



March 21, 2016

Mr. Greg Schaner
Office of Wastewater Management
Water Permits Division (M4203)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Submitted via Regulations.gov

Re: Comments on Proposed Rule: National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand (Docket ID No. EPA-HQ-OW-2015-0671)

Dear Mr. Schaner:

Thank you for the opportunity to comment on the Environmental Protection Agency's (EPA) proposed revisions to the permitting regulations for small municipal separate storm sewer systems (MS4s).¹ This letter provides the comments of Natural Resources Defense Council, on behalf of our over 380,000 members nationwide.

In summary, we urge EPA to:

- (i) establish performance standards defining the “maximum extent practicable,” including an on-site retention standard for new development and redevelopment;
- (ii) improve certain aspects of the proposal to conform to the *Environmental Defense Center* decision and EPA's intent;
- (iii) adopt a hybrid of proposed Options 1 and 2, which, we believe would provide the most effective water quality protections;
- (iv) ensure that permittees' evaluation and assessment requirements (including monitoring) are linked directly to the permit's measurable requirements;
- (v) delete ill-conceived “guidance” that discourages permit requirements beyond the minimum control measures, and clarify associated language in the regulatory text;
- (vi) provide strong examples of sufficiently “clear, specific, measurable and enforceable” permit requirements;
- (vii) ensure that all small MS4 general permits conform to Clean Water Act requirements as soon as legally possible; and
- (viii) ensure that individual small MS4 permits are also consistent with the Ninth Circuit's holding.

¹ Proposed Rule—National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand, 81 Fed. Reg. 415 (Jan. 6, 2016).

“Attachment 1” to this letter provides recommended line edits to EPA’s proposed regulatory text for Option 1. (These edits are presented in “redline” format.) We have not drafted specific regulatory text to reflect our other comments, since EPA’s proposed rule did not include draft language for Options 2 or 3. However, we would welcome the opportunity for dialogue with EPA and other stakeholders about specific regulatory language for other aspects of a final rule, if EPA considers an approach that is not based exclusively on Option 1.

1. As EPA, the National Research Council, and the courts have recognized, urban runoff, including from “small MS4s,” is a widespread source of water pollution that EPA must better regulate to meet Clean Water Act goals.

In a landmark 2008 report, the National Research Council (NRC) found that “[s]tormwater runoff from the built environment remains one of the great challenges of modern water pollution control, as this source of contamination is a principal contributor to water quality impairment of water bodies nationwide.”²

EPA explained, in a 2009 Federal Register notice, that “the NRC found that ‘stormwater permits leave a great deal of discretion to the regulated community to set their own standards and to self-monitor.’ As a result, across the Nation there is inconsistency in the NPDES program and in stormwater management programs required by NPDES permit with respect to stormwater discharges from MS4s caused by stormwater discharges from development.”³ The NRC itself described the situation even more bluntly: “Most dischargers have no measurable, enforceable requirements.... Significant changes to the current regulatory program are necessary to provide meaningful regulation of stormwater dischargers in the future.”⁴

Accordingly, EPA’s 2009 notice announced the Agency’s “plans to initiate national rulemaking to establish a comprehensive program to reduce stormwater discharges from new development and redevelopment and make other regulatory improvements to strengthen its stormwater program.”⁵ EPA stated that the Agency, “shares the NRC Committee’s perspective that it is imperative that the stormwater regulations be as effective as possible in protecting water quality.... The role of MS4s in reducing stormwater impacts from the built environment is crucial and growing, given that these sources of adverse water quality impacts are continually expanding.”⁶

Despite the unequivocal findings of the NRC report, EPA has since “deferred” that earlier rulemaking effort – unjustifiably, we believe. Nonetheless, EPA’s conclusions and the NRC’s warnings about the importance of improving stormwater regulations and MS4 permitting remain equally pressing today.

² Committee on Reducing Stormwater Discharge Contributions to Water Pollution, National Research Council, “Urban Stormwater Management in the United States” (2008), p.vii. (This document, along with other referenced documents, is included in the Appendix following this letter.)

³ 74 Fed. Reg. 68,617, 68,620, Stakeholder Input; Stormwater Management Including Discharges from New Development and Redevelopment (Dec. 28, 2009) (quoting NRC report).

⁴ National Research Council, “Report in Brief: Urban Stormwater Management in the United States” (2008).

⁵ 74 Fed. Reg. at 68,617.

⁶ *Id.* at 68,620.

EPA's current rulemaking is intended to end the self-regulatory scheme reflected in EPA's current small MS4 general permitting regulations, which the NRC found to be ineffective and the U.S. Court of Appeals for the Ninth Circuit has found to be unlawful.⁷ Although the focus on small MS4s is narrower than the rulemaking EPA initiated in 2009, small MS4s account for a substantial share of urban stormwater pollution – potentially more even than larger municipalities, in the aggregate.⁸ EPA must act, consistent with the views it expressed in 2009, to make these revisions to the small MS4 regulations “as effective as possible in protecting water quality.”⁹

2. EPA rules should establish meaningful, substantive pollution control requirements for all small MS4 permits, including an on-site retention standard for new development and redevelopment.

EPA presents three options in the proposed rule. However, none of these options would establish substantive pollution control standards defining the Clean Water Act's requirement to reduce MS4 pollutant discharges to the “maximum extent practicable” (MEP). Instead, all three options leave it to the permitting authority in each state to establish pollution control standards, on a permit-by-permit basis. As discussed below, “Option 1” – particularly if it is strengthened as recommended in this letter – can lead to improved application of the MEP standard by permitting authorities. However, relying on the independent judgments of approximately fifty permitting authorities cannot ensure that all small MS4s will be required to implement pollution control measures that, *in fact*, reduce pollutant discharges to the MEP.

Courts have held that the statutory phrase “‘to the maximum extent practicable’ does not permit unbridled discretion.”¹⁰ Rather, “[i]t imposes a clear duty on the agency to fulfill the statutory command to the extent that it is feasible or possible.”¹¹ While the term “practicable” is not defined in the municipal stormwater context, “practicable” as used in a different section of the Clean Water Act has been defined as meaning that technology is required unless the costs are “wholly disproportionate” to pollution reduction benefits.¹² EPA is well-equipped to establish nationwide regulatory performance standards implementing this statutory MEP standard, just as the agency routinely does with other technology-based statutory standards under the Clean Water Act.

⁷ *Env'tl. Def. Center, Inc. v. United States Env'tl. Prot. Agency*, 344 F.3d 832 (9th Cir. 2003) (hereinafter *EDC*).

⁸ EPA estimates that there are about 6,700 regulated small MS4s. Nationwide, the vast majority of municipalities with populations under 100,000 that are located within Census-defined “urbanized areas” are regulated as small MS4s. Such municipalities comprise about 44% of the U.S. population. This is substantially more than the larger municipalities regulated as “large” and “medium” MS4s, which account for about 27% of the U.S. population. See Census statistics available at <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1142.pdf> and <https://www.census.gov/geo/reference/ua/uafaq.html?cssp=SERP>. Further, because smaller municipalities typically have a lower population density, due to sprawl development patterns, the total land area of small MS4s almost certainly exceeds the land area of the larger ones.

⁹ 74 Fed. Reg. at 68,620.

¹⁰ *Defenders of Wildlife v. Babbitt*, 130 F.Supp.2d 121, 131 (D.D.C. 2001) (internal citations omitted).

¹¹ *Id.*; see also *Friends of Boundary Waters Wilderness v. Thomas*, 53 F.3d 881, 885 (8th Cir. 1995) (“feasible” means “physically possible”).

¹² *Rybachek v. EPA*, 904 F.2d 1276, 1289 (9th Cir. 1990).

The absence of nationwide substantive standards will most certainly perpetuate inconsistent protections around the country, making it unlikely that residents of all fifty states will receive a consistent, robust level of protection for their cherished local waterbodies, as per Clean Water Act requirements. Without such nationwide standards, EPA cannot truly “ensure that each [MS4’s storm water management] program reduces the discharge of pollutants to the maximum extent practicable,” as required by the court in *EDC*.

Therefore, we urge EPA to establish performance standards and other measurable requirements defining the “maximum extent practicable,” to ensure that the permitting authority in each state provides at least a certain minimum “floor” of protection.¹³ Most significantly, with respect to post-construction runoff from new development and redevelopment, EPA must adopt an on-site retention standard that prevents or minimizes water quality impacts by keeping runoff on-site, before it can cause pollution in local water bodies.

Indeed, as noted in Part 1, above, EPA has already expended significant effort towards developing such a performance standard for post-construction runoff. Yet, the Agency stated in 2014 that it would “defer” that effort.¹⁴ With the instant rulemaking, however, EPA is no longer deferring all regulatory action concerning implementation of the MEP standard. Accordingly, in issuing these regulations to implement the MEP standard, EPA must issue a rule that accounts for the best available scientific and technical knowledge; the only way to do so is to issue a rule setting an on-site retention performance standard for post-construction runoff.

Authoritative scientific studies demonstrate that on-site retention of stormwater is the most effective means of controlling stormwater pollution from developed areas,¹⁵ more effective than

¹³ EPA rules should be clear that such a “floor” is not all that the Clean Water Act demands. First, EPA rules should require that the permitting authority determine whether, based on the best current scientific understanding of stormwater management and the best practices in use in other jurisdictions at the time of permit issuance, the “maximum extent practicable” includes any more stringent pollution control obligations beyond the “floor.” Second, EPA should be clear that permitting authorities must also determine whether any additional effluent limitations are necessary “to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.” 40 C.F.R. § 122.34(a). EPA should also emphasize that general NPDES antibacksliding rules would apply, and therefore states would not be permitted to weaken existing standards that exceed the federally-established “floor.”

¹⁴ EPA, “Proposed National Rulemaking to Strengthen the Stormwater Program,”

<https://www.epa.gov/npdes/proposed-national-rulemaking-strengthen-stormwater-program>.

¹⁵ See, e.g., National Research Council, *Urban Stormwater Management in the United States* (2009). The National Research Council (NRC), a landmark 2009 report requested by EPA, recommended that stormwater management efforts focus on reducing runoff volumes from developed land due to the “water degradation resulting from the increased volume as well as increased pollutant loadings in stormwater runoff.” *Id.* at 4. The NRC found that, because greater runoff volumes lead to more pollution, reducing stormwater runoff by retaining it on-site can dramatically reduce the pollutant loads from development. See, e.g., *id.* at 9. In fact, the NRC recommends that stormwater flow be used as a regulatory proxy for the loading of pollutants. *Id.* at 50-51. In regard to MS4 permitting, the NRC specifically recommended an approach whereby “[m]unicipal permittees would be required...to make ARCD [Aquatic Resources Conservation Design] techniques top priorities for implementation in approving new developments and redevelopments, to be used unless they are formally and convincingly demonstrated to be infeasible.” *Id.* at 500. (The NRC report defines “Aquatic Resources Conservation Design” as chiefly comprising stormwater management techniques that reduce the volume of runoff through infiltration, evapotranspiration, and rainwater harvesting, which retain runoff on-site. *Id.* at 497-99.) Further, the NRC

alternative approaches.¹⁶ On-site retention standards are indisputably “practicable” throughout the country since they have been applied in numerous jurisdictions nationwide, as documented by EPA and others;¹⁷ for specific sites where it may be technically infeasible to retain the target runoff volume on-site, a performance standard can allow for alternative compliance, as in many of the existing permits and local regulations with on-site retention standards. EPA, in connection with a previous national rulemaking effort, publicly expressed its view that a “[r]etention standard approach for development is necessary and cost-effective,” and that such an approach is “achievable, easy to understand, & enforceable.”¹⁸ To our knowledge, EPA has never retracted that view; to the contrary, EPA continues to promote such standards in publications such as the “MS4 Permit Improvement Guide,” which is cited in the preamble to the proposed MS4 general permit remand rule.¹⁹ The “MS4 Permit Improvement Guide” even goes so far as to provide sample language that permitting authorities can include in permit fact sheets as the rationale in support of on-site retention standards.²⁰ Indeed, in several states where EPA is the permitting authority, EPA has issued permits (or proposed draft permits) that include an on-site retention standard; in the accompanying fact sheets, EPA has explained the legal and technical bases for determining that such permit terms are necessary to meet the “maximum extent practicable” standard.²¹ Similarly, EPA guidance for federal facilities, issued

recommends that all MS4 permit requirements implementing the MEP standard, including post-construction requirements, should be expressed numerically in order to be most effective and avoid ambiguity. *Id.* at 542.

¹⁶ As the 2009 NRC report concluded, “effective hydrologic mitigation for urban development cannot just aim to reduce post-development peak flows to predevelopment peak flows.” *Id.* at 6. This is because reducing peak discharge leaves the underlying increase in runoff volumes untouched, which “partly explains why evaluation of downstream conditions commonly document little improvement resulting from traditional flow-mitigation measures.” *Id.* at 33. Controlling the *quantity* of runoff volume has also been shown to be more effective than relying on runoff *quality* standards. This is because “the constituents remaining even in ‘treated’ stormwater represent a substantial, but largely unappreciated, impact to downstream watercourses,” *id.* at 25, and because “flow is itself responsible for additional erosion and sedimentation that adversely impacts surface water quality,” *id.* at 99. Further, courts have found MS4 permits deficient for failing to include pollution control measures, such as infiltration measures, that would reduce discharges more than conventional controls would. *N.C. Wildlife Fed’n Cent. Piedmont Group of the NC Sierra Club v. N.C. Div. of Water Quality*, No. 05 EHR 2055, 06 EHR 0164, 2006 WL 3890348, at “Conclusions of Law” ¶¶ 17-18 (N.C.O.A.H. Oct. 13, 2006) (available at <http://www.ncoah.com/hearings/decisions/ehr/05%20EHR%202055%20-%2006%20EHR%200164.doc>). Courts have also upheld determinations by permitting authorities that on-site retention standards represent the MEP for control of post-construction runoff pollution. *City of Bluefield, et al., v. Mandirola, et. Al.*, Civil Action No. 10-AA-71 (Circuit Court of Kanawha County, W.Va. Dec. 14, 2010) (copy including in Appendix to this letter).

¹⁷ See, e.g., EPA, “Post-Construction Performance Standards and Water Quality-Based Requirements: A Compendium of Permitting Approaches” (2014), available at http://www3.epa.gov/npdes/pubs/sw_ms4_compendium.pdf (citing examples from permits in EPA Regions 1, 2, 3, 4, 5, 6, 8, 9, and 10); and EPA, “MS4 General Permits and the Six Minimum Control Measures: A Compendium of Permit Requirements” (Oct. 2015) (available in the docket for this rulemaking) (citing examples from permits in Tennessee, New Mexico, California, Maryland). In part “c” of Attachment 2 to this letter, we also provide many additional examples (New York, West Virginia, Montana, Massachusetts (draft), Connecticut).

¹⁸ Overview of EPA’s Stormwater Rule Considerations, EPA presentation to Water Environment Research Foundation (November 16, 2011) at 5. (This document was provided by EPA in response to a Freedom of Information Act request, and is available online at <https://foiaonline.regulations.gov/foia/action/public/view/request?objectId=090004d280a2d1d0>.)

¹⁹ See EPA, MS4 Permit Improvement Guide, EPA 833-R-10-001 (April 2010), at 50-57, available at https://www3.epa.gov/npdes/pubs/ms4permit_improvement_guide.pdf.

²⁰ *Id.*

²¹ See, e.g., EPA Region 8, Statement of Basis for Buckley Air Force Base Small MS4 Permit, No. CO-R042003 (2013), pp. 15-16, 18-19, available at

pursuant to Section 438 of the Energy Independence and Security Act of 2007, requires new development and redevelopment projects to manage onsite (*i.e.*, prevent the offsite discharge of) the 95th percentile storm through infiltration, harvesting, and/or evapotranspiration.²²

In sum, because on-site retention of stormwater is a demonstrably practicable post-construction stormwater management approach that yields maximum pollution reductions, it represents the “maximum extent practicable” for control of post-construction runoff under Clean Water Act § 402(p)(3)(b)(iii).²³ EPA should act now to adopt in federal regulations an on-site retention standard defining the “maximum extent practicable” standard. Given the scientific evidence and practical experience supporting this approach, it would be arbitrary and capricious for EPA to fail to do so.

We note that states, utilities, and environmental organizations voiced their support for the establishment of such a national performance standard when EPA was previously considering updates to its national stormwater regulations. In a joint letter to EPA, a diverse group of organizations from these sectors wrote that “including new development and redevelopment standards for on-site retention is an important element of the proposed rule and will help to provide much needed reductions in the permanent discharges created by development, both in ‘greenfield’ undeveloped locations and urban infill settings.”²⁴

3. EPA should improve certain aspects of the proposal to make sure the final rule conforms to the *Environmental Defense Center* decision and EPA’s stated intent, regardless of which “option” EPA selects.

The core legal principles underlying EPA’s proposal are sound. As described in the draft rule’s preamble, pursuant to the ruling by the U.S. Court of Appeals for the Ninth Circuit in *Environmental Defense Center v. EPA*,²⁵ EPA must revise the small MS4 permitting rules to comply with the Clean Water Act. In the preamble, EPA correctly states the requirements of that decision as follows:

https://www.epa.gov/sites/production/files/documents/buckleymss4finalpermitsob_co-r042003_0.pdf; EPA Region 6, Fact Sheet and Supplemental Information for the New Mexico Small MS4 General Permit (Draft), No. NMR040000 (2015), pp. 5, 41-45, available at

https://www3.epa.gov/region6/water/npdes/sw/sms4/pdf/nmr04000_draft_fact_sheet.pdf; EPA Region 1, Fact Sheet for the Massachusetts Small MS4 General Permit (Draft), Nos. MAR041000, MAR042000, MAR043000 (2014), pp. 11, 86-92, available at <https://www3.epa.gov/region1/npdes/stormwater/ma/2014FactSheet.pdf>, page 11, 86-92); EPA Region 3, Fact Sheet, NPDES MS4 Permit No. DC000021 (Government of the District of Columbia) (2011), available at https://www3.epa.gov/reg3wapd/pdf/pdf_npdes/stormwater/DCMS4/FinalPermit2011/DCMS4FINALDCfactsheet093011.pdf.

²² EPA, Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under § 438 of the Energy Independence and Security Act, at 12 (2009) (“U.S. EPA Federal Projects Guidance”), https://www.epa.gov/sites/production/files/2015-08/documents/epa_swm_guidance.pdf.

²³ See also *infra*, Part 3.d.i. (explaining that applying the MEP standard requires comparison of alternative standards and selection of the most effective standard unless that standard not practicable).

²⁴ Joint letter from NRDC, American Rivers, Association of State and Interstate Water Pollution Control Administrators, National Association of Clean Water Agencies, and Water Environment Federation to EPA (July 8, 2011), available at http://w.weftec.org/PostStormwater_ConstructionLtr_070811.

²⁵ *EDC*, 344 F.3d at 832.

To conform to the court’s decision, the rule needs to ensure that permitting authorities determine what requirements are needed to reduce pollutants from each permitted small MS4 “to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act,” as currently required for small MS4 permits under 40 CFR 122.34(a). The proposed rule must also require NPDES permitting authorities to provide the public with the opportunity to review, submit comments, and request a public hearing on these requirements.²⁶

The preamble further explains, correctly, that:

To be consistent with the court’s decision, one criterion that any option must meet is that it must ensure the permitting authority provides a final determination on whether the requirements to which the MS4 is subject, whether articulated fully in the permit itself or defined in whole or part by the MS4 operator in the NOI, meet the NPDES requirements to reduce discharges to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Act.

* * *

To be consistent with the court’s decision, any option chosen must provide for public notice and the opportunity to request a public hearing on what is considered necessary for a permitted MS4 to meet the requirement to reduce discharges to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA, regardless of where those requirements are defined.²⁷

EPA has proposed three general “options” for the new rule, each of which could, in theory, meet these requirements and improve the quality and effectiveness of small MS4 permits. As discussed below, in Part 4 of this letter, we believe that a hybrid of Options 1 and 2 is the best approach to ensure that, in practice, permit terms actually meet all applicable, substantive legal standards and that there are meaningful opportunities for public participation in permitting decisions.

Before describing our recommended hybrid approach, however, we identify below several aspects of EPA’s proposal that should be strengthened to conform to the *EDC* decision and EPA’s stated intent. These recommendations apply regardless of which “option” EPA selects as the basis for the final rule.

a. The final rule must require that permitting authorities define all permittee obligations in “specific, clear, measurable, and enforceable” terms.

In EPA’s description of Option 1 and in the accompanying proposed regulatory language (§ 122.34(a)), EPA emphasizes that permit conditions must establish in “specific, clear, and

²⁶ 81 Fed. Reg. at 418.

²⁷ *Id.* at 420.

measurable terms” what the permittee is required to do reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. For the reasons EPA explains, the requirement that permittees’ obligations be stated in “clear, specific, and measurable” terms is essential to ensure that permitting authorities, rather than permittees, determine what pollution control requirements are necessary to meet the applicable, substantive legal standards. Such permit terms, in EPA’s words, provide “sufficient clarity and specificity to enable permittees, the public, and regulatory authorities alike to understand what is required” of permittees”;²⁸ provide “certainty and understanding as to what must be accomplished during each permit term”;²⁹ and “make it clear to all what level of effort is expected of the permittee during the permit term for each permit provision.”³⁰

To ensure that this requirement applies to all permit terms, the final rule should do the following:

i. The requirement must apply regardless of which “option” EPA selects in the final rule.

Regardless of which “option” EPA selects in the final rule, the rule must require that the permitting authority define each permittees’ obligations in “clear, specific, and measurable” terms. In EPA’s description of Option 2, however, EPA does not refer to the concept of “specific, clear, and measurable” requirements. If Option 2 is selected – either as the sole basis for the rule, or as part of Option 3 or another hybrid approach – the rule must provide that each permittee’s “BMPs, measurable goals, schedules, and other activities...[that] the permitting authority will need to incorporate...as enforceable elements of the permit”³¹ must be stated in “clear, specific, and measurable” terms.

ii. The requirement must clearly apply to all permit terms, not only to permit terms implementing the minimum control measures.

It appears to be EPA’s intent that the requirements of proposed § 122.34(a) will apply to all permit terms, not only to permit terms implementing the minimum control measures. This includes permit terms under § 122.34(c) (“Other applicable requirements”) and § 122.34(d) (“Evaluation and assessment requirements”). This is the correct approach, to ensure that permitting authorities, rather than permittees, make the final determination as to all pollution control requirements. To make this explicit in the regulatory text, the first sentence of proposed § 122.34(a) should be revised to state that, in each permit, “...the Director must include permit conditions pursuant to paragraphs (b), (c), and (d) of this section that establish in specific, clear, and measurable terms...” (If EPA selects Option 2, or allows states to choose Option 2, the same provision should apply to the enforceable terms incorporated into each MS4’s authorization to discharge.)

²⁸ *Id.* at 422.

²⁹ *Id.* at 422.

³⁰ *Id.* at 421.

³¹ *Id.* at 427.

iii. The regulatory text should add the word “enforceable” following the words “clear, specific, and measurable”.

Further, regardless of which option EPA selects, the phrase “clear, specific, and measurable” in the regulatory text should be modified to say “clear, specific, measurable, and enforceable.” This would underscore that permit terms must be sufficiently specific that an adjudicatory body (administrative or judicial) could determine whether a permittee is in compliance with or in violation of the permit. The preamble cites EPA’s “MS4 Permit Improvement Guide” for the proposition that permit terms must be “clear, specific, measurable, and enforceable.”³² EPA should use this entire phrase, including the word “enforceable,” in the regulatory text.

b. The final rule should more precisely define the components of a “clear, specific, measurable, and enforceable” permit term, both in general and with respect to each of the minimum control measures.

The preamble also cites the statement from the “Permit Improvement Guide” that, in order for permit requirements to be “clear, specific, measurable, and enforceable, each Permit Requirement will ideally specify: What needs to happen; Who needs to do it; How much they need to do; When they need to get it done; and Where it is to be done.”³³ The proposed regulatory text, at § 122.34(a), attempts to capture this notion by providing that “effluent limitations may be expressed as requirements to implement best management practices (BMPs) with clear, specific, and measurable requirements, including, but not limited to, specific tasks, BMP design requirements, performance requirements or benchmarks, schedules for implementation and maintenance, and frequency of actions.” These are all important characteristics of clear, specific, measurable, and enforceable permit terms. However, the proposed language is ambiguous as to whether each BMP must include these elements, or whether they are merely suggested. These elements should be mandatory and should apply to each BMP. The final regulatory text (for any “option” selected) should be changed to expressly state that “each BMP shall include” these elements.³⁴

Similarly, the regulatory text for each “minimum control measure” (in sections 122.34(b)(1)-(6)) should be revised to clarify that clear, specific, measurable, and enforceable requirements must be established for each required element of the minimum control measure.³⁵

c. The regulatory text should not require the permittee to “develop” elements of a program, but rather to “implement” and (where applicable) “enforce” the required program elements.

³² *Id.* at 422, 424, 425.

³³ *Id.* at 422.

³⁴ We note that this change would be consistent with the intent of the original Phase II rule that there must be “measurable goals for each of the BMPs including, as appropriate, the months and years in which [the MS4] will undertake required actions, including interim milestones and the frequency of each action.” 40 C.F.R. § 122.34(d)(1)(ii).

³⁵ This change would ensure that the rule is not read as meaning that the permit must include clear, specific, measurable requirements to have a program that addresses the minimum control measures. Rather the rule must unambiguously state that the permit must set forth each of the required elements of each minimum control measure in clear, specific, and measurable terms.

The regulatory text from the original Phase II rule, in many places, requires the permittee to “develop, implement, and enforce” certain elements of a stormwater management program. In the proposed regulatory text, EPA appropriately eliminates this language from the first sentence of § 122.34(a), because, under the *EDC* ruling, a permit cannot delegate responsibility to a permittee to develop its own pollution control requirements; rather, the permitting authority must establish those requirements, which the permittee must then implement and (where applicable) enforce.³⁶

However, in EPA’s proposed regulatory text, the requirement to “develop” certain aspects of a program remains in sections 122.34(b)(3) (illicit discharge detection and elimination), 122.34(b)(4) (construction site storm water runoff control), 122.34(b)(5) (post-construction storm water management in new development and redevelopment), and 122.35 (pollution prevention/good housekeeping for municipal operations). Regardless of which option EPA selects, the requirement to “develop” the aspects of a program should be eliminated, to avoid any implication that the permittee is developing its own pollution control requirements after being granted authorization to discharge. (Under “Option 2,” an MS4 may bear responsibility to “develop” aspects of a proposed program, for submission in its NOI, prior to authorization to discharge. But the permit would still require the MS4, following authorization to discharge, only to “implement and enforce” the requirements that the permitting authority has incorporated into the permit, with respect to that permittee.)

To the extent that permittees need to “develop” protocols for implementing specific permit requirements, this would be covered by the provision (in the first paragraph of proposed 122.34(b)) stating that “the permit must also require a written storm water management program document or documents that, at a minimum, describes how the permittee intends to comply with the permit’s requirements...”

d. EPA should expand upon the list of factors that permitting authorities must consider when developing permit conditions for each successive permit term.

Proposed § 122.34(a) states that each small MS4 general permit “must include conditions that establish in clear, specific, and measurable, terms, what is required to reduce the discharge of pollutants to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act....Each successive permit must meet the requirements of this section based on current water quality conditions, record of BMP effectiveness, and other relevant information.”³⁷

We strongly support the explicit statement in the rule that the conditions of “[e]ach successive permit must meet” the applicable legal standards, indicating that permit terms deemed legally sufficient at one point in time may no longer be sufficient in the future. Over time, the understanding of which pollution control measures and standards are the most *effective* and

³⁶ A requirement that the permittee “enforce” certain permit requirements relates to those control measures that require an exercise of the permittee’s own regulatory authority, such as requirements to prohibit illicit discharge or to regulate construction and development activities.

³⁷ 81 Fed. Reg. at 432.

practicable can evolve, requiring corresponding changes in permit conditions to meet the “maximum extent practicable” standard. Likewise, between one permit term and the next, new information can change the understanding of what pollution controls are needed “to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.” Absent such a specific requirement in the rule, there is a significant risk that many states’ permit terms will remain relatively static from permit term to permit term, as has been the case in many states to date.

Proposed § 122.34(a), as quoted above, explicitly requires permitting authorities to consider “current water quality conditions, record of BMP effectiveness, and other relevant information” when determining what permit conditions are necessary to meet the applicable legal standards. We strongly urge EPA to identify specifically in the rule several additional factors that each permitting authority must consider when establishing permit conditions (or, under Option 2, when establishing enforceable requirements that will be incorporated into an MS4’s authorization to discharge).

i. The rule should require consideration of the terms of other MS4 permits.

Under the *EDC* decision, EPA must adopt a small MS4 permitting rule that “ensure[s] that each [MS4’s storm water management] program reduces the discharge of pollutants to the maximum extent practicable.”³⁸ To achieve that result, EPA should revise the last sentence of proposed § 122.34(a) to require permitting authorities to consider, when developing MS4 permit terms, “the conditions in other permits issued under this section by the Director and by permitting authorities in other states.”

The plain meaning of the phrase “maximum extent practicable” dictates that, if a permit in “State X” includes a pollution control requirement that achieves greater pollution reduction than “State Y” is considering for its permit, the permitting authority in State Y must either adopt that more effective requirement or explain why such requirement would not be “practicable” within State Y. The recommended rule language would effectuate that plain meaning.

This interpretation of the “maximum extent practicable” standard, under CWA § 402(p)(3)(B)(iii), is consistent with judicial interpretations of other regulatory standards using the phrase “maximum extent practicable” or similar comparative words such as “best.” For example, under the Endangered Species Act, an applicant for an incidental take permit (ITP) must develop a Habitat Conservation Plan (HCP) that minimizes and mitigates harm to the protected species “to the maximum extent practicable.”³⁹ In *Southwest Center for Biological Diversity v. Bartel*, a California district court held that an HCP would not meet the “maximum extent practicable standard” if there was “...another alternative that would have provided more mitigation or caused less harm to the endangered species and...the rejected alternative was in fact feasible....”⁴⁰ Similarly, in a recent Clean Water Act case challenging an EPA-issued NPDES general permit, the Second Circuit held that EPA could not make the required determination that the permit terms were based on the “best available technology

³⁸ *EDC*, 344 F.3d at 856.

³⁹ 16 U.S.C. § 1539 (2)(B).

⁴⁰ 470 F. Supp. 2d 1118, 1157-58 (S.D. Cal. 2006) (emphasis added).

economically achievable” where the agency did not “adequately explain[] why standards higher than the [standard in the permit] should not be used given available technology.”⁴¹ The court agreed with the petitioners that “EPA should have first considered what ‘available’ technology was capable of achieving, and then created standards based on that capability.”⁴² The court faulted EPA for overlooking evidence of “a number of technologies that can achieve standards higher than [the standard in the permit].”⁴³ The court stated that “seeking to find systems that are capable of doing better than the current standard is in keeping with the technology-forcing aspect of the CWA [internal citation omitted]. EPA should have first looked at the available...technologies as identified by the [Science Advisory Board] Report. Then, finding that those technologies could exceed the [standard EPA selected], EPA should have adjusted its standard accordingly, or explained why it would not.”⁴⁴

The reasoning of these cases, along with a plain reading of CWA § 402(p)(3)(B)(iii), show that a permitting authority cannot establish MS4 permit terms under the MEP standard without first considering the terms of other MS4 permits, and determining whether, if such permit terms are more effective at reducing pollution, they are also practicable.

Moreover, EPA has taken the legal position, in briefing to the Environmental Appeals Board, that “in establishing what constitutes maximum extent practicable [for any given MS4 permit], EPA must look at a variety of factors, including ...current best practices employed by other MS4s.”⁴⁵

This approach is also consistent with EPA’s statement in the preamble to the proposed rule that “EPA finds promise in some of the strategies that EPA and state permitting authorities are already implementing, which will serve as useful models to those permitting authorities needing advice on how to write their permits....”⁴⁶ Similarly, EPA states in the preamble that, “as the list of examples of clear, specific, and measurable provisions in general permits grows, presumably other states should be able to take advantage of these ideas for their own permits...”⁴⁷

⁴¹ *Natural Res. Def. Council v. United States Env’tl. Prot. Agency*, 808 F.3d 556, 570 (2d Cir. 2015).

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ EPA Region 8’s Response to Petition for Review, *In re Buckley Air Force Base Municipal Separate Storm Sewer System* (NPDES Appeal No. 13-07) at 22 (emphasis added), available at [https://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/4CEBE347DDC7341485257C4300509261/\\$File/2013-12-13%20FINAL%20Buckley%20Response%20Brief.pdf](https://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/4CEBE347DDC7341485257C4300509261/$File/2013-12-13%20FINAL%20Buckley%20Response%20Brief.pdf). See also *id.* at 25-26 (“In assessing what post-construction stormwater controls are “practicable,” Region 8 also considered what practices are being implemented by similar MS4s under their permits.... As a final aspect of its MEP determination, Region 8 looked to other jurisdictions to see what their MS4 permits contained with regard to controlling the discharge of pollutants in postconstruction stormwater.”).

⁴⁶ 81 Fed. Reg. at 422.

⁴⁷ *Id.* at 428-29. In other portions of the preamble, EPA notes that other states’ permit terms are relevant to determining what a given state’s permit should require. For example, the preamble cites the Compendium of permit provisions that accompanies the proposed rule, as well as a 2014 EPA publication titled *Municipal Separate Storm Sewer System Permits: Post-Construction Performance Standards & Water Quality-Based Requirements: A Compendium of Permitting Approaches*, and explains that “[t]he fact that many permitting authorities have already included provisions that would qualify as clear, specific, and measurable under the proposed rule indicates that making this a requirement for all permits is reasonable and achievable.” 81 Fed. Reg. at 423.

Finally, to facilitate permitting authorities' consideration of the terms of other permits, EPA should collect, publish, and continually update examples of the most effective requirements in existing permits, and states should be required to consider these, rather than haphazard or cherry-picked examples selected only by each individual permitting authority.

ii. The rule should require consideration of impairment status of receiving waters and any applicable total maximum daily loads.

The last sentence of proposed § 122.34(a) lists “current water quality conditions” as one factor that must be considered when establishing permit conditions. This is a critically important factor. The final rule should expand upon this by expressly requiring consideration of the impairment status of receiving waters, as well as consideration of any applicable total maximum daily loads. This explicit requirement would help ensure faithful implementation of the requirement, pursuant to the first sentence of proposed § 122.34(a), to establish permit conditions that “protect water quality [and] satisfy the appropriate water quality requirements of the Clean Water Act.” Adding this explicit requirement would also make binding EPA’s clear statement in the preamble to the proposed rule that permitting authorities “would need to evaluate...information that may suggest what is necessary to address existing water quality conditions, including whether additional requirements are needed to address an applicable TMDL.”⁴⁸)

iii. The rule should expressly require consideration of other factors EPA identified in the preamble to the proposed rule.

In the preamble to the proposed rule, EPA identified a number of additional factors that permitting authorities “would need to review,”⁴⁹ “would need to evaluate,”⁵⁰ or “would need to consider”⁵¹ when developing “clear, specific, and measurable” permit terms that meet the applicable, substantive legal standards. In the final rule, EPA should revise the last sentence of § 122.34(a) to include these factors specifically.

e. EPA should require permitting authorities to explain clearly, in the administrative record, why their permit conditions meet the applicable legal standards.

EPA should establish a clear and binding requirement to justify permit terms in the record.

⁴⁸ *Id.* at 422.

⁴⁹ “[I]n advance of issuing any successive small MS4 general permit, the permitting authority would need to review, among other things, information on the relative progress made by permittees to meet applicable milestones, compliance problems that may have arisen, the effectiveness of the required activities and selected BMPs under the existing permit, and any improvements or degradation in water quality.” *Id.* at 422.

⁵⁰ “[P]ermitting authorities]...would need to evaluate the quality of the existing SWMPs, the track record of each MS4 in implementing their respective SWMPs, the types of BMPs that have proven effective, and information that may suggest what is necessary to address existing water quality conditions, including whether additional requirements are needed to address an applicable TMDL.” *Id.* at 422.

⁵¹ “Among other factors that the [permitting authority] would need to consider when issuing a new, or the next, general permit are how long the MS4 has been permitted, the degree of progress made by the small MS4 permittees as a whole and for individual MS4s as well, the reasons for any lack of progress, and the capability of these MS4s to achieve more focused requirements.” *Id.* at 422.

We strongly support EPA's statement in the proposed rule's preamble that "the administrative record [for each permit] would explain the rationale for [the permitting authority's] determination" that its selected permit conditions satisfy the applicable legal standards. In our experience, this type of explanation is often missing from the fact sheets that accompany MS4 general permits. EPA should include not only in the preamble, but in the binding language of the rule itself, a requirement that permitting authorities must clearly explain in the administrative record why the adopted permit conditions meet the applicable legal standards. This procedural requirement is critical to ensure that permitting authorities adhere to the purpose and intent of the rule, and that they do so in a transparent manner. (EPA should also impose this requirement if the final rule is based on "Option 2"; permitting authorities should be required to document their rationale for approving pollution controls proposed by the permittee.)

As an example, consistent with point 3.d. above, the record in support of permit conditions implementing the MEP standard would need to explain why other possible permit conditions, including those in effect in other states and those proposed in public comments, would not achieve greater pollution reductions than the or would not be practicable to implement.⁵²

- f. EPA should clearly explain in the preamble that any requirements the permitting authority includes in the permit "to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act" are federal law requirements.**

In some delegated states, state law purports to prohibit the state permitting authority from including in permits provisions more stringent than required by federal law. In some cases, these states have argued that, because the existing Phase II rule does not establish specific, substantive requirements implementing the "maximum extent practicable" standard, they cannot establish specific requirements in permits. To avoid this problem, EPA should make clear in the preamble to the final rule that any permit terms that a permitting authority determines under § 122.34 are necessary to "reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act" are effluent limitations imposed *pursuant to* the permitting authority's obligations under the federal Clean Water Act, *not in excess of* those requirements.

Similarly, EPA should make clear in the preamble that, because such permit terms are requirements of federal law, EPA Regions have the authority to object to permit terms that do not "reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act." EPA should make clear that EPA Regions need not point to more specific substantive requirements in EPA regulations as the basis for such objections.⁵³

⁵² Cf., e.g., *NRDC v. EPA*, 808 F.3d at 570 (holding that EPA cannot determine that NPDES permit terms are based on the "best available technology economically achievable" where the agency did not "adequately explain[] why standards higher than the [standard in the permit] should not be used given available technology").

⁵³ As EPA has argued to the Environmental Appeals Board: "The fact that an administrative agency has not promulgated a general rule does not limit the authority of that agency to perform its statutory duty...[The MS4] permitting process is an adjudication, and to suggest that EPA cannot apply the narrative standard from CWA § 402(p)(3)(B)(iii) without first implementing the standard in a rule would contravene that principle." (citation

Our recommended line edits to § 122.34(c)(1), discussed in Section 6 of this letter, below, would also reinforce this point.

g. Other issues

i. EPA should revise wording that suggests permittees will make determinations that must be made by the permitting authority.

In several places in the proposed regulatory text, EPA has retained – perhaps inadvertently – language from the existing rule that is framed in terms of pollution control measures selected by the permittee, rather than by the permitting authority. The most significant of these relates to the “evaluation and assessment requirements” in section 122.34(d). This is addressed in detail in Part 5 of this letter, below.

Additionally, our recommended line edits to the regulatory text, attached to this letter, proposed revisions to address this issue in several other places., including in the following sections:

- 122.33(b)(2)(i)(B) – insert “proposed” before the phrase “measurable goals,” in regard to the required contents of an individual permit application
- 122.34(b)(3)(i)(C) –
 - replace “your” with “the”
 - change “Develop and implement a plan to detect and address non-storm water discharges” to “procedures for detection and elimination of non-stormwater discharges”⁵⁴
- 122.34(b)(4)(ii) – replace “encourage” with “require”; and replace “your” with “the permittee’s”
- 122.34(b)(5)(i)(B) – replace “address” with “require”⁵⁵
- 122.34(b)(5)(ii) –
 - replace “chosen” with “included in the program”
 - replace “choosing appropriate BMPs” with “implementing the program”
 - insert “consistent with the specific permit requirements” after “the municipality’s program goals”
- 122.34(b)(5)(ii) – insert “consistent with the specific permit requirements” after “the municipality’s program goals”
- 122.34(d)(3)(iv) – replace the requirement to report on any “change in any identified best management practices or measurable goals for any of the minimum control measures”

omitted)). EPA Region 8’s Response to Petition for Review, *In re Buckley Air Force Base Municipal Separate Storm Sewer System* (NPDES Appeal No. 13-07) at 19 (emphasis added), available at [https://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/4CEBE347DDC7341485257C4300509261/\\$File/2013-12-13%20FINAL%20Buckley%20Response%20Brief.pdf](https://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/4CEBE347DDC7341485257C4300509261/$File/2013-12-13%20FINAL%20Buckley%20Response%20Brief.pdf).

⁵⁴ This change would also make § 122.34(b)(3)(i)(C) consistent with the language of the first sentence of § 122.34(b)(3)(i), which requires the permit to require the permittee implements a program to “detect and eliminate” illicit discharges.

⁵⁵ This change would also make § 122.34(b)(5)(i)(B), requiring an ordinance or other regulatory mechanism for post-construction controls, consistent with the language of § 122.34(b)(4)(i)(A), requiring an ordinance or other regulatory mechanism “to require erosion and sediment controls.”

with a requirements to report on “any change in the permittee’s storm water management program”

ii. EPA should require permittees to post their storm water management program documents online

In the 17 years since the original Phase II rule was issued in 1999, it has become commonplace for local governments to post at least some information about their storm water management programs online. Section 122.34(d)(2) should require not only that a summary of the permittees storm water management program be available for public inspection upon request, but that that the storm water management plan documents required under § 122.34(b) must be posted online.

4. EPA should adopt a “hybrid” approach for small MS4 general permits, requiring the “Traditional General Permit Approach” (Option 1) for the six minimum control measures and the “Procedural Approach” (Option 2) for water quality-based effluent limitations.

Each of EPA’s three options in the proposed rule calls for NPDES permitting authorities – not MS4 permittees – to determine the pollution control measures that small MS4s must implement. This is essential to ending the unlawful, ineffective self-regulatory scheme that prevails today under EPA’s existing rules.

Under Option 1 (“Traditional General Permit Approach”), EPA would require permitting authorities to establish within the permit itself all requirements that MS4s must comply with to meet legal standards. Under Option 2 (“Procedural Approach”), EPA would require permitting authorities to review all permittees’ proposed pollution control programs to determine their legal sufficiency, and to allow public comment and the opportunity for a hearing before that determination is made. Under Option 3 (“State Choice Approach”), the permitting authority would choose between the first two approaches or implement a combination of the approaches within the same permit.

We urge EPA to adopt a hybrid of Options 1 and 2, which we believe would provide the most effective water quality protections. Specifically, the final rule should require permitting authorities to: (1) use the Traditional General Permit Approach to develop permit conditions implementing the MEP standard (i.e., the six minimum control measures); and (2) use the Procedural Approach where the needs of a particular water body require additional water quality-based effluent limitations tailored to particular MS4 dischargers (for example, to implement a wasteload allocation from a total maximum daily load or otherwise ensure a discharge does not cause or contribute to water quality standards violations).

a. EPA should require the use of Option 1 to establish permit terms implementing the “maximum extent practicable” standard, and should strengthen the proposed regulatory language for Option 1.

The Traditional General Permit Approach provides the best opportunity to ensure that all small MS4s will be held accountable for implementing pollution control measures that reduce

pollution discharges to the maximum extent practicable. This option requires permitting authorities to include in the general permit itself a set of “clear, specific, and measurable” requirements concerning each of the six minimum control measures. This would help to eliminate the existing disparity among small MS4s’ stormwater programs within any given state.

Moreover, we are not confident that state permitting agencies have the staff capacity to perform a thorough review of every MS4’s proposed pollution control program in a timely fashion, to ensure that MS4s’ proposed pollution control measures do, in fact, meet the maximum extent practicable standard. The resources available to permitting authorities would be more fruitfully spent on developing a comprehensive set of strong, specific, permit terms applicable to all regulated small MS4s, with input up-front from the regulated community, concerned citizens, environmental organizations, and EPA.

Further, most environmental organizations – much less concerned individual citizens -- lack the capacity to meaningfully review and comment on dozens or even hundreds of NOIs in a state. EPA regional offices, which are responsible for oversight of delegated state NPDES programs, likewise have limited capacity to perform such reviews. It would therefore be much more efficient, and effective, for concerned members of the public and EPA regional offices to focus on the development of substantive MEP requirements at the state level. This approach would best serve the Clean Water Act goals of meaningful public participation in the permitting process and would result in better, more effective permits.

While we support the Traditional General Permit approach for the establishment of MEP requirements, we also urge EPA to strengthen the proposed Option 1 by incorporating the changes identified above, in section 3 of this letter.

We also urge EPA to clarify a portion of the preamble that describes the “flexibility” available under Option 1. The preamble states that “the permittee could continue to have flexibility in determining how it will implement the permit requirements based on considerations such as pollutant removal and cost-effectiveness”⁵⁶ While we recognize that a general permit cannot be prescriptive as to every last detail of an MS4’s storm water management program, EPA should be very careful not to characterize the permittees’ “flexibility” in a manner that invites unlawful self-regulation. We are particularly concerned that calling out “cost-effectiveness” as a basis for flexibility may lead permitting authorities to defer to MS4s the determination of what pollution control measures are necessary to meet the MEP standard. Consideration of cost-effectiveness would be most appropriate where general permit conditions are framed as measurable performance standards, giving permittees the flexibility to find the most cost-effective means to achieve the mandated performance. However, where permit conditions are framed as requirements to take certain actions, EPA must be clear that the permittee is required to take those actions. It would be helpful for EPA to provide specific examples of appropriate “flexibility in determining how the permittee will implement the permit requirements,” which do not cross the line into unlawful self-regulation.

⁵⁶ 81 Fed. Reg. at 421.

b. EPA should require the use of Option 2 to establish water quality-based effluent limitations, and should strengthen the procedural requirements that are proposed for Option 2.

The Clean Water Act requires the establishment of water quality-based effluent limitations within MS4 general permits when MEP requirements alone cannot ensure compliance with water quality standards – for example, when a receiving waterbody is impaired by pollutants associated with MS4 discharges, or an MS4’s discharge otherwise has a “reasonable potential” to cause or contribute to impairment. Where an MS4 general permit includes water-quality based effluent limitations, EPA should require permitting authorities to use the Procedural Approach to develop such permit terms. Water quality-based NPDES permit terms are driven by the needs of a particular water body, and require the permitting authority to develop pollution control requirements tailored to particular dischargers. The Procedural Approach, unlike the Traditional General Permit Approach, facilitates the development of such tailored requirements. A common example involves obligations to meet water quality standards in impaired waters: some MS4 permits direct permittees to develop TMDL implementation plans that identify the measures the permittee will implement to achieve required wasteload allocations (WLAs) or, in the absence of applicable WLAs, plans to reduce pollutant loads sufficiently to ensure compliance with water quality standards. We believe this is a necessary and appropriate use of the Procedural Approach, provided that strict procedural safeguards are established to ensure that permitting authorities do not create an unlawful self-regulatory scheme.

Specifically, the final rule should require that permittee-developed plans to meet water quality standards shall be subject to public notice by the permitting authority; a period for public comment to the permitting authority; EPA review and opportunity for EPA objection; an opportunity for a public hearing before the permitting authority; and approval by the permitting authority, with or without modifications to the permittee’s proposed plan. To ensure that this review process will be meaningful and effective, the final rule should require that a full proposed plan (not merely a summary of one, such as a Notice of Intent) must be submitted for review.

The final rule should require that, upon approval, such plans become enforceable terms of the permit. The rule should provide that the enforceable provisions of plans must (a) impose clear, specific, measurable, and enforceable obligations on the permittee specifying the pollution control measures that must be implemented; (b) include clear quantitative performance standards and specific deadlines for compliance with each obligation imposed on the permittee; and (c) include any “evaluation and assessment requirements,” in addition to the baseline requirements in the general permit, which are necessary to determine compliance with the plan (see also point #5 of this letter, regarding evaluation and assessment).

Further, the final rule should provide that a plan can be approved only if the permitting authority determines, based on an adequate administrative record, that the plan imposes obligations stringent enough to meet applicable legal standards. To that end, the rule should provide that the permit must specify the required elements of an approvable plan and the water quality-based standard by which the adequacy of the plan will be judged.

If EPA chooses Option 2 (either for water quality-based effluent limits or more broadly), EPA should strengthen and/or clarify certain aspects of the proposal:

- Option 2 should incorporate all of the improvements described in points 3, 5, and 6 of this letter, which pertain to both Options 1 and 2.
- The preamble states that, under Option 2, the permitting authority “would have the opportunity to require changes” before authorizing discharge.⁵⁷ EPA must be clear that the permitting authority has the *obligation* to require changes to an MS4’s proposed controls if they do not meet MEP and other legal standards. The preamble separately states that, if proposed management programs are insufficient, the “permitting authority would request supplemental information or revisions as necessary to ensure that the submission satisfies the regulatory requirements.”⁵⁸ Again, EPA should use mandatory language and clarify that the permitting authority *must* make (and not merely request) such revisions in that case.⁵⁹
- EPA asks whether Option 2 should allow for MS4s to publish the public notice of their NOIs. The rule should not allow this. Rather, it should require the permitting authority to publish the public notice, the same as would be the case for any permit application. Citizens wishing to review, and potentially submit comments and request a hearing on, NOIs should have a single, centralized place to look for public notices of NOIs. Otherwise, public notice is unlikely to effectively reach the intended audience, thereby undermining the Clean Water Act’s public participation requirements.
- EPA also asks whether, if permitting authorities are allowed to rely on MS4s to publish the public notice of an NOI, this should be “limited to when the State clearly makes the ultimate decisions about what requirements are sufficient to meet the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA.”⁶⁰ The premise of this question is flawed. To comply with the *EDC* ruling, as EPA recognizes elsewhere in the preamble, it must always be the case that the permitting authority makes that ultimate determination.⁶¹
- EPA asks whether procedures from the CAFO regulation, concerning amendments to nutrient management plans, should be adapted for purposes of changes to the BMPs and measurable goals in an MS4s’ approved NOI. Those provisions of the CAFO rule appear to be generally reasonable. Key elements of that rule, which should be applied to the MS4 general permit context, include the requirements that: (i) the permittee must submit proposed changes to the permitting authority and the permitting authority must

⁵⁷ *Id.* at 416.

⁵⁸ *Id.* at 426.

⁵⁹ Similarly, one passage in the preamble states that Option 2 would “preserve...the flexibility afforded the MS4 to identify the BMPs that it determines are needed to meet the minimum regulatory requirements....” 81 Fed. Reg. at 426. EPA should eliminate any suggestion that the MS4 is making the “determination” as to what BMPs are needed to meet regulatory requirements. As EPA explains elsewhere in the preamble, the *EDC* decision requires that the permitting authority must make that determination, regardless of which “option” EPA selects for the final rule.

⁶⁰ *Id.* at 427.

⁶¹ *See id.* at 420.

determine whether such changes comply with applicable, substantive legal requirements; (ii) substantial revisions require public notice, comment, and opportunity for a hearing before the permitting authority's final determination; and (iii) the permitting authority must inform the public even of "non-substantial" changes and make such revisions publicly available. Additionally, as with the initial determination to approve an NOI, EPA should make clear that the Agency retains the right to "object" to proposed substantial changes to a NOI.⁶²

- The preamble states that under Option 2, MS4s would be required to submit NOIs but not full stormwater management plans (SWMPs) in order to gain coverage under a permit.⁶³ The rule should require that existing permittees applying for renewed coverage submit their full SWMPs to enable a more thorough review of ongoing and proposed programs.
- The rule should ensure that NOIs are detailed and robust enough to enable the permitting agency to make an informed determination about whether each MS4's proposed controls meet legal standards. To that end, the rule should require that the proposed BMPs and measurable goals in an NOI must be described in "clear, specific, measurable, and enforceable" terms. Presently, some states' NOI forms are a mere checklist, which would not allow for a determination of whether an MS4's proposed BMPs and measurable goals satisfy applicable, substantive legal standards.

5. The rule's "evaluation and assessment requirements" must pertain to a permittee's compliance with the permit's measurable pollution control obligations, and with achievement of Clean Water Act goals, rather than achievement of the permittee's self-defined measurable goals.

The proposed rule provision concerning "evaluation and assessment requirements" (§ 122.34(d)) provides that a permit must require the permittee to "[e]valuate...progress towards achieving identified measurable goals,"⁶⁴ and "report [on]...progress towards achieving its identified measurable goals for each of the minimum control measures."⁶⁵ To avoid impermissible self-regulation, the rules must provide that evaluation and reporting is based on the measurable requirements specified in the permit. This includes measurable goals associated with water quality-based effluent limitations, not only those associated with the minimum control measures. Where the permit includes measurable requirements stated in terms of pollutant load limits or compliance with ambient water quality standards, the rule should require such monitoring as is necessary to enable evaluation of compliance with those permit terms.

Further, to be consistent with a useful portion of existing rule, and to facilitate improvements to the permit in successive permitting cycles, the permittee's self-evaluation and reporting (§ 122.34(d)(1) and (d)(3)) should address not only the permittee's compliance with specific permit terms, but also the effectiveness of the permittees' storm water management program (SWMP) at reducing the discharge of pollutants to the maximum extent practicable, protecting

⁶² *Id.* at 426 (discussing EPA's right to object to the adequacy of NOIs under Option 2).

⁶³ *Id.* at 425-26.

⁶⁴ *Id.* at 434.

⁶⁵ *Id.* at 435.

water quality, and satisfying the appropriate water quality requirements of the Clean Water Act. Under the existing rule, a permittee is required to “develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants to the maximum extent practicable, protecting water quality, and satisfying the appropriate water quality requirements of the Clean Water Act” (existing § 122.34(a)). The existing requirement to evaluate and report on “program compliance” (existing § 122.34(d)(1) and (d)(3)), in turn, reflects the effectiveness of the SWMP at achieving those objectives. Under the revised rule, the permittee should likewise be required to evaluate and report on the effectiveness of its program at achieving those underlying goals. Such reporting would also assist the permitting authority in improving permit terms with each successive permit term: As EPA states in the preamble, “NPDES authorities [must] revisit permit requirements during the permit issuance process and...make any necessary changes in order to ensure that the subsequent permit continues to meet NPDES requirements”; and to do so, “in advance of issuing any successive MS4 general permit, the permitting authority would need to review, among other things...the effectiveness of the required activities and selected BMPs under the existing permit.”⁶⁶

This point #5 applies regardless of which “option” EPA selects for the final rule.

6. EPA should delete the “guidance” in the current rule that recommends against including in permits additional requirements beyond the minimum control measures, and should clarify the language in the associated regulatory text concerning “more stringent effluent limitations.”

EPA “proposes to remove the guidance in the current regulations at § 122.34(e)(2). The guidance reflects EPA’s recommendation for the initial round of permit issuance, which has already occurred for all permitting authorities. The phrasing of the guidance language no longer represents EPA policy with respect to including additional, more stringent requirements. EPA has found that a number of permitting authorities are already including specific requirements in their small MS4 permits that address not only wasteload allocations in TMDLs, but also other more stringent requirements that are in addition to the six minimum measures irrespective of the status of EPA’s 40 CFR 122.37 evaluation.”⁶⁷ We strongly support EPA’s proposal to delete this “guidance,” which “strongly recommends” against including water quality based effluent limitations in small MS4 permits in the absence of a TMDL or equivalent analysis. Given the slow pace of TMDL development around the country, the approach recommended in that paragraph has failed to protect water quality.

Further, EPA should clarify the language of § 122.34(c)(1), which defines permitting requirements concerning “more stringent effluent limitations” that may be “needed to protect water quality.” First, as written, the proposed text of § 122.34(c) does not form a complete sentence. It should include, before subsections (i) and (ii), the phrase “The permit must include”. This would be consistent with the wording of the first sentences of §§ 122.34(a), (b), and (c); moreover, the mandatory language, “must include,” is needed in order to conform to the requirement, in proposed § 122.34(a), that permits “must include permit conditions that establish

⁶⁶ *Id.* at 422.

⁶⁷ *Id.* at 424.

in specific, clear, and measurable terms what is required...to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act.”⁶⁸

Second, to be consistent with EPA’s rationale for removing the guidance in the existing § 122.34(e)(2), EPA should revise the new § 122.34(c) (formerly § 122.34(e)) so that it is not limited to using “TMDL[s] or equivalent analysis” as a basis for “more stringent effluent limitations.” Instead, § 122.34(c) should provide for any more stringent effluent limitations that “are necessary to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.” It should refer to “an approved total maximum daily load (TMDL) pursuant to section 122.44(d)(1)(vii)(B) or other analysis that determines such limitations are needed to protect water quality” as examples of the bases (but not the only applicable bases) for such more stringent limitations., consistent with EPA’s 2014 memorandum concerning the establishment of water quality-based effluent limitations in stormwater permits.⁶⁹

This point #6 applies regardless of which “option” EPA selects for the final rule.

7. EPA should provide strong examples of sufficiently “clear, specific, measurable and enforceable” permit requirements.

In the “Compendium of Permit Requirements” released along with the proposed rule,⁷⁰ EPA identified permit terms that the Agency considers sufficiently “clear, specific, and measurable” to satisfy Option 1 requirements and to “make it clear to all what level of effort is expected of the permittee.”⁷¹ Additionally, in the preamble to the proposed rule, EPA provided examples of the types of permit terms that would not be considered “clear, specific, and measurable.”⁷² We strongly support EPA’s intent to provide examples along with the final rule, to illustrate the meaning of “clear, specific, and measurable.” However, EPA should improve its examples in several respects.

First, the preamble states that permit terms with certain characteristics “do not appear to have the type of detail that would be needed” to satisfy the “clear, specific, and measurable” test.⁷³ In fact, all of the examples provided in that portion of the preamble definitely do not qualify as “clear, specific, and measurable.” EPA should revise the preamble to state, without qualification, that the listed examples “do not have the type of detail that is needed.”

Second, EPA should provide an explicit disclaimer that EPA does not endorse the permit terms in the Compendium as sufficiently stringent to represent the maximum pollution reduction that is practicable, as required by section 402(p) of the Clean Water Act. Permit terms may satisfy the

⁶⁸ *Id.* at 432.

⁶⁹ EPA, “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs,’” (Nov. 26, 2014), available at https://www3.epa.gov/npdes/pubs/EPA_SW_TMDL_Memo.pdf.

⁷⁰ EPA, Compendium of Permit Requirements.

⁷¹ 81 Fed. Reg. at 421.

⁷² *Id.* at 423.

⁷³ *Id.* at 423 (emphasis added).

requirement of being “clear, specific, and measurable,” and yet be too weak, in substance, to satisfy the “maximum extent practicable” standard.

Third, EPA should keep many of the examples in the Compendium, but should delete others because they are too vague to satisfy Option 1 and the requirements of the Ninth Circuit ruling. As discussed at length in Attachment 2 to this letter, many of the examples in the compendium delegate too much discretion to permittees to select their own pollution control programs. EPA should delete these examples from the Compendium.

Fourth, in the “Economic Analysis” report accompanying the proposed rule, EPA identifies five states’ permits that, in EPA’s view, “include provisions consistent with Option 1.”⁷⁴ (Those states are California, Washington, Massachusetts, New Hampshire, and New Mexico.) While many of the provisions in these permits are indeed “clear, specific, and measurable,” many others do not meet that standard, as discussed in Attachment 2 to this letter. Consequently, EPA should avoid any suggestion that these permits would not need to be revised to comply with Option 1.⁷⁵

Finally, EPA should include additional examples of “clear, specific, and measurable” permit terms to the Compendium. In Attachment 2 to this letter, we recommend a number of such provisions.

8. EPA should clarify that the Clean Water Act principles giving rise to the remand are binding on permitting authorities immediately, and should ensure that all small MS4 general permits conform to the final rule as soon as legally possible after the rule’s effective date.

Thirteen years have passed since the Ninth Circuit vacated and remanded, in part, the Phase II rule. States continue to issue permits that violate the Ninth Circuit’s holding and, therefore violate the Clean Water Act. EPA must do everything within its power to ensure that permitting authorities *immediately* cease issuing permits that violate the Clean Water Act and that, once the final rule is promulgated, all small MS4 general permits conform to the rule as soon as legally possible. Specifically, EPA should do three things.

First, the proposed rule’s preamble correctly explains that “to be consistent with the [*Environmental Defense Center*] decision,... [EPA’s rules] must ensure the permitting authority provides a final determination on whether the requirements to which the MS4 is subject, whether identified fully in the permit itself or defined in whole or in part by the MS4 operator in the NOI [Notice of Intent], meet the NPDES requirements to reduce discharges to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Act.”⁷⁶ However, EPA’s 2004 memorandum on implementation of the *EDC* ruling provided a contrary – and incorrect – interpretation of the court decision. The memo states that, although the

⁷⁴ EPA, *Economic Analysis for the Proposed Municipal Separate Storm Sewer System General Permit Remand Rule* at 5, available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2015-0671-0014&disposition=attachment&contentType=pdf>.

⁷⁵ See *id.*

⁷⁶ 81 Fed. Reg. at 420.

permitting authority must “conduct an appropriate review” of each NOI, permits can authorize discharge based simply on the *submission* of an NOI, without any permitting authority *determination* that an MS4’s self-selected best management practices meet applicable Clean Water Act requirements.⁷⁷ EPA should immediately revoke the 2004 memo and replace it with one that correctly describes permitting authorities’ responsibilities under the Clean Water Act. EPA headquarters should direct the Agency’s regional offices to ensure that, going forward – even before a final rule takes effect – all MS4 general permits issued or renewed must comply with those Clean Water Act requirements.

Second, EPA should ensure that the final rule is implemented in practice as soon as legally possible. The preamble to the proposed rule suggests that states may need to amend their own rules before the new EPA rule takes effect. It is not evident to us that this is correct. Because the final rule will be implementing core procedural principles of NPDES permitting, it would seem that every approved state program should already have authority to implement the rule. Moreover, EPA regional offices have authority to object to any permit that is contrary to the Clean Water Act. When issuing the final rule, EPA should speak to this issue more precisely to ensure that, to the extent that the law allows, all permits issued or renewed after the rule’s effective date will comply with the final rule.

Third, following issuance of the final rule, EPA should use any applicable authorities to secure the reopener and modification of existing permits that do not satisfy the rule’s requirements, particularly where such permits were issued or renewed recently before the rule’s effective date.

9. The final rule should ensure that individual small MS4 permits are also consistent with the Ninth Circuit’s holding.

a. The regulatory text should make clear that individual permit applications contain “proposed” measurable goals.

Whether a small MS4 permit is a general permit or an individual permit, the permitting authority must make the final determination of the necessary pollution control requirements. Accordingly, the regulatory text of proposed § 122.33(b)(2)(i)(B), concerning application requirements for individual permits, must be changed to require applicant to submit “proposed measurable goals.” (We note that this would be consistent with the regulatory text of proposed § 122.33(b)(2)(i)(A), which requires that individual permit applications include “the best management practices (BMPs) that the operator or another entity proposes to implement for each of the storm water minimum control measures.”)

⁷⁷ The 2004 memo (at p. 1) presumes that an NOI will identify the MS4’s self-selected best management practices. Yet, the memo states (at p. 3) that EPA “do[es] not believe official ‘approval’ of NOIs is necessary” and that authorization to discharge can occur merely “after a specified waiting period” following submission of the NOI. James Hanlon, Director, EPA Office of Wastewater Management, *Memorandum: Implementing the Partial Remand of the Stormwater Phase II Regulations Regarding Notices of Intent & NPDES General Permitting for Phase II MS4s* (Apr. 16, 2004).

- b. The regulatory text should clarify that small MS4 individual permits are subject to the requirements of § 122.34, unless the applicant opts for a permit pursuant to the Phase I rules.**

While the preamble makes it clear that the new requirements under § 122.34 apply to all general permits, the proposed regulatory text of § 122.34 does not explicitly state to what extent these requirements apply to individual permits. EPA should revise the language to make clear that revised § 122.34 applies to individual permits, unless the small MS4 opts for a permit pursuant to the Phase I rules under § 122.26.

The proposed regulatory language replaces the existing first sentence of 40 C.F.R. § 122.34(a), which began with the words “Your NPDES permit will require...,” with a new sentence that begins “In each permit issued under this section, the Director must include permit conditions....” The revised approach, which defines what the permitting authority must include in the permit, is wholly appropriate and necessary.

However, the phrase “each permit issued under this section” is ambiguous. Section 122.34 does not, technically, address the “issuance” of permits, but rather the contents of such permits. Section 122.33 more directly addresses the issuance of permits, insofar as it defines the ways in which a small MS4 can obtain permit coverage. Under § 122.33, there are four ways to obtain permit coverage. At least two of those -- under a general permit (§ 122.33(b)(1)), or under an individual permit where the MS4 “wish[es] to implement a program under § 122.34” (§ 122.33(b)(2)(ii)) -- are intended to be subject to the requirements 122.34. It appears that permits under the other two methods to obtain permit coverage -- which both involve an individual permit pursuant to the application requirements of § 122.26 -- can deviate from the requirements of § 122.34. Whatever the intent, EPA should clarify, in § 122.34(a), what is meant by a “permit issued under this section.” At a minimum, it must expressly include permits issued pursuant to sections §§ 122.33(b)(1) and (b)(2)(ii).

Further, if EPA selects “Option 2” or “Option 3,” the final rule text should still provide that individual permits issued pursuant to § 122.33(b)(1) need to comply with the requirements of § 122.34, as set forth in the proposed regulatory text for Option 1 (subject to the improvements to that regulatory text recommended in this letter). All of the principles reflected in the proposed § 122.34 are just as applicable to the terms and conditions of individual permits as they are to the terms and conditions of general permits or authorizations to discharge thereunder.

Finally, EPA should remove from the preamble the categorical statement that permitting authorities that issue only individual permits for small MS4s need not do anything different as a result of this rule.⁷⁸ As a factual matter, individual permits in those states may or may not be in compliance with the requirements of the revised rule (or, for that matter, the existing rule). There is no need for EPA to prejudge that question in the preamble to this rule.

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⁷⁸ 81 Fed. Reg. at 420.

Thank you for your consideration of our comments. If you have any questions, please contact Lawrence Levine at 212-727-4548 or llevine@nrdc.org.

Sincerely,

/s

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Attachment 1

NRDC's Recommended Revisions to Text of the Proposed MS4 General Permit Remand Rule

[Strikeout reflects proposed text recommended for deletion. Underline reflects text recommended for addition.]

§122.33 Requirements for obtaining permit coverage for regulated small MS4s.

(a) The operator of any regulated small MS4 under § 122.32 must seek coverage under an NPDES permit issued by the applicable NPDES permitting authority. If the small MS4 is located in an NPDES authorized State, Tribe, or Territory, then that State, Tribe, or Territory is the NPDES permitting authority. Otherwise, the NPDES permitting authority is the EPA Regional Office.

(b) The operator of any regulated small MS4 must seek authorization to discharge under a general or individual NPDES permit, as follows:

(1) If seeking coverage under a general permit issued by the Director, the operator must submit a Notice of Intent (NOI) consistent with § 122.28(b)(2). The operator may file its own NOI, or the operator and other municipalities or governmental entities may jointly submit an NOI. If the operator wants to share responsibilities for meeting the minimum measures with other municipalities or governmental entities, the operator must submit an NOI that describes which minimum measures it will implement and identify the entities that will implement the other minimum measures within the area served by the MS4.

(2)(i) If seeking authorization to discharge under an individual permit and wishing to implement a program under § 122.34, the operator must submit an application to the appropriate

NPDES permitting authority that includes the information required under § 122.21(f) and the following:

(A) The best management practices (BMPs) that the operator or another entity proposes to implement for each of the storm water minimum control measures described in § 122.34(b)(1) through (6);

(B) The proposed measurable goals for each of the BMPs including, as appropriate, the months and years in which the operator will undertake required actions, including interim milestones and the frequency of the action;

(C) The person or persons responsible for implementing or coordinating the storm water management program;

(D) An estimate of square mileage served by the small MS4; and

(E) Any additional information that the NPDES permitting authority requests.

(ii) If seeking authorization to discharge under an individual permit and wishing to implement a program that is different from the program under § 122.34, the operator will need to comply with the permit application requirements in § 122.26. The operator will need to submit both parts of the application requirements in § 122.26 (d)(1) and (2) at least 180 days before the operator proposes to be covered by an individual permit. The operator does not need to submit the information required by § 122.26(d)(1)(ii) and (d)(2) regarding its legal authority, unless the operator intends for the permit writer to take such information into account when developing other permit conditions.

(iii) If allowed by the Director, the operator of the regulated small MS4 and another regulated entity may jointly apply under either paragraph (b)(2)(i) or (ii) of this section to be co-permittees under an individual permit.

(3) If the regulated small MS4 is in the same urbanized area as a medium or large MS4 with

an NPDES storm water permit and that other MS4 is willing to have the small MS4 participate in its storm water program, the parties may jointly seek a modification of the other MS4 permit to include the small MS4 as a limited co-permittee. As a limited co-permittee, the operator of the small MS4 will be responsible for compliance with the permit's conditions applicable to its jurisdiction. If the operator of the small MS4 chooses this option it will need to comply with the permit application requirements of § 122.26, rather than the requirements of paragraph (b)(2)(i) of this section. The operator of the small MS4 does not need to comply with the specific application requirements of § 122.26(d)(1)(iii) and (iv) and (d)(2)(iii) (discharge characterization). The operator of the small MS4 may satisfy the requirements in § 122.26(d)(1)(v) and (d)(2)(iv) (identification of a management program) by referring to the other MS4's storm water management program.

(4) Guidance for paragraph (b)(3) of this section. In referencing an MS4's storm water management program, the regulated small MS4 should briefly describe how the existing program will address discharges from the small MS4 or would need to be supplemented in order to adequately address the discharges. The regulated small MS4 should also explain its role in coordinating storm water pollutant control activities in the MS4, and detail the resources available to the MS4 to accomplish the program.

(c) If the regulated small MS4 is designated under § 122.32(a)(2), the operator of the MS4 must apply for coverage under an NPDES permit, or apply for a modification of an existing NPDES permit under paragraph (b)(3) of this section, within 180 days of notice, unless the NPDES permitting authority grants a later date.

§ 122.34 Minimum permit requirements for regulated small MS4 permits.

(a) General requirement for regulated small MS4 permits. In each permit issued under ~~this~~ Sections 122.33(b)(1) or (b)(2)(i), the Director must include permit conditions pursuant to

paragraphs (b), (c), and (d) of this section that establish in specific, clear, ~~and~~-measurable, and enforceable terms what is required to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. For the purposes of this section, effluent limitations may be expressed as requirements to implement best management practices (BMPs) with clear, specific, ~~and~~-measurable, and enforceable requirements for each BMP.; Such requirements shall include~~ing~~, but are not limited to, specific tasks, BMP design requirements, performance requirements or benchmarks, schedules for implementation and maintenance, and frequency of actions. For permits being issued to a small MS4 for the first time, the Director may specify a time period of up to 5 years from the date of permit issuance for the permittee to fully comply with the conditions of the permit and to implement necessary BMPs. Each successive permit must meet the requirements of this section based on:

(1) current water quality conditions, including impairment status;

(2) information that may suggest what is necessary to address existing water quality conditions, including whether additional requirements are needed to address an applicable total maximum daily load;

(3) record of BMP effectiveness;

(4) consideration of the conditions in other permits issued under this section by the Director and by permitting authorities in other states;

(5) the quality of small MS4s existing storm water management programs;

(6) the track record of permit compliance by MS4s, including the reasons for any noncompliance;

(7) the capability of MS4s to achieve additional requirements; and

(8) and other relevant information.

The legal and factual bases for the Director's determination that the permit conditions satisfy all requirements of this section shall be set forth in the administrative record.

(b) Minimum control measures. The permit must include requirements that ensure the permittee implements, or continues to implement, the minimum control measures in paragraphs (b)(1) through (6) of this section during the permit term. The permit must also require a written storm water management program document or documents that, at a minimum, describe how the permittee intends to comply with the permit's requirements for each minimum control measure.

(1) Public education and outreach on storm water impacts. (i) The permit must identify the minimum elements of and require implementation of a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program.

(ii) Guidance for permitting authorities and regulated small MS4s. The permittee may use storm water educational materials provided by the State, Tribe, EPA, environmental, public interest or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service

and conservation corps or other citizen groups. EPA recommends that the permit require the permittee to tailor the public education program, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed and beach cleanups. In addition, EPA recommends that the permit should require that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. The permit should encourage the permittee to tailor the outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

(2) Public involvement/participation. (i) The permit must identify the minimum elements of-
and require implementation of a public involvement/ participation program that complies with State, Tribal, and local public notice requirements. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program.

(ii) Guidance for permitting authorities and regulated small MS4s. EPA recommends that the permit include provisions addressing the need for the public to be included in developing, implementing, and reviewing the storm water management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about

the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

(3) Illicit discharge detection and elimination. (i) The permit must identify the minimum elements of and require the ~~development,~~ implementation, and enforcement of a program to detect and eliminate illicit discharges (as defined at § 122.26(b)(2)) into the small MS4. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program. At a minimum, the ~~permit must require the permittee to~~ following elements must be included within the program:

(A) Develop~~ment,~~ if not already completed, of a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;

(B) To the extent allowable under State, Tribal or local law, effective~~ly~~ prohibit~~ion,~~ through ordinance, or other regulatory mechanism, of non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions;

(C) ~~Develop and implement a plan to~~ procedures for detection~~ion~~ and ~~address-~~ elimination of non-storm water discharges, including illegal dumping, to ~~your the~~ system; and

(D) Inform~~ing~~ public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

(ii) The permit must require the permittee to address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if they are identified as significant contributors of pollutants to the small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40

CFR 35.2005(b)(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

(iii) Guidance for permit writers and regulated small MS4s. EPA recommends that the permit require the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends that the permit require the permittee to visually screen outfalls during dry weather and conduct field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling, a program to promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials.

(4) Construction site storm water runoff control. (i) The permit must identify the minimum elements of and require the ~~permittee to develop~~, implementation, and enforcement of a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority

waives requirements for storm water discharges associated with small construction activity in accordance with § 122.26(b)(15)(i), the permittee is not required to ~~develop, implement, and/or enforce~~ a program to reduce pollutant discharges from such sites. ~~The permit must require the development and implementation of, a~~At a minimum, the following elements must be included in the program:

(A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

(B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(D) Procedures for site plan review which incorporate consideration of potential water quality impacts;

(E) Procedures for receipt and consideration of information submitted by the public, and

(F) Procedures for site inspection and enforcement of control measures.

(ii) Guidance for permit writers and regulated small MS4s. Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance. EPA recommends that the procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving

water quality. EPA also recommends that the permit ~~encourage~~require the permittee to provide appropriate educational and training measures for construction site operators. The permit should also include a requirement for the permittee to require a storm water pollution prevention plan for construction sites within the MS4's jurisdiction that discharge into the system. See §122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see §122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on ~~your~~the permittee's behalf.)

(5) Post-construction storm water management in new development and redevelopment. (i)

The permit must identify the minimum elements of and require the development, implementation, and enforcement of a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program. The permit must ensure that the program includes controls ~~are in place~~ that ~~would will~~ prevent or minimize water quality impacts. At a minimum, the following elements must be included in the program~~The permit must require the permittee to:~~

(A) ~~Develop and i~~Implementation of strategies to control post-construction runoff from new development and redevelopment projects, which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community;

(B) Use of an ordinance or other regulatory mechanism to ~~address~~require controls on post-construction runoff from new development and redevelopment projects to the extent allowable

under State, Tribal or local law; and

(C) Ensure ~~adequate~~ adequate long-term operation and maintenance of BMPs.

(ii) Guidance for permit writers and regulated small MS4s. If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the permit ensure that BMPs ~~chosen~~ included in the program: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. In ~~choosing appropriate BMPs~~ implementing the program, EPA encourages the permittee to participate in locally-based watershed planning efforts, which attempt to involve a diverse group of stakeholders including interested citizens. When ~~developing~~ implementing a program that is consistent with this measure's intent, EPA recommends that the permit require the permittee to adopt a planning process that identifies the municipality's program goals consistent with the specific permit requirements (e.g., minimize water quality impacts resulting from post- construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In ~~developing~~ implementing the program, the permit should also require the permittee to assess existing ordinances, policies, programs and studies that address potential impacts of storm water runoff to water quality. In addition to assessing these existing documents and programs, the permit should require the permittee to provide opportunities to the public to participate in the development of the program. Non-structural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide

buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that the permit ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that the permit requirements be responsive to these changes, developments or improvements in control technologies.

(6) Pollution prevention/good housekeeping for municipal operations. (i) The permit must identify the minimum elements of and require the ~~development and~~ implementation of an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The permit must establish clear, specific, measurable, and enforceable requirements concerning each element of the program. Using training materials that are available from EPA, the State, Tribe, or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

(ii) Guidance for permit writers and regulated small MS4s. EPA recommends that the permit address the following: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from the separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the permittee, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly ~~developed and~~ implemented operation and maintenance programs reduce the risk of water quality problems.

(c) Other applicable requirements. The permit must include:

(1) Any more stringent effluent limitations, including permit requirements that modify, or are in addition to, the minimum control measures and are necessary to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Such effluent limitations include, but are not limited to, permit conditions based on an approved total maximum daily load (TMDL) pursuant to section 122.44(d)(1)(vii)(B) or ~~other equivalent~~ analysis that determines such limitations are needed to protect water quality.

(2) Other applicable NPDES permit requirements, standards and conditions established in the

individual or general permit, developed consistent with the provisions of §§ 122.41 through 122.49, as appropriate.

(d) Evaluation and assessment requirements. The permit must require the permittee to:

(1) Evaluation. Evaluate ~~permit~~-compliance with all permit conditions, including the effectiveness of its stormwater management program at meeting measurable permit requirements and at reducing the discharge of pollutants to the maximum extent practicable, protecting water quality, and satisfying the appropriate water quality requirements of the Clean Water Act~~the appropriateness of its identified best management practices, and progress towards achieving identified measurable goals.~~

NOTE TO PARAGRAPH (d)(1): The NPDES permitting authority may determine monitoring requirements for the permittee in accordance with State/Tribal monitoring plans appropriate to the watershed. Participation in a group monitoring program is encouraged.

(2) Recordkeeping. Keep records required by the NPDES permit for at least 3 years, and to submit such records to the NPDES permitting authority when specifically asked to do so. The permit must require the permittee to make records, including a written description of the storm water management program, available to the public at reasonable times during regular business hours (see §122.7 for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permit may allow the permittee to require a member of the public to provide advance notice.) The permit must also require that the permittee to make available online the written storm water management program document or documents required under paragraph (b) of this section.

(3) Reporting. Unless the permittee is relying on another entity to satisfy its NPDES permit obligations under § 122.35(a), the permit must require the permittee to submit annual reports to the NPDES permitting authority for the first permit term. For subsequent permit terms, the

permit must require that permittee to submit reports in year two and four unless the NPDES permitting authority requires more frequent reports. The report must include:

(i) The status of compliance with all permit conditions, and the effectiveness of the permittee's stormwater management program at meeting measurable permit requirements and at reducing the discharge of pollutants to the maximum extent practicable, protecting water quality, and satisfying the appropriate water quality requirements of the Clean Water Act ~~an assessment of the appropriateness of the permittee's identified best management practices and progress towards achieving its identified measurable goals for each of the minimum control measures;~~

(ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

(iii) A summary of the storm water activities the permittee plans to undertake during the next reporting cycle;

(iv) A change in ~~any identified best management practices or measurable goals for any of the minimum control measures~~ the permittee's storm water management program; and

(v) Notice that the permittee is relying on another governmental entity to satisfy some of the permit obligations (if applicable), consistent with §122.35(a).

(e) Qualifying local program. If an existing qualifying local program requires the permittee to implement one or more of the minimum control measures of paragraph (b) of this section, the NPDES permitting authority may include conditions in the NPDES permit that direct the permittee to follow that qualifying program's requirements rather than the requirements of paragraph (b) of this section. A qualifying local program is a local, State or Tribal municipal stormwater management program that imposes the relevant requirements of paragraph (b) of this section.

4. Amend § 122.35 by revising the second and third sentences of paragraph (a)(3) to read as follows:

§122.35 As an operator of a regulated small MS4, may I share the responsibility to implement the minimum control measures with other entities.

(a) * * *

(3) * * * In the reports you must submit under § 122.34(d)(3), you must also specify that you rely on another entity to satisfy some of your permit obligations. If you are relying on another governmental entity regulated under section 122 to satisfy all of your permit obligations, including your obligation to file periodic reports required by § 122.34(d)(3), you must note that fact in your NOI, but you are not required to file the periodic reports.* * *

* * * * *

Attachment 2 – Comments on EPA’s “Compendium of Permit Requirements”

Please find below NRDC’s detailed comments on the draft “Compendium of Permit Requirements,” which is referenced in our comment letter on the proposed MS4 General Permit Remand Rule.

a. We agree that some of the provided examples are sufficiently “clear, specific, measurable and enforceable.”

Some of the provided examples meet the “clear, specific, measurable and enforceable” standard. In the final version of the Compendium, however, EPA should include a prominent disclaimer that the inclusion of a permit term in the Compendium does not reflect a judgment by EPA that such terms are stringent enough to meet the MEP standard, only that they are “clear, specific, measurable, and enforceable.”

We support the inclusion of the following permit terms in the Compendium. These permit terms have one or more features that make them “clear, specific, measurable, and enforceable”:

i. Permit terms requiring a certain action at a specific, measurable frequency

For example, permit terms requiring a certain action at a specific, measurable frequency meet the requirement. One relevant example is Vermont’s requirement that permittees distribute brochures twice in the first year and once in subsequent years, run two or more stormwater-related news stories per year, and hold at least one refresher teacher training course each year.¹ Minnesota, for another example, requires permittees to provide at least one opportunity annually for the public to provide input on the stormwater program.² Western Washington requires permittees to post their stormwater management plans and annual reports online annually,³ complete field screening of a certain percentage of the MS4 each year,⁴ inspect all stormwater treatment BMPs annually,⁵ and inspect municipally owned or operated BMPs annually.⁶ New Mexico’s Middle Rio Grande requires permittees to screen the entire jurisdiction for illicit discharges at least once every five years and high priority areas at least once per year,⁷ and to conduct site inspections of all construction projects annually.⁸ In Colorado, permittees must

¹ Compendium at 4.

² *Id.* at 9.

³ *Id.*

⁴ *Id.* at 10.

⁵ *Id.* at 20.

⁶ *Id.* at 29.

⁷ *Id.* at 12.

⁸ *Id.* at 16.

conduct inspections every 45 days at construction sites.⁹ Tennessee requires annual routine inspections of stormwater BMPs, and comprehensive inspections every five years.¹⁰ New Jersey requires permittees to sweep all streets meeting certain criteria once per month.¹¹

ii. Permit terms requiring a certain action to be completed by a specific deadline

Other “clear, specific, measurable and enforceable” permit terms are those requiring a certain action to be completed by a specific deadline. In Western Washington, for example, permittees must initiate an investigation within 21 days of any report or discovery of a suspected illicit connection.¹² California requires permittees to conduct an investigation to identify and locate the source of an illicit discharge within 72 hours of becoming aware of the discharge (or 24 hours if the discharge is suspected of being sewage and/or significantly contaminated).¹³ Tennessee requires a complete inventory of all regulated construction sites within 12 months of permit coverage (or 24 months for new MS4s).¹⁴

iii. Permit terms requiring a certain action when specific and objective criteria are met

We also believe the standard is met by example permit terms requiring a certain action when specific and objective criteria are met. In New Mexico’s Middle Rio Grande, permittees must designate areas as “high priority” for illicit discharge screening where there are citizen complaints concerning more than five separate events within a year.¹⁵ California requires permittees to sample any outfalls that are flowing or ponding more than 72 hours after the last rain event.¹⁶ The draft New Hampshire permit would require permittees to implement a Catchment Investigation Procedure where sampling results exceed specific numeric parameters.¹⁷ Also, Maine requires permittees to conduct inspections of construction activity within 24 hours of a rain event greater than 0.2 inches.¹⁸ In Colorado, each permittee must complete a compliance inspection within 14 days of identifying a failure to implement a control measure at a construction site.¹⁹ Western Washington requires monitoring at specified frequencies and locations that are determined based on the population of the MS4 (pages 34-36).²⁰

⁹ *Id.* at 17.

¹⁰ *Id.* at 19.

¹¹ *Id.* at 32.

¹² *Id.* at 11.

¹³ *Id.* at 12.

¹⁴ *Id.* at 13.

¹⁵ *Id.* at 12.

¹⁶ *Id.* at 12.

¹⁷ *Id.* at 13.

¹⁸ *Id.* at 15.

¹⁹ *Id.* at 17.

²⁰ *Id.* at 34-36.

iv. Permit terms requiring a certain action at a specific and measurable level of effort

Many of the permit terms meet the standard by requiring a certain action at a specific and measurable level of effort. In Vermont, for example, permittees must conduct teacher training in at least four schools²¹ and include at least three activities in the public involvement program that are listed in a menu of options.²² New Jersey requires permittees to achieve a certain number of public outreach “points” by choosing from a menu of compliance actions,²³ as well as to inspect a certain number of catch basins, with the number depending on the size of the MS4.²⁴ In Ohio, permittees must include more than one outreach mechanism in their public outreach programs, as well as target at least five different stormwater themes or messages over the permit term.²⁵ Similarly, the Massachusetts draft permit would require permittees to distribute a minimum of two educational messages over the permit term to each of four specified audiences.²⁶ California requires permittees to conduct surveys at least twice during the permit term to gauge the effectiveness of public outreach programs.²⁷ The New Hampshire draft permit would require permittees to complete a Catchment Investigation Procedure in 40 percent of the MS4 area within five years, and in 100 percent of the area within ten years.²⁸ In Maine, permittees must inspect construction activities at least three times in a particular watershed, or twice elsewhere.²⁹ Tennessee also requires permittees to sample all stream segments within the MS4 jurisdiction during the permit term.³⁰

v. Permit terms requiring compliance with a numeric performance standard

Many sufficiently specific permit terms require compliance with a numeric performance standard. In Ohio, for example, permittees must reach at least 50 percent of the population over the permit term through the public outreach program.³¹ Western Washington requires permittees to comply with specific pollutant concentration limits for non-stormwater discharges,³² achieve at least 80 percent of scheduled inspections of development sites,³³ and achieve at least 80% of scheduled inspections of stormwater BMPs.³⁴ In New Jersey, permittees are required to adopt

²¹ *Id.* at 4.

²² *Id.* at 9.

²³ *Id.* at 6.

²⁴ *Id.* at 32.

²⁵ *Id.* at 7.

²⁶ *Id.* at 8.

²⁷ *Id.* at 7.

²⁸ *Id.* at 13.

²⁹ *Id.* at 15.

³⁰ *Id.* at 34.

³¹ *Id.* at 7.

³² *Id.* at 10.

³³ *Id.* at 14.

³⁴ *Id.* at 20.

yard waste ordinances that prohibit placing yard waste closer than 10 feet from a storm sewer inlet.³⁵ Tennessee includes a numeric performance standard for on-site retention of post-construction runoff, as well as numeric standards for off-site mitigation or fee-in-lieu where the on-site retention standard cannot be fully met.³⁶ The New Mexico Middle Rio Grande permit includes a numeric performance standard for on-site retention of post-construction runoff.³⁷ California also includes numeric performance standards for on-site retention and for hydromodification management;³⁸ we suggest that EPA also include in the Compendium adjacent sections of the California permit that include additional design parameters to ensure the on-site retention standard is met.³⁹ Maryland's permit requires permittees to comply with and enforce state regulations for post-construction runoff control;⁴⁰ we suggest that EPA also include in the Compendium an explanation that the referenced standards require development to use environmental site design (green infrastructure) practices to manage the runoff from a 1 inch storm event. The New Hampshire draft permit would ensure that no sump shall be more than 50 percent full for any catch basins serving catchments draining to impaired waters with certain pollutants of concern.⁴¹

b. Some of the cited examples are insufficiently “clear, specific, measurable and enforceable” and should be deleted from the Compendium.

While many of the presented examples meet the “clear, specific, measurable and enforceable” standard, not every example cited in the preamble is sufficient to “make it clear to all what level of effort is expected of the permittee” as EPA stated would be necessary to meet Option 1 requirements.⁴² EPA should remove these examples from the compendium, or include them as examples of permit terms that do *not* meet the standard.

i. Permits that weaken specific and measurable requirements with vague associated language

Cited permits that fail to meet the standard include those whose specific, measurable requirements are undercut by vague associated permit language. For example, the Massachusetts draft permit requires permittees to “at a minimum consider the topics” listed in the permit when developing their outreach and education programs. While the topics listed are “specific,” the permit does not clearly require the permittee to incorporate them (or even any minimum number

³⁵ *Id.* at 11.

³⁶ *Id.* at 18.

³⁷ *Id.* at 23.

³⁸ *Id.* at 24-25.

³⁹ California State Water Resources Control Board, Water Quality Order No. 2013-0001-DWQ, NPDES General Permit No. CAS000004 for Storm Water Discharges from Small MS4s (Feb. 2013), *available at* http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/order_final.pdf.

⁴⁰ Compendium at 25.

⁴¹ *Id.* at 27.

⁴² Draft rule at 421.

of them) into its public outreach program, instead imposing only the vague requirement to “at a minimum consider” them. As a result permittee expectations are unclear under this provision.

Western Washington provides another example of insufficiently specific permit language. The permit requires permittees to engage in a “documented effort” to eliminate illicit connections within 6 months.⁴³ This six-month deadline is objective and specific, but the requirement for a “documented effort” is overly vague because it is not clear whether an MS4 must simply *make an effort* to eliminate the illicit connection, or to *actually eliminate* the illicit connection, within the deadline. If “making an effort” is all that is required, such a requirement is not specific or measurable.

In Maine, the permit requires annual inspections of a certain percentage of BMPs “located in the direct watershed of a lake most at risk from new development or in watersheds of an urban impaired stream.”⁴⁴ The required percentages to be met are specific and objective, but the phrase “a lake most at risk” is not defined, so the geographic scope of this requirement is not clear.

The Massachusetts draft permit’s post-construction section states that “the permittee is encouraged to require the capture of at least the 1 inch (90th percentile) storm event.”⁴⁵ The language describes a clear, specific, and measurable performance standard, but uses non-mandatory permit language (like “the permittee is encouraged to...”), which EPA highlighted and discouraged in the preamble to the proposed rule;⁴⁶ such language leaves the ultimate judgment of whether to comply to the permittee and thereby renders compliance assessments or enforcement very difficult.⁴⁷ We note that the draft Massachusetts provision in the Compendium appears to be from an outdated version of the draft permit; the 2014 draft posted on the EPA Region 1 website instead includes a clear, specific, enforceable requirement to retain the first 1 inch of runoff from all impervious surfaces on site, or where 100% retention is not technically feasible, to provide the level of pollutant removal equal to or greater than the level of pollutant removal provided through the use of biofiltration on the remaining portion of the first 1 inch of runoff.⁴⁸ EPA should substitute this updated language in the Compendium.

Vermont’s permit requires the permittee to “prohibit the use of any phosphorus containing fertilizer unless warranted by a current soil test” (page 29),⁴⁹ but the permit does not define or

⁴³ Compendium at 11.

⁴⁴ *Id.* at 21.

⁴⁵ *Id.* at 28.

⁴⁶ Proposed Rule—National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand, 81 Fed. Reg. at 423 (Jan. 6, 2016).

⁴⁷ Please note that the Massachusetts permit language is not highlighted in gray in the Compendium, but could be interpreted as an EPA-approved example of a “clear, specific, measurable” requirement due to its inclusion in the document.

⁴⁸ EPA Region 1, General Permit for Stormwater Discharges from Small MS4s in Massachusetts (DRAFT), Section 2.3.6.a.ii.(a), (Sept. 2014), *available at* <http://www3.epa.gov/region1/npdes/stormwater/ma/2014DraftMASmallMS4GeneralPermit.pdf>.

⁴⁹ Compendium at 29.

explain the circumstances in which a soil test could make such an exception “warranted.” This vague provision makes it difficult to assess whether a permittee is in compliance with the requirement or not.

- ii. Permit terms that allow permittees to “opt out” of the permit’s specific and measurable requirements.

A number of the cited permit terms include sufficiently specific and measurable requirements, but allow permittees to, in lieu of complying with those requirements, develop (without permitting authority review or opportunity for public comment and hearing) and implement their own alternative approaches. Such permit terms allow unlawful self-regulation. The Vermont permit, for example, establishes numeric performance metrics for public outreach programs⁵⁰ (listed above as “good” examples that would comply with Option 1), but it also allows permittees to choose an alternate track wherein they formulate their own programs and performance metrics rather than complying with the ones set forth in the permit.⁵¹

Along the same lines, the version of the New York permit cited in the compendium (issued in 2010) provides that “if a stormwater management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent...then MEP will be assumed to be met for post-construction stormwater discharged by the practice.”⁵² Even if the standards in the design manual are clear, specific, and measurable, the permit does not require that such standards be applied in order to meet the MEP standard, but only provides that *if* the permittee *chooses* to apply those standards (or “equivalent”) then MEP is satisfied; no alternative compliance approach is set forth in clear, specific, measurable terms, leaving the permittee to decide for itself what other approaches may constitute MEP. We note that the current New York permit, issued in 2015, revised this language and does include a clear, specific, measurable, and enforceable post-construction performance standard. That permit requires compliance with post-construction standards included in the states Construction General Permit, which in turn requires compliance with numeric performance standards for on-site retention of post-construction runoff.⁵³ EPA should substitute that updated permit language (including the cross-referenced standards in the state’s Construction General Permit) in the Compendium.

In Ohio, the permit requires monthly follow-up inspections of construction activities, “unless you [the permittee] document your procedures for prioritizing inspections.”⁵⁴ While the monthly inspection requirement is specific and measurable, the permit authorizes the permittee

⁵⁰ *Id.* at 4.

⁵¹ *Id.* See subsections (3)-(4).

⁵² *Id.* at 22.

⁵³ New York State Department of Environmental Conservation, SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-0-15-003, at 63 (May 2015), *available at* http://www.dec.ny.gov/docs/water_pdf/ms4permit.pdf.

⁵⁴ *Id.* at 16.

independently to “opt out” of this condition and establish its own procedures, without any measurable standard by which to judge the adequacy of alternative procedures.

The West Virginia permit establishes pollution concentration parameters that trigger follow-up action, but only requires permittees to consider and incorporate them “as appropriate,” thereby allowing permittees the choice of whether or not to adopt them.⁵⁵

iii. Permit terms that are measurable but not specific

In some cases, permit terms may meet the “measurable” requirement but lack sufficient specificity to make permittees’ responsibilities clear. For example, the New Jersey permit requires “an annual employee training.”⁵⁶ This requirement is measurable because the training must be conducted annually, but it is not specific because it does not describe the topics that the training must cover or any other criteria for the training to meet.

iv. Permit terms that are specific but not measurable

Permit terms must be both specific *and* measurable. The New Jersey permit is specific in requiring yard waste collection programs, although the “frequency of pickups shall be determined at the discretion of the [MS4],” which is not a measurable requirement.⁵⁷ (This permit language is not highlighted in gray in the Compendium, but could be interpreted as an EPA-approved example of a “clear, specific, measurable” requirement due to its inclusion in the document.)

v. Permit terms that are neither measurable nor specific

Some permit terms meet requirements for neither specificity nor measurability. The Pennsylvania draft permit requires permittees to “provide adequate public notice and opportunities for public review, input, and feedback” on ordinances, plans, and reports (page 10).⁵⁸ The qualifier “adequate” is the type of “caveat” permit language that EPA specifically calls out in the preamble as language that “do[es] not appear to have the type of detail that would be needed under the proposed rule.”⁵⁹ In addition to the lack of specificity, the provision “includes no minimum frequency that can be used to measure adequacy” of the opportunities for public participation, and therefore, according to the preamble, “lack[s] a measurable component.”⁶⁰ Similarly, Western Washington: the permit requires permittees to “tak[e] appropriate maintenance actions in accordance with the adopted maintenance standards.”⁶¹ In

⁵⁵ *Id.* at 31.

⁵⁶ *Id.* at 32.

⁵⁷ *Id.* at 11.

⁵⁸ *Id.* at 10.

⁵⁹ Proposed rule at 423.

⁶⁰ *Id.*

⁶¹ Compendium at 29; *see also* at 30.

the preamble to the proposed rule, EPA states that requirements for permittees to take action “as appropriate” would not qualify as “clear, specific, and measurable.”⁶²

The Pennsylvania draft permit states that “measures should be included [in the permittee’s storm water management program] to encourage retrofitting LID into existing development. DEP’s Pennsylvania Stormwater Best Management Practices Manual ... provides guidance on implementing LID practices.”⁶³ This provision does not include any specific or measurable requirements, but rather provides only recommendations and guidance. In the preamble to the proposed rule, EPA states that such provisions, which are “preface[d] with non-mandatory words, such as ‘should’ or ‘the permittee is encouraged to’” would not qualify as “clear, specific, and measurable.”⁶⁴

In California, the permit requires MS4s to “ensure that all staff implementing the construction site storm water runoff control program are adequately trained,”⁶⁵ another example of “caveat” language that defers the decision of what constitutes “adequate” training to the permittee.⁶⁶ The permit would need to specify the frequency or type of training that is necessary in order to meet the “maximum extent practicable” standard.

The New Hampshire draft permit would require permittees to investigate sources of excessive sediment loading to catch basin sumps “and to the extent practicable, abate contributing sources.”⁶⁷ The permit presents another example of “caveat” language that EPA has said will not comply with Option 1 requirements because it allows the permittee to define its own parameters and creates uncertainty about the circumstances in which abatement will be required.⁶⁸

vi. It appears that no existing permits fully meet Option 1 requirements

In the “Economic Analysis” report accompanying the proposed rule, EPA identified five states’ permits that, in EPA’s view, “include provisions consistent with Option 1.”⁶⁹ (Those states are California, Washington, Massachusetts, New Hampshire, and New Mexico.) While many of the provisions in these permits are indeed “clear, specific, and measurable,” many others do not meet

⁶² Proposed rule at 423.

⁶³ Compendium at 26.

⁶⁴ Proposed rule at 423.

⁶⁵ Compendium at 16.

⁶⁶ Proposed rule at 423.

⁶⁷ Compendium at 28.

⁶⁸ Proposed rule at 423.

⁶⁹ EPA, *Economic Analysis for the Proposed Municipal Separate Storm Sewer System General Permit Remand Rule* at 5, available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2015-0671-0014&disposition=attachment&contentType=pdf>.

that standard, as detailed below. Consequently, EPA should avoid any suggestion that these permits would not need to be revised to comply with Option 1.⁷⁰

For example, in addition to the examples from the Compendium discussed above, each of these five permits contains other permit terms that are not sufficiently “clear, specific, and measurable” to satisfy Option 1.

California has one of the most “clear, specific, and measurable” permits in the country, but it nonetheless does contain some provisions that lack specificity and/or measurable components. For example, the permit’s requirements for public involvement and participation programs lack measurable components. For example, the requirement to “[c]reate opportunities for citizens to participate in the implementation of BMPs through sponsoring activities”⁷¹ does not establish how many opportunities or activities need to be completed in order to meet this requirement or how frequently they should be offered. The permit also requires MS4s to “develop and implement a process for incorporating water quality and habitat enhancement features into new and rehabilitated flood management facilities,”⁷² but it does not describe any specific criteria or standards by which to judge the sufficiency of the “process” the permittee develops.

The Western Washington permit’s public involvement and participation requirements are not specific and lack measurable components. Permittees are required to “create opportunities for the public to participate in the decision-making processes involving the development, implementation, and update of the Permittee’s SWMP,” without specifying any quantitative performance measures.⁷³ By failing to specify the required types or frequencies of participation opportunities, the permit does not make clear what level of effort is expected of the permittee.

The Western Washington permit also requires MS4s to “[i]mplement practices, policies and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee,” without describing what types of “practices, policies, and procedures” would satisfy this requirement or establishing an objective performance standard for “reduc[ing] stormwater impacts associated with runoff.”⁷⁴ Permittees are required to develop a “schedule for implementation of structural BMPs” as part of their Stormwater Pollution Prevention Plans for heavy equipment maintenance/storage yards and material storage facilities, but the permit

⁷⁰ *See Id.*

⁷¹ California Small MS4 Permit at 30.

⁷² *Id.* at 46-47.

⁷³ Washington Department of Ecology, Western Washington Phase II Municipal Stormwater Permit, at 19 (Aug. 2013, modified Jan. 2014), *available at* <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phaseIIww/5YR/2014mod/WWAPhaseII-Permit-2014Final.pdf>.

⁷⁴ *Id.* at 38.

provides no specific performance outcomes for those BMPs and provides no timeline that the implementation schedule must follow.⁷⁵

The Massachusetts draft permit and the New Hampshire draft permit are very similar, having both been developed by EPA Region 1. We acknowledge that the permits contain many “clear, specific, and measurable” requirements, but not all included permit terms currently meet this standard.

For example, the draft permits state that, upon detection of a sanitary sewer overflow entering the MS4, “the permittee shall eliminate it as expeditiously as possible.”⁷⁶ This requirement lacks a specific timeframe for elimination of the SSO, which is necessary in order to clearly define what is expected of the permittee. The permits also require permittees to “develop and implement mechanisms and procedures designed to prevent illicit discharges and SSOs, such as...”, followed by a menu of optional actions from which to select.⁷⁷ The permits fail to specify how many of these options must be chosen, at a minimum, in order for a permittee’s “mechanisms and procedures” to meet the MEP standard.

The New Mexico draft permit’s public education component requires MS4s to use “a mix of locally appropriate strategies” to “target specific audiences and communities.”⁷⁸ While it provides a list of example strategies, the permit does not indicate how many strategies should be utilized, how many communities or audiences should be targeted, or what the frequency of communication should be. The permit’s provisions governing municipal operations are similarly vague, requiring the “[d]evelopment and implementation of an employee training program to incorporate pollution prevention and good housekeeping techniques into everyday operations and maintenance activities,” but it does not establish any metrics for the rigor or frequency of the training program or describe the kinds of techniques that the program should teach.⁷⁹ This section also requires “maintenance schedules” for municipal stormwater controls without setting any minimum upkeep frequency,⁸⁰ and it directs MS4s to “develop or modify” various manuals and programs without explaining what components of those manuals and programs need to be modified and with what objective.⁸¹ Finally, it directs MS4s to select a “target number” of structures to inspect each quarter entirely at their own discretion.⁸² The New Mexico draft permit provides a menu of options for MS4s to use in ensuring the “appropriate implementation” of management practices on private property, but requires only that they “consider” “some or all”

⁷⁵ *Id.* at 39.

⁷⁶ Massachusetts Draft Small MS4 Permit at 26; U.S. EPA Region 1, General Permit for Stormwater Discharges from Small MS4s in New Hampshire (DRAFT), at 28 (2013), *available at* <http://www3.epa.gov/region1/npdes/stormwater/nh/2013/NHMS4-NewDraftPermit-2013.pdf>.

⁷⁷ Massachusetts Draft Small MS4 at 36; New Hampshire Draft Small MS4 Permit at 37-38.

⁷⁸ New Mexico Draft Small MS4 Permit at 39.

⁷⁹ *Id.* at 31.

⁸⁰ *Id.*

⁸¹ *Id.* at 32.

⁸² *Id.* at 31-32.

of those options. This provision provides no guidance for MS4s, or for anyone reviewing an MS4's compliance with the permit, in determining which, or how many, of these options must be selected in order to meet the MEP standard, or what criteria should be used if the MS4 selects an entirely different approach as the permit allows.⁸³

c. EPA should include additional examples of permit terms that are sufficiently “specific, clear, and measurable”.

In the preamble to the proposed rule, EPA requested comment on “what additional examples [in addition to those in the Compendium] should be highlighted as being clear, specific, and measurable in current small MS4 general permits.”⁸⁴ We believe the following MS4 general permit terms meet that standard and should be considered for inclusion in a revised version of the Compendium.

Public outreach and education requirements:

- Arizona's permit requires the permittee to “distribute a minimum of two educational messages to at least two different audiences each year of the permit term.”⁸⁵
- Arkansas's permit requires that the “stormwater public education and outreach program shall include more than one mechanism and target at least five different stormwater themes or messages over the permit term. At a minimum, at least one theme or message shall be targeted to the land development community.”⁸⁶
- Utah's permit requires an education program directed at four specific audiences (“(1) residents, (2) businesses, institutions, and commercial facilities, (3) developers and contractors (construction), and (4) MS4 industrial facilities”) and includes a list of specific topics to be covered by that program.⁸⁷

Public involvement and participation requirements:

- Arkansas's and Ohio's permits both require that the “stormwater public involvement/participation program shall include at least five public involvement activities over the permit term,” and include a list of suggested activities.⁸⁸

⁸³ *Id.* at 25.

⁸⁴ Proposed rule at 423.

⁸⁵ Arizona Department of Environmental Quality, General Permit for Stormwater Discharges from Small MS4s, Permit No. AZG2015-00X, at 12 (2015), *available at* https://www.azdeq.gov/environ/water/permits/download/small_ms4_gen_permit.pdf.

⁸⁶ Arkansas Department of Environmental Quality, Small MS4 Permit, Permit No. ARR040000, part 3, at 3 (Aug. 2014), *available at* http://www2.adeq.state.ar.us/water/branch_permits/general_permits/stormwater/pdfs/arr040000_final_20140131.pdf.

⁸⁷ Utah Department of Environmental Quality, General Permit for Discharges from Small MS4s, Permit No. UTR090000, at 12 (July 2010), *available at* <http://www.deq.utah.gov/Permits/water/updes/docs/2010/07Jul/2010SmallMS4GPfinal7-26-2010.pdf>.

⁸⁸ Arkansas Small MS4 Permit, part 3, at 4; Ohio Environmental Protection Agency, Authorization for Small MS4s to Discharge Storm Water, Permit No. OHQ000003, at 7 (Sept. 2014), *available at* http://epa.ohio.gov/portals/35/permits/SmallMS4_Final_GP_sep14.pdf.

- Maine’s permit requires the permittee to host or conduct one public participation event each year; the event “must include a pollution prevention and/or water quality theme.”⁸⁹
- Virginia’s permit requires MS4s to “participate, through promotion, sponsorship, or other involvement, in a minimum of four local activities annually (e.g., stream cleanups; hazardous waste cleanup days; and meetings with watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the operator's small MS4).”⁹⁰

Illicit discharge detection and elimination requirements:

- Arkansas’s permit requires “dry-weather screening of all stormwater outfalls located in the MS4’s urbanized area at the time of this permit coverage over the permit term,” and requires annual updates to the storm sewer system map.⁹¹
- Georgia’s permit also requires dry weather screening inspections of 100% of the total outfalls within the five-year permit term.⁹²
- Virginia’s permit requires that “(i) if the total number of outfalls in the small MS4 is less than 50, all outfalls shall be screened annually or (ii) if the small MS4 has 50 or more total outfalls, a minimum of 50 outfalls shall be screened annually.”⁹³

Construction site requirements:

- Arkansas’s permit requires “pre-construction site plan reviews (reviews of construction site Stormwater Pollution Prevention Plans) of 100 percent of projects from construction activities that result in a land disturbance of greater than or equal to one acre. These applicable sites shall be inspected at least on a monthly basis to ensure compliance.”⁹⁴
- South Carolina’s permit establishes detailed requirements for the frequency of inspections at construction sites.⁹⁵

Post-construction requirements:

- West Virginia’s permit requires regulated sites to keep and manage on-site the first 1 inch of rainfall with no discharge to surface waters.⁹⁶

⁸⁹ Maine Department of Environmental Protection, General Permit for the Discharge of Stormwater from Small MS4s, Permit No. MER041000, at 16 (2013), available at http://www.maine.gov/dep/land/stormwater/ms4/2013_Municipal_MS4_GP.pdf.

⁹⁰ Virginia Department of Environmental Quality, General VPDES Permit for Discharges of Stormwater from Small MS4s, Permit No. VAR04, 9 VAC 25-890-40 (permit by rule), at II.B.2.b (July 2013), available at <http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+9VAC25-890-40>.

⁹¹ Arkansas Small MS4 Permit, part 3, at 6.

⁹² Georgia Department of Natural Resources, Small MS4 Permit, Permit No. GAG610000, at 11 (Dec. 2012), available at https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/FINAL_GAEPD_NPDES_MS4_PhaseIIISmall_GAG610000_Y2012Dec6.pdf.

⁹³ Virginia Small MS4 Permit at II.B.3.c.1.b.

⁹⁴ Arkansas Small MS4 Permit, part 3, at 8.

⁹⁵ South Carolina Department of Health and Environmental Control, NPDES General Permit for Stormwater Discharges from Regulated Small MS4s, Permit No. SCR030000, at 27-28 (Jan. 2014), available at http://www.scdhec.gov/Environment/docs/Final_SMS4_Permit.pdf.

- Montana’s permit requires regulated sites over one acre to use low impact development to retain 0.5 inches of rainfall, which represents the 90th percentile storm event in Montana.⁹⁷
- As noted above, the most current draft Massachusetts permit includes a numeric performance standard for on-site retention of post-construction runoff.⁹⁸
- As noted above, the most current New York permit includes (by cross-reference to standards in the state’s Construction General Permit) a numeric performance standard for on-site retention of post-construction runoff.⁹⁹
- Connecticut’s proposed draft permit would require new and redevelopment sites to retain the volume generated by 1 inch of rainfall (the water quality volume), except redevelopment sites with greater than 40% impervious cover would be required to retain the volume generated by 0.5 inch of rainfall.¹⁰⁰
- Arkansas’s permit requires “pre-construction site plan review (for compliance with local requirements for post-construction management of stormwater) of 100 percent of projects from construction activities that result in a land disturbance of greater than or equal to one acre to ensure that required controls are designed per requirements.”¹⁰¹
- Georgia’s permit requires inspections of 100% of post-construction stormwater management structures during the five-year permit term.¹⁰²

Pollution prevention/good housekeeping requirements:

- Arkansas’s permit requires “an annual employee training for all eligible employees” (and also defines the term “eligible employee”). It further requires annual inspections for certain defined types of municipal facilities.¹⁰³
- North Dakota’s permit requires permittees to “inspect, at minimum, 20% of the MS4 outfalls, snow disposal areas, sediment basins and ponds each year on a rotating basis.”¹⁰⁴

⁹⁶ West Virginia Department of Environmental Protection, General NPDES Permit for Stormwater Discharges from Small MS4s, Permit No. WV0116025, at 24 (July 2014), *available at* <http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/MS4%20GP%202014.pdf>.

⁹⁷ Montana Department of Environmental Quality, General Permit for Storm Water Discharges Associated with Small MS4s, Permit No. MTR 040000 (2015) (not available online).

⁹⁸ EPA Region 1, General Permit for Stormwater Discharges from Small MS4s in Massachusetts (DRAFT), Section 2.3.6.a.ii.(a), (Sept. 2014), *available at* <http://www3.epa.gov/region1/npdes/stormwater/ma/2014DraftMASmallMS4GeneralPermit.pdf>.

⁹⁹ New York State Department of Environmental Conservation, SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-0-15-003, at 63 (May 2015), *available at* http://www.dec.ny.gov/docs/water_pdf/ms4permit.pdf.

¹⁰⁰ Connecticut Department of Energy and Environmental Protection, General Permit for the Discharge of Stormwater from Small MS4s (DRAFT), at 23-24 (Aug. 2015), *available at* http://www.ct.gov/deep/lib/deep/water_regulating_and_discharges/stormwater/municipal/150901_ms4_general_permit_master_draft_clean_8-27-15.pdf.

¹⁰¹ Arkansas Small MS4 Permit, part 3, at 10.

¹⁰² Georgia Small MS4 Permit at 21-22.

¹⁰³ Arkansas Small MS4 Permit, part 3, at 12.

- Utah’s permit requires inspections of municipal facilities at specified frequencies, determined based on the type of facility.¹⁰⁵

Additionally, EPA should consider compiling examples of permit terms from *individual* MS4 permits (both Phase I and Phase II permits) that qualify as “clear, specific, and measurable.” Permitting authorities may find such examples to be useful when writing both individual and general MS4 permits, for both Phase I and Phase II permittees.

¹⁰⁴ North Dakota Department of Health, Authorization to Discharge under the North Dakota Pollutant Discharge Elimination System for Small MS4s, Permit No. NDR04-0000, at 11 (July 2009), *available at* <http://www.ndhealth.gov/wq/storm/MS4/NDR04per20090701E.pdf>.

¹⁰⁵ Utah Small MS4 Permit at 27-28.