers. The relief afforded by this provision extends to October 1, 1992. After that date, all municipal separate storm sewers are subject to the requirements of sections 301 and 402. (Emphasis added).

Unpermitted non-stormwater discharges must be prohibited from discharging into the MS4. The CWA requires that each MS4 permit “shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers.” 33 U.S.C. § 1342(p)(3)(B)(iii). Federal CWA regulations define an illicit discharge as “any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.” 40 C.F.R. § 122.26 (b)(2).

C. Discussion and Requested Permit Language

1. Stormwater discharges subject to water quality standards

The proposed permit requires the County to: “Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with Maryland’s receiving water quality standards.” Proposed Permit section III.1. This language is confusing and unclear, in large part because it appears to be conflating two separate but equally important requirements – the requirement to ensure that stormwater discharges from the MS4 are in compliance with WQS under CWA section 301, and the requirement to prohibit non-stormwater discharges into the MS4 under CWA section 402(p).⁵ Instead, the permit should clearly prohibit non-stormwater discharges.

In drafting a clear prohibition against discharges that cause or contribute to excursions from WQS, MDE should look to similar language that has been adopted in other jurisdictions. *See* Ventura County MS4 Permit, 28-29 (May 7, 2009) (“Discharges from the MS4 that cause or contribute to a violation of water quality standards are prohibited.”); Washington State Phase I Municipal Stormwater Permits for 2012-13 and 2013-18 (2012) (“...the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited,” and “[t]his permit does not authorize a discharge which would be a violation of Washington State Surface Water Quality Standards....”); Los Angeles County MS4 Permit, 24-25 (April 14, 2011) (“Discharges from the MS4 that cause or contribute to the violation of Water Quality Standards or water quality objectives are prohibited.”).

To address the foregoing requirements, we request that MDE revise the relevant permit language as follows:

Section III. Water Quality

The permittee must manage, implement, and enforce ~~a stormwater management program (SWMP)~~the programs, plans, and practices required in this permit in accordance with the Clean Water Act (CWA) and corresponding stormwater National Pollutant Discharge Elimination System (NPDES) regulations, 40 CFR Part 122, to meet the following requirements:

⁵ Non-stormwater discharges are also addressed in section VI of these comments.

1. ~~Effectively prohibit pollutants in stormwater discharges or~~ Eliminate non-stormwater discharges and other unauthorized discharges into the MS4;
2. Eliminate pollutants in stormwater discharges from the MS4 as necessary to comply with Maryland's receiving water quality standards;
23. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with Title 33 of the U.S. Code (USC) §1342(p)(3)(B)(iii); 40 CFR §122.44(k)(2) and (3); and
34. Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with all the conditions contained in PARTs IV through VII of this permit, including milestones and final dates for attainment of applicable WLAs, shall constitute compliance with §402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with ~~Maryland's receiving water quality standards~~ and any EPA approved stormwater WLAs for this permit term.

2. Prohibited non-stormwater discharges

To be effective and enforceable, the final permit's illicit discharge requirements must ensure that non-stormwater pollutants are actually prohibited from being discharged into the system, as required by CWA § 402(p)(3)(B)(iii). It is not sufficient to require that the County implement a "program." Instead, the permit must require that all illicit non-stormwater discharges be eliminated or permitted by MDE. MDE should therefore revise the permit section III.D.3. as follows:

Prince George's County shall continue to implement an illicit discharge inspection and enforcement program. This program shall~~to~~ ensure that all discharges ~~to and from~~ into the MS4 that are not composed entirely of stormwater are either permitted by MDE or eliminated. Activities shall include, but not be limited to:

- a. Field screening at least 150 outfalls annually. Each outfall having a discharge shall be sampled using a chemical test kit. Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to the County's storm drain system;
- b. Conducting annual visual surveys of commercial and industrial areas as identified in PART IV.C.2 above for discovering, documenting, and eliminating pollutant sources. Areas surveyed shall be reported annually;

~~c. Maintaining a program to address and, if necessary, respond to~~ Eliminating illegal sewer connections, sewer leaks, illegal discharges, dumping, and spills;

~~d. Using appropriate enforcement procedures for~~ Investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and

~~e. Reporting illicit discharge detection and elimination activities as specified in PART V of this permit.~~

II. TOTAL MAXIMUM DAILY LOADS

A. Legal Standard for Implementing TMDLs

While it is appropriate for the permit to explicitly prohibit discharges that cause or contribute to violations of water quality standards, that alone is not sufficient to “ensure compliance” with applicable water quality standards. The permit must also include a mechanism for measuring and verifying progress and, ultimately, enforcing compliance with standards. For impaired waters, that mechanism is embodied in TMDL implementation plans (called “restoration plans” in the proposed permit).

CWA regulations require that effluent limits in NPDES permits “are consistent with the assumptions and requirements of any available wasteload allocation....” 40 C.F.R. § 122.44(d)(1)(vii)(B). TMDLs are founded on the assumption and requirement that point source WLAs will be enforced through NPDES permits. For example, the Chesapeake Bay TMDL at p. 7-1 states that “the existence of the National Pollutant Discharge Elimination System (NPDES) regulatory program and the issuance of an NPDES permit provide the reasonable assurance that the WLAs in the TMDL will be achieved” by point sources. *See* EPA, Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment, 7-1 (Dec. 29, 2010) (hereafter “Bay TMDL”). (Emphasis added.) Thus, the permit must ensure attainment of applicable WLAs.

As shown in Appendix B of the proposed permit, the County’s MS4 is subject to final EPA-approved TMDL WLAs that cover numerous stream reaches and the Chesapeake Bay. Compliance with these WLAs are needed to address discharges of excess bacteria, nutrients, sediment, mercury, polychlorinated biphenyls (PCBs), and trash that contribute to violations of applicable water quality standards.

B. Watershed Implementation Plans for the Chesapeake Bay TMDLs

The Prince George's County MS4 permit is a critical part of part of the “Accountability Framework” for implementing the Chesapeake Bay TMDLs. *See* Bay TMDL, 7-1 (Dec. 29, 2010). MDE acknowledges that “Maryland’s NPDES stormwater permits issued to Prince George’s County and other municipalities will require coordination with MDE’s Watershed Implementation Plan and be used as the regulatory backbone for controlling urban pollutants toward meeting the Chesapeake Bay TMDL by 2025.” Proposed Permit at 16, Part VI. A. This is the primary difference between the Bay TMDL and prior voluntary Bay agreements, which

lacked enforcement and accountability measures and ultimately failed to achieve their goals while wasting taxpayer dollars.

In particular, the Prince George's Watershed Implementation Plan (“WIP”) for the Bay TMDL states that the County must achieve reductions in its MS4 loading by 13.53% for total nitrogen, and by 23.15% for total phosphorus by 2017—*i.e.*, these reductions must occur within the proposed permit term. *Prince George’s County, Maryland, Phase II Watershed Implementation Plan*, at 23, Table 10 (July 2, 2012). In fact, the WIP depends heavily upon robust implementation of the MS4 permit for achieving pollution reductions and tracking progress. *Id.* at 3 (summary of the implementation approach for the urban sector is to “[a]chieve conditions specified in the anticipated new municipal separate storm sewer system (MS4) permits.”)

Prince George’s County is **poised to adopt** a stormwater utility fee to help fund MS4 implementation, as required by the Watershed Protection and Restoration Program, H.B. 987 (2012). It is therefore imperative that MDE use its NPDES permitting authority to help maintain the public’s confidence, by ensuring that fees paid by property owners are used strategically and effectively. The Final Permit must therefore include a clear and enforceable provision for implementing the wasteload allocations included in the Bay TMDL for nutrients and sediments in stormwater discharges to the Anacostia River, Patuxent River, Potomac River, Mattawoman Creek, and other tributaries to the Bay.

C. Legal Requirements for Compliance Schedules

The final permit must require that TMDL implementation plans include interim and final deadlines for attainment of TMDL WLAs. It is crucial that the interim and final deadlines include dates not only for implementing plans and programs, but also for achieving quantifiable reductions in polluted stormwater discharge. Only by including deadlines based on pollutant load reductions can MDE “ensure” compliance with water quality standards in impaired waterways with TMDLs, as required by CWA § 301.

TMDL compliance schedules must also comply with Maryland’s regulations, which require that, “[w]hen a compliance schedule is imposed, the Department shall... [r]equire the permittee to achieve compliance within... the shortest reasonable time consistent with the requirements of the Federal Act and State law or regulation.” Md. Code Regs., § 26.08.04.02.C.(2)(a)(iii). It further requires that compliance schedules that extend longer than 9 months must include “interim dates of 9 months or less for... [c]ompliance with interim requirements, or submission of reports of progress toward completion of the interim requirements.” Md. Code Regs., § 26.08.04.02.C.(2)(b).

D. Regulatory Guidance for Compliance Schedules and Measureable Goals

Congress adopted a national permitting program in order to bridge the gap between the states’ adoption of WQS and the continuing lack of tangible improvements in water quality. MDE should draw from existing guidance and studies discussed below, which identify the critical elements of writing successful stormwater permits that ensure measurable progress and compliance with WQS.

In its guidance specifically designed to address stormwater permits in the Chesapeake Bay and Mid-Atlantic region, EPA recommended the following:

Issuing Permits with Clear and Measurable Provisions: It is critical that all permit provisions be clear, objective, specific, measurable, and enforceable. Permits should incorporate clear performance standards, include measurable goals or quantifiable targets for implementation and include specific deadlines for compliance. Doing so will clarify expectations for permittees and also allow permitting authorities to more easily assess compliance. These are not elements to be delegated to permittees as part of their stormwater management program planning or updating processes. Practicability determinations are the obligation of the permitting authority not the permittee. Vague phrases such as "as feasible" and 'as possible' and 'practicable' are to be avoided in a permit because such caveats allow subjective interpretation, result in inconsistent implementation by permittees, and create difficulties in permit authority oversight and enforcement. The permit writer's role is to determine what is necessary to achieve in effluent controls and to develop clear, enforceable language that conforms to these determinations.

EPA, "Urban Stormwater Approach for the Mid-Atlantic Region and the Chesapeake Bay Watershed," at 5 (July 2010) (emphasis added).

Similarly, drawing from an in-depth study of stormwater programs, EPA Region 9 and its consultants at Tetra Tech, Inc. concluded:

A clear, well-written permit and plan are critical for successful implementation of a storm water management program. This requires the permitting authority to describe the required actions clearly in a permit and the permittee to clearly articulate how it will meet these requirements in a storm water plan. The Phase I MS4 evaluations conducted by Tetra Tech have found that the more advanced storm water programs generally have more detailed, well-written permits and plans.

Kosco, et al., "Lessons Learned From In-Field Evaluations of Phase I Municipal Storm Water Programs," at 193 (2002). As a result of this study, EPA recognized that "[w]ithout specific, measurable elements, almost any activity an MS4 takes could be deemed to be in compliance with the permit." Laura Gentile and John Tinger, "U.S. E.P.A. Region IX, Storm Water Phase I MS4 Permitting: Writing More Effective, Measurable Permits," at 135 (February 2003).

More recently, EPA has provided updated guidance on "providing numeric water quality-based effluent limitations in NPDES permits for stormwater discharges." The memo states:

EPA now recognizes that where the NPDES authority determines that MS4 discharges and/or small construction stormwater discharges have the reasonable potential to cause or contribute to water quality standards excursions, permits for

MS4s and/or small construction stormwater discharges should contain numeric effluent limitations where feasible to do so. EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.

Hanlon and Keehner, “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permits Based on Those WLAs,” at 3 (Nov. 12, 2010) (emphasis added).

E. Discussion and Requested Permit Language

The proposed permit requires the County to complete “Restoration Plans” for implementing TMDLs. We request the following revisions to the proposed permit language to incorporate clear requirements and compliance schedules with interim deadlines (“benchmarks” and “milestones”) for attaining WQS, eliminating non-stormwater (illicit) discharges, performing maintenance on installed controls, and undertaking adaptive management:

Section IV.E.2.b (within “Restoration Plans and Total Maximum Daily Load” permit section):

b. Within one year of permit issuance, Prince George’s County shall submit to MDE for approval a restoration plan for each stormwater WLA approved by EPA prior to the effective date of the permit. The County shall submit restoration plans for subsequent TMDL WLAs within one year of EPA approval. Upon approval by MDE, these restoration plans will be incorporated into the permit as enforceable under this permit provisions via a major modification,⁶ including milestones, benchmarks, and final dates for attainment of applicable WLAs. The County shall fully implement the plan upon MDE approval.

If the County cannot demonstrate that its selected projects, programs, and controls will achieve WLAs, MDE will revise this permit to include additional controls and/or additional numeric effluent limitations sufficient to ensure that all applicable WLAs will be met. The County shall post the most current version of the plan on the County’s website.

As part of the restoration plans, Prince George’s County shall:

i. Include a compliance schedule containing the final date for meeting applicable WLAs and interim milestones and numeric benchmarks. Final attainment dates shall be set as the soonest possible date by which each WLA can be attained and shall be consistent with the deadlines associated with the Chesapeake Bay TMDL and associated Watershed Implementation Plans.

⁶ This recommended language also ensures the public’s right to participate in the development and approval of effluent limits in the permit, as discussed in **section IV** of these comments.

a. Numeric benchmarks will specify annual pollutant load reductions and will be used to assess progress toward attainment of milestones and ultimate WLA attainment;

b. Interim milestones will be expressed as a pollutant load reduction, with associated deadlines for attainment, will be enforceable upon incorporation into the permit, and will be included where final attainment of applicable WLAs requires more than five (5) years. Milestone intervals will be as frequent as possible but will in no case be less frequent than every five(5) years;

ii. Include a detailed schedule for implementing all structural and nonstructural water quality projects, enhanced stormwater management programs, illicit discharge detection and elimination program, erosion and sediment control program, and alternative stormwater control initiatives necessary for meeting applicable WLAs, along with provision of the basis for the chosen approach, through demonstration with modeling of how each applicable WLA (and associated benchmarks and milestones) will be attained using the chosen projects, programs, and controls, by the date for ultimate attainment;

iii. Establish a quantitative assessment of the County's current pollutant loadings using the information collected during the source identification process required by Part IV.C of this Permit. This assessment of current loadings shall serve as the baseline from which the pollutant load reductions called for in the County's compliance schedule shall be calculated;

~~ii-~~iv. Provide detailed cost estimates for individual projects, programs, controls, and plan implementation and maintenance;

~~iii-~~v. Evaluate and track the implementation of restoration plans through monitoring ~~or~~ and modeling to document the progress toward meeting established benchmarks, deadlines, and stormwater WLAs; and

~~iv-~~vi. Develop an ongoing, iterative process that continuously implements structural and nonstructural restoration projects, program enhancements, new and additional programs, and alternative BMPs where EPA approved TMDL stormwater WLAs are not being met according to the benchmarks and deadlines established as part of the City's watershed assessments. If data indicate failure to meet any applicable WLA, including failure to attain any interim milestone or benchmark, the City shall make appropriate adjustments to its programs and controls within six (6) months to address these failures.

The foregoing permit language establishes a clear roadmap for achieving water quality standards in waters that are currently impaired and covered by TMDLs. Inclusion of this

language in the final permit would serve the interests of MDE, the County, and the public, by adding clarity and certainty that is currently lacking in the proposed permit.

III. REDUCING POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE

A. The “Maximum Extent Practicable” Legal Standard

Section 402(p)(3)(B) of the CWA contains the following requirement, commonly known as the “maximum extent practicable” or “MEP” standard:

Permits for discharges from municipal storm sewers... (iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

33 U.S.C. § 1342(p)(3)(B). It is MDE’s responsibility to determine what constitutes reduction of pollutants to the MEP, and to establish clear permit terms that implement this requirement. *See* EPA, “Urban Stormwater Approach for the Mid-Atlantic Region and the Chesapeake Bay Watershed” at 5 (July 2010) (“Practicability determinations are the obligation of the permitting authority not the permittee.... The permit writer’s role is to determine what is necessary to achieve in effluent controls and to develop clear, enforceable language that conforms to these determinations.”).

Maryland has already recognized that, in most instances, Environmental Site Design or “ESD” is the most effective technology for curbing problems caused by polluted stormwater runoff. Accordingly, the General Assembly enacted the Stormwater Management Act of 2007 which directs MDE to adopt regulations that require developers to demonstrate that “[e]nvironmental site design [is] implemented to the maximum extent practicable,” and “[s]tandard best management practices [are] used only where absolutely necessary.” Md. Code. Ann., Envir. § 4-203(b)(5)(ii)(3) (2012). Under the Act, “[e]nvironmental site design’ means using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources.” *See* H.B. 786, Fiscal and Policy Note (rev’d April 2, 2007).

B. Discussion and Requested Permit Language

Water quality in Prince George’s County has been seriously degraded by the proliferation of impervious surface areas, which has resulted from unregulated or poorly regulated construction and development.⁷ We therefore strongly support requirements in the permit to reverse the adverse impacts of impervious surfaces. However, the permit language needs significant improvement to ensure that the activities undertaken to fulfill this permit requirement are effective.

⁷ The problems associated with uncontrolled urbanization are discussed in depth in the National Research Council’s report, *Urban Stormwater Management in the United States* (2009).

The proposed permit contains no definition of “restoration,” and does not otherwise establish an objective standard that MDE can use to base its review and approval of the County’s plan for restoring impervious surfaces. Instead, the permit states that the County “shall commence and complete the implementation of restoration efforts for twenty percent of the County’s impervious surface area consistent with the methodology described in” the MDE document “Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits” (MDE, June 2011 or subsequent versions).

The lack of a clear definition of “restoration” is a disservice to the County, which is under pressure to spend significant sums of taxpayer funds to install stormwater controls that are both effective and that meet the requirements of the permit. Further, the Draft 2011 Guidance does not provide adequate guidance in identifying and prioritizing effective and efficient restoration methods. A host of technical flaws within the 2011 Guidance have been identified and raised with MDE by watershed conservation groups. See Letter from Hammer *et al.* to Dr. Robert Summers (April 30, 2012), attached as **Exhibit O**. Among other problems, the Draft 2011 Guidance:

- Gives restoration credit for practices based solely on their removal of nitrogen, phosphorus, and/or sediment, while neglecting other pollutants in stormwater such as bacteria, PCBs, mercury, and trash;
- Does not address practices needed to fix biological and habitat impairments associated with stormwater;
- Overestimates the effectiveness of extended-detention stormwater ponds; and
- Includes vague, undefined terms such as “treatment,” raising the likelihood that impervious area restoration credit will be given for practices that reduce or address only a fraction of the spectrum of problems associated with stormwater.

Further, the Guidance exempts all developments installed after 2002 from the permit’s requirement to conduct a surface area assessment to determine potential stormwater control needs. This exemption is based on MDE’s apparent assumption that “BMPs from this stormwater program era are deemed state-of-the-art and need to be maintained, but will provide limited opportunity for water quality improvement.” 2011 Guidance at 4. However, there simply is no legal or technical basis for this exemption. Practices installed since 2002 are likely to consist of detention and filtering practices that are termed “standard” practices in the Stormwater Management Act of 2007. Allowing the County to install “standard” practices undermines the goal of the Stormwater Management Act of 2007 to ensure that non-ESD practices are used only when “absolutely necessary.” Md. Code. Ann., Envir. § 4-203 (2012).

We recommend that the final permit encourage the use of ESD where possible to meet the County’s impervious surface restoration requirement. Where ESD is not possible, the final permit should encourage the use of effective techniques for removing pollutant loads that originate from impervious surfaces to prevent their discharge from the MS4, including: inlet

capture systems for catching gross solids, oils, hydrocarbons prior to discharge from the MS4; vortex stormwater solids separator systems; sub-surface sand filters and other filter systems; trash nets and trash boxes; and sub-surface stormwater detention vaults.

To address these concerns, we request that MDE revise the following language in section IV.D.:

The following management programs shall be implemented in areas served by Prince George's County's MS4. These management programs ~~are~~ shall be designed to control stormwater discharges to the maximum extent practicable (MEP) and shall be maintained for the term of this permit. Additionally, these programs shall be integrated with other permit requirements to promote a comprehensive adaptive approach toward solving water quality problems. The County shall modify these programs according to needed program improvements identified as a result of periodic evaluations by MDE to ensure that the County is in fact reducing its discharge of pollutants to the MEP.

We request that MDE also revise the proposed permit language in Section IV.E.2.a. as follows:

By the end of this permit term, Prince George's County shall commence and complete the implementation of restoration efforts for twenty percent of the County's impervious surface area ~~consistent with the methodology described in the MDE document cited in Part IV.E.2.a.~~ that has not already been restored to the MEP, in addition to any impervious surface area which the County is under a previous obligation to restore. Such restoration efforts shall be designed to retain on-site at least 1 inch of stormwater from a 24-hour storm through evapotranspiration, infiltration, and/or reuse using Environmental Site Design retrofit techniques, unless the County demonstrates that:

- (i) sole use of such techniques to meet the requirements of this section is impracticable and the County has exhausted all reasonable opportunities to use ESD to meet this requirement; and
- (ii) that other types of restoration techniques will, in combination with ESD techniques, be adequate to achieve all applicable benchmarks, milestones, and final deadlines for attainment of WLAs and protect or restore the physical and biological integrity of the County's streams and rivers.

It is also important that the County remove any impediments to the use of ESD in its local code. To that end, we request that MDE revise the proposed permit requirements as follows, in section IV.D.1.a.:

- a. Implementing the stormwater management design policies, principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual*. This includes:

- i. Complying with the Stormwater Management Act of 2007 (Act) by implementing environmental site design (ESD) to the MEP for new and redevelopment projects;
- ii. Tracking the progress toward satisfying the requirements of the Act and identifying and reporting annually the problems and modifications necessary to implement ESD to the MEP; ~~and~~
- iii. Within one year of permit issuance, reviewing existing planning and zoning and public works ordinances and other codes to identify impediments to, and opportunities for promoting, the implementation of ESD to the MEP;
- iv. Within two years of permit issuance, modifying ordinances and codes identified above to eliminate impediments to and opportunities for promoting the implementation of ESD to the MEP; and
- ~~iii.~~ v. Reporting annually the modifications that have been made or need to be made to all ordinances, regulations, and new development plan review and approval processes to accommodate the requirements of the Act.

We request that MDE also add the following clarifying language in the section of the permit requiring “Management Programs”:

Permit section IV.D.1.a.i.:

Complying with the Stormwater Management Act of 2007 (Act) by implementing environmental site design (ESD) to the MEP, as defined by the Act and implementing regulations, for new and redevelopment projects

Permit section IV.D.1.b.iii.:

Number of stormwater exemptions issued, including the justification for the exemption and associated pollutant load;

Permit section IV.D.1.b.iv.:

Number and type of waivers received and issued, including those for quantity control, quality control, or both. Multiple requests for waivers may be received for a single project and each should be counted separately, whether part of the same project or plan. The total number of waivers requested and granted for qualitative and quantitative control shall be documented, along with the justification for the waivers and associated pollutant load.

Finally, we request the following revision to the proposed permit language pertaining to trash and litter:

Section IV.D.4.a. (within the section on “Trash and Litter”):

- a. Within one year of permit issuance, the County shall inventory and evaluate all current trash and recyclable pick-up operations, litter control programs, and public outreach efforts and issue a report of the findings as required in Part V. The ~~analysis-report~~ shall identify opportunities for improving overall efficiency, especially in the Anacostia River watershed, which the County shall implement.

We believe that, collectively, the foregoing permit language will ensure that the County is, in fact, reducing the discharge of pollutants in stormwater to the maximum extent practicable.

IV. MONITORING

A. Legal Standard for Monitoring Requirements

“State-issued NPDES permits must mandate, [among other things], compliance with the inspection, reporting, and monitoring requirements of the Act as outlined in 33 U.S.C. § 1318. See 33 U.S.C. § 1342(b)(2).” *Menzel v. County Utilities Corp.*, 712 F.2d 91, 94 (4th Cir. 1983). CWA regulations require MS4 permittees to submit a “proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment.” 40 C.F.R. § 122.26(d)(2)(iii)(D). Those regulations further require MS4 permittees to sample and assess discharges into the MS4 from landfills, industrial facilities and hazardous waste sites. 40 C.F.R. § 122.26(d)(2)(iv)(C).

B. Discussion and Requested Permit Language

The proposed permit requires physical monitoring in one location in Black Branch for the purpose of assessing the County’s implementation of the *2000 Maryland Stormwater Design Manual*. In addition, it requires chemical, physical, and biological monitoring in only one outfall and one associated in-stream location in Bear Branch. There is no explanation for MDE’s choice of these extremely limited monitoring requirements, and no demonstration in the administrative record that this monitoring program is “representative” of the entire MS4 system, as required by 40 C.F.R. § 122.26(d)(2)(iii)(D). A monitoring program designed to generate data from only two locations (one of which is limited to physical monitoring) falls far short of the applicable legal requirements.

Instead, we recommend that the permit require the County to develop a monitoring program that meets specific minimum requirements that are set out in the permit. And, because these monitoring requirements constitute a major permit requirement, they must be approved by MDE and incorporated into the permit through a major permit modification. To effectuate this requirement we request that MDE adopt the following permit language in Section IV.F of the permit:

F. Assessment of Controls

Assessment of controls is critical for determining the effectiveness of the NPDES stormwater management program and progress toward improving water quality. The County shall use chemical, biological, and physical monitoring to assess watershed restoration efforts, document BMP effectiveness, ~~or and calibrate water quality models for showing~~ track progress toward meeting benchmarks, milestones and final deadlines for attainment of any applicable WLAs developed under EPA approved TMDLs identified above. ~~Additionally, the County shall continue physical stream monitoring in the Black Branch watershed to assess the implementation of the latest version of the 2000 Maryland Stormwater Design Manual.~~ Specific monitoring requirements are described below.

Within 2 years of the effective date of this permit, the County shall develop, public notice, and submit to MDE for review and approval a monitoring program sufficient to demonstrate compliance with all provisions of this permit, including TMDL restoration plans, wasteload allocations, milestones, and benchmarks. The program shall include water quality monitoring and may be supplemented by modeling. The program will be incorporated into the permit as enforceable provisions via a major modification. The County shall fully implement the program upon MDE approval.

For water quality monitoring, the number of samples, sampling frequencies, and number and locations of sampling sources must be adequate to ensure data are statistically significant and interpretable for all County water bodies. This monitoring must also be adequate to determine if improvement in water quality is being attained in order to make modifications to relevant management programs as necessary.

If the County chooses to use modeling (including modeling based on volume reduction achieved by impervious surface restoration) to supplement its water quality monitoring efforts, the County shall show that its chemical and physical monitoring provides accurate representations of water quality conditions sufficient to calibrate its model(s). In its annual report to MDE, the County shall describe how it has calibrated its model(s) with monitoring.

The County shall evaluate the implementation of the program in its annual report and make adjustments to its monitoring and modeling programs if their results are found at any point to be inaccurate or insufficiently representative.

This proposed language allows the County to make the determination in the first instance of what monitoring program is most appropriate to the system. Once proposed, MDE and the public will have an opportunity to review and suggest revisions to the monitoring program. Finally, MDE will approve a monitoring program only if it complies with the regulatory standard for a “monitoring program for representative data collection.” 40 C.F.R. § 122.26(d)(2)(iii)(D).

V. MAINTENANCE OF STORMWATER PRACTICES AND FACILITIES

A. Legal Requirements for Maintenance of Installed Controls

The permit needs to include clear minimum requirements for maintaining installed stormwater control practices and facilities, to ensure that the County’s programs and plans continue to perform as needed to meet WQS and other legal requirements. To facilitate this, CWA regulations required MDE to gather from the County “information on existing structural and source controls, including operation and maintenance measures for structural controls, that are currently being implemented.” 40 C.F.R. § 122.26(d)(1)(v). MDE’s own regulations are also instructive:

A. Maintenance requirements established in this regulation shall be contained in all county and municipal ordinances and shall provide for inspection and maintenance. The owner shall perform or cause to be performed preventive maintenance of all completed ESD treatment practices and structural stormwater management measures to ensure proper functioning. The responsible agency of the county or municipality shall ensure preventive maintenance through inspection of all stormwater management systems. The inspection shall occur during the first year of operation and then at least once every 3 years after that.

Md. Code Regs. § 26.17.02.11.A.

B. Discussion and Requested Permit Language

We recommend that MDE add a new permit section titled “Maintenance of Stormwater Management Practices,” in place of the current language in Section IV.D.1.d.:

d. Maintenance of Stormwater Management Practices

i. County Owned and Operated Practices

Within 18 months of the effective date of this permit, the County shall develop and implement a maintenance plan for all County-owned and operated stormwater management practices. This plan shall be designed to ensure that these practices are properly maintained so that they operate as designed, are safe, and are free from trash. The plan shall provide for the inspection of all practices at least once every three years and shall identify the means by which the County will keep the practices properly maintained. The County shall submit documentation in its annual reports identifying the practices inspected, the number of maintenance inspections performed, the County’s inspection schedules, the actions used to ensure compliance, and any other relevant information.

ii. Non-County Owned and Operated Practices

In conjunction with updating of relevant ordinances and policies, as required by COMAR 26.17.02, the County shall develop accountability mechanisms to ensure maintenance of stormwater control measures on non-County property. Those mechanisms may include combinations of deed restrictions, ordinances,

maintenance agreements, or other policies deemed appropriate by the permittee. The County must also include a long-term maintenance verification process, which may include County inspections, 3rd party inspections, owner/operator certification on a frequency deemed appropriate by the permittee, and/or other mechanisms.

As with our requested monitoring language, our requested language on maintenance allows the County to propose in the first instance the maintenance plans that are appropriate to the County's system. The public and MDE will then have an opportunity to review the plans and suggest changes. MDE will then approve the plan only if it meets minimum legal requirements.

VI. PUBLIC RIGHT TO COMMENT ON AND CHALLENGE PLAN APPROVAL

A. Legal Requirements for Public Participation in Setting Effluent Limits

Where the terms of pollution control plans and programs are approved by MDE and incorporated as enforceable terms of the permit, those plans and programs must be treated as major modifications to the permit. This is because “[S]ection 301 of the Act mandates that every permit contain (1) effluent limitations that reflect the pollution reduction achievable by using technologically practicable controls, *see* 33 U.S.C. § 1311(b)(1)(A), and (2) any more stringent pollutant release limitations necessary for the waterway receiving the pollutant to meet ‘water quality standards.’ 33 U.S.C. § 1311(b)(1)(C).” *American Paper Inst, Inc.. v. EPA*, 996 F.2d 346, 349 (D.C. Cir. 1993) (emphasis added). Moreover, the permit cannot allow MDE and the County to negotiate different terms outside of the formal permit issuance process.

The plans and schedules required under the proposed permit will constitute “effluent limitations” insofar as they will contain restrictions on “quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources... including schedules of compliance.” 33 U.S.C. § 1362(11) (defining “effluent limitations” under the CWA). CWA regulations require that new or revised effluent limitations must be incorporated through a formal (*i.e.* major) permit modification that fully complies with public participation requirements:

If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of § 124.5(c), and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See § 124.5(c)(2)... If a permit modification satisfies the criteria in § 122.63 for “minor modifications” the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in part 124 (or procedures of an approved State program) followed.

40 C.F.R. § 122.62. (Emphasis added). Part 124 referenced in this section requires that non-minor permit modifications be subject to the same procedural requirements as new or re-issued permits. *See* 40 C.F.R. §§ 124.5 - 124.15.

In the context of an analogous regulatory program, the Court of Appeals for the Second Circuit held that Concentrated Animal Feeding Operation (“CAFO”) nutrient management plans must be incorporated into a facility’s NPDES CAFO permit:

There is no doubt that under the CAFO Rule, the only restrictions actually imposed on land application discharges are those restrictions imposed by the various terms of the nutrient management plan, including the waste application *rates* developed by the Large CAFOs pursuant to their nutrient management plans. Indeed, the requirement to develop a nutrient management plan constitutes a restriction on land application discharges only to the extent that the nutrient management plan actually imposes restrictions on land application discharges. To accept the EPA's contrary argument - that *requiring* a nutrient management plan is itself a restriction on land application discharges - is to allow semantics to torture logic.

Waterkeeper Alliance Inc. v. EPA, 399 F.3d 486, 502 (2d Cir. 2005) (emphasis in original).

Like CAFO nutrient management plans, TMDL implementation plans and other stormwater programs developed under a MS4 permit contain restrictions on the discharges of stormwater pollutants from the county’s MS4. Because the terms of those plans embody effluent limitations restricting point source discharges, they must be incorporated into the Permit through a major permit modification.

B. Discussion and Requested Permit Language

The requested language above already addresses this comment. In particular, our requested language for permit section IV.E.2.b. requires that TMDL implementation plans (or “restoration plans”) be incorporated into the permit through a major modification. (“incorporated into the permit as enforceable under this permit provisions via a major modification,⁸ including milestones, benchmarks, and final dates for attainment of applicable WLAs. The County shall fully implement the plan upon MDE approval.”) We requested similar language in permit section IV.F. for the County’s monitoring program. (“Within 2 years of the effective date of this permit, the County shall develop, public notice, and submit to MDE for review and approval a monitoring program....The program will be incorporated into the permit as enforceable provisions via a major modification. The County shall fully implement the program upon MDE approval.”)

In addition to the above, we note that any modification of the permit’s requirements must be accomplished through a major permit modification, with the narrow exception of those

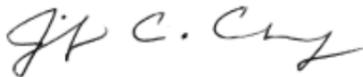
⁸ This recommended language also ensures the public’s right to participate in the development and approval of effluent limits in the permit, as discussed in section IV of these comments.

modifications that meet the definition of a “minor modification” in 40 C.F.R. § 122.63.⁹ Accordingly, changes made pursuant to the following permit terms are almost certain to require a major modification process:

- Proposed Permit Part IV.D.3.a.: “Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to the County’s storm drain system”
- Proposed Permit Part IV.D.5.b.: “The maintenance program shall include these or MDE approved alternative activities,” and “Within one year of permit issuance, an alternative maintenance program may be submitted for MDE approval indicating the activities to be undertaken and associated pollutant reductions.”

Conclusion

For the reasons stated above and supported by the attached supporting documents, we urge MDE to significantly revise the proposed permit prior to final issuance. We encourage you to contact us with any questions and would welcome the opportunity to discuss these comments at MDE’s request.



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⁹ For MS4s, “minor modifications” include only changes made to “[c]orrect typographical errors; [r]equire more frequent monitoring or reporting by the permittee; [c]hange an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; [or] ... [d]elete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.” 40 C.F.R. § 122.63.