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DEQ Response to Comment on

National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Phase II General Permit

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MS4 Phase II General Permit

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Overview

In accordance with the 40 Code of Federal Regulations part 124.17, this document presents Oregon Department of Environmental Quality's response to comments received on the Draft National Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Oregon.

DEQ took public comments on the draft permit from November 27, 2017 to February 20, 2018, and hosted a public hearing on January 26, 2018. DEQ received over 31 unique written letters and 2 oral comments on the draft permit. This document, as well as the final Permit and Permit Evaluation Report, should be collectively considered as DEQ's response to all significant comments submitted on the proposed permit.

Each comment letter/oral comment contained one or more comments that DEQ excerpted, sorted according to topics and organized by corresponding permit condition. With the exception of adding the referenced permit condition, DEQ did not otherwise edit the comment excerpts. DEQ addressed all significant issues that the public comments raised. In many cases DEQ cross-referenced similar responses. To the extent that a comment response addresses issues that other comments raised, the responses should be considered together. Where indicated, DEQ has changed the final permit and PER. The Administrative Record contains copies of each comment letter, as well as information considered by DEQ during the permit development process.

DEQ made minor changes throughout the Permit and PER text for clarity, to correct grammar and to correct document formatting. Where major changes were made, DEQ noted the change in the document. A redline version of the permit and PER are also available for review.

Summary of Key Changes

The following is a summary of the key changes in the final permit:

- **Requirement to Reduce the Discharge of Pollutants** - Based on comments received DEQ added the following condition to the permit:
Pursuant to 40 CFR §122.34(a), the permit registrant must at a minimum develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce pollutants from the MS4 to the maximum extent practicable, to protect water quality and to satisfy the appropriate water quality requirement of the Clean Water Act. This permit identifies the management practices, control techniques and system, and design and engineering methods necessary to meet this standard.
- **Water Quality Standards** - “Causing or contributing”, based on comments, DEQ modified permit condition to include the underlined text:
If the permit registrant complies with all the terms and conditions of this permit, it is presumed that the permit registrant is not causing or contributing to an excursion above the applicable water quality standards as established in OAR 340-041.
- **Illicit Discharge Detection and Elimination** - Based on comments received and because other permit conditions ensure appropriate attention to illicit discharges into the MS4s, DEQ removed the septic system investigation and on-site investigation requirements from the permit.
- **Illicit Discharge Detection and Elimination** - Based on comments, DEQ removed the System Evaluation for Chronic Illicit Discharges and replaced this section with a Dry Weather Screening Program. This modification aligns with the existing MS4 Phase I permits.
- **Construction Site Runoff Control** - The 5,000-square-foot threshold was modified to:
7,000 square feet or more for Large Communities
10,890 square feet (one quarter of an acre) or more for Small Communities
- **Post-Construction Site Runoff for New Development and Redevelopment** - For counties the 5,000-square-foot threshold was modified to (for their coverage area that is outside a urban growth boundary):
For counties, through ordinance or other regulatory mechanism, to the extent allowable under state law, the permit registrant must require the following for project sites discharging stormwater to the MS4 that create or replace 10,890 square feet (a quarter of an acre) or more of new impervious surface area.

List of Commenters

Commenter/Affiliation

Anderson Schultz LLP
Association of Oregon Counties
Clean Water Services
League of Oregon Cities
National Association of Clean Water Agencies
Oregon Association of Clean Water Agencies
Oregon Environmental Council
Oregon Home Builders Association
Rogue Riverkeeper (oral and written)
Rogue Valley Sewer Service
Special Districts Association of Oregon
Water Environment Services
Willamette Riverkeeper
City of Albany
City of Albany
City of Albany (oral and written)
City of Ashland
City of Bend
City of Eugene
City of Gresham
City of Keizer
City of Millersburg
City of Oregon City
City of Portland
City of Springfield
City of Springfield
City of Springfield
City of Turner
Jackson County Roads
Marion County
Polk County

Signatory

Lolly Anderson
Mike Eliason
Robert P. Baumgartner
Tracy Rutten
Emily Rimmel
Susie Smith
Lori Grant
Jon Chandler
Stacey Detwiler
Jennie Morgan
Mark Landauer
Greg Geist
Travis Williams
Peter Troedsson
Mark Yeager
Chris Bailey
Paula Brown
Wendy Edde
Therese Walch
Keri Handaly
Elizabeth Sagmiller
Kevin Kreitman
Martin Montalvo
Loren Shelley
Christine Lundberg
Matt Stouder
Sunny Washburn
David Sawyer
Mike Kuntz
Matt Knudsen
Sidney Mulder

1.0 General Topics

1.1 *Maximum Extent Practicable and Exceedance of Federal Rules*

1. *Comment from Oregon Association of Clean Water Agencies*

The draft MS4 Phase II general permit does not include a definition of maximum extent practicable (MEP). DEQ staff has stated in public workshops that the total requirements contained in the draft permit constitute MEP from their perspective. The draft permit is a “one-size-fits-all” approach that includes an entire suite of specific prescriptive measures that must be developed and implemented by all permit registrants within the permit period. By doing so, DEQ has either discarded the federal MS4 MEP standard out of hand, or presumes that all of the permit registrants are homogeneous, and therefore can reasonably be subjected to a singular set of standards that DEQ staff has determined they can all practicably achieve. DEQ staff has not conducted the research and analysis required to make a determination that the requirements contained in the draft permit are practicable for all of the permittees.

The approach taken by DEQ is not permissible under the still-valid federal regulatory framework that allows flexibility in the imposition of stormwater management measures to reflect MEP in relation to each community’s circumstances. For example, new permittees clearly do not have the capacity to implement the same measures, in a five-year period, as existing permittees, and the minor differences DEQ has included in the draft permit to address this are arbitrary and insignificant relative to the magnitudes of requirements they have included.

The Congressional record on application of MEP to MS4 permits shows that the U.S. Congress intended that the stormwater measures be adopted on a location-by-location basis, considering a number of factors, including: receiving water conditions, local concerns, MS4 size, climate, implementation schedules, current ability to finance the program, beneficial water used, hydrology, geology and capacity to perform operation and maintenance. EPA refined this procedure in the Phase II MS4 Remand Rule, while still providing for flexibility in the general permit to address the wide variety of small MS4 communities in each state. DEQ has not put in the “greater effort” envisioned by EPA in “synthesizing” the various MS4 capabilities across the state. 81 Fed. Reg., at 89330. Instead, DEQ has chosen prescriptive, one-size-fits-all permit conditions that do not take into account the statewide variabilities in small MS4 communities.

The refusal to account for these variabilities has produced impracticable permit conditions that are neither “effective” or “achievable,” as required by EPA. DEQ staff has been provided with considerable input on this point while the draft permit was under development. In response, DEQ has incorporated minor differences in the implementation schedules for the permit requirements of existing vs. new registrants, and minor differences between large and small communities for some of the prescriptive measures. However, the distinction between large and small communities, and the minor differences in some of the prescriptive measures were set arbitrarily by DEQ staff, with no connection to the circumstances that EPA and Congress recognize need to be considered when determining what is practicable for each community. DEQ staff has not provided any evidence that it has assimilated or analyzed demographic, economic, geologic, topographic, organizational or any other information about the permit registrants that would provide the necessary baseline to begin to establish what constitutes MEP for communities.

REQUEST: If DEQ intends to use the general permit approach, there needs to be three or four separate general permits or one general permit with substantively different requirements and time frames, established based on well-researched and justified (by DEQ) distinctions based on actual community-based MEP considerations. If they are set arbitrarily, as DEQ has done in the current draft, they will exceed MEP for some, if not most, Phase II MS4 communities. Rectifying this problem would require effort on DEQ’s part to comply with the intended “extra work” to set a reasonable MEP range in each of the permits as EPA recognized in the Remand Rule, when it laid out the general permit as an option. The permits could be developed with templates (similar to the WPCF template developed for the UICs), where the six minimum measures serve as the template requirements, with menus/check lists of program elements permittees can select and indicate scale and frequency of effort in their programs. This approach

would include findings on MEP for each permit registrant. This is needed to provide flexibility for adaptive management that enables improved environmental performance and program effectiveness/efficiencies.

2. *Comment from National Association of Clean Water Agencies*

The U.S. Environmental Protection Agency's NPDES MS4 General Permit Remand Rule -effective January 2017 -provided additional clarity on the development, issuance, and implementation of stormwater permits for Phase II MS4s, but it did not change or impact the underlying MEP standard that applies to these systems. In implementation, however, starting with EPA-issued permits in Region 1, there has been a recent trend toward more restrictive, water quality standards-driven approaches for MS4s, and away from the CWA's traditional MEP standard.

Oregon DEQ's draft MS4 Phase II General Permit continues this troubling trend, relying not on MEP, but instead on compliance with water quality standards. If the Oregon DEQ's draft permit is finalized without substantial revisions, NACWA believes that the existing Phase II MS4s and the seven new Phase II MS4 communities will not only experience significant implementation challenges, but they will also face considerable financial burdens-all of which are inconsistent with the MEP standard set by Congress. Oregon's permit would set a dangerous precedent that will have national implications.

Although it is mentioned in the Redline Draft Permit Evaluation Report, the proposed Oregon MS4 Phase II General Permit fails to specifically mention or include a definition of the MEP standard. Rather, the proposed MS4 Phase II General Permit requires the permittees "not to cause or contribute to a violation of a water quality standard as established in OAR 340-041."

It is not feasible for MS4 communities to adhere to a strict compliance with water quality standards (WQS) because of the nature of MS4 discharges and the improbability of controlling what pollutants are discharged and at what quantities or concentrations. Oregon Phase II municipalities will need to allocate significant financial resources and pollution control technologies to attempt to meet the "cause or contribute" standard in the draft permit, which will increase compliance costs for communities already facing increased operation costs and affordability challenges.

Oregon DEQ should base compliance with the permit on the MEP standard and incorporate the flexibility Congress intended for MS4s to account for the unique geographic, hydrologic, and land use requirements that define each community's urban runoff needs.

...NACWA urges Oregon DEQ to make substation revisions to the proposed MS4 Phase II General Permit to adhere to the federal MEP standard and grant Oregon communities the necessary regulatory flexibility to determine and implement the stormwater management practices that work best for their respective community.

3. *Comments from Cities of Albany, Bend, Oregon City, Springfield, Turner, and Jackson County*

Municipal Separate Storm Sewer System (MS4) discharges are statutorily different than other kinds of point source discharges under the Clean Water Act, primarily because it would be difficult, if not impossible, for cities, towns and other municipal entities to capture, sample, or treat its stormwater in systems that span great areas with many points of contribution and multiple outfalls. Because of this complexity, Congress determined that MS4 permittees should be required to reduce pollutants in their discharge to the "maximum extent practicable." 33 U.S.C. § 1342(p)(3)(B)(iii). This is known as the "MEP" standard and is only applicable to municipal stormwater:

By rule, the Environmental Protection Agency ("EPA") issued six minimum control measures for Phase II MS4s that constitute the framework for a storm water discharge control program for regulated small MS4 jurisdictions that, when properly implemented, satisfy the MEP standard. 40 C.F.R. §122.34. EPA interprets the MEP standard to provide municipal entities flexibility "to optimize reductions in storm water pollutants on a location-by-location basis. EPA envisions that this evaluation process will consider such factors as the condition of receiving waters, local concerns, and other aspects included in a

comprehensive watershed plan. Other considerations may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water, hydrology, geology, and capacity to perform operation and maintenance.” 64 Fed. Reg. 68722, at 68754 (December 8, 1999) (Final Phase II Rule). Portions of the 1999 Final Phase II Rule were remanded to EPA for additional rulemaking to address procedural concerns raised in *Environmental Defense Center v. U.S.*

Environmental Protection Agency, 344 F.3d 832 (9th Cir. 2003.) However, EPA’s interpretation of the MEP standard was not challenged in that case. The Ninth Circuit noted that its ruling “does not preclude regulated parties from designing aspects of their own stormwater management programs, as contemplated under the Phase II Rule,” but that such programs must “be subject to meaningful review by an appropriate regulating entity...” *Id.* at 856. Thus, despite remand of portions of EPA’s 1999 Final Phase II Rule, the Ninth Circuit agreed that regulated MS4 jurisdictions could still develop stormwater management programs that take into consideration local conditions and concerns.

EPA issued revisions to its Final Phase II MS4 rule in late 2016 to address the *Environmental Defense Center* opinion. 81 Fed. Reg. 89320 (December 9, 2016) (“National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand Rule”). The Remand Rule includes three options for permitting authorities to issue Phase II permits that are consistent with the Ninth Circuit’s ruling: (1) a traditional general permit containing detailed permit conditions that spell out measures satisfying the MEP standard for permittees; (2) individual permits in which each permittee includes in its application measures specific to the municipal entity satisfying the MEP standard; and (3) some combination of the first two options. See, 40 CFR § 122.28(d). The preamble to the rule specifies that permit conditions must be “clear, specific, and measurable” when using the traditional general permit approach. EPA offers its *Compendium of MS4 Permitting Approaches – Part I: Six Minimum Control Measure Provisions* (November 2016) as examples of permit conditions from various states that meet the “clear, specific, and measurable” requirement. EPA also references a “MS4 permit standard,” which involves permit requirements that reduce pollutants “to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.” 81 Fed. Reg., at 89323.

In applying these requirements to Phase II MS4 general permits, EPA “acknowledges the challenge that permitting authorities will face in developing and issuing a Comprehensive General Permit. Synthesizing the collective understanding of MS4 capabilities across an entire state, and translating this into effective and achievable permit requirements, will require a greater effort up front in developing one of these permits.” 81 Fed. Reg., at 89330. EPA goes on to suggest that the challenge of developing a comprehensive permit can be addressed by “subcategorizing MS4s by experience, size, or other factors, and creating different requirements for each subcategory.” 81 Fed. Reg., 89330. These approaches are intended to assist permitting authorities in dividing small MS4s “into smaller categories, which are composed of municipalities with a greater degree of similarity among them.” 81 Fed. Reg. at 89330.

In the Remand Rule, EPA does not attempt to reinterpret the MEP standard enacted by Congress 33 U.S.C. § 1340(p)(3)(B)(iii) and, importantly, is not requiring states to adopt a single MEP standard applicable to all owners and operators of small MS4s. Because Congress established MEP as the standard applicable to all MS4s, and intended that MEP be determined on a location-by-location basis taking into consideration specific local concerns such as conditions of receiving waters, MS4 size, climate, implementation schedules, current ability to finance a program, beneficial uses of receiving water, hydrology, geology and capacity to perform operation and maintenance, EPA likely would be exceeding its authority if it attempted to prescribe a detailed MEP program applicable to all MS4 owners and operators regardless of local conditions and concerns. Instead, EPA has acknowledged the challenge of a “one-size-fits-all” approach in a general permit and has suggested that permitting authorities offer different permit requirements for similarly situated small MS4s that will be covered by the permit.

Oregon, acting through the Environmental Quality Commission (EQC), has not expressly adopted by rule a specific definition of the MEP standard. However, following the 1987 amendments to the CWA,

Oregon amended OAR 340-045-0015(2) to require that regulated MS4 jurisdictions obtain MS4 NPDES permits subject to the CWA stormwater permit requirements in 40 CFR §122.26, which requires regulated MS4 jurisdictions to comply with the EPA MEP standard. The EQC has therefore adopted the federal MEP standard by requiring regulated MS4 jurisdictions to obtain a permit subject to the requirements in 40 CFR §122.26.

The EQC also adopted a rule that requires DEQ to prepare for the EQC a statement of whether a proposed rule will impose requirements in addition to any applicable federal requirements and, if so, to provide a written explanation of, among other things, the reasons for the differing requirements, and the alternatives considered. OAR 340-011-0029. DEQ did not prepare such a statement when the EQC amended OAR 340-045-0015(2) and, therefore, there was no intent to be more stringent than the federal program. There are a number of instances in the draft permit where DEQ impermissibly exceeds the federal program without this authorization.

[Albany] DEQ staff has not provided any evidence it has assimilated or analyzed demographic, economic, geologic, topographic, organizational, or any other information about the permit registrants that would provide the necessary baseline to begin to establish what constitutes MEP for each individual community... DEQ's assertion these requirements and others in the draft permit represent the MEP standard for all Phase II communities without performing the detailed analysis of each community described above lacks credibility.

[Albany] The current draft Phase II MS4 Permit would impose on Albany detailed and prescriptive stormwater control measures. Many of the draft Phase II MS4 permit requirements extend well beyond the six minimum measures required by the federal rules (40 C.F.R. §122.34) and even beyond EPA's detailed MS4 Permit Improvement Guide. As noted above, the EQC and DEQ have not followed the proper procedures that would allow DEQ to impose an MEP standard that is more stringent than the federal MEP. Moreover, the Draft Phase II MS4 Permit attempts, impermissibly, to create a single definition of MEP that is at odds with the still-valid Congressional intent behind the MEP standard: to allow flexibility in defining permit terms for MS4s.

[Bend] The permit should be written so enough individualization is recognized and addressed so as the permit as a whole does not extend beyond MEP for individual Phase IIs. Furthermore the permit should not incorporate numeric water quality standards. While the examples above exemplify the reason for these statements, to further enumerate the legal reasons why, the City refers to the analysis conducted by Laura Maffei, Cable Huston LLP...

[Springfield] DEQ has however, impermissibly attempted to create its own definition of MEP through implementation of the draft permit, which is inconsistent with and more stringent than the federal standard. DEQ staff has said on several occasions, including public meetings, that the proposed "permit alone establishes MEP" (Mark Riedel-Bash, January 29, 2018 at the MS4 Phase II public hearing, DEQ Eugene Office, 165 East 7th Ave).

[Springfield] As the DEQ considers public comment on the proposed draft permit and moves to issue a final permit, the City of Springfield strongly encourages the Department to implement language within the permit that is consistent with the federally adopted and EQC approved Maximum Extent Practicable standard.

4. Oral Comment from City of Albany

The Department has issued a single general permit wherein the Department has decided what Maximum Extent Practicable means for every regulated community. This approach disregards the language and intent of the federal stormwater regulations that require "controls to reduce the discharge of pollutants to the maximum extent practicable" (33 U.S.C. §1342(p)(3)(B)). While not explicitly defined, MEP exists so that jurisdictions may develop methods to optimize pollutant reduction taking into consideration factors such as the jurisdiction's size, climate, geography, local concerns, and ability or capacity to finance the program. It would be possible for the Department to develop general permits that describe MEP for a

group of permit registrants based on shared characteristics, and in fact the EPA suggests taking such an approach, however that is not what has been presented for public comments here.

... Both of these [MEP and Schedule A.1] significant legal concerns with this draft permit could potentially be resolved if the Department would revise the permit to return it to an appropriate MEP standard.

... If the Department is insistent on the issuance of a General Permit for Municipal Stormwater, then at least three separate permits should be developed to reflect the different capabilities of existing permit registrants, new registrants and small communities.

... In summary, the draft permit ignores the federal guidance regarding MEP, attempts to replace MEP with numeric water quality standards, is overly prescriptive, goes well beyond the EPA required six minimum control measures, and includes excessive and costly administrative requirements that serve no benefit for improving water quality.

5. *Comment from City of Ashland*

The draft MS4 Phase II permit does not utilize the federal “maximum extent practical (MEP)” standards. This places a hold of prescriptive, “one-size-fits-all” requirements that are unreasonable for small permittees. It is recommended that DEQ set a reasonable MEP standard be defined to meet permit requirements.

6. *Comment from City of Eugene*

The requirements in the proposed permit, in particular in Schedules A.3.c. (Illicit Discharge Detection and Elimination) and A.3.e. (Post-Construction Site Runoff for New Development and Redevelopment) are overly prescriptive, go beyond federally-mandated minimum program requirements for MS4 Phase IIs, and in some instances leap-frog over current requirements for MS4 Phase Is or are technically infeasible. Examples include: required use of the Center for Watershed Protection (CWP) guidelines and manuals; the requirement to evaluate at least 20% of the MS4 as measured in lineal feet; and a mandatory retention requirement for new development.

7. *Comment from City of Gresham*

The draft GP for the Phase II municipalities contains no reference to MEP. Although the Permit Evaluation Report does reference the standard in various discussions. In preparation of these comments numerous state general permits were reviewed for comparison. The California State Water Resource Control Board’s December 2017 Permit Amendment Package offers the following:

MEP -the minimum required performance standard for implementation of municipal storm water management programs to reduce pollutants in stormwater. Clean Water Act §402(p)(3)(B)(iii) requires that municipal permits “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design engineering methods, and such other pollutants.” MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically feasible BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. This process of implementing, evaluating, revising, or adding new BMPs is commonly referred to as the iterative process. [emphasis added]

The removal of the MEP standard from the permit has no precedence or defense from DEQ. The permit reads like a 1200-Z permit which is issued to private property completely under the control of the operator as compared to a city boundary where many/most pollutant contributors are thousands of humans making individual choices that are literally impossible to control in a real time scenario.

... We understand that third parties want accountability in permits, but these requirements must factor in the MEP standard and the base foundation that you are asking agencies without developed budgets or

programs to fully develop six COMPLEX program areas in an extremely short timeframe with no flexibility.

8. *Comment from City of Springfield*

The proposed draft permit developed by DEQ will greatly impact Springfield, as it extends well beyond the Federal six minimum control measures for stormwater management. The Council and I are particularly concerned that the draft permit is inconsistent with Congressional intent with respect to the Federal Maximum Extent Practicable (MEP standard), and would not provide local communities with the flexibility intended by Congress to account for local conditions and concerns. It appears that DEQ is attempting to create its own, more restrictive definition of MEP through this permit process.

...It is the City of Springfield's opinion that the proposed draft MS4 Phase II General Permit contains language that is not implementable, unclear, and extends well beyond the Federal six minimum control measures without scientific or technical basis. The draft language takes away flexibility at the local level for jurisdictions to make decisions as intended under the MEP standard in the Clean Water Act (CWA). If implemented, multiple facets of the complex, administrative nature of the permit will provide little to no benefit to water quality, and will require the City to dedicate significant amounts of time, money and resources that will preclude Springfield's ability to successfully implement meaningful improvements to water quality in the Willamette and McKenzie River basins.

9. *Comment from City of Portland*

The proposed Phase II permit does not include Maximum Extent Practicable (MEP) language despite acknowledgement in the Permit Evaluation Report (PER) that it serves as the MS4 standard established by the Clean Water Act.

Please replace all language in Schedule A.1.a with the following: "Maximum Extent Practicable. Permittees must reduce the discharge of pollutants from the MS4 to the maximum extent practicable, subject to the requirements set forth in 40 CFR § 122.34."

The issue of the MEP standard versus numeric effluent limits for MS4 permits has been resolved through the legal process both at the state and federal levels. The US Environmental Protection Agency (EPA) has interpreted the MEP standard in a manner that provides the flexibility "to optimize reductions in stormwater pollutants on a location-by-location basis" due to the scale and complexity associated with municipal stormwater. In Oregon, the Environmental Quality Commission adopted the federal MEP standard by requiring regulated MS4 jurisdictions to obtain permits subject to the requirements in 40 CFR § 122.26.

When portions of the Phase II Rule were remanded to EPA for additional rulemaking (2003), the Ninth Circuit Court noted that its ruling did not preclude regulated MS4 jurisdictions "from designing aspects of their own stormwater management programs." Although the EPA specified that permit conditions be "clear, specific, and measurable" in its 2016 Remand Rule, the EPA also referenced the "MS4 permit standard" and did not attempt to reinterpret the MEP standard enacted by Congress. Therefore, although Phase II general MS4 permits should contain conditions that are "clear, specific, and measurable," they must be, first and foremost, "practicable". There are a number of conditions in the proposed permit that are impracticable and, thus, fail to meet the MS4 permit standard set by the EPA.

10. *Comment from Oregon Home Builders Association*

The draft permit assumes numerous facts that aren't in evidence. Such as the legal or environmental basis for going dramatically beyond federal requirements. Or the financial and technical capability of the affected local governments. Or the percolation capacity of soils in most of western Oregon.

11. *Comments from League of Oregon Cities, Association of Oregon Counties, and Special Districts Association of Oregon*

DEQ has strayed from the federal "maximum extent practicable" (MEP) standard established for MS4 NPDES permits. This one-size-fits-all general permit is topped with a host of prescriptive requirements

that cannot be reasonably achieved by small and new MS4 Phase II permittees. DEQ has chosen prescriptive permit conditions that do not take into account the statewide variabilities in small MS4 communities.

We share the Association of Clean Water Agencies' (ACWA) concerns that DEQ has exceeded its authority in including water quality standards in the permit. Schedule A.I.a. of the draft permit implies that MS4 permittees must meet numeric water quality standards where stormwater from dispersed non-point sources is discharged. The result of this would force municipalities to implement end-of-pipe treatment throughout their entire systems to meet this requirement. This is clearly not practicable nor affordable to implement for any jurisdiction.

...As a result, the department has produced an impracticable permit that is neither "effective" or "achievable," as required by EPA. Furthermore, the prescriptive nature of the permit requirements goes beyond the federal minimum requirements, again thereby likely creating an unfunded mandate under the Oregon Constitution. Finally, the administrative requirements throughout the draft permit are overly onerous and have little to no correlation to the achievement of water quality benefits.

DEQ Response

Establishing Permit Conditions

The Clean Water Act Section 402(p), 33 U.S.C. § 1342(p) and the National Pollutant Discharge Elimination System (NPDES) stormwater regulations, establish the permit requirements for regulated MS4 discharges. These authorities¹ require a NPDES permit for regulated MS4 discharges to effectively prohibit non-precipitation related flows from entering the MS4; require controls to reduce pollutant discharges to the maximum extent practicable (MEP), including management practices, control techniques and system design and engineering methods, and such other provisions as the permitting authority deems appropriate for the control of such pollutants.

In 1990, EPA developed the first phase of federal stormwater regulations as directed by the CWA. The "Phase I" regulations established NPDES permit application and related requirements for stormwater discharges from *large MS4s* and *medium MS4s*, as determined by the 1990 Census². In 1999, EPA developed the "Phase II" stormwater regulations, and designated certain small MS4s as requiring NPDES permit coverage. *Regulated small MS4s* include any MS4 discharge not already covered by a Phase I MS4 permit and that is located (partially or wholly) within an Urbanized Area.³

In December 2016, EPA issued the NPDES Stormwater Final MS4 General Permit Remand Rule (referred to henceforth as the Remand Rule) to:

- Revise its regulations governing the way in which small regulated MS4s obtain coverage under an NPDES general permit and
- Clarify how required MS4 permit conditions must be established by the NPDES permitting authority.

In its discussion of the Remand Rule, EPA clarified that it is the NPDES permitting authority's responsibility to establish permit conditions:

...that permitting authorities determine what permit requirements are needed to reduce pollutants from each permitted small MS4 "to the maximum extent practicable (MEP), to protect water quality, and to

¹ Section 402(p)(3)(B) of the CWA, 33 U.S.C. § 1342(p)(3)(B)

² In Oregon, large- and medium MS4s include those located in the greater Tri-County area around Portland, etc.

³ Urban Area (UA) is defined by the U.S Census Bureau's Decennial Census. See US Census Bureau's *2010 Census Urban and Rural Classification and Urban Area Criteria* for additional information. See also 40 CFR 122.32.

satisfy the appropriate water quality requirements of the Clean Water Act” (referred to hereinafter as the “MS4 permit standard”).⁴

...that it is the permitting authority’s responsibility, and not that of the small MS4 permittee, to establish permit terms and conditions that meet the MS4 regulatory standard and to delineate the requirements for implementing the six minimum control measures, other terms and conditions deemed necessary by the permitting authority to protect water quality, as well as any other requirement. The final rule also emphasizes that permit requirements must be expressed in “clear, specific, and measurable” terms. These modifications do not alter the existing, substantive requirements of the six minimum control measures in § 122.34(b).⁵

EPA’s discussion of its rationale for the Remand Rule further addressed the topics of “minimum federal permit requirements”, their relationship to the concept of MEP, and the permitting authority’s ability to establish permit terms and conditions that – in their view- are needed to satisfy the MS4 permit standard.

Several commenters requested clarification or raised concerns about the extent to which the Phase II regulations establish minimum permit requirements. This question is often raised in the context of state laws that prohibit the permitting authority from including terms and conditions in a permit that are more stringent than the federal minimum requirements or include more than the federal minimum requirements. Some comments confuse the specified elements of the minimum control measures described in § 122.34(b). In a related manner, a number of permitting authorities have shared with EPA their experiences in encountering resistance to a proposed permit requirement on the basis that it is not explicitly required in the federal regulations. In addition, some commenters asked EPA to clarify that suggestions made in the “guidance” paragraphs that are unique to the small MS4 regulations are not mandatory permit terms.

The regulations specify the elements that must be addressed in a permit. It is up to the permitting authority to establish the specific terms and conditions to meet the MS4 permit standard for each of these elements. The minimum control measures set forth in § 122.34(b), for instance, are not intended as minimum permit requirements, but rather areas of municipal stormwater management that must be addressed in permits through terms and conditions that are determined adequate to meet the MS4 permit standard. For that matter, if a permitting authority were to merely use the minimum control measure language from § 122.34(b) word-for-word and include no further enforceable permit terms and conditions, this permit would not satisfactorily meet the requirement to establish clear, specific, and measurable requirements that together ensure permittees will comply with the MS4 permit standard. EPA emphasizes that what constitutes compliance with the MS4 permit standard continues to evolve. The need to reevaluate what is meant by “maximum extent practicable” for each permit term, as well as the need to determine what is necessary to protect water quality and satisfy the appropriate water quality requirements of the CWA, means that what constitutes compliance will by necessity change over time. Therefore, in EPA’s view, those that argue that the minimum federal requirements are what is included in the wording of the minimum control measures, are misconstruing the intent of the regulations, and are handicapping permits by artificially tying the MS4 permit standard to the minimum control measures.

EPA emphasizes that the minimum control measures do not restrict the permitting authority from regulating additional sources of stormwater pollutant discharges, not specifically mentioned in the minimum control measure language....⁶

Additionally, EPA provided the following statement in the Remand Rule:

...For a permitting authority to include requirements in a permit based on these “guidance requirements,” because in its view they are necessary to ensure MS4s meet the MS4 permit standard,

⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

⁵ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89326.

⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89342-43.

does not mean that the permit has established requirements beyond the federal minimum or that the permitting authority impermissibly used guidance to develop enforceable requirements.⁷

MEP vs. MS4 permit standard

Several commenters stated the following:

The draft MS4 Phase II general permit does not include a definition of maximum extent practicable...

... [DEQ] discarded the federal MS4 MEP standard out of hand...

...DEQ should base compliance with the permit on the MEP standard...

DEQ added the following language to the permit in Schedule A1.a, which cites to the federal rule that includes the reference to MEP.

Pursuant to 40 CFR §122.34(a), the permit registrant must at a minimum develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from their MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Oregon Administrative Rules.

This permit identifies the management practices, control techniques and system, and design and engineering methods necessary to meet this standard.

DEQ agrees that MEP must be considered when establishing permit conditions and performed this evaluation throughout the permit development process (see response in Sections 3.3.4.1 and 3.3.5.2 and PER Section 4.3.5.4). While MEP was considered when establishing permit conditions, the Remand Rule clarified that the standard for MS4 Phase II general permits is the MS4 Permit Standard, not simply the MEP standard.

A final change to § 122.34(a) that EPA proposed was to reflect the iterative nature of the MS4 permit standard and require that what is considered adequate to meet the MS4 permit standard, including what constitutes “maximum extent practicable”...⁸

...permit 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”⁹

DEQ is responsible for accounting for the various local conditions when developing permit conditions. The permit represents the minimum required needed to satisfy the MS4 permit standard, as determined by DEQ; or the detail provided in the general permit represents the minimum requirements that DEQ determined to meet the MS4. As discussed later, DEQ accounted for the various local conditions when developing permit conditions.

It should be noted that all MS4 Phase II general permits issued after the effective date of the Remand Rule (Jan. 9, 2017) are required to meet the MS4 permit standard (or a permit that reduces pollutant discharge from the MS4 to the maximum extent practicable, protects water quality and satisfies the appropriate water quality requirements of the CWA).

⁷ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

⁸ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89337-38.

⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

Exceedances of Federal Rules and Permit Language Beyond Phase II Rules

Several commenters stated that many of the permit requirements go beyond the six federal minimum control measures, go beyond MEP, and go beyond what would otherwise be required under the CWA. This topic is also addressed by EPA in the Remand Rule, see the following excerpt:

EPA emphasizes that the minimum control measures do not restrict the permitting authority from regulating additional sources of stormwater pollutant discharges, not specifically mentioned in the minimum control measure language... Such a requirement represents what is necessary, for those small MS4s, to reduce pollutants as necessary to meet the MS4 permit standard. This does not mean that the requirement is more stringent than the minimum control measures, but rather it constitutes what is needed in the permitting authority's view to satisfy the MS4 permit standard.¹⁰

The minimum control measures set forth in § 122.34(b), for instance, are not intended as minimum permit requirements, but rather areas of municipal stormwater management that must be addressed in permits through terms and conditions that are determined adequate to meet the MS4 permit standard. For that matter, if a permitting authority were to merely use the minimum control measure language from § 122.34(b) word-for-word and include no further enforceable permit terms and conditions, this permit would not satisfactorily meet the requirement to establish clear, specific, and measurable requirements that together ensure permittees will comply with the MS4 permit standard.¹¹

Regardless of the permitting authority that implements the MS4 permitting program, whether it's DEQ or EPA, municipalities that operate a regulated MS4 are required to follow the requirements of the federal regulations which this permit implements. As the compliance standard for this permit is the MS4 Permit Standard, the permit authority is delegated authority to establish the necessary permit requirements to meet the MS4 Permit Standard.

It is up to the permitting authority to establish the specific terms and conditions to meet the MS4 permit standard for each of these elements.¹²

As meeting the MS4 permit standard is the minimum requirement of the federal rule, permit conditions that meet this standard are not beyond the federal rules. The permit includes conditions established to protect water quality impacts to the receiving waterbodies as discussed later in this document. The final permit includes conditions to prevent further degradation of the currently impaired receiving waterbodies. The conditions referred to by several commenters, as “beyond the federal minimums or exceeding federal rules” are required by federal rules to meet the federal CWA Sections 305(b) and 303(d), see section 3.3.4.2 and 3.3.5.2. Regulations that govern DEQ's MS4 permit program and the issuance of this MS4 NPDES permit are in accordance with federal regulations.^{13,14}

Several commenters stated that the “draft Phase II MS4 permit requirements extend well beyond the six minimum measures required by the federal rules (40 CFR §122.34) and even beyond EPA's detailed MS4 Permit Improvement Guide.” In the “*Clear, Specific, and Measurable*” Permit Requirements section of the Remand Rule, EPA addressed this comment:

Permit provisions that simply copy the language of the Phase II regulations verbatim without providing further detail on the level of effort required or that do not include the minimum actions that must be carried out during the permit term. For instance, where a permit includes the language in § 122.34(b)(4)(ii)(B) (i.e., requiring “...construction site operators to implement appropriate erosion and sediment control best management practices”) and does not provide further details on the minimum set of

¹⁰ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

¹¹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89342-43.

¹² NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

¹³ 64 Federal Register 68754, 68763, 68734 (December 8, 1999); EPA Stormwater Phase II Final Rule.

¹⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016).

*accepted practices, the requirement would not provide clear, specific, and measurable requirements within the intended meaning of the proposed Traditional General Permit Approach. The same would also be true if the permit just copies the language from the other minimum control measure provisions in § 122.34(b) without further detailing the particular actions and schedules that must be achieved during the permit term.*¹⁵

It is DEQ's determination that the final permit strikes an appropriate balance between allowing each permit registrant flexibility to implement controls and measures, while also effectively prohibiting pollutants from entering the MS4. The final permit establishes "clear, specific, and measurable" language/requirements that provide sufficient detail of the minimum requirements that the permit registrant must implement to comply with the MS4 permit standard.

Comprehensive General Permit and MEP

DEQ determined that the Comprehensive General Permit was the most appropriate permitting approach for regulated MS4 Phase II communities in Oregon for this permit cycle. This approach provides the regulated MS4s, DEQ and the public with a clear understanding of the permit requirements, by establishing a common and consistent set of performance standards and process requirements. The permit should also reduce some of the administrative redundancies and inefficient practices and allow for improved alignment with other DEQ water quality programs. Additionally, this approach eliminates the requirement for DEQ to propose a permit modification each time a permit registrant updates their SWMP Document. The final permit also establishes a uniform and improved process to streamline annual reporting.

The Remand Rule states that the permitting authority, DEQ, has discretion to determine the most appropriate permitting approach that is best suited for the small regulated MS4s:

*The final rule provides permitting authorities with full discretion to choose which option is best suited for its permitting needs and specific circumstances.*¹⁶

By DEQ choosing the Comprehensive General Permit Approach, the final permit must establish all of the necessary permit terms and conditions required to reduce the discharge of pollutants from the permit registrant's MS4 to meet the MS4 permit standard. This is necessary to comply with the Remand Rule.

*...the permitting authority issues a small MS4 general permit that includes the full set of requirements necessary to meet the MS4 permit standard of "reducing pollutant discharges from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA." Under the Comprehensive General Permit, all requirements are contained within the general permit, and no additional requirements are established after permit issuance...*¹⁷

Clear, Specific and Measureable Conditions vs. Conditions Implemented to MEP

In the Remand Rule EPA included examples of permit language that does not appear to have the type of detail that would be needed and therefore create uncertainty. The following are excerpts from the Remand Rule that describe permit conditions that create uncertainty:

... "requirements that include "caveat" language, such as "if feasible," "if practicable," "to the maximum extent practicable," and "as necessary" or "as appropriate" unless defined.

¹⁵ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89335.

¹⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89328.

¹⁷ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89325.

...non-mandatory words, such as “should” or “the permittee is encouraged to...” This type of permit language makes it difficult to assess compliance since it is ultimately left to the judgment of the permittee as to whether it will comply.

Permit requirements that lack a measurable component. For instance, permit language implementing the construction minimum control measure that requires inspections “at a frequency determined by the permittee” based on a number of factors.

Provisions that require the development of a plan to implement one of the minimum control measures, but does not include details on the minimum contents or requirements for the plan, or the required outcomes, deadlines, and corresponding milestones.¹⁸

This requirement for clear, specific, and measurable requirements applies to any permit term or condition established under § 122.34, including requirements addressing the minimum control measures, any water quality-based requirements, and the evaluation, recordkeeping, and reporting requirements.¹⁹

In this clarification EPA addresses the comments DEQ received requesting that the permit include requirements that are implemented “to the maximum extent practicable.” As discussed by EPA above, this type of requirement creates uncertainty and does not provide clear, specific, and measurable conditions as required by the Remand Rule. Therefore, the final permit requires more certainty as to requirements consistent with the Remand Rule and the MS4 standard. In the final permit, DEQ included permit conditions that were determined to be “clear, specific, and measurable”

Per the Remand Rule, one of the goals of clear, specific, and measurable requirements is the following:

... [the] perceived benefits for permittees, permitting authorities, and the public, particularly because it will be more clearly stated in the permit what is expected for compliance.²⁰

DEQ did not establish a new or unique definition of MEP in this permit. In the final permit DEQ establishes permit conditions necessary 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”²¹

Or to meet the MS4 Permit Standard. This approach is discussed in the Remand Rule:

...EPA intends for the permitting authority to retain discretion in determining how much specificity is needed for different permit requirements. The level of specificity may change over time, for example, to reflect a more robust understanding of more effective stormwater management controls or to meet specific state needs.²²

DEQ agrees that prior to the Remand Rule it may have been unclear whether the permit registrant or the permitting authority established the permit conditions. As a result, historically MS4 permits in Oregon relied on the permit registrant’s to develop the specifics the permit conditions in a SWMP Document. This process was dependent on the registrant’s self-identified measurable goals and self-evolution of MEP. In contrast, the Remand Rule provides clarity that the permitting authority establishes the applicable terms and conditions and the permit is used to establish and evaluate compliance with the permit requirements.

¹⁸ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89335.

¹⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89326.

²⁰ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89334.

²¹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

²² NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89335.

MEP comment by Mark Riedel-Bash (DEQ)

DEQ acknowledges the statement “that the permit is MEP” was not complete. DEQ should have stated that the permit represents the minimum required needed to satisfy the MS4 Permit Standard, which includes the requirement 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.²³

Needs to Perform “Extra Work” for this Permitting Approach

Regarding the comments that DEQ “did not provide any evidence it has assimilated or analyzed demographic, economic, geologic, topographic, organizational, or any other information about the permit registrants that would provide the necessary baseline to begin to establish what constitutes MEP for each individual community...” As noted in the PER and this document, DEQ considered various informational sources to determine which permitting approach would be most appropriate for the small regulated MS4s in Oregon, including, but not limited to the following:

- The current MS4 Phase I and II permits in Oregon
- Submittals by the Phase I and II permittees (e.g., Annual Reports and other supplemental documents), submittal by New Registrants and unpermitted MS4s (e.g., TMDL Implementation Plans and Management strategies presented in the Water Quality Management Plans of Total Maximum Daily Loads)
- Review of local ordinances and regulatory mechanisms currently imposed by Phase I and II permittees, including New Registrants and other unpermitted MS4s in Oregon
- Review of other existing or proposed MS4 Phase II general permit. With consideration to their types of populations, climate, and economics

The selection of a Comprehensive General Permit approach was ultimately based on the literature review discussed in the PER and this document; the goal is to eliminate the discharge of pollutants from the MS4 to the receiving waterbodies, in accordance with the federal NPDES MS4 regulations.

DEQ’s approach is further supported by the Remand Rule:

The final rule provides permitting authorities with full discretion to choose which option is best suited for its permitting needs and specific circumstances. While there are significant considerations, advantages, and disadvantages to selecting either of the two permitting approaches, EPA is leaving the decision of which method to adopt for each general permit up to the permitting authority.²⁴

Furthermore, the Remand Rule states:

At the same time, EPA intends for the permitting authority to retain discretion in determining how much specificity is needed for different permit requirements. The level of specificity may change over time, for example, to reflect a more robust understanding of more effective stormwater management controls or to meet specific state needs.²⁵

As discussed in the PER and this document, the Comprehensive General Permit approach was selected after DEQ’s review of local ordinances, a literature review, a review of water quality reports and a comprehensive public process.

²³ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

²⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89328.

²⁵ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89335.

CWA requires more flexible MEP; One-size-fits-all permit

Several commenter stated that the Clean Water Act requires more flexibility for permit registrants to establish permit conditions that are considered MEP, or MEP should be the standard used for compliance with this general permit. DEQ recognizes the MEP standard and the federal rules concerning it [i.e., 40 CFR §122.34(a)] and agrees that the CWA allows for flexibility for permit registrant to implement a SWMP. The final permit established permit terms and conditions to satisfy the MS4 Permit Standard, which includes MEP, in addition to being protective of water quality and satisfying the appropriate water quality requirements of the Clean Water Act.

DEQ disagrees that the permit is written in an overly prescriptive or “one-size-fits-all” format as alleged by several commenters. Within the basic federal regulatory framework, examples of flexibility in this a one-size fits all approach are illustrated below:

- Flexibility in the selection and design of public education messages that are relevant for each permit registrant or community.
- Flexibility in the selection of stewardship opportunities.
- Flexibility in the selection of an appropriate MS4 map format.
- Flexibility in how to weigh a variety of factors in developing IDDE and construction site runoff escalating enforcement and response procedure.
- Flexibility in the development of priority screening locations for IDDE dry weather screening.
- Flexibility in the selection of what BMPs are most effective within the permit registrants’ area.
- Flexibility in the section of a site performance standard.
- Flexibility in how a permit registrant establishes their post-construction runoff mitigation program.

The final permit strikes an appropriate balance between allowing each permit registrant flexibility to implement controls and measures, while also effectively prohibiting pollutants from entering the MS4. Several of the permit requirements are prescriptive on what is required but provide flexibility on how specific requirements are met. In other words, there are many pathways to comply with the permit requirements.

The permit establishes what DEQ determined is the minimum for small regulated MS4s to satisfy the MS4 permit standard; applicable to the various groups identified in the permit as Existing Registrants, New Registrants, Large Communities, and Small Communities. The final permit accounts for different implementation issues faced by these groups, while still establishing a uniform minimum MS4 permit standard. Additionally, DEQ acknowledges that each permit registrant faces different challenges, such as heavily urbanized vs. rural areas, and determined that the requirements of the permit allow adequate tailoring by each permit registrant and allow the permit registrant to concentrate work on their priority areas.

The use of a general permit for small regulated MS4s has been successfully implemented by 47 other states. Of the 6,695 regulated Phase II MS4s, 6,589 are covered by 54 general permits.²⁶

MEP Standard vs. Numeric Effluent Limits

In the issuance of the 1999 federal Phase II rules, EPA directed state permitting authorities to “establish requirements for each of the minimum control measures” in issuing the general permit.²⁷ In this rule, EPA also noted that “to reduce the risk that permittees will develop inadequate BMPs, EPA intends to develop a menu of

²⁶ U.S. EPA. 2016. *MS4 Permits - Compendium of Clear, Specific & Measurable Permitting Examples*, EPA-830-S-16-002.

²⁷ 64 Federal Register 68754, 68763, 68734 (December 8, 1999); EPA Stormwater Phase II Final Rule.

BMPs to assist the operators of regulated small MS4s.” These numeric effluent limits for stormwater retention and treatment are among the references EPA provides in this menu. Additionally, in the 1999 Phase II rule, EPA referenced a 1993 guidance that contained design requirements that “reflect the greatest degree of pollutant reduction that is economically achievable.” This design requirement forms the foundation of the site performance standard in this general permit.

In the discussion of this 1993 guidance, EPA highlighted the post-construction numerical treatment standard of an 80% reduction in total suspended solids that is used in this general permit. Moreover, EPA highlighted a narrative retention requirement of mimicking the pre-development hydrology to extent practicable. Since this time, the capacity to more effectively treat stormwater has evolved and the use of a numerical retention standards is widespread in the U.S. as noted in Section 4.3.5.3 of the PER, as demonstrated by specific examples in in this document, and in common references used by Phase II permit writers.^{28, 29, 30}

The inclusion of a numeric effluent limitation is consistent with EPA’s intent as expressed in the 1999 federal Phase II rules and as specified in a 2014 EPA memorandum regarding the integration of TMDLs into NPDES permit. In the 1999 federal Phase II rule, EPA stated that the “Maximum Extent Practicable standard should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards.”³¹ In the memo referenced above, EPA provides updated guidance on the types of water quality-based effluent limits considered most appropriate for stormwater permits and provided, as an example, the inclusion of a “numeric retention-based performance requirement for post-construction stormwater discharges” as a “clear, specific, and measurable way” to meet TMDL allocations in a permit.³² EPA addressed the use of narrative, numeric, and other forms of permit requirements in the Remand Rule:

Like the term “measurable,” “numeric” is another term that is often misunderstood to require numeric end-of-pipe concentration and/or mass pollutant limitations similar to those that commonly appear in permits issued to other types of point source dischargers (e.g., industrial process discharges and discharges from sewage treatment plants). EPA intends numeric to be read more broadly to include an objective, quantifiable value related to the performance of different requirements for small MS4 programs. For example, “numeric” can refer to the number or frequency of required actions to be taken such as a requirement to “clean 25% of the catch basins in your service area on a yearly basis” or “complete 6 of 10 public education events specified in the following table on an annual basis.” “Numeric” can also refer to a specified numeric performance levels, such as a retention standard for post-construction discharges from new development and re-development sites, e.g., “The first inch of any precipitation must be retained on-site.” Another example of a numeric performance requirement is exemplified by the following provision from the 2016 Vermont Small MS4 general permit: “The control measure(s) is designed to treat at a minimum the 80th percentile storm event. The control measure(s) shall be designed to treat stormwater runoff in a manner expected to reduce the event mean concentration of total suspended solids (TSS) to a median value of 30 mg/L or less.”³³

DEQ’s general permit uses quantitative standards for the design of post-construction runoff BMPs. This approach is consistent with 33 USC §1342(p)(3)(B)(iii) which requires the permitting authority to “reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or State determines appropriate for the control of such pollutants.”

²⁸ *Permitting Green Infrastructure: A Guide to Improving Municipal Stormwater Permits and Protecting Water Quality*, American Rivers, 2016.

²⁹ U.S. EPA. 2010. *MS4 Permit Improvement Guide*. EPA 833-R-001

³⁰ U.S. EPA. 2015. *MS4 General Permit and Six Minimum Control Measures – A Compendium of Permit Requirements*

³¹ 64 Federal Register 68722, 68754 (December 8, 1999); EPA Stormwater Phase II Final Rule.

³² Sawyers, Andrew D. and Best-Wond, Benita. 2014. Memorandum: Revisions to the November 22, 2002 Memorandum *Establishing TMDL Wasteload Allocation (WLA) for Stormwater Sources and NPDES Permit Requirements Based on Those WLAs*, U.S. EPA

³³ *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016) pages 89336-37.

Required Rulemaking

Regarding the comment that DEQ did not follow the proper procedures that would allow DEQ to impose an MEP standard that is more stringent than the federal MEP, DEQ is not required to propose this permit nor the terms and conditions of this permit to the EQC as this permit is consistent with the federal requirements cited in OAR 340-045-0015(2). The permit's requirements are based on Section 402(p) of the CWA, 33 U.S.C. § 1342(p), and EPA regulations for permitting municipal stormwater discharges (40 CFR §§ 122.28, 122.30-35, and 123.35; see also 64 FR 68722 [Dec. 8, 1999] and 81 FR 89320 [Dec. 9, 2016]). As the EPA delegated permitting authority for MS4 permits, DEQ is required to establish permit requirements that in accordance with current rules. DEQ established a permit that meets the MS4 permit standard in Oregon, is not beyond the federal minimums as cited by several commenters and therefore the permit is consistent with existing EQC rules.

1.2 MS4 Stormwater Permits vs. Industrial Stormwater Permits

12. Comment from City of Bend

At the December meeting covering this draft permit, DEQ staff stated that the requirements in this draft permit are like those in the industrial permit. The implication was made clear that DEQ is not seeing the MS4s as significantly different than industrial permittees, and thus is using this line of thought as an underlying reason to move beyond MEP into MEP + additional requirements to meet water quality standards and numerical requirements.

DEQ Response

Please see Section 1.1 above for discussion of the *MEP Standard vs. Numeric Effluent Limits*. DEQ agrees that MS4 stormwater discharges are different from industrial and construction stormwater discharges and has established terms and conditions specific to municipal stormwater discharges, urban activities, urban development and common municipal illicit discharges.

1.3 Request to Propose Individual Permit Conditions

13. Comment from City of Albany

To resolve the unfunded mandate triggered by the draft permit, Albany suggests DEQ return to its current practice of issuing individual permits to Phase II communities. This would allow communities, through their SWMP, to develop stormwater programs and requirements that are reflective of their water quality priorities, organizational abilities, and financial capacity to ensure these programs are practicable and implementable.

14. Comment from Jackson County

Some of the components of the draft permit are so onerous that they forced permittees to perform a thorough review of the permit statutes and structure. As a result of this review, and our comments above related to MEP and Unfunded Mandates, Jackson County requests that DEQ allow Jackson County (and other similarly situated permittees) propose measures that not only address permissible DEQ standards but also address local conditions and concerns. DEQ can meet the challenge of developing and issuing a permit by taking into consideration the challenges faced by similarly-situated permittees.

DEQ Response

Please see Section 1.1 for discussion of *MEP vs. MS4 Permit Standard and Exceedances of Federal Rules and Permit Language Beyond Phase II Rules*, for response to the comment that the CWA requires more flexible MEP. Please see Section 1.5 for discussion of *Unfunded Mandate*.

See Section 1.1 for discussion of the permitting approach taken in this permit.

In the Remand Rule EPA addressed the topic of the permitting authority's role in the selection of the permitting approach that is taken, an excerpt is provided here:

*The final rule provides permitting authorities with full discretion to choose which option is best suited for its permitting needs and specific circumstances.*³⁴

The permit establishes the minimum requirements for small regulated MS4s to satisfy the MS4 permit standard. If any permit registrant is unable to meet the terms and conditions of the general permit or does not wish to be regulated by this general permit, the permit registrant may apply for an individual permit in accordance with OAR 340-045-0030 or cease discharge.

1.4 “Clear, Specific, and Measureable”

15. *Comment from Oregon Environmental Council*

Of primary concern, there are multiple instances where the General Permit does not include the “clear, specific and measurable” terms and conditions to implement the six minimum control measures as defined by the final permit remand rule. For each minimum control measure, the General Permit should state the specific standards that must be met and the minimum set of accepted practices to meet those standards. For example, we strongly support the application of erosion and sediment controls for land disturbances of 5000 square feet or more as outlined in the Construction Site Runoff Control measure, but the Permit does not describe the minimum practices or measurable outcomes expected to assure discharges of pollutants are reduced to the maximum extent practicable. We also strongly support the Post-Construction Site Runoff Control measure and application to development of 5000 square feet or more of new impervious surface. The Permit requires targeting an outcome of predevelopment hydrologic function and provides flexibility to the agency to determine how to measure performance, but fails to specify the performance standard that must be met. Many states have developed clear standards; we encourage DEQ to review effective standards used elsewhere and ensure each minimum control includes clear, specific and measurable standards.

16. *Comment from Rogue Riverkeeper*

We remain concerned that the 2017 proposed permit continues to lack permit terms and conditions that meet the “clear, specific, and measureable” standard as defined under the final permit remand rule. DEQ must establish the allowable minimum requirements for the minimum control measures. For each minimum control measure, DEQ should clearly establish what actions need to occur and when, the required outcomes, and the minimum steps needed to achieve those outcomes.

...throughout Schedule A and the six minimum control measures, we urge DEQ to include clear, specific, and measurable standards. This will better protect water quality and be more aligned with the final permit remand rule. In our comments, we have attempted to identify language in Schedule A that would not be considered clear, specific, and measurable based on the final permit remand rule and to provide alternatives and sample provisions from existing Phase II general permits.

17. *Comment from Willamette Riverkeeper*

Given DEQ is utilizing the Comprehensive General Permit Approach, after reviewing the permit language, we are concerned that DEQ does not provide an appropriate level of clear, specific, and measurable permit terms and conditions, in order to reduce pollution to the maximum extent practicable. In not providing these, the Draft Permit does not meet the standard provided by the US EPA's final permit remand rule issued in December of 2016.

³⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89328.

For each minimum control measure, DEQ should clearly establish what actions need to occur and when, the required outcomes, and the minimum steps needed to achieve those outcomes. As clearly stated in the final permit remand rule, these terms and conditions “may be narrative or numeric, but must be enforceable.” This should apply to the six minimum control measures outlined in the permit.

18. Comment from Oregon Home Builders Association

EPA published their final MS4 General Permit Remand Rule on Dec. 9, 2016, satisfying a remand by the U.S. Court of Appeals for the Ninth Circuit (*Environmental Defence Center v. EPA*).

Despite heavy lobbying, EPA failed to use this court-mandated rulemaking as a means to “raise the floor” of the MS4 program. However, moving forward, this rule now requires state permit writers to incorporate “clear, specific and measurable” terms into all Phase II permit limits. EPA released a compendium of “approved” example provisions with the final MS4 Remand Rule, available here. Almost all of permits featured in EPA’s guidance highlight numeric limits as key to regulating post construction flow (e.g., “capture and treat first 1” of rainfall”).

DEQ Response

DEQ agrees that the permit must include clear, specific, and measurable requirements. DEQ reviewed the final permit and EPA’s *Compendium of MS4 Permitting Approaches, Part 1: Six Minimum Control Measures* and determined that the permit includes several of the permit provisions that have been identified by EPA as “clear, specific, and measurable” requirements under the Remand Rule and 40 CFR § 122.34(a). Specific permit condition comments regarding clear, specific, and measurable requirement are addressed in the relevant control measure section in this document.³⁵

1.5 Unfunded Mandate

19. Comment from Oregon Association of Clean Water Agencies

The federal minimum requirements for this MS4 Phase II general permit under the Clean Water Act are for permittees to implement the six minimum measures to the MEP, and the EPA Phase II MS4 Remand Rule clarifies that the requirements must be clear, specific, and measurable. ACWA asserts in many instances throughout the draft permit that DEQ’s proposed requirements go beyond MEP for at least some of the regulated communities to be covered under this permit. DEQ staff, in both the December 7, 2017 workshop and the January 29, 2018 public hearing on this permit stated that the total requirements of the draft permit define MEP for the MS4 Phase II permittees (existing and future).

Article XI, section 15 of the Oregon Constitution states, in relevant part, that “[e]xcept as provided in subsection (7) of this section, when the Legislative Assembly or any state agency requires any local government to establish a new program or provide an increased level of service for an existing program, the State of Oregon shall appropriate and allocate to the local government moneys sufficient to pay the ongoing, usual and reasonable costs of performing the mandated service or activity.” Or Const, Art XI, §15(1). Section 15 goes on to say that local governments are not required to comply with measures that require such expenditures without reimbursement from the state. Or Const, Art. XI, §15(3). Section 15 provides exceptions to this, including that “[a] new program or an increased level of program services established pursuant to action of the federal government so long as the program or increased level of program services imposes costs on local governments that are no greater than the usual and reasonable costs to local governments resulting from compliance with the minimum program standards required under federal law or regulations.” Or Const, Art. XI, §15(7)(d) (emphasis added).

Requiring all MS4 Phase II jurisdictions to comply with all provisions in the draft Phase II MS4 Permit will clearly trigger Article XI, section 15 of the Oregon Constitution as an unfunded mandate. The permit

³⁵ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

conditions will certainly require many Phase II communities to either provide an increased level of service or provide all-new services to their communities beyond what would otherwise be required under the Clean Water Act. If state funding is not provided for these services, the Phase II communities are constitutionally allowed to avoid compliance with the terms of the permit that require these expenditures.

Although Article XI, section 15 includes a provision exempting federally imposed programs, the exemption only applies to the “minimum program standards required under federal law or regulations.” As discussed in detail above and in the jurisdiction-specific letters from ACWA members, the draft Phase II MS4 Permit will require implementation of measures that go well beyond the minimum federal requirements. As noted in *Dept. of Finance et al. v. County of San Diego*, Super. Ct. No. 34-2010-80000604-CU-WM-GDS (Ca. Super. Ct. 2017), the individual permit terms are not federal requirements because each permitting authority has a choice of specific terms that meet the six federal minimum standards. Thus, the permit terms that require new or expanded programs are state-mandated and must be state funded. These requirements therefore represent an unfunded mandate for which the state must provide funding or remove incompatible conditions from the permit.

20. *Comment from City of Albany, City of Springfield, City of Oregon City, Jackson County*

[Albany] To resolve the unfunded mandate triggered by the draft permit, Albany suggests DEQ return to its current practice of issuing individual permits to Phase II communities. This would allow communities, through their SWMP, to develop stormwater programs and requirements that are reflective of their water quality priorities, organizational abilities, and financial capacity to ensure these programs are practicable and implementable.

[Jackson County] It is the opinion of Jackson County that much of the Draft General Permit as written will trigger Article XI, Section 15, of the Oregon Constitution regarding unfunded mandates. Although Article XI, Section 15 includes a provision exempting federally imposed programs, the exemption only applies to the “minimum program standards required under federal law or regulations.” The draft Phase II MS4 Permit will require implementation of measures that go well beyond the minimum federal requirements. If state funding is not provided for measures exceeding minimum federal standards Phase II communities are constitutionally allowed to avoid compliance with the terms of the permit that require these expenditures.

[Jackson County] Jackson County believes that every item commented on below triggers Article XI, Section 15. Further, we believe there are many other instances which trigger this constitutional section. Jackson County reserves the right to exert our rights under Article XI, Section 15 related to any component of the final permit triggering that section.

[Springfield] Requiring the City of Springfield to comply with all provisions in this draft permit clearly triggers Article XI, section 15 of the Oregon Constitution as an unfunded mandate. The permit conditions contained would require the City to provide an increase level of service well beyond what would otherwise be required under the Clean Water Act.

Article XI, section 15 contains a provision exempting federally imposed programs, however the exemption only applies to the “minimum program standards required under federal law of regulations.” As discussed in detail in the comments in this submittal package, the draft MS4 Phase II General Permit contains numerous implementation measures that would require Springfield to implement measure well beyond the federal minimum. As noted in *Dept. of Finance et al. v. County of San Diego*, Super. Ct. No. 34-2010-80000604-CU-WM-GDS (Ca. Super. Ct. 2017), the individual permit terms are not federal requirements because each permitting authority has a choice of specific terms that meet the six federal minimum standards. Thus, the permit terms that require new or expanded programs are state-mandated and must be state funded. These requirements therefore represent an unfunded mandate for which the state must provide funding or remove incompatible conditions from the permit.

21. *Comment from City of Millersburg*

Complying with all requirements of this permit will require the permittee to provide an increased level of service, or new services beyond what would otherwise be required under the Clean Water Act. Per Article XI, Section 15 of the Oregon Constitution, “[e]xcept as provided in subsection (7) of this section, when the Legislative Assembly or any state agency requires any local government to establish a new program or provide an increased level of service for an existing program, the State of Oregon shall appropriate and allocate to the local government moneys sufficient to pay the ongoing, usual and reasonable costs of performing the mandated service or activity.” Or Const, Art XI, §15(1). Schedule A.2.e. of the draft permit states, “The permit registrant must provide adequate finances, staff, equipment, and other support capabilities to implement the control measures and other requirements outlined in this permit.” Therefore, the financial burden of implementing the permit is borne solely by the permit registrant, therefore constituting an unfunded mandate.

22. *Comment from City of Turner*

The specific requirements, components and language of the permit deliver additional problems. Some reinforce the legal concerns stated above, particularly the unfunded mandate, other issues arise from a lack of clarity, still others arise from the impractical nature of the requirements.

23. *Comment from Rogue Valley Sewer Services*

RVSS is concerned that many components of the draft permit may trigger Article XI, Section 15 of the Oregon Constitution regarding unfunded mandates as it will require providing program services at a higher level than are required through the federal Clean Water Act. Section 15 provides that local governments are not required to comply with measures that require such expenditures without reimbursement from the state.

24. *Comment from League of Oregon Cities, Association of Oregon Counties, and Special Districts Association of Oregon*

Many of our members have participated throughout the development of the draft rules and we believe that they need a great deal more work before being issued by the Department of Environmental Quality. We are concerned that many of the requirements will fail to accomplish the water quality improvements we hope to achieve while needlessly wasting a great deal of utility ratepayer funds. Furthermore, some of the requirements under the rule are beyond the capacity or authority of our members and others are likely unfunded mandates under Oregon's Constitution.

We believe that some of the prescriptive permit requirements extend beyond the federally- mandated minimum program requirements and could therefore constitute an unfunded mandate under Article XI, section 15 of the Oregon Constitution. Examples includes the Schedule A.3.c.vi. (A), (B) Illicit Discharge Detection and Elimination requirements that go well beyond being reasonable or practicable, and Schedule A.2.e. SWMP Resources - "The permit registrant must provide adequate finances, staff, equipment and other support capabilities to implement the control measures and other requirements outlined in this permit." DEQ does not have the authority to tell local governments how to deploy their own resources.

DEQ Response

Please see Section 1.1 for discussion of *MEP vs. MS4 permit standard* and response that the permit *Exceedances of Federal Rules and Permit Language Beyond Phase II Rules*.

This permit was drafted and issued in accordance with the federal regulations govern the MS4 NPDES permits. DEQ is the EPA delegated permitting authority for MS4 permits in Oregon and therefore, DEQ is required to establish permit conditions that are accordance with current federal rules. Regardless of whether DEQ or EPA implements the MS4 program, municipalities that operate an MS4 are required to follow the requirements of the federal regulations which this permit implements. Based on the Remand Rule, the final permit must satisfies the MS4 permit standard, as determined by the permitting authority (or DEQ). The final permit is not

beyond the federal regulation as alleged by several commenters, as the permit requirements were established to satisfy the MS4 permit standard (see excerpt below).

EPA emphasizes that the minimum control measures do not restrict the permitting authority from regulating additional sources of stormwater pollutant discharges, not specifically mentioned in the minimum control measure language... Such a requirement represents what is necessary, for those small MS4s, to reduce pollutants as necessary to meet the MS4 permit standard. This does not mean that the requirement is more stringent than the minimum control measures, but rather it constitutes what is needed in the permitting authority's view to satisfy the MS4 permit standard.³⁶

1.6 Beyond EPA's 2017 Construction General Permit

25. Comment from Oregon Home Builders Association

DEQ's proposal will add numerous new enforceable stormwater milestones and management benchmarks to Oregon's Small MS4 programs, many of which will directly affect land development. The comments below provide feedback on specific proposals we see as problematic to local flexibility and best judgment, representing overreach and overly prescriptive solutions in areas that should be left up to municipal discretion. Many changes in the Construction Site Runoff section, for example, are far above and beyond EPA's 2017 Construction General Permit ("CGP") adopted in last January so there is additional concern that Oregon is departing from federally issued guidelines

DEQ Response

1200-C vs. MS4 Phase II GP Construction Runoff Threshold

Through the construction and post-construction runoff provisions DEQ seeks to simultaneously improve pollutant reduction across the urban landscape, while providing the regulated small MS4 permit registrant with the flexibility to establish exactly what is deemed as appropriate and reasonable erosion/sediment/onsite waste management controls for their jurisdiction. As noted in the PER and this document, several of the Existing and New Registrants already have local ordinances that address construction and post-construction runoff from sites that are less than 1 acre.

Any construction site in Oregon that results in a land disturbance of one acre or more, according to federal rules, is required to obtain coverage under a NPDES construction stormwater permit or equivalent (in Oregon this is referred to as the NPDES 1200-C Construction Stormwater General Permit or 1200-C permit).³⁷ The 1200-C permit is a statewide stormwater discharge general permit intended for all qualified construction sites statewide. The permit requires site owners or operators to develop an erosion and sediment control plan to control site erosion and stormwater runoff. The MS4 Phase II general permit requires construction site owners or operators to develop an erosion and sediment control plan to manage construction stormwater runoff. The role of this permit is to address the specific impacts associated with urban construction stormwater discharges, such as increased impervious areas and to identify BMPs specific to their communities' needs, and to minimize the discharge of pollutants from construction sites to protect the receiving waterbodies (see Section 3.3.4.2 of this document for discussion of thresholds and water quality considerations).

As noted in the PER, all of the permit registrants discharge to receiving waterbodies identified as being "impaired" for a variety of pollutants and the applicable TMDLs call for the control of erosion and the pollutants associated with sediment such as mercury, bacteria and nutrients. Controlling runoff from smaller construction sites within the MS4 will prevent sediment-laden runoff, and in the case of the MS4 Phase II permit, this includes a large number of construction activities that would not be permitted under the 1200-C permit, see Section 3.3.4.2, *Ordinance and/or Other Regulatory Mechanism*, for discussion of the thresholds

³⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

³⁷ NPDES 1200-C Construction Stormwater General Permit or 1200-C permit equivalents include coverage under a 1200-CA or 1200-CN permit.

associated with the construction stormwater runoff control measure. The inclusion of these additional construction sites and permit conditions to address urban construction stormwater runoff is an essential element in this permit to improve water quality in the receiving waterbodies. Further, establishing erosion, sediment and onsite waste management control expectations at most active construction sites within these urban areas is a reasonable and effective way to prevent pollutants from reaching receiving waters via MS4 discharges.

EPA discusses the association of impact associated with construction stormwater runoff in the Stormwater Phase II Final Rule factsheet for Construction Site Runoff Control Minimum Control Measure. Here EPA states the following:

*Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in Table 1, sediment is usually the main pollutant of concern. According to the 2000 National Water Quality Inventory, States and Tribes report that sedimentation is one of the most widespread pollutants affecting assessed rivers and streams, second only to pathogens (bacteria). Sediment runoff rates from construction sites, however, are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters.*³⁸

Further, as stated in the PER and in this document, sediment runoff from construction sites has been documented as a major contributor to the degradation of receiving waterbodies. Based on the requirement to be protective of water quality, DEQ is using its discretion to require the permit registrants to establish specifications for construction and post-construction runoff.

1.7 Increased Cost Of Housing; Administrative and Financial Burdens; Unlawful Taking

26. Comment from City of Albany

As proposed, the draft permit will dramatically impact local development and will create substantial administrative and financial burdens on construction of new single-family homes and large developments. All communities struggle to make housing affordable and the proposed permit will drive up the cost of housing and potentially prohibit currently developable property from development. Ultimately, the availability of land for development may be limited due to overly burdensome and costly permit requirements. Further, the implementation of the proposed permit conditions may represent an unlawful taking of property without just compensation.

27. Comment from Oregon Home Builders Association

The draft permit's construction standards will increase housing costs. Regardless of best efforts at the local level, there is simply no way that compliance will not be more expensive for the development industry and will increase the time involved in the permitting process...which is an unfortunate and unwelcome outcome, given the unprecedented housing crisis facing Oregon.

The draft permit will decrease housing production. By requiring more aggressive on-site treatment of stormwater, land that would otherwise be developable would contain stormwater facilities instead of housing.

³⁸ Stormwater Phase II Final Rule Construction Site Runoff Control Minimum Control Measure, PA 833-F-00-008 January 2000 (revised December 2005).

Further, because the cumulative burdens associated with layers of regulations can be overwhelming, DEQ is strongly urged to also be cognizant of the challenges that will continue to remain if the cumulative impacts from complying with the Phase II Permit at all levels of government are not considered.

...Because the very nature of home building invariably includes earth moving activities, OHBA's members must comply with federal, state and local stormwater regulations. DEQ's draft permit will directly affect regulations for which builders in Oregon are the ultimate end users. Specifically, developers will be directly affected by two MS4 permit conditions: EPA's minimum control measures for active construction (minimum measure #4) and post-construction stormwater control (minimum measure #5).

If stormwater regulations are not designed and implemented in a thoughtful way, they can decrease available pollutant-control options, increase costs, delay projects, result in poorly designed or maintained features, or simply occupy valuable space that could be used for housing or other community amenities. Oregon already faces an unprecedented crisis of both housing supply and housing affordability, making the prospect of losing density or increasing development costs or delay in getting housing to market extremely troubling.

On the other hand, approaches such as green infrastructure, if implemented well, can build value and achieve multiple community and environmental benefits.

DEQ's proposal will add numerous new enforceable stormwater milestones and management benchmarks to Oregon's Small MS4 programs, many of which will directly affect land development...

...The vast majority of OHBA's members run small businesses that construct 10 or fewer homes each year; the average subdivision in Oregon consists of around 20 lots. Small businesses are the engine of growth for the U.S. economy. At the same time, they are disproportionately impacted by federal regulations, underscoring the need for and importance of conducting thoughtful analysis to reduce regulatory burden.

As a constricting web of regulatory requirements affects every aspect of the land development and the home building process, it adds substantially to the cost of construction and prevents Oregon families from becoming homeowners. NAHB's estimates show that, on average, regulations imposed by government at all levels account for nearly 25 percent of the final price of a new single-family home built for sale. Costs are reflected in the final price of a new home and have a very practical effect on housing affordability. According to NAHB research, approximately 14 million American households are priced out of the market for a new home by government regulation each year.

It is critically important that each existing regulation, whether found at the federal, state, or local level, actually addresses the problem it was created for, avoids duplication with identical or similar regulation, and is designed in a manner to encourage both innovation and better "bang-for-buck" solutions. In this case, we feel it is imperative that the permit allow municipalities flexibility to determine how best to meet water quality goals. Further, because the cumulative burdens associated with layers of regulations can be overwhelming, DEQ is strongly urged to also be cognizant of the challenges that will continue to remain if the cumulative impacts from complying with the Phase II Permit at all levels of government are not considered.

28. *Comment from City of Springfield Mayor*

If implemented as written, the draft permit would place significant additional financial and administrative burden on the City, with little apparent benefit to water quality. Springfield already has the highest stormwater utility rate of any Phase II community, and the ability of our ratepayers to afford additional rate increases is nearing capacity. I am further concerned that proposed permit language will negatively impact development opportunities within the City, as well as substantially increasing the costs for affordable housing.

DEQ Response

Increased Cost of Housing

Historically, pollutants from urban stormwater runoff have negatively impacted downstream users more than where the pollutant enters the waterbody. This downstream degradation typically requires the downstream users to use more resources or pay a higher cost to meet the associated water quality standards of the waterbody. The approach taken in this permit was designed to treat and address the pollutant source, aimed at uniform implementation throughout the state.

DEQ acknowledges that there will be costs associated with the permit requirements but these requirements were deemed necessary to meet the MS4 Permit Standard. Stormwater requires treatment to achieve state water quality standards in waterbodies under TMDLs and to prevent the further degradation of waterbodies listed on DEQ's 303(d) list (or listed as impaired waterbodies). As discussed in the PER and this document, the LID approach is designed to provide the permit registrant and development community with more flexible development standards to create a variety of site designs. By accommodating compact developments, flexible development standards allow for communities to maximize their use of land that includes both physical and environmental constraints such as wetlands and waterways.

DEQ Response to Administrative and Financial Burdens

Additional cost associated with implementation of the permit and the registrants SMWP is dependent on local factors, such as population, geographic scope, types of land use, existing and potential water quality and habitat damage, the extent of previous stormwater management, and the administrative methods that permit registrants use to meet the requirements. Because these costs will differ based on local factors, it is difficult for DEQ to analyze costs associated with the permit requirements. It is similarly difficult for DEQ to quantify the financial benefits of stormwater management. In general, the benefits of stormwater management, in addition to protecting public and private property and infrastructure, includes primarily protection of water quality and aquatic habitat from the impacts of urbanization. Water quality protection is necessary for human health, industry, recreation and tourism, and is a necessary component of all ecosystems. The value of the benefits at risk is incalculable, given the complexity of restoring ecosystem functions. DEQ, local governments, and other entities spend a considerable amount of funding to implement CWA provisions to clean up impaired waters in urban and developing areas through TMDL studies and other environmental impact studies. Federal and state governments, in addition to many others, have invested significant funding to restore aquatic habitat for threatened salmon and other species, shellfish harvesting, recreation, navigation, and cleanup of contaminated sediment sites.

Unlawful Taking

DEQ disagrees that compliance with this permit would require permit registrants to take actions that would be determined to constitute a taking under the Nolan and Dolan test developed by the U.S. Supreme Court. There is a nexus between the requirements and the government purpose and there is a rough proportionality between the requirements and the impacts of development.

1.8 Comprehensive General Permit Approach

29. Oral Comment from Rogue River Keeper

The proposed permit would cover three existing permittees and four new permittees in the Rogue Basin and its impact on the Rogue would be substantial. Overall we generally support the comprehensive permit approach that DEQ has taken for the structure of the permit, meaning that the permit contains "the full set of requirements necessary to meet the MS4 permit standard or reducing pollutant discharges from the

MS4 to MEP to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act and further that all terms and conditions must be expressed in terms that are clear, specific and measureable. And that is where a lot of our comments will focus on, is places in the minimum that meet or could be improved to better meet that clear, specific, and measureable standard that is defined in the permit remand rule. Wanted to quickly touch on specifically the Post-Construction program, strongly supporting the prioritization of Low Impact Development in this section of the permit and the inclusion of new and redevelopment sites. Would emphasize the lack of specificity to meet that clear, specific and measureable standard identified in the Final permit remand rule in this section as well as some of the others.

30. *Comment from Rogue Riverkeepers*

In summary, we support DEQ’s use of the Comprehensive General Permit Approach as defined under the final permit remand rule. Under this approach, DEQ must identify the necessary controls using clear, specific, and measureable permit terms and conditions 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. We remain concerned that the 2017 proposed permit continues to lack permit terms and conditions that meet the “clear, specific, and measureable” standard as defined under the final permit remand rule. DEQ must establish the allowable minimum requirements for the minimum control measures. For each minimum control measure, DEQ should clearly establish what actions need to occur and when, the required outcomes, and the minimum steps needed to achieve those outcomes.

Additionally, DEQ must ensure that the compliance timelines for Existing and New Registrants comply with the requirements of the Clean Water Act. Although the final permit remand rule allows up to five years for compliance for new permittees, Section 402(p) of the Clean Water Act clearly states that “Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.” 33 CFR §1342(p)(4)(A), (B). DEQ must amend the proposed permit to ensure that the final permit will result in compliance within the three-year timeline required under the statute. The implementation deadlines for Existing Registrants should be in compliance with the three-year timeline required under the Clean Water Act.

...Rogue Riverkeeper supports the use of the Comprehensive General Permit Approach, as defined in the final permit remand rule. Additionally, we support DEQ’s efforts to identify the terms and conditions needed to meet the MS4 permit standard. However, we remain concerned that the proposed permit does not provide clear, specific, or measurable requirements for the six minimum control measures. Although the proposed permit includes provisions protective of water quality, such as establishing a numeric site performance standard for post-construction stormwater runoff, it does not provide adequate goals, limits, or standards that would allow for effective implementation, monitoring, or enforcement of the permit terms. For each minimum control measure, DEQ should clearly establish what actions need to occur and when, the required outcomes, and the minimum steps needed to achieve those outcomes.

31. *Comment from Oregon Environmental Council*

In general, we support the approach of moving smaller municipal stormwater agencies to a comprehensive, consistently-applied General Permit. While there are significant improvements to several of the six minimum control measures over requirements in previous MS4 Phase II individual permits, we do have concerns with the implementing standards and timelines.

DEQ Response

DEQ appreciates the support of the Comprehensive General Permit Approach.

See Section 1.1, *MEP vs. MS4 permit standard, Exceedances of Federal Rules and Permit Language Beyond Phase II Rules, Comprehensive General Permit Approach* for additional discussion. Comments regarding compliance timelines are addressed in Section 3.3, *Stormwater Management Program Control Measures*.

1.9 More flexibility, especially for New Registrants

32. Comment from National Association of Clean Water Agencies

Based on the 2010 U.S. Census, U.S. EPA automatically designated 7 municipalities and counties in Oregon as Phase II communities and DEQ recently notified them that they would need to obtain permit coverage under the MS4 Phase II General Permit by September 1, 2018. These communities, referred to as “New Registrants,” are first-time MS4 Phase II permittees and are completely unaccustomed to stormwater permitting requirements as compared to the 19 other, more experienced Phase II communities in Oregon.

These “New Registrants” likely do not have the staff, stormwater experience, or financial capabilities to even begin developing, let alone within a 5-year compliance period, the six minimum measures and best management practices that existing MS4 permittees are more accustomed to. Many of the specific requirements outlined in Oregon’s MS4 Phase II General Permit go well beyond typical compliance timeframes and the federal MEP standard. This seemingly “one-size fits all” approach exposes permittees to potential enforcement action and third-party litigation because it does not consider what is practically achievable for each community. Consistent with the intent of the MEP standard, Oregon must provide greater flexibility to recognize the unique challenges facing small communities.

33. Oral Comment for City of Albany

As the draft permit is written, Albany does not have the capacity to develop and implement the requirements it contains. Even for existing/renewing Phase II communities, implementing and complying with the draft permit will be a very difficult challenge, and they have had their programs for over 10 years. It is unrealistic to expect that newly permitted and the smaller MS4 communities can meet this challenge in the 5-year permit term, even with differences in compliance dates within the permit for new registrants.

If the Department is insistent on the issuance of a General Permit for Municipal Stormwater, then at least three separate permits should be developed to reflect the different capabilities of existing permit registrants, new registrants and small communities.

34. Comment for City of Gresham

Given that some Phase II communities do not have stormwater rates or a dedicated budget for many/most of the programs and actions required by the new permit, the five-year time frame for full compliance is unrealistic. For example, the 1990 Federal Regulations provided three years for the application process which included legal authority and SWMP creation with public involvement based upon local community concerns and prioritization of pollutants of concern. The actual permit was not issued until 1995.

Recommendation: Issue a second general permit for new applicants with an adjusted schedule and timeframe to allow for appropriate analysis, mapping, funding, and program planning to occur that does not include the exact standards for the six minimum measures as permittees who have had nine plus years to develop their programs. Other national permits have incorporated a tailored “two tiered” approach and have also used ranges of size to determine how much of an activity a permittee should do. For example, if a community has less than 50 outfalls, inspect them all, if a community has more than 50 outfalls, inspect at least 50 per year.

This permit will likely cause extreme financial strain on smaller communities with fewer staff and especially those without a dedicated stormwater fund or system development charges to fund a capital program. The first step to successfully implementing the six measures is to have appropriate legal authority and develop an enforcement procedure. Permittees should be granted a time frame to review their ordinances, identify short comings, and obtain community and council approval. The timeframe in Schedule A. Table 1 is an insufficient reflection of a municipalities need to conduct public involvement to

garner the resources to address the basic permit needs before it commences and then moves onto implementation of the six minimum measures.

Recommendation: Require new applicants to demonstrate or obtain adequate legal authority within the first several years of the permit issuance and submit a staffing analysis of their organization and which elements of the six minimum measures can be absorbed into the existing structure v. which elements require additional resources. This analysis could also contain the permittee's commitment of what is achievable by the end of the first permit term as the first iteration of its SWMP. Further, this could be required as an "interim" report at the three-year mark, rather than initially burdening the permittees with reports in year one and two when they are focusing on program analysis and resource and code enhancement.

35. Comment from City of Turner

Most permit holders have developed their program components during the first 10 years of the MS4 system. However, the new permit changes requirements in such a way that a major redraft of ordinances, engineering standards, tracking system, reporting templates, etc. will have to be done. This is not because of any water quality issues but merely because DEQ has altered the format of many topics in the permit. It thus requires a staff/cost burden that has little positive effect.

DEQ Response

Please see Sections 1.1, *CWA requires more flexible MEP; One-size-fits-all permit*, and Section 1.14, *Impracticable, One-Size-Fits All Conditions* in addition to the response below.

DEQ established the implementation timelines in this permit based on input from the Municipal Stormwater Advisory Committee. The implementation timelines decision in the final permit provide New Registrants the maximum amount of time allowable for all of the SMWP control measures (Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Site Runoff for New Development and Redevelopment, and Pollution Prevention and Good Housekeeping for Municipal Operations) program development. The timelines for New Registrants is clarified in the Remand Rule:

EPA is retaining in the final rule the proposed clarification that permitting authorities may provide up to 5 years for small MS4s being permitted for the first time to come into compliance with the terms and conditions of the permit and to implement necessary BMPs.³⁹

While there are many deadlines throughout the permit, the permit does not specify the order in which control measures are implemented, only completion timelines. As such, the permit registrants can choose to start any of the requirements when they determined it is most suitable to effective implementation of their program.

DEQ disagrees that New Registrants should be allotted additional time to complete implementation of the permit. In 2007, when the MS4 Phase II individual permits were issued, the permit registrants were allotted 4½ years to implement the terms and conditions of those individual permits, not 10 years as some commenters have suggested. At that time, most of these "newly regulated" MS4s did not have any stormwater management programs, these communities were required to develop and implement two stormwater management strategies, the MS4 permit and a TMDL implementation Plan (for example, the Willamette Basin TMDL was established Sept. 2006 and Rogue Basin TMDL established in Dec. 2008 and the individual MS4 Phase II permits were issued in 2007).

Further, all of the New Registrants have been implementing a stormwater management plan to address stormwater runoff as a Designated Management Agency, required by the various TMDLs. These implementation plans include several, if not all, of the minimum measures of the MS4 Phase II permit.

³⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89349.

DEQ determined that this approach provides flexibility for both the Existing and New Registrants, in accordance with the Remand Rule.

1.10 Tiered structure of the permit

36. Comment from City of Albany

How was 10,000 selected? Is it referenced somewhere as a definition of a small community? How does this population level affect water quality?

37. Comment from City of Millersburg

The reason this permit is not practicable or implementable in Millersburg is because the permit requirements are not substantially different for large and small communities. Millersburg has neither the resources nor the staff to implement the requirements of this permit. Additionally, Millersburg has no stormwater utility or rate structure to finance the implementation of the permit. The requirements of this permit are beyond "Maximum Extent Practicable" (MEP) for Millersburg. For these reasons, Millersburg has requested an opportunity to apply for a waiver prior to implementation of the permit. Or, if a general permit is adopted, we would request a separate general permit be developed for small communities with substantially lesser requirements which reflect MEP.

...Millersburg, as a very small community, does not have the same or similar financial and staffing resources as larger Phase II permittees (City of Springfield, City of Corvallis, etc.). It is unreasonable to expect Millersburg to provide the resources to implement the same programs as these larger communities. The full scope of the program as currently written is beyond MEP for Millersburg.

...As currently written, this permit is not practicable or implementable in Millersburg because the permit requirements are not substantially different for large and small communities. Millersburg has neither the resources nor the staff to implement the requirements of this permit. Additionally, Millersburg has no stormwater utility or rate structure to finance the implementation of the permit. The requirements of this permit are beyond "Maximum Extent Practicable" (MEP) for Millersburg. If a general permit is adopted, there should be a separate permit for small communities with substantially lesser requirements which reflect MEP.

38. Comment from City of Turner

After years of stakeholder requests for a tiered permit process, this permit does provide for a specific definition of a small city. This definition, however, does not create a tiered system. Specifically, this category is only used for 2 relatively small items in the entire permit., and setting the threshold of a "small city" as being under 10,000 in size has no nexus back to any municipal metric. It is merely a number pulled out of the air by DEQ.

DEQ Response

On April 27, 2017, DEQ hosted an information meeting to discuss how a tiered approach could be drafted in the Phase II permit, and at that time DEQ proposed the Small and Large Community tiers. In the evaluation of the tiers DEQ considered various informational sources, included the following:

- Other MS4 Phase II general permits with tiers, EPA was also consulted and performed independent research
- Various DEQ programs with small community definitions
- Oregon's MS4 Phase II permit registrant's populations (based on 2010 U.S. Census data and PSU Population Research Center Certified Population Estimates)
 - Breaks in the populations (e.g., 5,000, 10,000, etc.)
- Review of MS4 Phase II permit registrant's populations with additional factors:
 - Population density in conjunction with population (e.g., population density <2,000)

- Economic factors in conjunction with population (e.g., economical distressed communities, small disadvantaged communities, etc.)
- Coverage area in conjunction with population (e.g., urban area)

In the evaluation of this information, DEQ worked to identify breaks or a method for grouping the permit registrants. The following were investigated:

- Breaks in the populations (e.g., 5,000, 10,000, etc.)
- Population density in conjunction with population breaks (e.g., population density <2,000)
- Economic factors in conjunction with population breaks (e.g., economical distressed communities, small disadvantaged communities, etc.)
- Coverage area in conjunction with population breaks (e.g., urban area)

During the April 27, 2017, meeting DEQ identified the tiers, using the break in the populations of communities of less and greater than 10,000 people, which also coincided with a break in the coverage area. Additionally, DEQ's Clean Water State Revolving Fund Program provides a definition a small community:

"Small community" means a public agency serving a population of 10,000 or less.⁴⁰

Based on these factors DEQ determined that a population of 10,000 people was the appropriate criteria for the tiered structure.

For clarification, SMWP control measures that do not include separate tiered requirements are deemed necessary for all permit registrants to satisfy the MS4 permit standard.

1.11 Administrative requirements are overly onerous

39. Comment from Oregon Association of Clean Water Agencies

ACWA recognizes that reasonable program activity tracking and reporting is necessary to demonstrate and measure performance under the permit over time and to provide meaningful public information and information that supports program improvements through adaptive management. However, excessive data management, document production, web site management, and report submittals take precious time and resources away from the stormwater management programs in the six minimum measure areas where actual water quality benefits are achieved. For the smaller and new MS4 permittees, the funding and program staff for these activities do not even exist yet, and the administrative requirements go beyond MEP. For other existing permittees, excessive administrative burdens are simply a waste of finite public dollars. To be considered a successful permit, the focus of required programmatic activities should be on results-oriented activities that produce water quality benefits. DEQ has not struck an appropriate balance between administrative activities and productive work in this draft permit...

The requirement in the Annual Report Template for every MS4 outfall to have a separate sheet serves no meaningful purpose.

REQUEST: The draft permit should be reviewed with an eye toward administrative streamlining. MS4 permittees understand the needs for administrative accountability and public transparency. The level of prescription in the draft permit is simply not necessary to meet the test of "clear, specific, and measurable."

40. Comment from City of Albany

Albany does not have the capacity to implement the proposed General Permit and will not have the capacity to implement the permit by the end of the permit term. Many of the permit's requirements are overly burdensome administrative activities that result in no improvement in water quality and further

⁴⁰ OAR 340-54-0010-29 (Municipal Waste Water Treatment Works Construction Grants Program)

attempt to direct the management and decision-making authority of the local governing body, the Albany City Council. The estimated annual cost for Albany to comply with the draft Permit is \$1.6 million per year or approximately \$8 million for the five-year term of the permit. This represents an increase of approximately \$1 million over the current annual funding level, and implementation would require an additional six full time equivalent positions. To meet the required funding level, stormwater rates for all customers would need to increase by more than 57 percent.

...As proposed, the draft permit will dramatically impact local development and will create substantial administrative and financial burdens on construction of new single-family homes and large developments. All communities struggle to make housing affordable and the proposed permit will drive up the cost of housing and potentially prohibit currently developable property from development. Ultimately, the availability of land for development may be limited due to overly burdensome and costly permit requirements. Further, the implementation of the proposed permit conditions may represent an unlawful taking of property without just compensation.

41. Comment from City of Gresham

The permit language is prescriptive, detailed, and lengthy with regard to each of the six areas. However, our experience is that not all program areas are equally effective and some require more staffing and financial resources than others.

42. Comment from City of Oregon City

...although permit conditions must be “clear, specific, and measurable,” they also must be, first and foremost, “practicable.” A number of ACWA members have provided examples of permit terms that are “impracticable” and therefore fail to meet the MS4 permit standard set by EPA. Done properly, creating separate permit obligations for the different types of Phase II communities (small vs. large, new vs. existing permittee), would solve many of the problems identified by permittees in their comments.

DEQ Response

DEQ acknowledges that there will be costs associated with the permit requirements. Based on comments received, DEQ made several edits to the final permit in an effort to “streamline” the administrative processes including the utilization of an Annual Report template. It is DEQ’s determination that the final permit strikes the appropriate balance of meeting the MS4 permit standard and reporting requirements that demonstrate the permit registrant’s compliance with the permit.

Regarding the prescriptive nature of the permit and associated “clear, specific, and measurable” requirements, DEQ reviewed the permit conditions and EPA’s *Compendium of MS4 Permitting Approaches, Part 1: Six Minimum Control Measures*, and determined that the permit includes several provisions that have been identified by EPA as “clear, specific, and measurable” requirements under the Remand Rule and 40 CFR § 122.34(a).⁴¹ Additionally, DEQ reviewed the permit conditions to determine if they are implementable, as discuss further in this document (see the specific control measures).

1.12 Excessive Program Requirements

43. Comment from City of Keizer

The tracking and assessment requirements associated with each minimum control measure in the draft permit is a highly onerous condition of this permit. Given the prescriptive nature of the permit, the tracking and recordkeeping requirements could easily require the need for additional staff.

⁴¹ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

Please provide reasoning for this level of detail. Would these requirements provide the documentation for an EPA audit?

DEQ Response

As previously stated, the Comprehensive General Permit approach requires that the permit establish all the necessary permit terms and conditions required to meet the MS4 permit standard.

The Remand Rule addressed the requirement for permit registrants to track and assess in the “*Clear, Specific, and Measurable*” *Permit Requirements*, the excerpt is provided below:

...the term “measurable” means that the permit requirement has been articulated in such a way that compliance with it can be assessed in a straightforward manner... To help assess compliance, the permit should also contain a way to track whether the requirement has been met, such as requiring the permittee to keep a log of each inspection, including the date and any relevant findings ⁴²

The Annual Report template was drafted to capture the measureable compliance requirements of the permit. DEQ cannot anticipate ahead of time what documents EPA may request if an audit of the permit registrant’s SWMP is performed.

1.13 BMP Based Approach to Controlling Stormwater

44. Comment from Oregon Home Builders Association

Despite the rule change, states are still not obligated to adopt numeric limits for Small MS4s. Permit conditions may include a combination of narrative, numeric, or other types of requirements. In addition, the revised rule does not clarify or provide further detail on how to implement EPA’s “maximum extent possible” or MEP standard, the applicable effluent limit guideline for EPA’s small MS4 program. In other words, States still have wide discretion to make their own case for how MS4 programs meet the MEP standard.

...It is important to note that DEQ has substantial discretion to impose non-quantitative permit requirements pursuant to Section 402(a)(1) of the CWA, especially when the use of numeric limits is infeasible. The use of BMPs allows operators to enhance their controls when discharging into degraded water bodies, and retains much needed flexibility required on construction sites.

Permitting authorities have relied upon BMP-based technology approaches extensively in stormwater permitting. As far back as 1977, courts have recognized that there are circumstances when numeric effluent limitations are infeasible and have held that EPA may issue permits with conditions (e.g., BMPs) designed to reduce the level of effluent discharges to acceptable levels. And, as recently as 2006, The U.S. Court of Appeals for the Sixth Circuit has once again held that the CWA does not require the EPA to set numeric limits where such limits are infeasible.

We encourage DEQ to continue to employ a BMP approach throughout the Phase II general permit, as its use to date has demonstrated it is an effective way to reduce pollutants.

45. Comment from Polk County

Effluent Limitations are not only measured by monitoring/numeric.

DEQ Response

Please see Section 1.1, for discussion of *MEP Standard vs. Numeric Effluent Limits*.

DEQ agrees with the comments that effluent limitations may consist of narrative, numeric, and/or other types of requirements; and a BMP based approach to some of the permit conditions is an effective way to minimized

⁴² NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89336.

pollutant discharges. DEQ determined that narrative limits and numeric limits in the permit were necessary to satisfy the MS4 permit standard.

The use of numeric limits is addressed by EPA in the Remand Rule:

EPA clarified that permit limits need not be expressed only as “narrative” limits but can consist of “narrative, numeric, and other types” of permit requirements. The final rule provides a non-exclusive list of the types of narrative, numeric, and other types of terms and conditions that would be appropriate for small MS4 permits by stating that allowable terms and conditions could include, among other things “implementation of specific tasks or best management practices (BMPs), BMP design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and frequency of actions.”⁴³

The Remand Rule also provides EPA’s interpretation of “numeric”:

Like the term “measurable,” “numeric” is another term that is often misunderstood to require numeric end-of-pipe concentration and/or mass pollutant limitations similar to those that commonly appear in permits issued to other types of point source dischargers (e.g., industrial process discharges and discharges from sewage treatment plants). EPA intends numeric to be read more broadly to include an objective, quantifiable value related to the performance of different requirements for small MS4 programs. For example, “numeric” can refer to the number or frequency of required actions to be taken such as a requirement to “clean 25% of the catch basins in your service area on a yearly basis” or “complete 6 of 10 public education events specified in the following table on an annual basis.” “Numeric” can also refer to a specified numeric performance levels, such as a retention standard for post-construction discharges from new development and re-development sites, e.g., “The first inch of any precipitation must be retained on-site.” Another example of a numeric performance requirement is exemplified by the following provision from the 2016 Vermont Small MS4 general permit: “The control measure(s) is designed to treat at a minimum the 80th percentile storm event. The control measure(s) shall be designed to treat stormwater runoff in a manner expected to reduce the event mean concentration of total suspended solids (TSS) to a median value of 30 mg/L or less.”⁴⁴

The permit includes several numeric performance requirements that are used to establish an objective and verifiable means of compliance with a specific permit condition. Examples include:

- The permit registrant must distribute and/or offer at least two (2) educational messages or activities per year. *Schedule A.3.a.iii*
- Existing Registrants must conduct dry weather screening of at least 40 percent of their MS4 outfalls. *Schedule A.3.c.vi*
- New Registrants must conduct dry weather screening of at least 25 percent of their MS4 outfalls. *Schedule A.3.c.vi*
- ESCP for construction project sites that results in a minimum land disturbance of 7,000 square feet or more for Large Communities. *Schedule A.3.d.ii*
- ESCP for construction project sites that results in a minimum land disturbance of 10,000 square feet or more for Small Communities. *Schedule A.3.d.ii*
- The permit registrant must establish a site performance standard with a numeric stormwater retention requirement. *Schedule A.3.d.iv*

⁴³ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89337.

⁴⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89336-37.

1.14 Impracticable, One-Size-Fits All Conditions

46. Oral Comment from City of Albany

Albany provided a staff person, Mark Yeager, on the DEQ Advisory Committee for the development of this permit for more than 5 years, and provided written and verbal comments on previous draft permits as well as on the July 2016 draft MS4 Phase II permit. While the Department has reflected the input of the Advisory Committee and public comments in some areas of the draft permit, Albany is disappointed that the Department has chosen to develop a General Permit that attempts to define what is practicable for every regulated community, and to largely ignore the concerns of new permittees and small communities regarding the prescriptive nature and the one-size-fits-all approach in the proposed General Permit.

47. Comment from City of Albany

Members of Albany staff have participated actively for more than six years in the Department's efforts to develop new Phase II MS4 permit documents, including service on the DEQ Advisory Committee, detailed review of previous informal and formal permit drafts, and attendance at Department-sponsored "listening sessions." This is an indication of how seriously we take this issue. It is disappointing the Department, through the issuance of these formal draft documents, has chosen to mostly ignore the concerns of new permittees and small communities regarding the overly prescriptive nature and the "one-size-fits-all" approach in the proposed draft General Permit.

The discussion of the flawed legal framework for the Permit begins with DEQ's approach of requiring the same permit conditions for all Phase II MS4 permittees. This one-size-fits-all approach ignores the flexibility envisioned when, in 1987, Congress amended the Clean Water Act (CWA) to include municipal stormwater management. DEQ's proposed permit conditions far exceed statutory and regulatory requirements of the Clean Water Act.

...If DEQ refuses to issue individual permits to Phase II communities, then, at a minimum, DEQ must develop at least three separate general permits, one each for small, new and renewing permittees. These permits will need to be meaningfully different and reflect EPA's guidance to synthesize "...the collective understanding of MS4 capabilities across an entire state, and translating this into effective and achievable permit requirements.."(emphasis added). Albany would be willing to work with the DEQ to help develop appropriate requirements for new permittees like Albany.

48. Comment from City of Gresham

Requiring and allowing more time for analysis rather than providing lists of prescriptive requirements will result in SWMPs that are both representative of the community's unique qualities as well as the MEP standard. Rigid, one size fits all standards are not appropriate for municipal stormwater management programs, especially when the size and revenue generating ability of the communities being regulated varies greatly. For example, two new permittees Grants Pass and Rogue River have over 20% of their community living in poverty, as compared to Oregon's 16%. Moreover, Grants Pass is located within one of the poorest county's in the state.

Recommendation: Require new applicants to submit a fiscal analysis of their existing five-year budget and additional funds needed moving forward towards developing the six minimum measures. This allows areas with existing staff or support from other budgets such as transportation (street sweeping) or cctving (wastewater) to be set forth and established, while others are still being planned and funds being acquired via rate collection, etc.

DEQ Response

Please see Section 1.1, *MEP vs. MS4 Permit Standard, Exceedances of Federal Rules and Permit Language Beyond Phase II Rules*, and Section 1.8, *Comprehensive General Permit Approach* for discussion.

1.15 Antidegradation from the PER

49. Comment from Polk County

PER: “Therefore, in waters where existing uses are more sensitive than the uses specifically designated for the waterbody, the permit limits and requirements will protect the more sensitive existing beneficial uses, as well as other designated uses.”

Unclear what this means? What would be an example of a "more sensitive existing beneficial use"?

DEQ Response

Under the federal and state antidegradation policy, DEQ is required to ensure that any permitted discharges protect existing uses. In many instances, this ensures that permitted discharges do not lower water quality even in waters not currently attaining beneficial uses. In some instances, restoration of fish passages or improved surveys may indicate that certain uses, such as salmon and steelhead spawning, may occur where they haven't previously or haven't previously been recognized. Such information may not currently be indicated in use designation; however, permit limits must ensure that these uses are protected.

1.16 TMDL and NPDES Program Efficiency

50. Comment from City of Gresham

Related to the TMDL components of the permit, we request that DEQ merge the NPDES and TMDL staff to maximize DEQ performance on permit technical assistance and feedback to the communities on their programs. Our scientific assessment is that pollutants adhere to sediments or they are dissolved in the water column (in simplification), therefore, BMPs that work for stormwater also work for TMDL compliance. Granted, an agency may have additional programs not directly related to stormwater such as tree planting for temperature—but I do not see how this precludes the use of TMDL staff as NPDES staff and the same reporting timeframes and joint efforts. This request becomes especially poignant considering DEQ's current review of its permit fee structure which will place additional financial burden on communities. As such, we expect an appropriate amount of staffing and quality of time from DEQ regarding these two compliance programs.

DEQ Response

Thank you for your input regarding DEQ's structure. No permit conditions were modified as the commenter did not address conditions associated with the permit or the PER.

1.17 DEQ Utilization of Resources

51. Comment from City of Gresham

We encourage DEQ to put more of its resources into the permit program to oversee agencies' development of strong, solid, analytical SWMP's that will address NPDES, UIC, and TMDL concerns. We need flexibility and adaptive management authority in order to progress our programs and we need permits that are reissued without extensive lags in time that hold up the progress that we all want for Oregon's rivers and streams.

DEQ Response

DEQ acknowledges this comment and has requested a number of new positions in the NPDES and TMDL programs in its 2019 Agency Request Budget

No permit conditions were modified as the commenter did not address conditions associated with the permit or PER.

1.18 General Comment

52. Comment from Scott Teague

The Oregon Department of Environmental Quality should continue with the 'highest priority standards' in preventing a worsening of water quality. Over the past few years, DEQ has done a remarkable job in preventing toxic waters from infiltrating surface water quality for aquatic life and human health by setting criteria, designating waterbody uses and preventing a worsening of water quality. I believe the Oregon Department of Environmental Quality should continue with the highest priority standards allowing updated volunteer monitoring and resources, tissue sampling of toxic water monitoring, groundwater monitoring, toxic monitoring of sediment samples, the Oregon Coast beach water monitoring, water quality monitoring and the National Aquatic Resource Surveys just to name a few resources. To update and continue the highest priority standards of Oregon's waters will eliminate a worsening of water quality for all Oregonians.

DEQ Response

DEQ acknowledges this comment.

1.19 Request to Redraft permit

53. Comment from City of Ashland

The redline version remains inconsistent and needs further clarifications.

54. Comment from Oregon Association of Clean Water Agencies

The draft permit should be a clear and understandable reflection of DEQ's intended requirements. This is not the case with the draft MS4 Phase II General Permit, even after the redlined changes and errata sheet were generated. Depending on how DEQ may revise wording in the permit, ACWA's substantive concerns and comments would potentially change. The lack of clarity, consistency, accuracy in use of terms and references, creates increased opportunity for confusion, difficulty in implementation and risk of legal challenge.

55. Comment from National Association of Clean Water Agencies

We understand that Oregon DEQ held numerous stakeholder outreach initiatives in drafting the existing proposed permit. We also acknowledge and approach the staff time and effort it takes on the part of Oregon DEQ to draft a MS4 Phase II permit. However, the draft MS4 Phase II General Permit and issued errata include a considerable number of errors, inaccuracies, and inconsistencies that substantially impair the understanding and implementation of the permit.

National Association of Clean Water Agencies recommends that Oregon DEQ conduct an internal review and revise the permit so that it is clear and understandable, then provided for another round of public comment.

56. Comment from Millersburg

In many cases, the comments listed below are questions or clarifications regarding the intent, requirements, or conditions of the permit. Throughout the permit documents, there are conflicting statements or language and for some items, it is not possible to provide meaningful comments based on the current text.

57. Comment from Oregon Home Builders Association

In conclusion, we believe that the draft permit is far more likely to result in higher housing costs and lower housing production than it is in cleaner water. We believe that the draft permit is so flawed that DEQ needs to start over.

58. *Comment from League of Oregon Cities, Association of Oregon Counties, and Special Districts Association of Oregon*

As currently proposed the draft permit has several errors (typos, conflicting statements, wrong terminology, etc.), that were not rectified in the reissued "redlined" draft thereby making the draft permit confusing, difficult to implement and open to misinterpretation. Our members believe that the MS4 Phase II general permit should be clear and understandable, legally defensible, and implementable by the permittees. The draft permit does not meet these tests.

DEQ Response

DEQ acknowledges that the permit and PER contained several errors. In an effort to provide opportunity for clarification DEQ provided an 85-day public notice period (exceeding the 35-day required public comment period), publicly announce availability to answer questions, provided a redline versions of the permit and PER, and answered several informational requests for clarifications.

For comments addressing cost of housing or production see Section 1.7, *Increased Cost Of Housing; Administrative and Financial Burdens; Unlawful Taking.*

1.20 *DEQ's Process*

59. *Comment from City of Turner*

It would be irresponsible and an act of extreme denial to ignore the overall context within which the permit was written. To that point, I will make the following observations on DEQ's process:

- Poorly executed and managed by higher authorities at DEQ. At times, it appeared that staff running this permit process were under no management guidance what-so-ever.
- Staff were often ineffective or unskilled in the roles they played. Repeated calls for a person with experience in facilitating meetings went unheeded.
- Systematic lack of responsiveness to concerns, requests and comments from the MS4 stakeholder committee. At times it felt as if we were in an endless formal comment period, where at the very end DEQ would answer questions we had raised 5 years earlier. It was not until year 4 that DEQ held a "listening session"! It took that long to get the message that people felt unheard.
- Our Cities were viewed and generally treated like industrial polluters. From the beginning, there was a clear message that we were not partners in preserving the water quality of the state but rather, potential criminals, steeped in violation history and a lack of accountability, whose feet must be held close to fire to kindle any concern for environmental welfare. (Of note, when the City made records requests no DEQ staff person was able to produce a single violation record from a municipality .)
- The stakeholder committee spent over \$100,000 in staff time expenses in the 5 year process with little to show for the effort.
- The permit became a production target not a water quality goal. As the process went on and more time passed, the listening lessened and the effort at homogenizing the permit increased, such that it became clear the real management goal was creating more permit widgets that could be reported to higher authorities as proof water was being kept clean.

The contextual reality which guides and then damages this whole permit process and product is the actual pollution being generated. For Turner, I can speak emphatically that the thousands of acres of agricultural production lands outside our city limit create a turbid, brown swath of pollution rolling through town as it chooses. DEQ and the Legislature's inability to have honest dialogue about the sources of pollution and their magnitude ultimately make this permit an act in futility. The Clean Water Act allows them to target cities and not work up the political will to face water quality issues

DEQ Response

DEQ acknowledges that the development and drafting of this permit involved a considerable investment of time and resources for all parties involved. DEQ carefully considered the input and comments from the various stakeholders and has adjusted the process several times over the past six years. Throughout this process DEQ's goal has been to develop a permit that is both implementable and satisfies the applicable NPDES permit standards, in this case the MS4 permit standard.

DEQ determined that the permit satisfies the MS4 permit standard, contains the necessary requirements to protect water quality, and can be implemented by the permit registrants.

1.21 General Permit Experience

60. Comment from City of Turner

A final piece of the context aspect is the direct experience we have had with the permit process, of which this new draft language is only the latest step in a 10 year saga. Here again, I list the highlights of what we have seen:

- In 2006, I testified that DEQ needed to provide resources to permit holders or program development would be lacking. This very fact is now listed in DEQ's recent fee increase proposal as a "possible use" of new revenues. 10 years have gone by and still no real commitment to what needs to be done.
- DEQ has displayed a general lack of attention to the permit holder and lack of interest in the specifics of its own program. Annual reports often pile up unread, feedback is rare and I have never seen someone do an inspection or real compliance review.

The overall sense is that only the permit matters. After this 50 page document is signed, what then happens, how well it happens, and whether anyone needs help, is not so important.

...The current draft permit document-the result of 5 years of poor conversation, three changes in staff management and 2 or 3 shifts in philosophical disposition-is as poor as the process itself. The first area of serious concern are the multiple manners in which this permit is not legally defensible.

...In summary, the City does not support the draft permit and believes it is in violation of both the Clean Water Act and the Oregon State Constitution. Regarding the latter, we feel that the State has been, and in this permit continues, to shift THEIR statutory burden to provide for the water quality of the State onto the financial backs of local cities. The City of Turner will push back on this unfair policy to ensure DEQ plays its role, just as we are asked to play our role.

DEQ Response

DEQ acknowledges this comment. DEQ disagrees that the permit is a violation of the Clean Water Act or Oregon State Constitution. As previously discussed in Section 1.1, DEQ determined that the final permit satisfies the MS4 permit standard, contains the necessary requirements to protect water quality, and can be implemented by the permit registrants.

After the permit is issued, DEQ will work to utilize its available resources to provide technical assistance to the permit registrants.

DEQ disagrees with the comment alleging that DEQ shifted the statutory and financial burden associated with water quality requirements onto the permit registrants. As required by the 1999 Phase II rule and the Remand Rule, the permit must establish all of the necessary permit terms and conditions required for the permit registrant to meet the MS4 permit standard. While this permitting approach is different than the previously issued MS4 Phase II individual permit, DEQ has not shifted any additional burdens onto the permit registrants that were not required or necessary to comply with the federal regulations that govern MS4 Phase II permits

As discussed in this document, DEQ is the delegated permitting authority and is required to establish permit requirements that in accordance with current federal rules. DEQ established a permit and permit conditions that meet the MS4 Permit Standard, per the Remand Rule:

*...determine what permit 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”.*⁴⁵

*...specify the elements that must be addressed in a permit. It is up to the permitting authority to establish the specific terms and conditions to meet the MS4 permit standard for each of these elements.*⁴⁶

*...to choose which option is best suited for its permitting needs and specific circumstances.*⁴⁷

1.22 Leapfrog Phase I’s and may impact Phase I/Phase II Partnerships

61. Comment from City of Eugene

Eugene actively partners with the City of Springfield and Lane County on metro-area stormwater management activities to efficiently and effectively protect and improve water quality. To the degree that the Phase II permit requirements are overly prescriptive or leap-frog beyond the Phase I requirements, partnership efforts will be adversely affected.

DEQ Response

DEQ acknowledges that the permit conditions in the Phase II permit are not equivalent to those of the expired MS4 Phase II individual permits and that the permit may require an increased level of effort from the permit registrant to comply the permit conditions. DEQ is required to develop permits that meet the regulations at the time a permit is issued. This permit was drafted to comply with the 1999 Phase II rules and the subsequent Remand Rule.

*To address the remand, the regulations must ensure that permitting authorities determine what permit 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” (referred to hereinafter as the MS4 permit standard).*⁴⁸

Additionally, DEQ acknowledges that the permit may require Phase I/Phase II communities to update their partner agreements for implementation of the permit conditions.

Under the first permit, or the MS4 Phase II individual permits, DEQ provided municipalities great latitude to develop their SMWPs. These permitted Phase II MS4s drew from EPA reference documents, designed to assist permittees with compliance with the 1999 Phase II rules. In 2000, EPA developed a Fact Sheet on the six minimum control measures, which was revised in 2005.⁴⁹ These are the guidelines for implementation of the minimum control measures. DEQ reviewed the Existing Registrant’s annual reports to evaluate progress towards complying with the first NPDES MS4 Phase II Permit; frequently, DEQ found the minimum control measures fell short of these guidelines, as well as the practices in the National Menu of Stormwater BMPs.⁵⁰

The baseline for compliance with this permit is the practices presented in EPA’s Stormwater Phase II Final Rule, EPA’s *MS4 Program Evaluation Guidance*, and the 1999 Phase II rules and subsequent Remand Rule.⁵¹

⁴⁵ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

⁴⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89342-43.

⁴⁷ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89328.

⁴⁸ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

⁴⁹ Stormwater Phase II Final Rule, An Overview, EPA 833-F-00-001 Jan. 2000 (revised Dec. 2005).

⁵⁰ First released in October 2000, the menu of BMPs is based on the stormwater Phase II rule’s six minimum control measures.

⁵¹ MS4 Program Evaluation Guidance, EPA Office of Wastewater Management, EPA-833-R-07-003, Jan. 2007.

For example, the EPA program evaluation guidance provides common activities practiced nationwide and, therefore, reflects a good indicator of what has been deemed as the maximum extent practicable for general permits. The review of the annual reports from Phase II MS4s indicate that attempts to implement EPA's guidance was limited, particularly for the illicit discharge detection and elimination and post-construction runoff SWMP control measures. The general framework provided in the first iteration of the MS4 Phase II individual permits did not successfully lead to actions that would constitute implementation of the MS4 permit standard under this permit and may not be considered implementation to the maximum extent practicable (under the expired permits).

1.23 Violation of Home Rule

62. Comment from City of Turner

This blanket requirement to support permit implementation as defined by DEQ, is a violation of Home Rule.

DEQ Response

As this permit and the associated permit terms and conditions are required by federal law under the Clean Water Act, the requirements of this permit are not a violation of home rule. Furthermore, the approach taken by DEQ in the permit is consistent with the federal 1999 Phase II rules and the Remand Rule (effective as of Jan. 9, 2017).

1.24 Outstanding Waiver Request Background

63. Comment from City of Millersburg

In June of 2015, the City of Millersburg was approached by a representative from DEQ (Tammie Wilson) informing the City of the upcoming MS4 permit requirements. Although the option of requesting a waiver was presented, based on discussions, both at the meeting and subsequently over phone and email, DEQ made it sound very unlikely the City would be granted a waiver. Because of those representations by DEQ staff, Millersburg did not formally request a waiver, and in July of 2015, Millersburg submitted the notification form, indicating participation in the program.

Since that time, the actual cost and effort associated with implementation of the permit have become more apparent. This cost and effort is well beyond what was initially communicated to Millersburg in discussions with DEQ staff. The City of Millersburg feels that implementation of many of these requirements is beyond the maximum extent practicable (MEP) and will create an undue burden in terms of staffing and budgeting on the City. In November of 2017, the City of Millersburg requested the opportunity to revisit the waiver process and submit a waiver request. DEQ staff responded that they were not able to review the request at that time, but would respond when information became available (see Attachment A). Currently, Millersburg is awaiting a response on the waiver request. Millersburg will continue to pursue the possibility of a waiver. However, due to the timeline of the comment period, the comments in Attachment B are submitted on the draft Phase II MS4 General Permit.

DEQ Response

DEQ acknowledges this comment.

No permit conditions were modified as the commenter did not address conditions associated with the permit or PER.

1.25 Santiam Water Control District

64. Comment from Santiam Water Control District

DEQ should require Draft Permit applicants seeking to discharge stormwater into Water District Facilities to notify Water Districts of intent and obtain written permission before issuing a permit.

DEQ should require any entity that discharges stormwater into Water District Facilities, whether or not the entity is required to obtain the Draft Permit or other Stormwater Permit, to notify the impacted Water District and obtain written permission for discharge as a condition precedent to the waiver.

When Excluded MS4s discharge into Water District Facilities, DEQ should include express language in waivers issued under 40 CFR § 122.32(d) and (e) that the discharges will not create Clean Water Act liability for the entity operating the conveyance facility.

DEQ Response

The issuance of this permit, or the associated discharge authorization provided to the permit applicant/registrant, does not allow a permit registrant to discharge to privately owned conveyance systems or avoid compliance with any other applicable federal, tribal, state, or local laws or regulations. See Schedule F.A7. Property Rights and Other Legal Requirements:

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

1.26 Annual Report

65. Comment from City of Bend

Please be aware that the annual reporting form will need to meet federal American with Disabilities Act (ADA) formatting requirements for the City to be able to post it on our website. For efficiencies please provide opportunity and consideration in finalization of the reporting form to be able to submit together with the UIC permit annual report. For additional annual report form comments, separate from the public comment period permit comments, see Attachment 1.

66. Comment from Rogue Valley Sewer Services

The annual report template contains many grammatical and typographical errors that could easily be corrected through a peer review process and should be done prior to releasing for public review. A copy of the pdf is attached in which typos have been highlighted. Specific concerns regarding the content are outlined below.

DEQ Response

DEQ appreciates comments on the Annual Report and used the input received in finalizing the Annual Report Template.

2.0 Applicability and Notification Requirements

2.1 *Entities Eligible for Coverage*

No comments were received on this section.

2.2 *Permit Coverage Area*

No comments were received on this section.

2.3 *Eligibility Requirements*

No comments were received on this section.

2.4 *Individual Permit*

67. *Comment from Oregon Association of Clean Water Agencies*

This section requires small MS4 operators wishing to seek coverage under an individual permit to either submit an individual permit application, or a notice of intent to pursue one to DEQ, “along with a statement of why coverage under the general permit is not appropriate,” no later than 90 days before the effective date of this permit.

OAR 340-045-0030 enables people not wishing to be covered by a general permit the outright ability to choose application for an individual permit without justification. DEQ should not, through enactment of this general permit, attempt to restrict, or otherwise make onerous, MS4 permittees’ ability to apply for an individual permit.

REQUEST: Section 1.4.a. should be replaced with: “Any small MS4 operator requesting to be covered under an individual permit must submit an individual NPDES MS4 permit application under the procedures specified in OAR 340-045-0030.” DEQ should establish a reasonable time frame for applicants to submit applications for coverage under an individual permit.

68. *Comment from City of Albany*

Is it the DEQ’s intent to issue a final permit more than 90 days before effective date of permit? Compliance with this requirement depends on when DEQ issues the final permit.

Is this language intended to cover new MS4 operators not identified in this draft general permit if they become eligible following the 2020 census? Should be written more clearly if that is the intent.

69. *Comment from Polk County*

Polk County’s permit area is substantially different than other permit registrants. Majority of the urbanized areas are already developed. There is little opportunity to increase the existing development densities due to zoning regulations and an Intergovernmental Agreement with the City of Salem. Subdivisions are prohibited many properties are required to annex prior to partitioning, or there is a 5 acre minimum parcel size.

70. *Comment from City of Springfield*

How is the DEQ and the public to know the permittees intent to have a general permit and give the public the ability to comment if the permittee does not submit anything?

We understand the DEQ is trying to streamline the process and acknowledge that Existing MS4’s all applied and submitted for re-application under the Individual Permit process years ago, but there still should be some formal request for coverage under the new general permit, such as a letter of intent.

Suggested language to insert prior to the last sentence: No later than XX days prior to the effective date of the permit, Existing Registrants must notify the DEQ of their intent to continue coverage under this General Permit.

DEQ Response

As previously discussed in Section 1.1, *Maximum Extent Practicable and Exceedance of Federal Rules*, the minimum SWMP requirements established in the permit represent what is needed to meet the MS4 permit standard by all of the permit registrants (including, cities and counties and/or New and Existing Registrants).

Counties are Substantially Different

DEQ acknowledges that within the urbanized areas counties have less urban areas and these areas are less likely to be developed. The final permit accounts for this by establishing a threshold of 10,890 square feet for construction site runoff control and post-construction site runoff for new and redevelopment (see Sections 3.3.4.2 and 3.3.5.2.1 of this document for discussion of thresholds and water quality considerations).

OAR 340-045-0033

In accordance with OAR 340-045-0033, the sources (or permit registrants) that would be covered under this permit are involved the same or substantially similar types of operations:

- (a) There must be several minor sources or activities that involve the same or substantially similar types of operations.*
- (b) The sources or activities must have the potential to discharge or dispose of the same or similar types of wastes.*
- (c) The general permit must require the same or similar monitoring requirements, effluent limitations and operating conditions for the categories.*
- (d) The category of sources or activities would be more appropriately controlled under a general permit than an individual permit.⁵²*

On the permit's effective date, DEQ will terminate the 15 MS4 Phase II individual permit (these registrants are identified in the permit as Existing Registrants) and transfer their coverage to the MS4 Phase II general permit. The process of automatic termination is in accordance with OAR 340-045-0060 and does not require the permit registrant to formally request coverage under the general permit,

Termination or Revocation of an NPDES or WPCF Permit

(1) Automatic Termination. A permit is automatically terminated when:

- (a) DEQ issues a new permit for the same activity or operation⁵³*

Any registrant (Existing or New) that would like to seek coverage under an individual permit must submit an MS4 Phase II individual permit application to DEQ no later than January, 30, 2019.

Converge based on the 2020 Census

DEQ finds that the permit language in the Application Requirements section of the permit provides clear instruction for any New Registrant required to obtain coverage based on the 2020 Census. DEQ modified the

⁵² OAR 340-045-0033

⁵³ OAR 340-045-0060

permit language that was viewed as limiting a permit registrant's ability to apply for an individual permit, based on comments.

2.5 Discharge Authorization

71. Comment from Oregon Home Builders Association

The Draft Permit correctly states in Schedule A, Section 1.a that, "The permit registrant authorized to discharge municipal stormwater to waters of the state from its MS4, within the defined Permit Coverage Area." (Page 8) In addition, the Draft Permit notes that, "If the small MS4 is not located entirely within an UA, only the portion that is within the UA is considered the minimum permit coverage area."

However, specific terms and provisions later in the permit are made to apply to all construction sites, even those that do not release stormwater into the permitted MS4.

These provisions should be modified to specify that permit terms only apply to new and redevelopment releasing stormwater into the permitted portion of the MS4.

DEQ Response

This permit condition establishes the procedural step that DEQ will notify the permit applicant/registrant when it is authorized to discharge stormwater from its MS4 to surface waters of the state. It is likely that the commenter was referring to Schedule A.1, *Authorized Discharges*, rather than this section. The permit is only applicable to the portion of the geographic area served by the regulated MS4 or, only the portion that is within the urbanized area that discharges to surface waters of the state.

2.6 Application Requirements

72. Comment from City of Albany

Need copy of this application to assess ability to prepare and submit by Sept 1 2018. Requested a copy of application from DEQ on December 12, 2017, and the response from Mark Riedel on December 20 was "DEQ does not solicit comments on permit applications."

There is no Table 70H referenced in this OAR section.

Are registrants required to submit both hard copy and electronic copy?

DEQ Response

DEQ is not required to and does not solicit comments on the permit application. As discussed in the email response, the application will be similar to those of other stormwater general permits. The required elements of the application, referred to as a Notice of Intent by EPA, is addressed in the Remand Rule. The Comprehensive General Permit approach requires that the permit contains all of the requirements that will be used to assess compliance.

...the function of the NOI is the same as that of any other general permit NOI, and more specifically other stormwater general permits, where the NOI is used to establish certain minimum facts about the discharger, including the operator's contact details, the discharge location(s), and confirmation that the operator is eligible for permit coverage and has agreed to comply with the terms of the permit.⁵⁴

... By removing the possibility that permit requirements could be proposed in the NOI (or in the SWMP) and made part of the permit once permit coverage is provided under the Comprehensive General Permit

⁵⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89324.

*approach, the NOI will no longer look and function like an individual permit application, as the court found with respect to MS4 NOIs under the original Phase II regulations.*⁵⁵

DEQ modified the submittal language in this section to clarify that permit registrants are required to submit both a hard copy and electronic copy of the application.

DEQ confirmed that OAR 340-045-0075 contains Table 70H: *Municipal Separate Storm Sewer System General Permits: Annual Fees*.⁵⁶

⁵⁵ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89327.

⁵⁶ <https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=250408>

3.0 Schedule A - Effluent Limitations, Conditions, and Stormwater Management Program

3.1 *Authorized Discharges*

No comments were received on this section.

3.1.1 *Reduce the Discharge of Pollutants from the MS4*

The condition was added to the permit based on comments. See Section 3.1.2, *Implement Permit Conditions to MEP* and *MEP Inclusion in the Permit* below for comments and discussion.

3.1.2 *Water Quality Standards*

73. *Comment from Oregon Association of Clean Water Agencies*

This section of the draft permit is inconsistent with the U.S. Congressional Record on MEP, EPA Rules and Oregon Administrative Rules, and must be rewritten to reflect the MEP standard that Congress enacted for MS4s and that is reflected in the EPA MS4 Rules.

REQUEST: Section A.1.a. should be replaced with the following: “Maximum Extent Practicable. Permittees must reduce their pollutant discharges to the maximum extent practicable, subject to the requirements set forth in 40 CFR §122.34. MS4 implementation of stormwater management programs that include implementation of the six minimum measures to the maximum extent practicable constitutes compliance with this permit.”

...The language stating “The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041,” could be interpreted to apply numeric water quality standards at all outfalls, which is inconsistent with the federal regulatory framework for MEP. The draft permit language is not required by the EPA or the Clean Water Act—it exceeds the federal minimum requirements.

Application of water quality standards to MS4s also impermissibly applies numeric limits to MS4 discharges because it is not possible to determine compliance with water quality standards without assessing the numeric amount of a pollutant in both the waste stream and the receiving water body. In Oregon, the concept of numeric effluent limits in MS4 permits has been rejected by the Oregon Court of Appeals. *Tualatin Riverkeepers et al., v. Oregon Department of Environmental Quality et al.*, 235 Or. App. 132 (2010). According to *Tualatin Riverkeepers* MEP and associated stormwater best management practices are the mechanisms to be applied in MS4 permits for protecting water quality in Oregon.

REQUEST: Delete the requirement that “the permit registrant must not cause or contribute to a violation of water quality standards.” Replace the entire Section A.1.a. with language that requires the registrant to remove Stormwater pollutants from the MS4 to the maximum extent practicable through implementation of the six minimum measures as outlined in the EPA MS4 Phase II rules. Add language that states that MS4 implementation of stormwater management programs that include implementation of the six minimum measures to the MEP constitutes compliance with OAR 340-041.

...At the DEQ Workshop presentation on December 7, 2017, staff was asked for an explanation of why the “cause or contribute to a violation of water quality standards” was included in the permit given that Stormwater is known to carry pollutants.

DEQ staff responded that this language was included in the 1200Z stormwater permits that were recently updated, and that, therefore, this is the language that will be used in future Water Quality Program permits.

This response from DEQ staff points to lack of DEQ differentiation between industrial stormwater discharges and MS4 discharges, which is required by the Clean Water Act. In 1987, Congress established this differentiation in amending the Clean Water Act. Specifically, Congress determined that industrial stormwater discharges would continue to be subject to water quality standards, and, in contrast, that for municipal stormwater, the level of required pollutant reduction is to the “maximum extent practicable.”

Beyond the distinction set by Congress, there are clear, common sense reasons why municipal stormwater should and must be treated differently from industrial stormwater from a regulatory perspective. Industries are confined, site-specific entities that can readily control site activities leading to a pollutant discharge through stormwater at a point source. Those activities can be confined or curtailed, and the known source of pollution can be remedied. In contrast, the existence of a city or a county and the actions of their dispersed populations cannot be curtailed or regulated in a way that can eliminate the potential for non-point source discharge of stormwater. Moreover, in providing operations for a city and its infrastructure in the interest of protecting health, safety, welfare, property and the environment (which are the fundamental responsibilities of local government agencies), there are times when necessary actions will be taken, such as road sanding or de-icing, snow clean up, disaster management, fire suppression, etc. that will have the direct and unavoidable result of stormwater discharges that may temporarily have the potential to cause or contribute to water quality violations. Local governments should not be put in legal jeopardy for stormwater quality violations when the federal law provides a standard of pollutant reduction that is to the maximum extent practicable.

REQUEST: See suggested alternative language regarding requirements to eliminate pollutant discharges to the MEP.

...Following the 1987 amendments to the Clean Water Act, Oregon amended OAR 340-045-0015(2) to require that regulated MS4 jurisdictions obtain MS4 NPDES permits subject to the CWA stormwater permit requirements in 40 CFR §122.26, which requires regulated MS4s to comply with the EPA MEP standard. The EQC has therefore adopted the federal MEP standard. The EQC has not adopted an alternative MEP standard, therefore, DEQ acted without authority in replacing the MEP standard with the requirement to fully comply with water quality standards as established by this section, and with an unjustified compilation of a one-size-fits-all requirements.

REQUEST: This entire section should be replaced with the a simple and straightforward MEP standard. See suggested language above.

...The requirements under this section that define the registrant’s required corrective actions if the MS4 operator or DEQ becomes aware of a discharge that causes or contributes to an exceedance of a water quality standard are not only impracticable, they are, in many if not most cases, impossible. MS4s have many outfalls, and the contributing sources of stormwater at each outfall can come from all over the drainage basins for each outfall. The pollutant sources may not be identifiable or traceable, and may be wholly related to a temporary event based on the characteristics of a storm event, and therefore not correctable. Moreover, where discharges occur to water bodies that already exceed water quality standards, any addition of a pollutant from a stormwater outfall could be considered an exceedance, even if the MS4 is reducing the pollutant to the maximum extent practicable. The required investigation, report to DEQ, corrective measures and time frames should be eliminated.

REQUEST: This entire section should be replaced with the a simple and straightforward MEP standard. See suggested language above.

74. *Comment from National Association of Clean Water Agencies*

It is not feasible for MS4 communities to adhere to a strict compliance with water quality standards (WQS) because of the nature of MS4 discharges and the improbability of controlling what pollutants are discharged and at what quantities or concentrations. Oregon Phase II municipalities will need to allocate significant financial resources and pollution control technologies to attempt to meet the “cause or

contribute” standard in the draft permit, which will increase compliance costs for communities already facing increased operation costs and affordability challenges.

75. *Comment from Clean Water Services*

This term states that, “The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041.” This is the first MS4 permit proposed for issuance by Oregon DEQ that includes such a requirement, which constitutes a profound and far-reaching change to Oregon’s approach to MS4 permits. In amending the Clean Water Act to address stormwater discharges, Congress recognized that MS4s differ from other regulated point sources and so required the use of best management practices to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), rather than imposing a requirement to meet water quality standards. DEQ has followed this strategy until now. Water quality has improved under the MEP standard as MS4s adaptively managed their programs over the course of several permit terms. Current MS4 permittees have effective programs for responding to problems, including the control of illicit discharges. Mandating compliance with water quality standards without recognition of the important regulatory structure provided by the MEP standard will severely burden MS4s.

In spite of the serious potential impacts on regulated MS4s, the Permit Evaluation Report does not explain why DEQ has changed its position and decided to include conditions in the permit prohibiting the MS4 from causing or contributing to a violation of water quality standards. The imposition of water quality standards is not a compromise between the MEP standard and numeric end-of-pipe limits. For any MS4 discharging to a receiving stream that does not meet water quality standards¹, the requirement not to contribute to an exceedance of a water quality standard will result in end-of-pipe numeric limits that may be impossible to meet, given the nature of MS4s. MS4s are large, diffuse systems that receive stormwater runoff from a full range of industrial, commercial, institutional, transportation and residential sources. It is simply not practicable for MS4s to ensure compliance with water quality standards at all times and places when compliance would require MS4 communities to take impracticable measures to meet them. If DEQ is intending to change its approach to regulating MS4s in a way that will profoundly impact communities throughout the state, it should explain how it reached its decision, why MEP is not a sufficient standard and how DEQ weighed the burdens on communities versus any projected improvement in water quality that might result.

Further, the response that proposed condition A.1.a would require of an MS4 permit registrant to take upon becoming aware of a water quality excursion is impractical and unnecessary. MS4s receive inflows from numerous privately controlled sources as well as roadways and open space over which the permit registrant may have little or no direct control. Sources of pollutants may be diffuse, temporary and impossible to trace. They may also be beyond the regulatory reach of the permittee. As an example, the vast majority of E. coli contamination in surface waters in the District is from avian (51 percent), rodent (16 percent) and canine (13 percent) sources; human sources account for only 4 percent. While the District can implement programs to encourage responsible pet waste management, it cannot control wildlife. Instead of the proposed response requirements, the permit should require the permittee to follow up on identified exceedances according to its illicit discharge response plan and to integrate the findings into its program through adaptive management.

76. *Comment from Clackamas County Water Environment Services*

Schedule A(1)(a), titled “Water Quality Standards” states that “The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041.”. We strongly urge the Dept. of Environmental Quality (Department) to remove this language from the Phase II MS4 permit.

In the Willamette Valley, some water quality standards (such as 406 E. coli colonies/100 mL for pathogens) are exceeded from time to time by discharges from MS4s. Phase I MS4 permits in Oregon currently use a very different standard: Maximum Extent Practicable. Phase I MS4 permits in Oregon say the owner/operator of the storm sewer system shall “...*reduce the discharge of pollutants from the MS4 to*

the Maximum Extent Practicable (MEP). Compliance with this permit and implementation of a stormwater management program, including the Department-approved Stormwater Management Plan (SWMP), establishes this MEP requirement... ”. We strongly urge the Department to add similar language to the Phase II MS4 permit. We understand that the Phase II MS4 Permit SWMPs will not be approved by the Department, so the appropriate language to use in the Phase II MS4 Permit should mention that the permittee shall implement their SWMP.

Use of the MEP-based standard for MS4 permit compliance has, for over two decades in Oregon, guided improvements to the way storm sewer systems are managed and constructed while keeping the cost of compliance in a range which is affordable to most citizens. If water quality standards are not adjusted (406 E. coli colonies/100 mL is an example), converting to a State water quality standards-based approach in MS4 permits could require nearly all MS4-permitted storm sewer systems to be rebuilt to provide the necessary stormwater runoff volume and/or pollutant reductions. Unless grant funds from the State, the U.S. government, or some other source are provided, the resulting cost of rebuilding thousands of storm sewer systems in Phase I and Phase II MS4 communities in Oregon will be staggering and unaffordable for our citizens.

77. Comment from City of Bend

Permit Goes Beyond MEP Standard By Requiring Strict Adherence to Water Quality Standards and Not Properly Taking Into Account Individual MS4 Characteristics. Although Phase II MS4s are not required to conduct monitoring, this numeric language without permit shield language (such as that provided in the WPCF-UIC Stormwater permits (see Schedule D.8.)) or specific clarification reference “to the MEP” creates confusion, ambiguity, and exposure to third party lawsuits seeking clarity or a better defined standard. Without a specific definition of “cause or contribute,” any Phase II that is a designated management agency for a TMDL or that has a waterbody with pollutants of concern associated with stormwater runoff pollutants could be defined as “contributing” and thus would have to engage in corrective actions within 60 days. This also results in permit program overlap, because the MS4 programs are there to address stormwater pollutant contributions, while the separate TMDL system is set up to address water quality exceedances.

OAR 340-041 as referred to in Schedule A.1.a and PER: Written well before the advent of stormwater programs, the water quality standards are wide in breadth and not consistent in presentation. The language is not clear given notes from 2004 about the applicability of some sections, and a front note that the standards were not appropriately vetted for municipal review without clarification if the required vetting or approvals ever occurred. We would like to know the reference(s) to ensure that the water quality standards were provided for municipal review as was required of the Department in 340-041-0001 (3).

OAR 340-041 as referred to in Schedule A.1.a and PER: TDS: Cannot exceed 100.mg/L. Note states in the OAR 340-041 “EPA has not yet (as of August 2004) approved rule for federal Clean Water Act purposes such as use in NPDES permits.” The year 2004 is 14 years ago. We need clarification or applicability here, and for other constituents where this same note reappears.

OAR 340-041 as referred to in Schedule A.1.a and PER Statewide Narrative Criteria: OAR 340-041 Standard: ““Notwithstanding the water quality standards contained in this Division, the highest and best practicable treatment and/or control of wastes, activities, and flows must in every case be provided so as to maintain...overall water quality at the highest possible levels ... and other deleterious factors at the lowest possible levels.”

The draft PER specifically says narrative, aquatic life and human health criteria must be met.

Incorporating by reference this subsection: (a) Pulls “flows” into the Phase II Stormwater requirements running counter to the Virginia DOT vs EPA (2013) case decision (http://www.accotink.org/Accotink_Case_Decision.pdf); (b) goes beyond MEP with the inclusive “and” in “and/or” and “at the lowest possible levels” language.

OAR 340-041 as referred to in Schedule A.1.a and PER, Turbidity: Moreover, while several of the numerical criteria have a set number to meet, the section on turbidity is a 10% difference from a point upstream. Thus this is different for each waterbody and puts additional onus on communities with clean waters. In other words, for every size storm we experience, we would be required to keep our stormwater treated to 1.65 NTU. Drinking water is 1.0 NTU. For a visual of the general levels we are discussing, see Figure 1.

To meet the water quality standards in all cases the City of Bend would need to engage in full treatment of the entire stormwater flow despite event size, not just the water quality storm. This is a huge jump. Specifically, this is a 526% increase in the sizing of treatment needed considering the cubic feet of water that would need to be captured and treated for the difference between the water quality storm and the 100-year storm event within Bend's MS4. The water quality storms were set up as a practicable amount to obtain the Pareto efficient "bang-for-the-buck" in terms of cost per unit water treated. The water quality storms typically capture between 80-90% of the pollutants. The cost per unit effectiveness shoot significantly higher beyond these amounts as the curb flattens. DEQ is effectively asking the City and to move to 100% capture despite the costs and despite the MEP standard.

The City has tens of thousands of stormwater quality facilities and is working to protect the Deschutes River every day. Despite these efforts and successes we estimate that the draft permit would require an extra \$20M (with all UICs) or \$42 M - \$534 M (for all others) within this 5-year permit period to construct additional facilities to comply with the numerical requirements in the draft permit. Mandating a preference of green infrastructure over structural (which includes UICs), the costs move more to the latter range. These cost estimates do not include the significant land and life-cycle operation and maintenance costs that would be involved.

In developing these Class V construction estimates, we examined 11 different low impact development (LID) treatment measures in addition to a sediment manhole/UIC combo, and Contech treatment, using EPA-vetted cost data². Given that the other requirements and addressing stormwater quantity needs still exist, this proposed draft requirement alone would make us have to more than double our annual service charge for our stormwater utility as a whole (not just the pollution prevention program) just to meet the lowest end of the construction estimate. This is even though we have a very small MS4 system for a city of our size and comparatively low annual rainfall.

OAR 340-041 as referred to in Schedule A.1.a and PER: Unintended consequences. MEP is different for each community, and treating all as one comes with unintended consequences that could actually be more detrimental to water quality. For instance, to a greater degree than most of the Oregon NPDES MS4 permittees, the City of Bend must contend with public safety issues related to winter storms. We have leaned on using more basalt on roadways in the MS4 area to avoid salts that are known to be damaging to water quality. The manner in which this draft permit is written would result in hard choices we would need to make to flip the approach because the water quality standards have less restrictive requirements on chlorides, even though we find those would be worse for our waters than basalt. In considering all of the alternatives, one would also need to consider the potential for increased impacts from automobile crashes on both water quality and public health should the DEQ response be to do neither.

78. *Comment from City of Gresham*

"...registrant may not cause or contribute to a violation of water quality standard..." It is unclear how this section of the permit will not make every registrant (permittee) out of compliance upon issuance and continuously until the water quality standard(s) are met. DEQ acknowledges that most streams covered by this permit are impaired. Most have TMDLs or 303(d) listings. Urbanized areas (UAs) contribute to overall stream health degradation. Presumably DEQ intends to apply this only to the TMDL parameters listed for their community and provide a narrative standard of how following the TMDL plan and SWMP timeframes and objectives would constitute permit compliance—as is described in other national permits such as WA, ID, CA, ME, MN, etc. As written this permit is not implementable.

California December 2017 Order Amending General Permit Schedule

C. Effluent Limitations

1. Permittees shall implement controls as required...to reduce the discharge of pollutants...to the MEP. Permittees shall additionally reduce the discharge of pollutants (1) to achieve applicable TMDL wasteload allocations...

D. Receiving Water Limitations

Discharges shall not cause or contribute to an exceedance of water quality standards...

The Permittee shall comply with the receiving water limitations through timely implementation of control measures/BMPs and other actions to reduce pollutants in discharges... The stormwater program shall be designed to achieve compliance with the receiving water limitations.

The CA Permit then goes onto to specific TMDL compliance activities that must take place over a variety of timeframes per each city and TMDL type as a manner of tailoring the general permit so that it does not become a one size fits all. Further, the CA permit allows for an iterative loop between developing the SWMP to optimize TMDL pollutant reductions and then offering MEP and compliance language if the permittee complies with timeframes but does not otherwise meet the TMDL reductions then allocations and timeframes will be redeveloped.

This section goes on to require investigation of causes and the corrective actions taken in the form of a report to DEQ. As noted above, a municipality has hundreds of acres draining to a particular outfall and is NOT a finite source or boundary. i.e., Joe's metal shop has traces of metal filings in the shop yard and their sample exceeds water quality standards and they investigate, clean up yard, change operation procedures. A requirement to investigate hundreds of acres for a "source" of a legacy pesticide (an example of a wq standard that has been exceeded in Phase I permits) is not only nonsensical, but an extreme waste of the municipalities precious few program dollars that could be spent actually implementing operational BMPs as prescribed in other sections of the permit.

79. *Comment from City of Bend, City of Eugene, Jackson County, Oregon City, Marion County, City of Turner*

The draft Phase II MS4 Permit contains a provision that permittees may not "cause or contribute to a violation of water quality standards." This provision directly contradicts the Clean Water Act, under which MS4s must reduce pollutants to the "maximum extent practicable." 33 U.S.C. § 1340(p)(3)(B)(iii). Water quality standards and the MEP standard are mutually exclusive: MEP is limited by practicability while water quality standards are an absolute limit on the concentration of pollutants in the receiving water. Hypothetically, it could be impracticable for an MS4 to meet water quality standards such that applying water quality standards to MS4s would render the MEP standard meaningless and superfluous. The rules of statutory construction do not allow superfluous language in federal law, and thus Congress did not intend water quality standards to apply to MS4s. Congress' intent is clear in the statute that MEP is the only standard for MS4s.

The Ninth Circuit directly addressed this question in *Defenders of Wildlife v. Browner* and found that Congress clearly intended MS4s to be governed by a separate standard. 191 F.3d. 1159 (1999). In its analysis, the court noted that industrial stormwater discharges are explicitly required to comply with 33 U.S.C. § 1311, which governs water quality standards, while this language was purposely excluded from the MS4 provisions. 191 F.3d., at 1165. The court went on to find that the Clean Water Act "replaces the requirements of § 1311 with the requirement that municipal storm-sewer dischargers 'reduce the discharge of pollutants to the maximum extent practicable...'. Id. (emphasis in original).

The Clean Water Act states that MS4 permits may contain "other provisions as the Administrator or the State determines appropriate for the control of such pollutants." 33 U.S.C. § 1340(p)(3)(B)(iii). This portion of the permitting provision for MS4s does not open the door to inclusion of water quality

standards in MS4 permits. First, as noted above, it would impermissibly render the MEP portion of the statute meaningless and superfluous. Second, its position within the statute indicates that it is meant to modify “maximum extent practicable” by listing the conditions that might be included. It is not intended to apply a wholly different standard to MS4s. Although Defenders of Wildlife notes that permitting authorities could include water quality standards in MS4 permits under this provision, this discussion is dicta in the opinion. More importantly, it is internally inconsistent with the court’s own holding that MEP “replaces the requirements of § 1311” and that including water quality standards in MS4 permits would render MEP “superfluous.” 191 F.3d. at 1165 (emphasis in original). It is only logical to read the “other provisions” portion of the statute to mean other provisions within the limitations of “maximum extent practicable” and not beyond it.

Including water quality standards in MS4 permits also impermissibly applies numeric limits to MS4 discharges because it is not possible to determine compliance with water quality standards without assessing the numeric amount of a pollutant in both the stormwater discharge and the receiving water body. In Oregon, the concept of numeric effluent limits in MS4 permits was decided in Tualatin Riverkeepers et al., v. Oregon Dep’t Of Environ. Quality et al., 235 Or. App. 132 (2010). This case challenged Phase I MS4 permits on the basis that numeric limits were required to meet TMDL requirements. DEQ and intervenors successfully argued that, even though wasteload allocations are expressed numerically, they are applied using MEP and associated Best Management Practices in MS4 permits, both of which are not numeric controls. Applying water quality standards to the Phase II MS4 Permit would be contrary to this important decision in Oregon.

[Albany] None of the existing Phase I or Phase II permits in Oregon contain any similar “cause or contribute to...” language. At the DEQ Workshop presentation on December 7, 2017, staff was asked for an explanation of why the “cause or contribute to a violation of water quality standards” was included in the permit. DEQ staff responded that this language was included in the 1200Z industrial stormwater permits that were recently updated and that, therefore, this is the language that will be used in future water quality permits.

[Albany] This response from DEQ staff points to lack of DEQ differentiation between industrial stormwater discharges and MS4 discharges. In 1987, Congress established this differentiation in amending the Clean Water Act. Specifically, Congress determined industrial stormwater discharges would continue to be subject to water quality standards, and, in contrast, that for municipal stormwater, the level of required pollutant reduction is to the “maximum extent practicable.” See the discussion on the Defenders of Wildlife decision discussed above.

[Albany] This phrase [cause or contribute] implicitly requires permittees to monitor MS4 discharges with respect to water quality standards at all outfalls. While not explicitly requiring monitoring, it is impossible for MS4 permittees to know if they are complying with this requirement without proactive measures such as sampling and monitoring.

[Albany] “must implement” implies completed corrective action. It is likely that almost all issues will take longer than 60 days to resolve. This language should be changed to say “initiate” and completed as soon as reasonably possible.

[Albany] Downstream where? Portland, Columbia River, etc.? How does the DEQ intend to prove that a particular MS4 is the cause of or contributing to a violation of WQS, particularly given the number of 303(d) listed water bodies in the state?

Jackson County, the above referenced language should be replaced with MEP.

Albany, Marion County, City of Oregon City, and City of Eugene replace all of Schedule A.1.a. with the following:

“Maximum Extent Practicable. Permittees must reduce their pollutant discharges to the maximum extent practicable, subject to the requirements set forth in 40 CFR § 122.34.”

Add language that states that MS4 implementation of Stormwater management programs that include implementation of the six minimum measures to the MEP constitutes compliance with OAR 340-041.

80. *Comment from City of Millersburg*

All stormwater has some degree of pollutants in it. When a downstream water body is already impaired, it could be interpreted that permit registrants are contributing to the violation of the water quality standard due solely to the fact that there is any stormwater discharge to the water body. With this language, the permit registrant may be in immediate danger of being in violation of the permit as soon as the permit is adopted. This language needs to be changed or deleted.

81. *Comment from Oregon Home Builders Association*

Maximum Extent Practicable (MEP) is the statutory standard that governs the level to which municipalities are responsible for limiting and reducing pollution in stormwater. This standard is specifically intended to take into account the unique financial and technology limitations facing municipal sources.

Clean Water Act section 1311(b) establishes technology based effluent standards. 33 U.S.C. § 1311(b). Congress, however, did not include the technology standard for municipal stormwater discharges in section 1311. Instead, in the Water Quality Act of 1987, it placed the standard, MEP, in section 1342(p)—the permitting section of the CWA. 33 U.S.C. § 1342(p)(3)(B)(iii).

Congress defined MEP to include "management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

Furthermore, at the same time Congress developed the municipal requirements it established requirements for industrial discharges. 33 U.S.C. § 1342(p)(3)(A). That section provides "Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 1311 of this title." *Ibid.* (emphasis added).

This provides two avenues to include water quality based limits into industrial permits. First, section 1342(a)(1)(A) (which is the "this section" referenced above) allows for such requirements. Second, section 1311(b)(1)(C) allows for the inclusion of water quality limits. Congress, however, used different language for municipal permits in section 1342(p)(3). It did not require compliance with section 1311, or "any other applicable provision" of section 1342. This is further proof that MEP is the sole standard applicable to MS4s.

Any attempt to supersede MEP in favor of water quality based effluent limitations is inappropriate and unlawful. We strongly suggest that the Draft Permit be revised to establish MEP as the applicable standard throughout the permit.

82. *Comment from City of Portland*

Instead of the appropriate MEP language as noted above, Schedule A.1.a. states that the permit registrant "must not cause or contribute to a violation of water quality standards." This language is not appropriate in an MS4 permit and should be removed. Water quality standards and the MEP standard are distinctly different paradigms: MEP is constrained by practicability while water quality standards are essentially a limit on the concentration of pollutants in the receiving water. A related court case in Oregon (*Tualatin Riverkeepers et al., v. Oregon Dept. of Environ. Quality et al., 2010*) about numeric effluent limits in MS4 permits supports this argument. (The case established that even though TMDL wasteload allocations are expressed numerically, they are applied in MS4 permits using MEP and associated Best Management Practices). These different standards would be more reconcilable within the permit if all language in Schedule A.1.a is removed except for the last paragraph beginning with "DEQ may impose...".

If the water quality standards conditions are retained in the permit, Schedule A.1.a.i should be amended to state "Within 48 hours of discovering the violation, the permit registrant must initiate an investigation to

determine the cause of the violation” because investigations of this nature are often not concluded within a 48-hour timeframe.

The PER also contains problematic language on this item. The 3rd paragraph, page 17 states that the “permit registrant is required to take immediate corrective actions within 48 hours of discovering the violation to evaluate the cause of the exceedance,” but the permit only requires an investigation within that timeframe, not corrective actions. The PER then goes on to state “Within 30 calendar days of discovering the violation, permit registrants must evaluate the effectiveness of the control measures on-site...” but the permit only requires a report within that timeframe to document the corrective actions taken or planned. It does not require an effectiveness evaluation for “control measures” that may or may not have been implemented by that time or even appropriate given the nature of the violation. Please correct the PER language in accordance with permit requirements.

83. *Comment from City of Keizer*

The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR340-041.

Recommendation: Add language to the Permit that states that the registrant is in compliance as long as the Permit is being implemented.

Please specify (in the PER at least) whether 303(d) or TMDL pollutants are included under this section. Stormwater runoff will nearly always have SOME amount of 303(d) or TMDL listed pollutants. E.g. Any summer storm would ‘contribute’ Temperature (Willamette TMDL). And any amount would appear to be a violation of this standard if 303(d) and TMDL standards are referenced here. If the language has to stay, and if DEQ doesn’t want reporting all the time, then the PER should clarify intent here.

...See above, again this is such a broad situation that it’s impossible to meet. How far downstream? If there is a temperature or turbidity ‘violation’ at a location, are all MS4 permittees upstream to the headwaters culpable?

If there is no longer to be any shield in complying with the permit BMPs, then there seems to be nothing a permittee can do to protect themselves (aside from ending all MS4 discharges

84. *Comment from Polk County*

Reword to, "The permit registrant is required to implement their SWMP to ensure that stormwater discharge does not cause or contribute to a violation of water quality standards in OAR 340-041".

Permit coverage area is already in exceedance of water quality standards. Reword to “...cause or contribute to an exceedance of existing water quality standard.”

No where under the “Authorize Discharge” section does it say this is a requirement [how to collect and evaluate water quality exceedance].

85. *Comment from City of Springfield*

DEQ has attempted to insert numeric water quality standards into the draft permit via language in Schedule A.1.a. The language, which reads “The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041” is not acceptable to the City of Springfield and contradicts language contained in the Clean Water Act, whereby MS4s must reduce pollutants to the “Maximum Extent Practicable” (MEP) 33.U.S.C. § 1340(p)(3)(B)(iii). The MEP standard is limited by practicability, whereas the numeric water quality standards are not. As City of Springfield staff (and numerous other MS4s) have pointed out to DEQ on several occasions, application of water quality standards to MS4s applies numeric limits to the City’s discharges because it is not possible to determine compliance with water quality standards without determining the numeric amount of a pollutant in the stormwater runoff as well as the receiving water body.

The Oregon Court of Appeals ruled in 2010 that numerical effluent limits were not required in MS4 permits because the MEP standard controls discharges. *Tualatin Riverkeepers et al., v. Oregon Dep't of Environ. Quality et al.*, 235 Or. App. 132 (2010). This case challenged Phase I MS4 permits on the basis that numeric limits were required to meet Total Maximum Daily Load (TMDL) requirements. DEQ and interveners successfully argued that, even though wasteload allocations are expressed numerically, they are applied using MEP and associated best management practices (BMPs) in MS4 permits.

In summary, the proposed language in Schedule A.1.a. regarding reasonable potential to exceed water quality standards does not belong in the Phase II MS4 permit. The correct standard for MS4 permits is reduction of pollutants to the Maximum Extent Practicable. DEQ should remove the reference to “cause or contribute” from the draft MS4 Phase II General Permit.

The City of Springfield proposes the following language for Schedule A.1.a:

Maximum Extent Practicable. Permittees must reduce their discharges to the maximum extent practicable, subject to the requirements set forth in 40 CFR § 122.34.

...As discussed in detail in the attached letter, DEQ's proposed “Cause or contribute to” language in A.1.a is tantamount to requiring numeric limits verses requiring the use of the Federal MEP standard as directed by the EPA.

This (cause or contribute) language would supersede any MEP language that is in the permit; it is the directive of the EPA to implement BMP's to MEP, and not numeric limits. By requiring water quality standards, the DEQ is impermissibly moving the Phase II program away from a BMP based program with a maximum extent practicable standard by adding new water quality based effluent limitations.

An MS4 is substantially different from and industrial permittee and this draft permit should not contain industrial permit language. An industrial facility can be given strict permit limits when such limits are necessary to protect water quality because the facility could shut down or modify their industrial processes if they cannot comply with the permit limits. In contrast, an MS4 does not control its own processes with respect to stormwater (i.e., MS4s cannot stop the rain, or plug stormwater outfalls and allow system flooding, etc.)

86. *Comment from Rogue Valley Sewer Services*

The lack of the use of MEP in the draft permit and the inclusion of the clause “The permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041.” is problematic as all but one Phase II permittee currently discharge into waters for which TMDLs have been established, thus by definition they are causing and contributing to a violation of a water quality standard. Other states address this by including language essentially stating that if the permittee is in compliance with the permit, they are not in violation of the water quality standard.

Ohio III.A.1. You shall develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from your small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of OAR 340-041 and the Clean Water Act.

Wisconsin 1.3.1 ...For the term of this permit, compliance with water quality standards will be addressed by adherence to the requirements in this permit.

Wisconsin 1.3.2 This permit does not authorize discharges that the Department determines will cause or have reasonable potential to cause or contribute to an excursion above any applicable water quality standards. Where such determinations have been made, the Department may notify the municipality that an individual permit is necessary. However, the Department may authorize coverage under this permit where the storm water management programs required under this permit will include appropriate controls and implementation procedures designed to bring the storm water discharge into compliance with water quality standards.

The draft DEQ permit contains no such language.

Suggested Change: MEP as a means of meeting permit requirements should be included in the permit itself, rather than just in the Permit Evaluation Report (PER). Specifically, DEQ should add language that states that a Registrant’s implementation of stormwater management programs that include implementation of the six minimum measures to the MEP constitutes compliance with this permit and OAR 340-041.

Additionally, modifications to A.1.a. should be made. The corrective actions for water quality violations outlined in A.1.a. are similar to those of Washington’s Department of Ecology Phase II permit, however the Ecology permit is more implementable as it allows for analysis of actions and timeframes. The DEQ permit requires that “Permit registrant must implement the corrective actions no later than 60 days...” whereas Ecology’s permit outlines planning actions that must be taken to determine the solution within 60 days. Some situations may easily be corrected in less than 30 days, whereas others may take months.

Suggested Change: The permit should be revised to provide a time period in which to develop a plan of action to address the situation, including developing a workable timeline for implantation.

87. *Comment from Rogue Riverkeeper*

Rogue Riverkeeper strongly supports the provision under Schedule (A)(1)(a) that “the permit registrant must not cause or contribute to a violation of a water quality standard as established in OAR 340-041.” Although the current draft permit approaches this provision differently from the draft permit under review in August 2016, this provision is consistent with the broader goals of the Clean Water Act to ensure fishable, swimmable streams and will help to protect and restore water quality in the Rogue basin.

88. *Comment from League of Oregon Cities, Association of Oregon Counties, and Special Districts Association of Oregon*

We share the Association of Clean Water Agencies' (ACWA) concerns that DEQ has exceeded its authority in including water quality standards in the permit. Schedule A.1.a. of the draft permit implies that MS4 permittees must meet numeric water quality standards where stormwater from dispersed non-point sources is discharged. The result of this would force municipalities to implement end-of-pipe treatment throughout their entire systems to meet this requirement.

This is clearly not practicable nor affordable to implement for any jurisdiction.

DEQ Response

Regulatory Framework/DEQ’s Authority to Regulate Stormwater

See Section 1.1, *Establishing Permit Conditions*.

Causing or Contributing to

Several of the comments questioned the applicability of the permit language “causing or contributing to an excursion of the applicable water quality standards” and recommended replacement of this language with the following:

Permittees must reduce their pollutant discharges to the maximum extent practicable, subject to the requirements set forth in 40 CFR §122.34.

Similar comments were addressed by EPA in the New Hampshire Small MS4 General Permit and included the following response.

The New Hampshire Small MS4 General Permit language:⁵⁷

⁵⁷ The 2017 New Hampshire Small MS4 General Permit was issued on January 18, 2017.

Pursuant to Clean Water Act 402(p)(3)(B)(iii), this permit includes provisions to ensure that discharges from the permittee’s small MS4 do not cause or contribute to an exceedance of water quality standards, in addition to requirements to reduce the discharge of pollutants to the maximum extent practicable. The requirements found in this Part and Part 2.2 constitute the water quality based effluent limits of this permit. Requirements to reduce the discharge of pollutants to the maximum extent practicable are set forth in Part 2.3.

EPA Response to Comments on the New Hampshire Small MS4 General Permit:⁵⁸

In Defenders of Wildlife v. Browner, the court explained that CWA Section 402(p)(3)(B)(iii) allows a permitting authority the discretion to require less than strict compliance with state water quality standards as well as the “authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants.” Defenders of Wildlife v. Browner, 191 F.3d 1159, 1166 (9th Cir. 1999). Thus, whereas the NPDES permitting authority must include provisions that reduce the MS4’s discharge of pollutants to the MEP, it may also include additional provisions that ensure compliance with state water quality standards where necessary to control pollutants. Consistent with the Defenders of Wildlife decision, EPA has previously stated that, where the NPDES permitting authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality standard exceedance, the permitting authority should “exercise its discretion” to include the necessary requirements to meet water quality standards. See Revisions to the November 22, 2010 Memorandum “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs” (November 26, 2014) (“2014 Guidance”), page 4 (USEPA, 2014).

In exercising its discretion as the permitting authority, consistent with the holding in Defenders of Wildlife v. Browner, EPA has determined that it is necessary to include WQBELs in this permit in order to ensure that discharges from the permitted MS4s do not cause or contribute to exceedances of state water quality standards. See Fact Sheet Section B Part 2.0 and EPA Response to Comments 61-83. Moreover, the 2003 permit included WQBELs, and it would be inconsistent with antibacksliding provisions of the CWA to now withdraw such provisions from this permit.

...The Final Permit includes requirements to ensure that the permitted MS4 discharges will not cause or contribute to exceedances of water quality standards (see EPA Response to Comments 227 - 233). Water quality standards are those State Water Quality Standards that are approved by EPA by the date of permit issuance. The requirement that discharges do not cause or contribute to a water quality standards violation apply to all NPDES permit holders, not just new dischargers (as one commenter asserted). EPA notes that the States adopt water quality standards based on allowable concentrations of pollutants that will allow waterbodies to meet designated uses, and are not written for particular kinds of discharges or based on whether flows are continuous or intermittent.

The draft and the final permit contain requirements that, when fully implemented, will lead to the reduction of pollutants in stormwater discharges such that the discharge does not cause or contribute to an excursion of an applicable water quality standard. The approach in this permit is consistent with the applicable MS4 regulations and the CWA; additionally, this approach is also supported by the MS4 permit standard in the Remand Rule. As previously discussed, the permit must establish permit terms and conditions required to meet the MS4 permit standard, which is the compliance standard for this permit:

MS4 operator to reduce the discharge of pollutants from its MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water⁵⁹

⁵⁸ EPA Response to Comments on: National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in New Hampshire, NPDES Permit Nos. NHR041000, NHR042000, and NHR043000

⁵⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89320.

The final permit was modified to state in Schedule A.1.a:

If the permit registrant complies with all the terms and conditions of this permit, it is presumed that the permit registrant is not causing or contributing to an excursion of the applicable water quality standards as established in OAR 340-041. To the extent that monitoring shows otherwise investigation and corrective action is required.

Implement Permit Conditions to MEP

Several commenters have suggested that the permit language be modified to the following:

Permittees must reduce their pollutant discharges to the maximum extent practicable, subject to the requirements set forth in 40 CFR §122.34. MS4 implementation of stormwater management programs that include implementation of the six minimum measures to the maximum extent practicable constitutes compliance with this permit.

EPA addressed the issue of permit conditions that do not appear to have the type of detail that would be needed to be “clearly” implemented and therefore create uncertainty. The following are excerpts from the Remand Rule that describe permit conditions that create uncertainty:

Permit requirements that include “caveat” language, such as “if feasible,” “if practicable,” “to the maximum extent practicable,” and “as necessary” or “as appropriate” unless defined. Without defining parameters for such terms (for example, “infeasible” means “not technologically possible or not economically practicable and achievable in light of best industry practices”), this type of language creates uncertainty as to what specific actions the permittee is expected to take, and is therefore difficult to comply with and assess compliance.⁶⁰

As described in the Remand Rule, EPA interpreted the Clean Water Act provision on municipal discharge to require permits that have clear requirements to meet the standard “to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the water quality requirements of the Clean Water Act.”⁶¹ DEQ is delegated authority to determine the necessary requirements to meet the MS4 permit standard.

Other MS4 Permits

One commenter provided examples of permit conditions from Ohio and Wisconsin. These states permit conditions are similar to the DEQ’s discussion in the PER, which states the following:

NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements under the CWA. At a minimum, MS4 permit terms and conditions must satisfy the requirements set forth in the federal regulations at 40 CFR § 122.34(a) through (e).

DEQ modified the permit; the final permit includes the following modified text:

If the permit registrant complies with all the terms and conditions of this permit, it is presumed that the permit registrant is not causing or contributing to an excursion of the applicable water quality standards as established in OAR 340-041.

This additional permit language more explicitly addresses DEQ’s intent of the water quality standards conditions with the final permit. If a permit registrant becomes aware or is notified that a pollutant in their MS4 discharge is causing or contributing to an excursion above an applicable water quality standard, the

⁶⁰ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89335.

⁶¹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89320.

permit registrant must take corrective actions. If the permit registrant is complying with all the terms and conditions of this permit the exceedance of the state water quality standard is not a permit violation, failure to comply with, implement or complete the required follow up to the associated exceedance would be a permit violation.

MEP Inclusion in the Permit

DEQ added the following condition to the final permit based on comments.

a. Reduce the Discharge of Pollutants from the MS4

Pursuant to 40 CFR §122.34(a), the permit registrant must at a minimum develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce pollutants from the MS4 to the maximum extent practicable, to protect water quality and to satisfy the appropriate water quality requirement of the Clean Water Act. This permit identifies the management practices, control techniques and system, and design and engineering methods necessary to meet this standard.

DEQ maintained that the discussion of the MS4 permit standard, MEP and the MEP standard were more appropriately addressed in the PER. The following is an excerpt from the PER:

In accordance with the Remand Rule, NPDES permits for regulated small MS4s must include terms and conditions 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 under the Clean Water Act. At a minimum, MS4 permit terms and conditions must satisfy the requirements set forth in the federal regulations at 40 CFR § 122.34(a) through (e).

Maximum extent practicable (or MEP) is the statutory standard that describes the level of pollutant reduction that small MS4 operators must achieve, and what constitutes maximum extent practicable must continually adapt to current conditions and understanding of BMP effectiveness. Neither the CWA nor the stormwater regulations provide a specific definition of maximum extent practicable. The lack of a detailed definition allows for flexibility in MS4 permitting.

The iterative process of imposing the maximum extent practicable standard over successive permit terms consists of the NPDES permitting authority defining clear, specific, and measurable NPDES permit requirements; permit registrants implementing the required actions as part of a comprehensive program; and the permit registrants and NPDES permitting authority evaluating the effectiveness of best management practices used to date. This iterative permitting process continues, permit term to permit term, until water quality standards are attained.

DEQ has defined the required stormwater management control measures, and evaluation and assessment requirements, that small MS4 operator must implement in order to comply with the MS4 Permit Standard in the permit...

Response to a Water Quality Excursion and Corrective Action Timeline

DEQ reviewed the corrective action timeline in the Department of Ecology’s Western Washington Phase II GP and modified the corrective action timelines to the following:

If the permit registrant or DEQ determines that a pollutant in the permit registrant’s MS4 discharge is causing or contributing to an excursion of an applicable water quality standard, the permit registrant must take the following corrective actions:

- i. *Within 48 hours of becoming aware of or being notified of the excursion, the permit registrant must begin to investigate the cause of the excursion;*

- ii. *Within 30 days of becoming aware of the excursion, the permit registrant must notify DEQ in writing of the excursion (for on-going or continuing excursions, a single written notification will fulfill this requirement); and*
- iii. *Within 60 days of becoming aware of or being notified of the excursion, the permit registrant must submit a report to DEQ that documents the following:*
 - (A) *The results of the investigation, including the date the excursion was discovered;*
 - (B) *A brief description of the conditions that triggered the violation or the cause; and*
 - (C) *Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed.*

The permit registrant must implement the corrective action(s) in accordance with the schedule approved by DEQ, beginning upon receipt of DEQ's written response to the report submitted.

3.1.3 Limitations of Coverage

89. Comment from Oregon Association of Clean Water Agencies

Many MS4 Phase II permittees also have permits for their stormwater UICs. These systems are often integrated and interspersed within the MS4 as well, so where it makes sense to coordinate the two permits, it would be much more effective, and would avoid confusion and possible conflicts. For instance, the due date of the WPCF-UIC permit annual report was set to November 1st to coincide with the traditional MS4 Annual Report due date. It makes sense to keep these due dates the same to avoid the need for duplicative reports.

Similarly, DEQ should be aligning the authorized non-stormwater discharges. The WPCF UIC permit authorized discharges match up with the existing Phase II permit discharges. The NPDES permits are five-year permits, while the WPCF-UIC permits (most of which are in their fifth year) are ten-year permits. The proposed draft MS4 Phase II permit makes changes to the list of authorized discharges. DEQ should reconsider the proposed changes through the lens of maintaining consistency with the UIC permits.

90. Comment from City of Bend

Many Phase II municipalities also have permits for their stormwater UICs. These systems are often integrated and interspersed within the MS4 as well, so where it makes sense to coordinate the two permits we request that be done. As such, we ask that the authorized discharges be coordinated. The WPCF UIC permit authorized discharges match up with the existing Phase II permit discharges. The NPDES permits are a 5 year permit while the WPCF-UIC permits (most of which are in their 5th year) are a 10-year permit. The proposed NPDES MS4 Phase II permit makes changes to the list of authorized discharges. We ask that these be kept consistent with coordinated changes necessary made at the next permit cycle. For example, we suggest adding "Vehicle washing that does not use detergents or hot water as per the UIC Schedule A1.p; and including de- chlorinated fountain discharges in addition to de-chlorinated swimming pool discharges to bring in line with the UIC permits.

Additionally the UIC permit includes Landscape irrigation, whereas the proposed MS4 permit includes landscape irrigation but with the addition of "provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions." In addition to not being well-coordinated with the UIC permit, this additional language needs improvement to be implementable. Suggest removal of the additional language. If not, then depending on your intentions for inclusion, clarify new addition in parenthesis to reword as: "(assuming all pesticides, herbicides and fertilizers not applied in accordance with manufacturer's instructions constitutes a spill and is handled as such)" or to "(so long as the permittee has instituted appropriate pollution prevention BMPs such as education regarding proper application.)"

DEQ Response

DEQ reviewed the allowable non-stormwater discharges (referred to as authorized stormwater discharges in the UIC general permit) and modified portions of this permit, where determined appropriate. DEQ acknowledges that the two lists of allowable non-stormwater discharges have some differences. The differences in the final permit were maintained to address the pollutants or sources most common in regulated MS4 stormwater discharges. UIC permits are required to meet the requirements of the Safe Drinking Water Act while this permit is required to meet the Clean Water Act. DEQ will evaluate the UIC permit language during the next renewal process to determine if the conditions can further aligned.

As discussed later in the document, the submission deadline for the Annual Report was changed to Nov. 1.

See the Section 3.1.4.1, *Allowable Non-Stormwater Discharges* section below for additional response.

3.1.4 Allowable Non-Stormwater Discharges

91. Comment from City of Bend

Allowable Non-Stormwater Discharges, the permit does not authorize discharge of non-stormwater from the MS4, except where such discharges satisfy one of the following conditions: “ i. The non-stormwater discharge is currently in compliance with and covered under a separate NPDES permit.”

We suggest adjusting the language by removing “currently in compliance” so that the MS4 permittees are not out of compliance just because another NPDES permittee is out of compliance and is overflowing to our system through no fault of our own.

92. Comment from Oregon Association of Clean Water Agencies

Under Section A.1.c.i., an allowed non-stormwater discharges includes the conditions that “[t]he non-stormwater discharge is currently in compliance with and covered under a separate NPDES permit.” (emphasis added). This requirement is not practicable or possible for the MS4 operators to ensure or enforce upon because they have little to no way of controlling individual site compliance with DEQ-issued NPDES permits. The statement suggests that if the MS4 operator becomes aware that any NPDES permitted site is out of compliance with any provision of a DEQ-issued permit, the MS4 operator is required to treat it as a prohibited discharge and take enforcement action, yet DEQ is the delegated and responsible authority to enforce its permits.

REQUEST: Strike “currently in compliance with” from A.1.c.i.

93. Comment from City of Portland

Please amend the language as follows: “The non-stormwater discharge is ~~currently in compliance with~~ and covered under a separate NPDES permit.” The item, as currently written, is completely impracticable. The words “currently in compliance” are problematic as they tie MS4 permittees’ compliance to other NPDES discharges for which they often have no control or authority. It also implies that all instances of NPDES non-compliance qualify as prohibited discharges because they’re not “allowable”. However, monitoring and reporting violations under a 1200-Z or 1200-C permit, for example, are completely incompatible with this language. DEQ directly administers most NPDES permits and is responsible for enforcing non-compliance. It is inappropriate to passively delegate this responsibility to MS4 permittees. Please strike the language as noted.

DEQ Response to Limitation of Coverage

DEQ removed the language, “currently in compliance with” from Schedule A.1.c.i.

3.1.4.1 *Allowable Non-Stormwater Discharges (non-stormwater discharge categorizes)*

94. *Comment from Oregon Association of Clean Water Agencies*

Under Section A.1.c.iii. several aspects of the listed discharges “categorized as an authorized or allowable non-stormwater discharge” are problematic, as follows:

iii. (B) “Landscape irrigation (provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer’s instructions).” The application of pesticides, herbicides and fertilizers is regulated under federal laws, and the “manufacturer’s instructions” are found on the product labels, which constitute federal requirements. MS4s are neither qualified nor designated the authority to assess whether application of these substances has been done in accordance with the labels, nor are they the enforcement agency for violations of labeling laws. Even if they were, policing the practices of every property owner and landscape worker would clearly be impracticable for MS4 operators. Under the Federal Insecticide, Rodenticide, and Fungicide Act and Oregon Department of Agriculture regulations, if pesticides are found in rivers and streams, the manufacturer’s label must not have been followed. Pesticides are routinely found in Oregon rivers and streams.

REQUEST: Eliminate “provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer’s instructions.”

95. *Comment from City of Albany*

“Uncontaminated” All drinking water contains some level of contaminants. Flushing practices generally include some aeration of the water to reduce chlorine levels. All groundwater contains some level of contaminants

Landscape irrigation: The City cannot be responsible for ensuring compliance with manufacturer’s instructions for private landowners.

Irrigation water and lawn water are the same.

Suggestion: However, if any of these non-stormwater discharges is a significant source of pollutants as determined by the permit registrant...

96. *Comment from City of Ashland*

Cities do not provide oversight and cannot ensure all instances of pesticide. Herbicides and fertilizer applications are in accordance with manufacturer’s recommendations. It is recommend this section be removed or replaced with appropriate MEP provisions.

97. *Comment from City of Gresham*

These have been taken from the 1200-Z permit and some are not appropriate for a municipality. For example, “landscape irrigation (provided all pesticides... have been applied in accordance with manufacturer’s instructions.” If you are speaking only of the PUBLIC AGENCY applications ONLY this might apply, but the caveat language makes this discharge allowance null and void for private non-point sources because municipal staff have NO METHOD of determining whether a particular person or business did or did not follow the label. The same concept applies to “...pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred...”

98. *Comment from City of Keizer*

Add language so that it matches or mirrors the similar list in the IDDE section, which says we must prohibit pool discharges with biocides, etc.

99. *Comment from City of Millersburg*

“However, if any of these non-stormwater discharges is a significant source of pollutants, the permit registrant must prohibit that discharge or require implementation of appropriate BMPs to reduce the discharge of pollutants associated with the source before discharge to the MS4.” How is “significant” determined? Who decides if it is significant? Is it up to the permit registrant to determine the criteria?

100. Comment from Marion County

Allowable non-stormwater discharges should be allowable or not. Using language like significant source is subjective and leads to confusion.

101. Comment from Polk County

All of these discharges could "cause or contribute" to water quality standards, which is not consistent with section "A" above. In A.1.c.iii(Q) include the underlined insertion; "Dechlorinated swimming pool, cooled spa/hot tub, and fountain discharges."

They are all sources of pollution to some degree. i.e., car washing, lawn watering (fertilizers) and irrigation are all listed.

102. Comment from City of Springfield

Parts of this section are not implementable and impracticable as drafted. Three of the non-stormwater allowable discharges are either not-implementable, dated practices that are no longer used, and high sediment loading practice that is not currently allowed in most MS4s, and contains unclear language.

Landscape irrigation - It is not reasonable for DEQ to expect the permittee to verify that all users within the MS4 are applying pesticides, herbicides and fertilizers in accordance with manufacturer's instructions. This concern was raised during previous public comment periods. In order to make this section of the permit implementable, DEQ should remove language in parentheses in A.1.c.iii. as follows: (~~provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions~~).

Street and pavement wash waters - This is a dated practice that is currently not practiced in most MS4's; especially at or around construction sites. This practice allows a high volume of sediment, gravel, garbage, and potentially heated water to enter the public system. Additionally, all spilled material cannot be removed from pervious surfaces unless the surface is removed. Allowing uncontrolled street and pavement washing would add to TMDL pollutant loading such as mercury, bacteria, and temperature instead of reducing loading.

Street and pavement wash waters would also be in conflict the required illicit discharge ordinance on Pg. 14 - A.3.c.iii. *Ordinance and/or Other Regulatory Mechanisms*. The following from Pg. 14 - A.3.c.iii. would be in conflict:

(B) wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;

(D) washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing; and

(E) washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas - including parking lots, streets...

DEQ should edit Sch A.3.c.iii Allowable Non-Stormwater Discharges number (S) Street and pavement wash waters, to prohibit the use of detergents, chemicals, or heated water and only allow the discharge by the direction and or approval of the MS4 operator. This way the MS4 operator may continue to respond efficiently to a cleanup and use options such as "plug, flush, and suck", continue to use water while sweeping, and can restrict uncontrolled street flushing around construction sites.

Dye testing - Dye is not a water discharge; it is a "chemical". Even though dye is considered non-toxic the "allowable non-stormwater discharges" section is not the place to have a chemical listed. DEQ's intention may have been to say "water associated with dye testing activity" and not just "dye testing". Change to "water associated with dye testing activity" to provide clear language.

103. Comment from Clackamas County Water Environment Services

Schedule A(1)(c) is the non-stormwater discharges section. This list needs to be expanded to include:

Although the washing of streets and pavement is authorized by this section of the permit, the permit should also say the surface needs to be swept first and that all additives (such as hot water) aren't used. The pre-sweep and the prohibition of the use of additives is required by the DEQ's 1700A NPDES permit...see de minimis conditions section.

Washing the exterior, including roofs, of buildings, provided that additives such as hot water or detergent aren't used (the prohibition of the use of additives is required by the DEQ's 1700- A NPDES permit...see de minimis conditions section)

The various types of potable water, including water line flushing and potable water sources, should be discharged in a manner that is consistent with the DEQ's October 2000 Fact Sheet titled "Management Practices for the Disposal of Chlorinated Water". This Fact Sheet specifies that de-chlorination may be necessary prior to discharge to the MS4.

Dechlorinated swimming pool discharges are included in this list, but hot tubs are not. Please include hot tubs on this list provided that the waters are dechlorinated and have been allowed to cool for at least 12 hours prior to discharge to the MS4."

104. Comment from City of Portland

Please strike the language in item (B) as follows: "~~Landscape irrigation: (provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions).~~" MS4 permittees have little to no ability to ensure the general public's adherence to pesticide manufacturer's instructions.

Please clarify which of the listed allowable discharges includes fire/sprinkler system purge waters and other de minimis discharges as determined by DEQ.

105. Comment from Rogue Valley Sewer Services

(B) Landscape Irrigation: The Registrant does not provide oversight and cannot ensure that all instances of pesticide, herbicide and fertilizer application are in accordance with manufacturer's instructions. The provision on landscape irrigation is beyond MEP and should be removed.

106. Comment from League of Oregon Cities, Association of Oregon Counties, and Special Districts Association of Oregon

Other concerns include a requirement contained in Section A.1.c.iii. that would, in effect, require permittees to oversee whether the application of pesticides, herbicides and fertilizers are in accordance with the manufacturer's labeling. MS4s are neither qualified nor designated the authority to assess whether application of these substances has been done in accordance with the labels, nor are they the enforcement agency for violations of labeling laws.

DEQ Response

DEQ agrees with the statement that these discharges could "cause or contribute" to water quality standards. This acknowledgment is addressed in the following permit conditions:

Schedule A.1.b: *If the permit registrant or DEQ determines that a pollutant in the permit registrant's MS4 discharge is causing or contributing to an excursion of an applicable water quality standard, the permit registrant must take the following corrective actions:*

- i. *Within 48 hours of becoming aware of or being notified of the excursion, the permit registrant must begin to investigate the cause of the excursion;*
- ii. *Within 30 days of becoming aware of the excursion, the permit registrant must notify DEQ in writing of the excursion (for on-going or continuing excursions, a single written notification will fulfill this requirement); and*
- iii. *Within 60 days of becoming aware of or being notified of the excursion, the permit registrant must submit a report to DEQ that documents the following:*

- (A) *The results of the investigation, including the date the excursion was discovered*
- (B) *A brief description of the conditions that triggered the violation or the cause; and*
- (C) *Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed.*

The permit registrant must implement the corrective action(s) in accordance with the schedule approved by DEQ, beginning upon receipt of DEQ's written response to the report submitted.

DEQ may impose additional water quality-based limitations or terminate permit coverage, if information in the application, required reports, or from other sources indicates that the discharge is causing or contributing to a violation of water quality standards, either in the receiving waterbody or in a downstream waterbody.

And Schedule A.1.d of the permit:

If any of these allowable non-stormwater discharges are or becomes a significant source of pollutants, the permit registrant must prohibit that discharge or require implementation of appropriate BMPs to reduce the discharge of pollutants associated with the source before discharge to the MS4.

DEQ acknowledges that allowable non-stormwater discharges may contain pollutants, however, it is ultimately the responsibility of each permit registrant covered under this permit to minimize the pollution that enters into their MS4 and ensure that any discharge into their system is uncontaminated. The identified allowable non-stormwater discharges are allowed, assuming they have not been identified as significant contributors of pollutants to the receiving waterbody or in a downstream waterbody. To the extent that monitoring shows that discharges are exceeding water quality standards corrective action is necessary.

MS4 Discharge is Causing or Contributing to an Excursion of an Applicable Water Quality Standard

As stated in the final permit, it is presumed that if the permit registrant complies with all the terms and conditions of the permit then the permit registrant is not causing or contributing to a water quality standard violation. If the permit registrant discovers or is made aware that their discharge is causing or contributing to an excursion of an applicable water quality standard, including discharges that are identified in the permit as Allowable Non-Stormwater Discharges, the permit registrant must either prohibit the discharge or implement additional BMPs to reduce the pollutant.

In the event that DEQ determines, based on monitoring or other information, that a permit registrant's discharge is causing or contributing to an excursion of an applicable water quality standard, DEQ will notify the permit registrant in writing.

Definitions

The permit retains the following modified permit language for landscape irrigation non-stormwater discharges:

- (B) *Landscape irrigation. For permit registrant owned or operated areas landscape irrigation will be considered allowable only if pesticides and fertilizers are applied in accordance with manufacturer's instructions.*

This modified condition specifies that the permit registrant is responsible for landscape irrigation non-stormwater discharge that originate from permit registrant owned or operated areas. This modified condition addresses the comments that the permit registrant has very little ability to ensure the general public's application of pesticides and fertilizers.

DEQ modified the language for the following allowable non-stormwater discharges:

- (O) Charity car washing (provided that chemicals, soaps, detergents, steam or heated water are not used. Washing is restricted to the outside of the vehicle, no engines, transmissions or undercarriages).
- (Q) Dechlorinated swimming pool discharges including hot tubs (heated water must be cooled for at least 12 hours prior to discharge).
- (T) Routine external building wash-down (provided that chemicals, soaps, detergents, steam or heated water are not used).
- (S) Street and pavement washwaters (provided that chemicals, soaps, detergents, steam or heated water are not used).
- (U) Water associated with dye testing activity

Significant Source of Pollutants

Regarding comments pertaining to the following permit language:

If any of these allowable non-stormwater discharges are or becomes a significant source of pollutants, the permit registrant must prohibit that discharge or require implementation of appropriate BMPs to reduce the discharge of pollutants associated with the source before discharge to the MS4.

DEQ determined that the inclusion of the language “as determined by the permit registrant” limits this conditions beyond its intended scope. The determination if a non-stormwater discharge is identified as a significant source of pollution can be made by DEQ or the permit registrant.

1200-Z Allowable Non-Stormwater Discharges

DEQ did not replicate of the allowable non-stormwater discharge from the 1200-Z Industrial Stormwater permit. In the development of the allowable non-stormwater discharges, DEQ reviewed the allowable non-stormwater discharges on the Phase I permit, the allowable non-stormwater discharges in the administratively extended Phase II permits, other MS4 Phase II general permits throughout the country, and other DEQ issued NPDES and WPCF permits. It is DEQ’s determination that the list is appropriate for MS4 discharges from regulated small MS4s.

3.2 Permit Registrant's Responsibilities

3.2.1 Coordination Among Registrants and Joint Agreements

107. Comment from Rogue Valley Sewer Services

Rogue Valley Sewer Services has been listed in the draft permit as a “Co-registrant” with the City of Central Point, City of Phoenix, City of Talent, and Jackson County. No definition of “co-registrant” is provided in the draft permit, however, RVSS does not fit the definition of a co-applicant, as provided in 6.d. RVSS did not apply for the MS4 Phase 2 permit in a cooperative agreement with the cities and county. Rather, RVSS currently holds an MS4 Phase 2 permit for which it is the sole registrant and for which it was the sole applicant. In its 2011 renewal application, RVSS again applied for a renewed permit as the sole applicant. RVSS holds Intergovernmental Agreements with each of the cities and county that it serves that specify responsibilities of each party under the MS4 Phase 2 permit.

With the exception of White City Industrial, the MS4 systems are owned and operated by the cities and county. However, though RVSS does not own or operate the MS4, RVSS is the entity that has adopted the ordinances allowing implementation of the Stormwater Management Plan including enforcement for illicit discharges into the stormwater system and implementation of the Stormwater Design Manual. Additionally, RVSS conducts clean-ups when material is illicitly discharged into the stormwater system.

Suggested Change: RVSS would like to request that the current method of listing RVSS as the sole permit registrant be maintained and that the cities and county continue to be considered co-implementers on the permit. This follows the model of Clean Water Services and makes sense as we operate our stormwater programs in a substantially similar manner.

DEQ Response

DEQ modified the permit include the following:

- i. *If MS4 operators elect to submit a joint application, each co-registrant is jointly responsible for permit compliance. If a single MS4 operator elects to submit an application for multiple registrants (referred to as co-implementers), the sole applicant is solely responsible for permit compliance for each of the co-implementers.*
- ii. *A permit registrant may elect to work with or delegate implementation of one or more stormwater management program (SWMP) control measure to another permit registrant or entity. The permit registrant remains responsible for compliance with any permit conditions that another permit registrant or entity fails to implement.*
- iii. *If a permit registrant elects to work with or delegate implementation of one or more SWMP control measure to another permit registrant or entity, there must be a written agreement between the permit registrant and the other permit registrant or entity memorializing the delegation. This agreement must be made available to DEQ upon request.*

3.2.2 Maintain Adequate Legal Authority

108. Comment from City of Albany

What does this phrase mean? [to the extent allowable pursuant to the respective authority granted under state law] Does it mean different things to each individual permittee? This language needs to be clarified.

109. Comment from City of Springfield

The date (July 1, 2023) is in conflict with the date(s) given for Existing Registrants in Table 1 and in the MCM sections that also require legal authority.

If the DEQ's intent is that the permittees have until July 1, 2023 unless specified elsewhere in the permit, then add: "unless specified elsewhere in this permit" to the sentence.

DEQ Response

Regulated small MS4s are required to adopt, update, and maintain adequate legal authority to implement and enforce the required SWMP control measures as allowed or authorized pursuant to applicable state laws.⁶² DEQ expects the permit registrant to utilize all relevant regulatory mechanisms available to control pollutants discharged into and from their MS4. DEQ recognizes that the different permit registrants have different and unique legal powers under state law; the scope of such legal authority may include enforcement through statute, ordinance, policy, permit, contract, administrative order, or other means. If the permit registrant does not have penalty authority, the permit registrant should consider alerting other local or state entities that do have authority to assist them in addressing problems.

DEQ deleted the language in this section addressing implementation dates.

⁶² 40 CFR §122.34(b)(3)(ii)(B), (b)(4)(ii)(A), and (b)(5)(ii)(B)); *MS4 Permit Improvement Guide*, April 2010. EPA 833-R-10-001.

3.2.3 SWMP Document

110. Comment from City of Albany, City of Springfield

...this section is unclear; the permit states: "...SWMP Document must be completed, submitted with the second Annual Report...". This language conflicts with the evaluation report (PER), which states: "to submit with first annual report" (page (19). The department should clarify its intention. New registrants will need at least until September 30, 2020 to complete this effort.

111. Comment from City of Keizer

PER says due with 1st Annual Report... reword one or other so that PER and permit language matches.

112. Comment from Polk County

In the permit it says it's due with the second Annual Report.

113. Comment from Rogue Riverkeeper

Rogue Riverkeeper supports the requirement for permittees to describe how they comply with the terms and conditions of the permit in the SWMP document. This section reflects DEQ's decision, as stated in the Permit Evaluation Report, to utilize the Comprehensive General Permit Approach and include permit terms and conditions that will reduce stormwater discharges from the MS4 to the maximum extent practicable, protect water quality, and satisfy appropriate requirements of the Clean Water Act. As stated in the Permit Evaluation Report:

DEQ has defined the required stormwater management control measures, and evaluation and assessment requirements, that small MS4 operator must implement in order to comply with the MS4 permit standard in this permit. To reduce the discharge of pollutants from the MS4 to the MEP, the permit registrant must develop, implement, and enforce the control measures outlined Schedule A.3 (Stormwater Management Program Control Measures). To protect water quality, the permit registrant must implement applicable requirements of Schedule D.1 (Special Conditions).⁷

Rogue Riverkeeper supports the use of the Comprehensive General Permit Approach under which DEQ identifies clear, specific, and measurable permit terms and conditions that permittees must meet to reduce the discharge of pollutants from the MS4 to the MEP in compliance with the Clean Water Act.

114. Comment from City of Turner

Requirement to produce a complete SWMP which describes "in detail" how every aspect of the permit is being implemented is a much higher burden than has been required.

DEQ Response

DEQ appreciates the support of the Comprehensive General Permit Approach.

DEQ modified the due date for the first Annual Report in the PER to be consistent with the date in the permit.

Regarding the comment that the SWMP document is not required to be detailed, the SWMP Document requirements in the permit are consistent with the Remand Rule.

The final rule at § 122.34(b) requires each permit to require the permittee to develop a "written stormwater management program document or documents that, at a minimum, describes in detail how the permittee intends to comply with the permit's requirements for each minimum control measure." Requiring that portions of the SWMP be in the form of written documentation is not a new requirement, but rather a clarification.⁶³

⁶³ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89339.

3.2.4 SWMP Information and Metrics

No comments were received.

3.2.5 SWMP Resources

115. Comment from Oregon Association of Clean Water Agencies

This section states: “The permit registrant must provide adequate finances, staff, equipment and other support capabilities to implement the control measures and other requirements outlined in this permit.” It is clearly the responsibility of the permittee to assess the resource needs associated with implementing the requirements of the permit. DEQ’s authority lies with setting environmental performance standards, not prescribing funding or staffing for local government programs, the needs of which are clearly outside DEQ’s expertise to assess. This requirement also constitutes an un-funded mandate.

REQUEST: Alternative language recommended for the permit comes from the EPA draft Idaho MS4 Phase II permit, as follows: “The permit does not require specific staffing or funding levels, thus providing the Permittees with the flexibility and incentive to adopt the most efficient methods to comply with permit requirements.” This language provides the flexibility permittees will need in implementing the permit.

116. Comment from City of Albany

Since the DEQ has determined MEP for each community, and since the minimum requirements exceed those contained in Federal law and rules, this requirement is an unfunded mandate in violation of the Oregon Constitution. This is also a violation of the home rule charter for local municipalities. This should be a performance based permit. Who determines “adequate finances, staff, equipment...?” Third parties could sue for non-compliance – this language must be removed.

117. Comment from City of Millersburg

The permit registrant must provide adequate finances, staff, equipment, and other support capabilities to implement the control measures and other requirements outlined in this permit.” This is a huge financial burden on a small city. Millersburg currently has neither adequate staff or equipment to implement many of the requirements of this permit. Additionally, Millersburg does not currently have a stormwater utility or service charge and therefore, no financial resources to hire staff or purchase equipment. Implementing the requirements of this permit is beyond the Maximum Extent Practicable (MEP) for this small community.

118. Comment from City of Portland

This section should be removed. The substantive requirements of the permit will dictate the level of resources that are needed to comply. This language results in a double jeopardy risk for permittees.

119. Comment from City of Turner

... [this section] requires that permit holders provide "adequate finance, staff, equipment and other support capabilities". In actuality, the City of Turner does not have adequate resources for any of its program work. The revenue context of the State- restrictive tax laws, precious little in State funding redistribution and NO direct aid for storm water program implementation-shifts the entire burden of storm water program funding to the local level, which in itself is unacceptable. But to allow DEQ to determine, based on language in the permit, what is "adequate" support, is too much. If the Budget Committee merely decides to pay for police uniforms rather than storm water monitoring software the implication is that the City could be out of compliance which is both unreasonable and, again, violates the intent of MEP.

...The collection of information and metrics that must be tracked is added administrative work with little discernable water quality gain.

DEQ Response

The permit language was maintained as drafted, with minor edits to address repeated terms.

Please see Section 1.1 for comments regarding *the MS4 permit standard, MEP, Requirement Beyond the Federal Minimum and Flexibility* and Section 1.5 for comments regarding *Unfunded Mandate*.

DEQ reviewed the recommendation to include language from EPA's draft Idaho MS4 Phase II permit and determined that the recommended language was from the Idaho MS4 Phase II draft permit's factsheet. The permit language used in both the Idaho MS4 Phase II permit and this permit are nearly identical, as well as the language in the Idaho MS4 Phase II permit factsheet and this permit's PER.

Adequate Funding

EPA Region 6 responded to a similar comment on the topic of adequate funding. An excerpt of their response is provided below:

Permit Condition: Each permittee shall provide adequate finance, staff, equipment, and support capabilities to fully implement its SWMP and all requirements of this permit.

Region 6 response: "Adequate" funding is typically determined in an enforcement context resulting from failure to comply with permit requirements. It is virtually impossible to prescribe a one-size-fits-all definition of "adequate," since the SWMPS will vary and one permittee may be much more efficient in accomplishing permit compliance than another.⁶⁴

DEQ did not establish a definition of adequate funding in the permit or PER. The permit registrant is required to implement a SWMP to comply with the permit or the MS4 permit standard. DEQ recognizes that the process of developing and implementing a SWMP may be complex, including development of funding methods and mechanisms. This process may reflect a creation or revision of a mix local programs. Stormwater regulations have been in place since the early 1990s, the Existing Registrants already have an SWMP in place, as required by the previous permit, and are required to be in compliance with their individual permit. All of the New Registrants have been implementing a stormwater management program similar to the minimum measures in this permit as part of their TMDL implementation plans.

3.3 Stormwater Management Program Control Measures

120. Comment from City of Albany

This requirement, as dictated by the DEQ, does not represent MEP. The DEQ has determined that all New Registrant communities, regardless of size or financial capability, must be compliant with all permit requirements in the same timeframe as those Existing Registrants who have had programs implemented since 2007. The DEQ should, at a minimum develop separate general permits, with significantly lesser requirements for the first permit cycle, for the New Registrants.

Simply providing slightly more time to develop and implement new programs to meet permit requirements does not recognize the scope of effort required for a stormwater management program.

121. Comment from Rogue Riverkeeper

Table 1 under this provision outlines the implementation schedule for Existing and New Registrants. As defined in the proposed permit, Existing Registrants are currently covered under an individual NPDES MS4 stormwater discharge permit, are eligible for coverage under the general permit, and have submitted a renewal application. New Registrants have not been previously covered under an NPDES MS4 permit. The effective date for the proposed permit is January 1, 2019 and the permit term ends on December 23,

⁶⁴ NPDES Permit No. NMR04A000, *Response To Comments Received On The Subject Draft*, Oct. 8, 2014.

2023. New Registrants must fully implement the requirements of the six minimum control measures by July 1, 2023. This is aligned with the final permit remand rule, which clarifies that “first-time small MS4 permittees have up to five years to develop and implement their SWMPs.” Further, the final remand rule is clear that the five-year timeline is to support new permittees. Specifically, the final remand rule states that:

This change is intended to preserve the flexibility included in Phase II regulations in place prior to this final rule, and to more clearly indicate that the extended time period for compliance is intended to apply to MS4s that must put a stormwater management program in place for the first time.

Section 402(p) of the Clean Water Act is equally clear, however, regarding a firm deadline for implementation of MS4 permits. Specifically, “Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.” 33 CFR §1342(p)(4)(A), (B). DEQ must amend the proposed permit to ensure that the final permit will result in compliance within the three-year timeline required under the statute. The implementation deadlines for Existing Registrants should be in compliance with the three-year timeline required under the Clean Water Act.

122. Comment from Willamette Riverkeeper

The timing of permit compliance is also problematic. We feel that the DEQ must ensure that the compliance timelines for Existing and New Registrants comply with the Clean Water Act. Section 402(p) of the Clean Water Act clearly states that “Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.” 33 CFR §1342(p)(4)(A), (B). It seems to us that the DEQ should modify the draft permit to ensure that compliance occurs within a three year timeline.

123. Comment from Oregon Environmental Council

We are also concerned about compliance timelines for existing registrants. While the final permit remand rule allows up to five years for compliance for new permittees, the Clean Water Act specifies compliance no later than 3 years after issuance of the permit; the General Permit should be revised to clarify a 3 year implementation date for existing registrants for all six minimum control measures.

124. Comment from City of Springfield

Table 1 SWMP Control Measures Implementation Schedule is not needed, and is in conflict with some of the MCM section “By Dates”. DEQ should remove Table 1; all the MCM sections have “by dates” already listed.

125. Comment from Rogue Valley Sewer Services

This section of the permit, as well as each of the minimum control measure sections, indicate a point at which the Registrant must begin to develop or begin to review their plans. Stating a date to begin the activity is overly prescriptive. Registrants will determine when they need to start work based on the capacity and needs of their individual organizations. Simply stating a compliance date is enough.

DEQ Response

3-year vs. 5-year Implementation Deadline

The CWA citation identified by the commenters is not applicable to Phase II permits or permit regulations. This condition only applies to the initial issuance of Phase I permits (see 57 Federal Register, page 60446, 1992), which clarified the applicability of 33 CFR §1342(p):

Section 402(p)(4) also specifies that permits for Phase I sources shall provide for compliance as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

Pursuant to the Court’s mandate, today’s rule codifies this provision in the regulations at 40 CFR 122.42(d) for subsequent inclusion in all initial stormwater permits for Phase I sources.⁶⁵

Develop Separate General Permits, With Significantly Lesser Requirements for New Registrants

As stated previously, the final permit represents what DEQ determined to be the minimum requirements needed to meet the MS4 permit standard in Oregon. DEQ considered the permit conditions and the timeline established for New Registrants and determined that the final permit is implementable. All the New Registrants are currently implementing a stormwater management program with all of the minimum control measure in accordance with their TMDL implementation plan. Additionally, New Registrants were notified in 2015 of the upcoming MS4 permit coverage requirement, invited to participate in the permit development meetings and encouraged to prepare for the MS4 Phase II general permit.

The Remand Rule also addressed compliance timelines for new MS4 permittees:

... the five-year period allowed to develop and implement their stormwater management program applies to the initial permit for new permittees. New permittees could include small MS4s that are in urbanized areas for the first time because of demographic changes reflected in the latest decennial census, or they could be specifically designated by a permitting authority as needing an NPDES permit to protect water quality. This change is intended to preserve the flexibility included in Phase II regulations in place prior to this final rule, and to more clearly indicate that the extended time period for compliance is intended to apply to MS4s that must put a stormwater management program in place for the first time... Therefore, EPA is retaining in the final rule the proposed clarification that permitting authorities may provide up to 5 years for small MS4s being permitted for the first time to come into compliance with the terms and conditions of the permit and to implement necessary BMPs.⁶⁶

Develop or Begin to Review

DEQ retained this permit language as drafted. All registrants must begin to develop or implement the SWMP control measure upon the effective date of the permit.

3.3.1 Public Education and Outreach

126. Comment from City of Gresham

One of the City of Gresham’s staff is an expert in behavior change science. Gresham believes strongly in the use of well-developed outreach programs. This section of the permit is problematic because it is too prescriptive in a way that is unserviceable from an actual implementation perspective. Requiring focus on four target audiences within a permit term dilutes the permittees ability to focus its E&O efforts on behaviors or pollutants of the highest concern. DEQ should allow the permittee to be analytical and create less of a “check the box” list for permittees. This only results in thoughtless compliance and sending two messages per permit cycle per target audience will accomplish little to nothing.

Programs work when target audiences are hyper defined and the program delivery is well analyzed, designed, implemented and evaluated. Further, public awareness does not equate to behavior change and is a fruitless endeavor. Smaller communities will not have the resources necessary to impact public behavior on the whole and should not be required to waste time and resources on awareness outreach for the sake of checking a box. This section should be narrowed to include only the public and the business community to preserve resources and avoid dilution.

⁶⁵ 57 Federal Register (1992) page 60446.

⁶⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

Require permittees to conduct an analysis of its population, its pollution sources and concerns and determine a prioritization of target audiences that it will address over a 5, 10 and 20 year outreach strategy. Permittees should not be expected or required to focus upon multiple target audiences and dilute their resources further. They should be allowed to implement a multi-year program that focus only on one significant behavior if that is all the resources they have to the MEP standard.

Gresham has done this successfully over the past 15 years. Our E&O program started with simple successes such as the implementation of the fish friendly car wash kit and marketing to schools. We later implemented the Doggie Don't program and slowly built up our marketing and installation of the dog boxes in community parks until the program was well established. We later moved onto a healthy lawns program and then integrated that into a successful rain garden and downspout promotion program that has further morphed into a partnership with Audubon to deliver the Backyard Habitat program that includes healthy lawns and onsite stormwater management. Gresham has worked on the latter for the past seven years while doing nothing else but some basic messaging around these topics in our media outlets. These efforts are expensive and resource intensive. Doing programs well takes an incredible amount of design, delivery, data collection and cost benefit analysis and requiring multiple programs all the time will only result in little to no impact in any sector.

DEQ Response

DEQ concurs with the comment that public education and outreach important. While conducting an ongoing education and outreach program will be a permit requirement for the first time for New Registrants, several of the New Registrants have been implementing education and outreach stormwater programs for several year as part of their TMDL Implementation Plans. DEQ encourages the permit registrants to build off of the previous successes and lessons learned from other MS4 programs to effectively educate the general public.

As stated in the permit and discussed in the PER, the objective of a public education program is to increase knowledge and behavior of the public to reduce pollutants that come into contact with stormwater. The program should improve audience's understanding of the causes and effects of stormwater pollution, as well as educate the public in ways they can reduce impacts to stormwater. The permit added structure to the conditions, while still allowing flexibility for the permit registrant to target their program appropriately. DEQ finds that this flexibility will allow for a more locally focused and appropriate public education and outreach program.

In accordance with the federal rules, these activities must be measured in order to demonstrate compliance with the related conditions. The permit defines target audiences, requires the permit registrant to provide educational materials to each, and includes topics for consideration for all audiences. The permit registrant may use the target topics listed in the permit or may focus on other topics specific to the small MS4; the permit registrant may also choose the type of educational outreach method best suited to the target audience in their community.

3.3.1.1 Implementation Dates

127. Comment from City of Springfield

There is a conflict in the date and in the Schedule. The Schedule (Schedule A.3.a.ii-vi) should only go to "v" since "vi" is Tracking and Assessment which requires annual reporting starting the first year and due Sept 30 2019 not by the "no later than date" of Jan. 1 2020. Change the Schedule to not include "vi".

DEQ Response

DEQ disagrees with this comment. The requirements in Schedule A.3.a.i address the implementation date for full compliance with the Public Education and Outreach program; progress made by the permit registrant must document.

3.3.1.2 *Conduct an Education and Outreach Program*

128. Comment from City of Albany

Conflicts with wording in referenced section. Is it, at least one of the four (per year? Per term?) or to each target audience at least once per permit term?

[Following] Language not appropriate as a permit condition due to its subjectiveness. Delete

The goal of the education and outreach program is to reduce the behaviors and practices that cause or contribute to adverse stormwater impacts on receiving waters. The program should promote specific by increasing the audience's understanding of actions they audience can take to reduce pollutant discharges in stormwater runoff and prevent non-stormwater discharges prevent pollutants in stormwater runoff from entering the MS4 and receiving waters.

129. Comment from City of Millersburg

The requirements of this section are confusing. Please clarify how many education and outreach efforts are required during the permit cycle and what audiences are required to be targeted.

130. Comment from City of Turner

Items ii and iv appear to actually contradict each other requiring different educational outreach.

DEQ Response

The following permit language was modified to address this comment regarding confusing language:

The permit registrant's public education and outreach program must include educational efforts targeting the three audiences listed in Schedule A.3.a.iv.

Regarding the comment requesting the deletion of inappropriate language, DEQ intentionally included this permit language to provide a clear definition of the goal of the education and outreach program, which is consistent with the "clear, specific, and measurable" requirement. DEQ retained language in the permit condition as originally drafted.

3.3.1.3 *Stormwater Education Activities*

131. Comment from City of Albany

What does "must consider" mean? Is a permit registrant in noncompliance if they do not perform education/outreach on this topic? Or must they only consider performing education/outreach on this topic?

Simply because there are septic systems in the MS4 does not mean those are necessarily a source of significant concern to the permit registrant. The permit registrant should have flexibility to determine if and how to address septic systems.

Albany, and many other permit registrants, do not have the authority or capacity to provide educate/outreach on the maintenance requirements of private septic systems.

132. Comment from City of Gresham

This section is confusing. We agree that describing potential target audiences and educational topics in the permit is appropriate, but there are too many variables in this section. Permittees should be able to determine the priority pollutant issues and target audiences in their community to tailor programs and messages to those. Creating a mandatory menu only slices the pie thinner and makes everything futile and a waste of resources. This concept is iterated in EPA's MS4 Permit Improvement Guide.

Erosion is a common issue across permittees therefore, focusing clearly on something important and doing it well will result in far more outcomes than shot gun approaches to many, many problems. E.g., "educate the construction community on best practice REQUIREMENTS related to erosion and sediment

control at least once per year. Describe how you will do this in the SWMP. (E.g., via city permit application process, meetings, forums, direct mail notices, website, etc.) " This is an example of a target audience of workers in need of potential translated materials and this would be best accomplished at the state level by DEQ.

...Delete the requirement to educate local elected officials. Again, this is achieved informally via the memos and presentations that go with the passage of stormwater code, stormwater and EPSC Manuals, program press releases, news coverage, social media, and generally cross departmental collaboration, etc. Further, council members are busy and sometimes unpaid. They do not have time to receive "general stormwater impact messages." Having this as another check the box action is administratively burdensome.

...Notably, our experience around trying to educate contractors is that is like herding cats (they will rarely show up and they will not read information). Because contracting requires state licensure, it is more appropriate for the state to require any licensed firm or individual engaging in land disturbing activities to attend or take an online class in EPSC techniques for some percentage of the employees working at the firm. Our experience is that contractors are aware of requirements, but are not on site and subcontractors often engage in actions that cause issues. Trying to require education to the industry as a whole is the most effective and efficient way to approach this issue. A better option for the permittee would be to establish a procedure related to development and construction permit issuance that informs the contractors and developers about local EPSC requirements, inspections and enforcement procedures and penalties for non-compliance.

Topic 1. More clear: Describe in the SWMP how you are going to inform the public on reporting pollutant concerns at least once annually.

Topic 2. This sounds like DEQ is asking for education related to reducing impervious area. This is ineffective in a general education setting because the barriers to removing pavement once installed are extremely high (cost/labor) What is useful is education on proper maintenance and protection of catch basins.

Topic 7. We agree that septic system education regarding proper maintenance would be beneficial. Requiring cities to conduct inspections of existing home systems is an overreach by DEQ and beyond most permittees legal authority.

133. Comment from City of Keizer

The permit registrant must at minimum, conduct education and outreach to each target audience identified below at least once during the permit term.

Recommendation: This language is confusing as written. Please consider adding a table or example to the PER.

134. Comment from City of Portland

Language in sub-sections ii and iv present conflicting information about target audiences. Sub-section ii states that permittees must target "at least one of the four audiences listed in Schedule A.3.a.iv." and sub-section iv states that the permittee must conduct outreach "to each target audience identified below at least once during the permit term." Please address the discrepancy.

135. Comment from Polk County

It would not make sense for us to target audience #2 (business, etc.) b/c our permit area is almost entirely residential.

- Change the requirement to 3 out of the 4 targeted audiences must be targeted during the permit term.

By using the term "and" does this mean in order to be in compliance we must target all audience within each category, or would targeting only "homeowners" be sufficient for #1.

Our permit area only has 1 industrial property, no commercial/businesses

Term [consider] is unclear whether it is required or not. Do we have to make this a topic, or just consider it being a topic?

DEQ Response

The final permit requirements are in accordance with the guidance provided by EPA, the *MS4 Permit Improvement Guide* and *Compendium of MS4 Permitting Approaches, Part 1*.⁶⁷ DEQ included a variety of approaches in the section; the permit defines the target audiences, requires the permit registrant to provide educational materials to each, and includes topics for consideration, to ensure clarity and allow for flexibility. The permit registrant may use these topics or may choose to focus on topics that are best suited to the target audiences in their community. DEQ finds that this approach allows the permit registrant with flexibility to deliver a locally focused and appropriate public education and outreach program.

It is DEQ's determination that the target audience identified in the final permit will allow the permit registrant flexibility to target their program appropriately, while addressing the common audiences that are likely present in these MS4s.

DEQ removed the language that the commenter identified with the "must consider" descriptor. The permit language was modified to address the comment regarding the number of education activities required.

Schedule A.3.a.ii: The permit registrant's public education and outreach program must include educational efforts targeting the three audiences listed in Schedule A.3.a.iv.

Schedule A.3.a.iii: The permit registrant must distribute and/or offer at least two (2) educational messages or activities per year.

With the modification to the permit language and associated changes to the PER, DEQ determined that adding a table or examples in the PER were not necessary.

3.3.1.4 Education on Construction Site Control Measures

136. Comment from City of Albany

Do these outreach events count toward the outreach requirements above (2 per year) or in addition to? Construction companies and contractors are already listed above as a target audience. Suggest deleting section and adding as a target topic.

137. Comment from City of Gresham

Recommendation: Delete the target audience of construction/development. The EPSC section already requires EPSC compliance and notification of training opportunities. Training of the development and construction community is an activity that is outside the local expertise or resources and is suggested to be led by either DEQ, EPA, or other applicable state agency. The Stormwater Manual (development standard requirement) also acts as an education device for the development, engineer, and architect community. Water wise landscaping, etc. are the purview of the water department educators, not the stormwater department.

138. Comment from City of Springfield

At least twice during the permit term, the permit registrant must conduct educational outreach to target construction site operators... As it reads, this would be "in addition to" the required 2 per year efforts as stated above in section (iii) Stormwater Education Activities. The DEQ clarified at the Dec. 7, 2017

⁶⁷ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

workshop that this is part of the 2 per year efforts and not “in addition to”. DEQ should re-draft the language to be “part of” and not “in addition to”.

DEQ Response

DEQ revised the list of target audience to the following:

1. *General public, homeowners, homeowner association, schoolchildren, and businesses (including home-based and mobile business).*
2. *Local elected officials, land use planners and engineers.*
3. *Construction Site Operators.*

The permit retains the requirement that the permit registrants must target construction site operators working within their community, at least twice during the permit term. This communication or education and outreach with construction site operators will benefit the work the registrants are implementing as part of the *Construction Site Runoff* control program.

3.3.1.5 Tracking and Assessment

139. Comment from Oregon Association of Clean Water Agencies

The annual public education evaluation requirement in Schedule A.3.a.vi.—There is not enough information generated in a year or two, or even three, to generate a meaningful evaluation and conclusions about program effectiveness. Not only that, the new permittees will take several years to get there stormwater programs, including public education, up and running, so there will not be any basis for an evaluation during the first permit cycle. Picking one activity in each year of the permit and evaluating it may be a clear, specific and measurable requirement, but it would be a waste of time, and it would provide bad information on which to make important program decisions for the future. In this case, it would make much more sense to require an evaluation of the public outreach program activities toward the end of the permit period.

140. Comment from City of Albany

“most effectively convey” is subjective and not measureable. Permit registrants can assess the event, what went well, what could be improved, etc., but knowing the “effectiveness” of a brochure, for example, is indeterminable.

141. Comment from City of Gresham

Recommendation: DEQ should require permittees to identify their target audience(s) and report annually on program delivery and estimates of total numbers of people reached. Further, DEQ should require the permittee to identify what it learns and how it will continue to evolve its strategy as a result. Actually measuring behavior change is usually beyond the ability or resources of a typical government agency. Our budgets simply do not allow for a reach that results in measurable behavior change. That said, DEQ should expect and require that programs are evaluated for “impact.” For example, if a program consists of workshops to teach people how to build a rain garden, it should contain a method to conduct follow up to determine whether any rain gardens were actually built. If the answer is no, it is reasonable to conclude that the permittee should abandon this strategy. This section is strongly in need of cleaning up and clarifying in order not to waste already precious public outreach dollars to comply with permit objectives that are well intentioned but will not have the desired results.

...It is unclear what DEQ means by evaluation. Programs are generally more elaborate than just "outreach" as described in this permit requirement. For example, a program for school kids or a program for homeowners to use less pesticides/add native plants. These types of programs would not be evaluated formally on an annual basis. More applicable would be to request the permittees to submit an evaluation of its education efforts in year four of the permit to submit with its annual report. This will help the permittee identify options for improving its efforts to describe in its SWMP update. Informal evaluations

can occur and be reported in the annual report, i.e., "staffing the farmer's market was a valuable way to reach the public about topic X." "Attending the annual city festival did not have the impact that we expected and we might try another event next year."

142. *Comment from City of Millersburg*

The permit registrant must evaluate at least one education and outreach activity during each year of the permit term." What does it mean to "evaluate?" How is it to be evaluated and documented? Is the evaluation method at the discretion of the permit registrant?

143. *Comment from City of Portland*

The requirement to "evaluate at least one education and outreach activity during each year of the permit term" is a complex undertaking that does not provide useful information unless substantial resources are pooled collectively and the process is carried out with great deliberation. This was demonstrated in an Association of Clean Water Agencies (ACWA) study that assessed information from 11 Phase I jurisdictions and was submitted to DEQ as required. The requirement should be removed or, at a minimum, changed to "once over the course of the permit term". Also, this requirement does not comport with the target audience frequency as noted above in sub-section iv. If the requirement is to target each audience once during the 5-year permit term, how can the activity be evaluated on an annual basis?

Further, the PER states "While the permit does not require the permit registrant to conduct an effectiveness evaluation to measure the success of public education activities during the permit term, the Annual Report form outlines an assessment requirement with the intended goal of assessing whether the desired changes in targeted behaviors has occurred due to the education and outreach programs." That is, by definition, an effectiveness evaluation (i.e. the education effected behavior change). Demonstrating behavior change is extremely arduous, as mentioned above, and should not be listed as an annual requirement. It should also be removed from the Annual Report form.

144. *Comment from City of Springfield*

Administratively heavy; no apparent water quality benefit – Evaluating one education and outreach activity each year is administratively heavy with no apparent water quality benefit. The City of Springfield has found that annual evaluations do not supply enough data to draw conclusions or determine successfulness. In order to get meaningful information and data, assessment should occur no more frequently than once in three or more years for the same education and outreach activity.

DEQ should revise this language to state that the permit registrant must evaluate at least one education and outreach activity during the permit term.

145. *Comment from Rogue Riverkeeper*

Rogue Riverkeeper strongly supports education and outreach activities to highlight the impacts of stormwater runoff and activities that target stakeholders can do to mitigate stormwater pollution. Further, we support the use of more prescriptive standards to require the distribution of two educational messages over the five-year permit term. The 2017 proposed permit is strengthened from the 2016 draft by including the requirement ... We are very supportive of the Assessment section under A(3)(a)(vi) that requires permittees to evaluate at least one education and outreach activity for each year of the five-year permit term. Evaluating these activities is essential to determining effective outreach strategies and measuring changes in behavior. More broadly, DEQ should include this type of assessment component for all six minimum control measures throughout the proposed permit. To further strengthen the assessment of this minimum control measure, DEQ should consider requiring that public awareness surveys be conducted twice per permit term following the model of the California MS4 Phase II General Permit. DEQ should strengthen this section by evaluating other MS4 Phase II General Permits to improve clear, specific, and measurable terms and conditions in the 2017 proposed permit, as required by the EPA. Specifically, the EPA stated 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." Further, the EPA stated that "as the list of examples of clear, specific, and measurable

provisions in general permits grow, presumably other states should be able to take advantage of these ideas for their own permits...” DEQ should fully evaluate the examples of clear, specific, and measurable permit terms and conditions for this minimum control measure in other MS4 Phase II General Permits.

DEQ Response

DEQ agrees with several commenters that permit registrants need to take a thoughtful and targeted approach when considering the goal of their public education and outreach program. The requirement to assess this program is consistent with the goals of this permit and the Remand Rule, which states:

*The permit must require the permittee to evaluate compliance with the terms and conditions of the permit, including the effectiveness of the components of its storm water management program, and the status of achieving the measurable requirements in the permit.*⁶⁸

As previously stated, the objective of a public education program is to increase knowledge and behavior of the public so that pollutants in stormwater are reduced. The program should improve the audience’s understanding of the causes and effects of stormwater pollution, as well as educate how they can reduce those impacts.

The permit establishes a metric for permit registrant to demonstrate compliance with the related provisions. DEQ is not expecting a sophisticated data gathering or permit registrants to hire consultants to perform this assessment. The permit does not provide a specific methodology to measure progress to allow flexibility for each permit registrant to determine their own indicators and to allow each registrant the opportunity to self-determine which activity they believe has been the most effective of achieving the program goals.

DEQ agrees that evaluating the effectiveness of printed material is difficult, therefore if all of the education and outreach activities for any given reporting year are limited to printed material, the permit registrant must provide the distribution statistics or other available metrics in the Annual Report, and a narrative description of how the permit registrant evaluated its success. Furthermore, DEQ will consider this comment when finalizing the Annual Report template.

DEQ retained the requirement for the permit registrants to document the evaluation, including a summary in of the assessment in the Annual Report.

3.3.2 Public Involvement and Participation

146. Comment from City of Albany

The permit registrant cannot ensure engagement, we can only provide opportunities... We must always follow these laws, this should not be a MS4 permit requirement... There are no public notice requirements for public involvement programs. Delete.

147. Comment from City of Portland

Please amend the first paragraph as follows: “The permit registrant must conduct a public involvement and participation program that engages interested stakeholders in the development and implementation of the SWMP control measures.” The public does not directly implement an MS4 permittee’s stormwater management plan.

DEQ Response

The goal of the public involvement and participation program is to allow the public (or residents and local entities) a role in developing, implementing, and reviewing a permit registrant’s SWMP, SWMP document and annual reports. This enables members of a community the opportunity to provide input, to review the activities being implemented and the progress being made by each permit registrant.

These conditions are in accordance with the Remand Rule:

⁶⁸ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89343.

The permit must identify the minimum elements and require implementation of a public involvement/participation program that complies with State, Tribal, and local public notice requirements. ...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.⁶⁹

DEQ did not delete the specific permit language identified by the commenters.

DEQ did modify the permit language in the final permit to clarify the permit conditions and to align closer with the Remand Rule.

3.3.2.1 Implementation Dates

148. Comment from City of Springfield

There is a conflict in the date and in the Schedule. The Schedule (Schedule A.3.b.ii-vi) should only go to “iii” since “iv” is Tracking and Assessment which requires annual reporting starting the first year and due Sept 30 2019 not by the “no later than date” of Jan. 1 2020. Change the Schedule to not include “iv”.

DEQ Response

DEQ disagrees with this comment. The requirements in Schedule A.3.b.i address the implementation date for full compliance with the Public Education and Outreach program. This implementation date does not invalidate any of the Public Education and Outreach program’s components intermediate implementation dates, any ongoing requirements to submit an annual report or the ongoing requirement for permit registrants to ensure that their staff is properly educated and trained.

3.3.2.2 Publicly Accessible Website

149. Comment from Oregon Association of Clean Water Agencies

The web site posting requirements in Schedule A.3.b.ii.—MS4 permittees are local government agencies that are in the business of providing transparent and accessible public information. That said, the requirements of this section to post every piece of information in every stage of development related to the MS4’s permit and Stormwater Management Program on the web site would not only be excessively overburdensome, it would result in unproductive time and energy spent by both staff and the public sorting through too much information. In particular, A.3.b.ii.(B) “Any reports, plans, strategies, or documents generated by a permit registrant in compliance with this permit, in draft form when the permit registrant is soliciting input from the public, and in final form when the document is completed” is excessive and should be significantly modified. DEQ staff may not be aware of the time and resources that go into preparation of web site-ready materials and web site maintenance, including adding information related to ADA requirements and necessary disclaimers. MS4 permittees are well-equipped to determine which documents and at what stage of development they should be posted.

...This section requires website updates at least annually, “and/or as new material is available.” Subsection (B) goes on to require posting of “Any reports, plans, strategies, or documents generated by a permit registrant in compliance with this permit, in draft form when the permit registrant is soliciting input from the public, and in final form when the document is completed.” This broad sweeping, all-encompassing requirement would take substantial resources just to meet the administrative burden of ensuring adequate postings to agencies websites, and in many cases, would be impracticable to meet. Moreover, this requirement is too broad and not well-defined. Local governments understand how and

⁶⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89350.

when to provide information to the public, both for comment and for final documentation. This language should be replaced with language that is simple and straightforward.

REQUEST: Alternative language recommendation: Replace “The website must be updated at least annually, prior to the submittal of annual report, and/or as new material is available” with “The website must be maintained by the permit registrant to provide current information, and be updated at least annually.” Replace subsection (B) with “draft documents issued for public comment, and final reports, plans and other official SWMP policy documents.”

150. Comment from City of Albany

When would the permit registrant be required to solicit input from the public?... Posting any and all documents related to this permit is unnecessary, burdensome and inappropriate.

151. Comment from City of Eugene

The proposed permit includes requirements which are administratively burdensome with no correlation to protection or improvement in water quality. Examples include: the annual public education evaluation requirement in Schedule A.3.a.vi.; and the requirement to post "any reports, plans, strategies or documents requirement by the permit" on a publicly accessible website in draft and final form in Schedule A.3.b.ii. The administrative requirements should be streamlined, and the jurisdictions' stormwater program resources should be focused on activities that are directly related to water quality protection and improvement.

152. Comment from City of Gresham

Only reports or documents draft or final would be posted for public comment. Deleted "plans and strategies"

153. Comment from City of Keizer

Any reports, plans, strategies, or documents generated by a permit registrant in compliance with this permit, in draft for when the permit registrant is soliciting input from the public, and in final form when the document is completed.

Recommendation: Please consider changing this section to specify the permit registrant is only required to post materials that are applicable to requirements in the permit. As written, this section would require a tremendous amount of work to manage because 'reports, plans, strategies, or documents' represents a tremendous amount of material.

[Schedule A.3.b.ii.B] As written, language is overly prescriptive and time consuming.

DEQ Response

DEQ modified the permit language associated with these conditions to the following:

The permit registrant must maintain and promote at least one publicly accessible website with information on the permit registrant's SWMP implementation, contact information, and educational materials. The website must be maintained to provide current information, and be updated at least annually. The permit registrant's website must incorporate the following...

Draft documents issued for public comment, and final reports, plans and other official SWMP policy documents.

3.3.2.3 Stewardship Opportunity

154. Comment from ACWA

Having and using a Citizen Advisory Committee should be added to the list of eligible stewardship opportunities.

155. Comment from Clackamas County Water Environment Services

Having and using a Citizen Advisory Committee should be added to the list (in the Phase 2 MS4 permit) of stewardship opportunities.

156. Comment from Marion County

Adopt-A-Road Litter Control should be included in the stewardship opportunity section of public involvement.

157. Comment from Polk County

This requirement does not appear to be a in CFR §§122.34(b)(2). We recommend deleting this section. This is confusing because the implantation date is Jan 1, 2020, but this implies we just have to do it once during the 5 year period.

158. Comment from City of Turner

Creating and managing a stewardship process, as well as a public participation program for the SWMP are both more added administrative time and cost.

DEQ Response

DEQ added Citizen Advisory Committee and Adopt-A-Road Litter Control as stewardship opportunities; and modified the implementation timeline for the public involvement and participation program.

DEQ determined that the stewardship opportunity requirement is implementable for all registrants. Several of the registrant (existing and new) are currently involved in at least one stewardship opportunity.

3.3.2.4 Tracking and Assessment

159. Comment from City of Keizer

This could easily take more time than the actual activity.

160. Comment from Rogue RiverKeeper

We support the development and maintenance of a SWMP Website under (A)(3)(b)(ii) and partner or create at least one stewardship opportunity over the five-year permit term under. Public involvement and participation could be strengthened in this section by following the model of Minnesota’s MS4 Phase II General Permit and including a requirement for at least one annual public meeting or other opportunity for public input. Additionally, this minimum control measure should include an assessment provision as demonstrated in A(3)(a)(vi) where permittees are required to identify and evaluate at least one stewardship activity or partnership. DEQ should strengthen this section by evaluating other MS4 Phase II General Permits to improve clear, specific, and measurable terms and conditions in the 2017 proposed permit, as required by the EPA.

DEQ Response

DEQ reviewed EPA’s *Compendium of MS4 Permitting Approaches, Part 1* and determined that the permit includes several of the permit provisions that have been determined to qualify as “clear, specific, and measurable” requirements. The approach in developing permit conditions is also consistent with the Remand Rule.^{70, 71}

⁷⁰ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

⁷¹ *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016).

3.3.3 Illicit Discharge Detection and Elimination

161. Comment from Oregon Association of Clean Water Agencies

This section states that: “The permit registrant must implement and enforce a program to detect and eliminate illicit discharges into the MS4, to the extent allowable by state laws.” DEQ’s requirements in this permit must be practicable for MS4 permittees to achieve. State laws may allow a scope of actions that is not practicable for local governments to implement.

REQUEST: The statement should be revised as follows: “The permit registrant must...to the practicable extent allowable by state laws.”

DEQ Response

As discussed in the PER, DEQ recognizes that permit registrants may have different types of legal authorities. The SWMP requirements may be modified as necessary to accommodate the different legal authorities that may be taken into account in developing the scope of program elements.

From the PER:

Since permit registrants may have different types of legal authority, each permit registrant must summarize their legal authorities to control pollutants in their MS4 in their SWMP Document as required Schedule A.2.c. The SWMP Document must describe how they impose their requirements, and/or use cooperative agreements with neighboring jurisdictions, to implement the required stormwater control measures based on their unique legal powers under state law.

Also see Section 3.2.5 for additional discussion SWMP Resources.

3.3.3.1 Implementation Dates

162. Comment from City of Springfield

There is a conflict in the Schedule (Schedule A.3.c.ii.-viii.). The Schedule should only go to “vi” since “vii is Training and Education and “viii” is Tracking and Assessment which both require annual implementation and reporting starting the first year, not “by date” of Jan 1 2022.

DEQ Response

DEQ disagrees with this comment. The requirements in Schedule A.3.c.i address the implementation date for full compliance with the Illicit Discharge Detection and Elimination program. This implementation date does not invalidate any of the Illicit Discharge Detection and Elimination program’s components intermediate implementation dates, any ongoing requirements to submit an annual report or the ongoing requirement for permit registrants to ensure that their staff is properly educated and trained.

3.3.3.2 MS4 Map

163. Comment from Oregon Association of Clean Water Agencies

These sections set out mapping requirements that are differentiated by the terms “Large Communities” (defined as having >10,000 population and “Small Communities” (cities defined as having <10,000 population and counties that are sole permittees). The differentiation between the requirements relates primarily to whether the maps must be maintained electronically or in printed format. The problem here is that the distinguishing factor, i.e. > or < 10,000 population, has nothing to do with whether or not the permittee has the infrastructure and resources (including professional GIS staff) to maintain an electronically based mapping system. It is not likely that local governments without the GIS infrastructure and staffing can acquire the technology and staffing, and populate the system just to support a stormwater program need within the permit period. On the other hand, those local government agencies with the

technology and staffing obviously will elect to maintain the required mapping electronically. This is a clear example of a requirement that is unnecessary, and that should be generalized enough that the MS4 permittee can determine practicable methods for developing and maintaining appropriate mapping to achieve the IDDE program objectives.

REQUEST: This section should be collapsed into one description of the required data and mapping information, and should provide the flexibility to maintain it in the form that is readily available to the permittee.

164. Comment from City of Gresham

Public and private system GPS mapping is a critical tool to implementing many/most BMPs within a SWMP. Long term asset management is an important financial investment for a municipality, so understanding the pipe/outfall size, material, condition, age, etc. of the variety of stormwater system assets would be beneficial to include in this process.

Recommendation: Permittees should be given an entire permit term or longer (pending identified available resources/rates) to update its digital data and offered an option for requesting an additional timeframe to complete data collection of elements that are complex and/or require additional resources. Using digital technology for system mapping and data documentation will yield better results over time than allowing paper maps, but permittees without resources and staffing should be allowed time to establish a path towards obtaining digital approaches and the staff with the skills to manage them.

... Suggest asking permittees without GIS systems in place to self-identify, describe their process for mapping their system and establish a timeframe for the future transition to a digital format.

165. Comment from City of Springfield

It is unclear as to what is meant by mapping standards; is this GIS mapping Standards or a facility owner/operator's mapping standard? Define mapping standards in the definitions to provide clear language.

DEQ is attempting to require that "...all available GIS data layers must be shared with DEQ upon request". It is unlikely the Permittee will be able to hand over all "data Layers" because the permittee most likely is not the owners of all the layers. There maybe share rights and proprietary information that is beyond the control of the Permittee. DEQ should revise the draft permit language to ask for the map, but not the data layer(s).

DEQ Response

Please see comment 1.10 for discussion on the Tiered structure of the (Large Communities vs. Small Communities).

DEQ recognizes the potential difficulties for some permit registrants to upgrade their MS4 map to a GIS format within the permit term; therefore, the permit was modified. The final permit requires that all permit registrants maintain a MS4 map. The specific requirement for Large Communities to maintain a GIS format was removed.

166. Comment from Polk County

Does digital inventory mean a spreadsheet?

This sentence does not make sense.

Depending on their available resources, permit registrants must utilize use one of techniques identified in the permit's on-site and septic system investigation requirements.

DEQ Response

A digital inventory can be maintained as a spreadsheet, or other dataset list.

3.3.3.2 Septic System Investigations and On-site Investigations

167. Comment from City of Albany

Without this additional language “*the permit registrant must maintain an inventory of all the known major outfall locations managed by the permit registrant*”, this requirement could be interpreted to mean we must map every downspout drain, foundation drain, private ditch or other stormwater outfall within our geographic boundary which is far too excessive.

168. Comment from City of Springfield

Unclear language - The requirement states that “all known outfalls” must be mapped.

At the Dec 7 2017 workshop the DEQ stated that the intent is “all outfalls that the MS4 owns and/or operates”. In the PER it states: “all outfalls that it owns/operates”. Additionally, this Permit language as drafted is also in conflict with the definition in Sch. D. The draft permit language should be changed to state that “all outfalls that the MS4 owns and/or operates” must be mapped as they become known or identified.

DEQ Response

DEQ had modified the permit language to the following:

...all the known outfall locations, owned or operated by the permit registrant.

DEQ does not agree with that statement that the requirement could be “*interpreted to mean we must map every downspout drain, foundation drain, private ditch or other stormwater outfall.*” This permit requirement is constant with the “clear, specific, and measurable” requirements provided EPA’s *Compendium of MS4 Permitting Approaches* and consistent with other MS4 permit in Oregon.⁷²

3.3.3.2 Septic System Investigations and On-site Investigations (continued)

169. Comment from City of Albany

Ongoing dry weather flows should not be required to be shown on a base stormwater system map.

170. Comment from City of Keizer

Add language to clarify those are not Private outfalls, but outfalls owned/operated by the permit registrant.

171. Comment from City of Springfield

Unclear language –“ ...identify the location and characteristics of any MS4 outfalls with ongoing dry weather flows”.

This would require a Dry Weather Assessment which Large Communities are not required to do, according to Page 17, A.3.vi.(B) of this draft permit. DEQ should change the proposed wording in the draft permit to reflect that Large Communities are not required to do dry weather assessments or screening, but should map their location as they become known or are identified.

⁷² *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

DEQ Response

Based on the comments received, DEQ modified the permit language to require one mapping requirement for all permit registrants (i.e., removing the Large and Small Communities separate conditions). The final permit retains the language for all registrants to identify the location of ongoing dry weather flows, this aligns with the final permit language in the *Dry Weather Screening Program*, which replaces the *System Evaluation for Chronic Illicit Discharges* requirements.

3.3.2.1 Septic System Investigations and On-site Investigations (continued)

172. Comment from Oregon Association of Clean Water Agencies

This section requires mapping related to septic system inspections, discharges, and narrative summaries of illicit discharges.

Septic system regulation is a DEQ program and DEQ has the authority to enforce its own regulations. DEQ may only delegate certain of its duties (including permitting and enforcement) under the statute to municipalities by agreement. ORS 454.725(1). Unless DEQ has such an agreement with a Phase II community, the community does not have the authority to inspect and enforce septic system regulations, nor can DEQ require it.

Therefore, this requirement cannot be met by the permittees and must be deleted from the permit—it is not implementable.

REQUEST: Alternative language recommendation: The locations of known septic system illicit discharges as provided to the MS4 permittee by DEQ or DEQ’s delegated agent in implementing state septic system programs.

173. Comment from City of Albany

Investigation locations cannot and should not be shown on the basic system map.

Albany, and many other permit registrants, do not have the authority or capacity to investigate private septic systems. Any requirements related to septic systems should be rewritten to only apply to jurisdictions with authority to manage septic systems.

... Investigation locations should not be shown on the basic system map – separate map might be OK. Narrative summaries do not belong on any map.

174. Comment from City of Springfield

Septic system regulation is a program run by DEQ; DEQ has the authority to enforce its own regulations and policies. DEQ is illegally attempting to delegate its authority for regulation and inspection (including permitting and enforcement) in this draft permit. DEQ is only permitted to delegate program authority under statute by agreement (ORS 454.725(1)). DEQ does not have an agreement with the City of Springfield regarding septic system regulation and inspection, and therefore may not delegate authority of its septic system program (including permitting, inspection and enforcement) under the MS4 Phase II General Stormwater Permit

This section of the permit is administratively burdensome with no apparent water quality benefit. As discussed with DEQ on numerous occasions and as acknowledged by the Department, the City has limited resources for performing additional administratively burdensome requirements. The DEQ is asking for 3 things to be mapped:

4. Portion inspected using a septic system investigation
5. Location of septic discharges
6. Narrative summary of discharges

This is very heavy for a mapping exercise and unclear as to how it should be mapped. The Portion inspected for septic systems would be very time consuming for areas within the MS4 that are not served by public infrastructure systems and are known to be on septic. The “location of septic discharges identified” is appropriate, but to map “a narrative summary of the chronic or continuous illicit discharges discovered”, is not; a “summary” is not a mapping feature.

DEQ should provide clarity regarding how and why to map “portion inspected using a septic system investigation” is appropriate. What is this used for? To calculate the requirements of “System evaluation” page 16 and 17? If so then it should be stated. Additionally, DEQ needs to be clear on what is being measured so the MS4 operator can map it.

DEQ should remove A.3.c.ii(D)(3) “Narrative summary of discharges” from the draft permit.

...Administratively burdensome with no water quality benefit – see comment above under Septic system Investigations. This would be a duplicate mapping effort if the permittee did both Septic System Investigations and followed up with an On-site Investigation.

DEQ Response

Based on comments received, DEQ removed the septic system investigation and on-site investigation requirements from the final permit. The final permit maintains the following requirement that the permit registrant’s ordinance or other regulatory mechanism prohibit the following:

Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4.

The final permit also added the requirement that chronic illicit discharges must be included on the MS4 map.

3.3.3.3 Ordinance and/or Other Regulatory Mechanisms

175. Comment from Oregon Association of Clean Water Agencies

The draft permit language is unclear and could easily be mis-interpreted. It should be modified as follows: “Discharges of runoff from material storage areas ~~containing~~, which contain chemicals, fuels, grease, oil, or other hazardous materials;”

176. Comment from City of Albany

The PER on page 25 states that the legal mechanism does not need to cite each individual prohibition.

177. Comment from City of Gresham

The industry term is Erosion and Sediment Control Plan. EPSC Plan--Not Construction Site Plan. The latter connotes a document that contains all building, plumbing, drainage, utilities, public works standards, easements, roads, etc. Not an appropriate term for this permit.

178. Comment from City of Keizer

[E] This activity would be impossible to enforce. As written this language basically prohibits individual residential or charity car washing which is an allowed discharge... If language is kept, this word should perhaps be “or” rather than “and”.

[F] This sentence needs to be rewritten to indicate that discharges OF runoff containing chemicals, fuels, grease, oil, or other hazardous material is prohibited from material storage areas.

179. Comment from City of Portland

Item (F) states that “Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials” should be considered a prohibited discharge under the permittee’s regulatory mechanism. This is problematic because it describes stormwater runoff even in cases where those areas are sufficiently controlled or covered to prevent contamination of the runoff. Please modify

the statement to read “Discharges of chemicals, fuels, grease, oil, hazardous materials or runoff contaminated with product from material storage areas.”

180. Comment from Polk County

In the evaluation report, it says we do "...not need to cite each individual prohibition, provided that the permit registrant's legal mechanism would or could address such discharges." (pg 25). Current draft permit language makes it seem like we need to list all of these discharges in our ordinance as a minimum.

181. Comment from City of Springfield

Unclear language – conflicts - By using the words “must” and “including”, this language dictates exactly what has to be in the MS4’s IDDE ordinance, some of which is in conflict with Sch. A.1.c. Allowable Non-Stormwater Discharges.

(B) wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;

(D) washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing; and

(E) washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas - including parking lots, streets...

Would be in conflict with Sch A.3.c.iii Allowable Non-Stormwater Discharges:

(S) Street and pavement wash waters... which states street and pavement washing is allowed.

Additionally, change “including” to “such as” to provide better language to meet the intention of the permit language according to the PER.

182. Comment from Clackamas County Water Environment Services

The draft lists “(F) Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil or other hazardous materials;”. This wording could be read to preclude any runoff from such outside storage area even if no contaminants are being discharged in the runoff.

Stormwater runoff is not an illicit discharge, so this should be removed from the permit or this should be changed to: “(F) Discharges containing chemicals, fuels, grease, oil or other hazardous materials from material storage areas;”

DEQ Response

DEQ modified the following permit language:

(E) Discharges of washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, or residential areas - including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc. - where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

(F) Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas;

DEQ reviewed condition A.3.c.iii.(B), (D), and (E) and determined that these conditions do not contradict the allowable non-stormwater discharges in Schedule A.1.c. Washwater from these sources have a significant likelihood of containing high concentrations of pollutants and DEQ determined it was necessary to include these prohibited illicit discharges.

Additionally, DEQ reviewed the local ordinances and regulatory mechanisms of regulated small MS4 in Oregon the existing ordinances or mechanisms can fully authorize these specific prohibitions. It is unnecessary for the ordinance or legal mechanism to cite the individual prohibitions listed in Schedule A.3.c.iii, provided that the permit registrant’s legal mechanism addresses such discharges, were they to be found discharging into

the MS4. This provision provides a minimum expectation for the local ordinance or legal mechanism but will not completely prohibit the breadth of possible non-stormwater discharges that could negatively impact water quality.

3.3.3.4 *Enforcement Procedures*

183. *Comment from City of Albany*

Every circumstance will be unique. Determining timelines for compliance in advance is not possible. Permittee should be required to adopt authority and then use its discretion to gain compliance in a timely manner.

DEQ Response

DEQ agrees that each enforcement action can be a unique situation. DEQ disagrees that the permit language does not allow the permit registrants flexibility when establishing their corrective actions and timelines. DEQ retained the following permit language as originally drafted:

The enforcement procedures must include timelines for compliance and, when formulating response procedures, must consider factors such as the amount of pollutant discharged, the type of pollutant discharge, and whether the discharge was intentional or accidental.

3.3.3.2 *Enforcement Procedures (continued)*

184. *Comment from City of Springfield*

Section states the escalating enforcement procedure must be submitted with the third Annual Report. It appears this should be with the fourth annual report since Table 1 and the MCM implementation dates both say 2022.

DEQ should change the draft permit language in A.3.c.iv to be the fourth annual report.

DEQ Response

DEQ clarified that the escalating enforcement procedure must be submitted with the third annual report for Existing Registrants and by June 30, 2023 for New Registrants:

For Existing Registrants, the escalating enforcement procedure must be submitted with the third Annual Report. New Registrants must submit the escalating enforcement procedure by June 30, 2023.

3.3.3.2 *Enforcement Procedures (continued)*

185. *Comment from Rogue Riverkeeper*

...the 2017 proposed permit also remove some language from the 2016 draft that weaken protections for clean water and are less clear, specific, and measurable. Under Schedule A(3)(c)(iv) Enforcement Procedures, the current permit removes the requirement to use the Center for Watershed Protection guidance manual for IDDE or an equivalent. Although the 2017 permit lists the required components of the enforcement and response procedure (e.g. timelines for compliance), it is less clear, specific, and measurable than requiring compliance with an established procedure under the Center for Watershed Protection guidance manual. The final permit remand rule specifically states that when a permit provision “does not provide further details on the minimum set of accepted practices, the requirement would not provide clear, specific, and measurable requirements...” Similarly, the 2017 proposed permit removes language included in the 2016 draft permit that outlines the required continuum of enforcement tools. In addition, the 2017 permit draft also removes the requirement from the 2016 permit to develop and

document in the SWMP Plan procedures for identifying illicit discharges, prioritizing investigation areas, and conducting field investigations. Removing this language makes the provisions under Schedule A(3)(c)(iv) less clear, specific, and measurable. The 2017 permit draft should be amended to require the use of specific enforcement procedures under the Center for Watershed Protection guidance manual or equivalent, specifically require the continuum of enforcement tools, and require permittees to document their procedures for illicit discharge investigations in the SWMP document.

DEQ Response

DEQ retained the language originally drafted. This condition provides permit registrants with the flexibility to implement ordinances and regulatory mechanisms that best utilize their resources, codes and specific concerns, while still being “clear, specific, and measurable.” DEQ recognizes that municipalities are organized differently, have different enforcement authority and processes, therefore, they should have the flexibility to develop an escalating enforcement procedure to achieve compliance.

3.3.3.5 Program to Detect and Eliminate Illicit Discharges

186. Comment from City of Albany

How is this [respond] defined?

This language is inconsistent with the initial paragraph in this section which requires response to all complaints “within two working days (on average).” How can we respond to and determine within 24 hours whether or not the incident is a threat if we have two working days to respond?

Timetable to eliminate illicit discharge will depend on context of situation. Impossible to have one timetable to eliminate illicit connections. Suggest removing reference “within 6 months”

Given the definition of illicit connections this language is not practicable or implementable.

187. Comment from City of Keizer

[Sch. A.3.c.v.D] What does summarized mean? A narrative description, a matrix?

188. Comment from City of Portland

Please amend sub-part (B).1. to the following: “Within 24 hours, respond to all illicit discharges, including spills, that impact or have the potential to impact the permit registrant’s MS4 and ~~which~~ are determined to constitute a threat to human health, welfare, or the environment.” As currently written, the requirement implies that the permittee must respond to releases for which they may have no jurisdiction, such as direct releases to waters of the state.

189. Comment from City of Springfield

Response to Complaints or Report, non-implementable; beyond MEP – this section states that upon confirmation of an illicit connection, the permit registrant must use the Enforcement Procedures in a documented effort to eliminate the illicit connection within 6 months. 6 months may not be enough time to eliminate a failed septic system and connect to a City system, especially when the septic system belongs to another authority.

DEQ would be holding the permittee responsible for the actions of another agency. MS4’s can only work in cooperation with other jurisdictions and within MEP.

If this section must remain in the permit, change language to be the end of the permit term; the permit language states that the MS4 has that long to be in compliance with the terms of the permit, or add a MEP statement.

DEQ Response

A response can include contacting the complainant, beginning an investigation, or other activities performed by the permit registrant that would be categorized as an action taken “in response” to a complaint.

DEQ modified the permit language addressing illicit discharges that constitute a threat to human health, welfare, or the environment. Modifications were made to provide clarity on the permit condition and as an acknowledgement that the different permit registrants have different legal powers under state law and the elimination of an illicit discharge may not be the sole responsibility of the permit registrant. Additionally, the permit language pertaining to the requirement that illicit discharges must be eliminated within 6 months of identification has been removed.

For discussion of permit requirements that are “to the maximum extent practicable” is discussed in Section 1.1. DEQ did not establish a new or unique definition of MEP, the final permit meets the MS4 permit standard.

DEQ determined that the three year timeline to eliminate chronic sewer discharges to receiving waters is appropriate given the health concerns associated with chronic, untreated sewage disposal via a stormwater conveyance system and the bacteria impairment on waters receiving MS4 discharge. This timeline provides permit registrants the opportunity to work such projects into their capital improvement or maintenance plans and ensures these types of projects are given priority during this planning process.

The Annual Report will include a section for the permit registrant to summarize their metrics associated with complaint response, source of illicit discharges, investigation timeline, outcome, and corrective actions and/or enforcement actions taken.

3.3.3.2 Program to Detect and Eliminate Illicit Discharges (continued)

190. Comment from Polk County

Delete the word "chronic". These requirements and things we must do annual, regardless of whether there is a chronic IDDE or not.

DEQ Response

Chronic Illicit Discharges are continuous illicit discharges resulting from sanitary or wastewater connections to an MS4, sanitary or /wastewater inflows into a MS4 and unpermitted industrial wastewater discharges to the MS4. These permit conditions are included to address the elimination of non-acute illicit discharges, therefore chronic is an appropriate qualifier for these illicit discharges and were not modified or removed.

3.3.3.5.1 Program to Detect and Eliminate Illicit Discharges - Clear, Specific, and Measureable

191. Comment from Rogue Riverkeeper

Rogue Riverkeeper generally supports the revisions made in the 2017 proposed permit to improve terms and conditions for the IDDE program that are clear, specific, and measureable. Specifically, we support the provisions under Schedule A(3)(c)(vi) System Evaluation for Chronic Illicit Discharges that require large communities to evaluate at least 20% of the MS4 by 2022 and 10% each year after that. Similarly, small communities are required to evaluate at least 40% of their MS4 outfalls by 2022 and 10% each year after that. These requirements are specific and enforceable and there are multiple examples from comparable MS4 Phase II General Permits with similar requirements. This represents an improvement from the 2016 draft permit.

...Finally, this section could be strengthened by including more clear, specific, and measureable requirements for IDDE following the models of other MS4 Phase II General Permits. For example, both Arkansas and Georgia’s Phase II General Permits require all outfalls to be screened for dry weather discharges within the five-year permit term. The Massachusetts Phase II General Permit requires outfalls

to be screened within three years for dry weather flows and provides a specific list of screening requirements, requirements for sampling when dry weather flows are discovered, and the minimum analysis for each sample. The 2017 proposed permit could be strengthened by incorporating these clear, specific, and measurable requirements from other Phase II General Permits. This minimum control measure should include an assessment provision as demonstrated in A(3)(a)(vi) where permittees are required to identify and evaluate at least one key activity in the minimum control measure. DEQ should strengthen this section by evaluating other MS4 Phase II General Permits to improve clear, specific, and measurable terms and conditions in the 2017 proposed permit, as required by the EPA.

DEQ Response

DEQ reviewed the MS4 Phase II general permits for Arkansas and Georgia, and EPA’s *Compendium of MS4 Permitting Approaches* and determined that the permit includes several of the permit provisions that have been determined to qualify as “clear, specific, and measurable” requirements. The approach in developing permit conditions is also consistent with the Remand Rule.^{73, 74}

DEQ acknowledges that the removal of the permit condition for Large Communities to investigate their MS4 for chronic illicit discharges may be less prescriptive, this is address by the increased the Dry Weather Screening requirements. The goal is to have the permit registrants in a position to evaluate all of their outfalls each permit term.

3.3.3.5.2 Program to Detect and Eliminate Illicit Discharges – Use of Center for Watershed Protection Manual

192. Comment from Oregon Association of Clean Water Agencies

DEQ exceeds federal rules and guidelines in multiple parts of the permit by requiring the use of the Center for Watershed Protection’s (CWP) guidelines and manuals. CWP is a private, non-profit organization; it is not a government agency and does not have rulemaking authority to modify the definition of MEP. This is an impermissible permit condition and is well outside the scope of the MEP standard.

REQUEST: The definitions of “field screening” at Schedule D.2.p., “on-site investigation” at Schedule D.2.gg., and “septic system investigation” at Schedule D.2.nn must be eliminated or replaced by a definition established by an appropriate regulatory agency.

193. Comment from City of Albany

Although not specified in the text of the permit, an on-site investigation is defined in the definitions section of the permit as an investigation using the procedures written by the Center for Watershed Protection. Thus, the CWP methodology is de facto required to be used by permit registrants, limiting the local jurisdiction’s ability to use methods most practicable for its circumstances.

As previously stated, we do not have the authority or capacity to investigate private septic systems. This authority lies with the DEQ or, if delegated, with the local county health departments.

194. Comment from Oregon City

DEQ also exceeds federal rules and guidelines in multiple parts of the permit by *requiring* use of the Center for Watershed Protection’s (CWP) guidelines and manuals. CWP is a private, non-profit organization; it is not a government agency and does not have rulemaking authority to modify the definition of MEP.

⁷³ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

⁷⁴ *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016).

CWP states in its 2004 Illicit Discharge Detection and Elimination guidance that the document “does not necessarily reflect the views of the [EPA], and no official endorsement should be inferred.” While it might be helpful for Phase II communities to use CWP’s IDDE document for its intended purpose (e.g., as guidance), the document should not be used to dictate permit conditions, particularly when the conditions are buried in the “definitions” section of the permit. These references to CWP’s guidance are impermissible permit conditions and are well outside the scope of the MEP standard.

DEQ Response

DEQ modified the permit and removed the permit language associated with the Center for Watershed Protection guidance and manual.

3.3.3.6 System Evaluation for Chronic Illicit Discharges

195. Comment from Oregon Association of Clean Water Agencies

Under (A) System Evaluation for Large Communities—Communities >10,000 in population and counties that are co-permittees--must evaluate at least 20% of the MS4 measured in linear feet by 2022, and then 10% each year for chronic illicit discharges, through 1. “On-site Investigation” and 2. Septic System Investigation.

There are several reasons this section of the draft permit is problematic and impracticable for MS4 Phase II permittees. First, it should be noted that the requirement for inspecting 20% of the linear feet of the MS4 within three years and 10% per year thereafter (A.3.c.vi.(A)1.) extends well beyond the requirements of the MS4 Phase I communities, which are currently required to conduct dry-weather inspection activities at priority downstream/outfall locations. Inspecting the linear system is far more time and resource intensive than conducting prioritized spot inspections at downstream points. Moreover, this requirement would result in both inefficient/ineffective use of public resources inspecting areas that pose little to no risk of containing illicit discharges just to implement a linear percentage requirement. For example, depending on the type of inspection (smoke testing or closed-circuit television), cost estimates are as high as \$25,000 per mile inspected. For closed-circuit television inspections, the lines must be cleaned prior to inspection. Base cleaning and closed-circuit television inspections cost about \$2.00 per foot, with additional charges of up to \$0.65 for heavy cleaning and landfill disposal fees. Simple math demonstrates that such a program would be impracticable for most if not all of the MS4 Phase II communities. Not only would that result in gross waste of public stormwater funds, it would also likely result in the lack of identification of actual chronic illicit discharges, which could otherwise be identified and addressed with a risk-based prioritized schedule of inspections and investigations, which the MS4 operator is best equipped to determine. The end result of this requirement would be misspent funds and lack of targeted water quality benefits.

REQUEST: The draft permit language in Schedule A.3.c.vi.(A) and (B) should be replaced by requirements to develop and implement system evaluations based on dry weather screening that is prioritized to focus on known and highest probability areas for illicit discharges first (as is the case in the Phase I individual permits). A targeted, prioritized program that can identify problem areas and inform follow-up activities for discharge elimination, combined with required development of Standard Operating Procedures, would be more effective and efficient, and would produce earlier water quality benefits than the system-wide evaluations contemplated in the draft permits. The level of programmatic activity required in the permit should reflect MEP for differing community conditions, which could be accomplished by issuing three or four general permits with differing requirements.

196. Comment form City of Gresham

A DEQ mandated inspection of 20% of the linear feet of the system is arbitrary and ignores the MEP standard. If Gresham were to conduct inspections of 100% of its system within a 5-year period, this would cost over \$4.5M and represent more than a 200% increase in the current allocation. This further

exemplifies our position that the creation of an overall SWMP is part of an overall strategy which evaluates the cost/benefit of each BMP and results in optimizing the benchmarks used within the plan to demonstrate compliance.

Recommendation: Permittees should be allowed to determine what portion of their system they CCTV inspect. Factors that a community will consider include the specific age of portion of their system, plumbing codes and pipe materials. All play a role in whether illicit connections are probable. Moreover, illicit discharges are very intermittent and notoriously difficult to see when scoping a pipe, so this method is not as advantageous as compared to the cost as DEQ obviously believes. Conducting CCTV inspections of all completed construction projects in growing communities may yield greater returns. Permittees should be required to analyze this option when developing its SWMP.

...DEQ imposing an arbitrary metric for system inspection without full review of a developed SWMP and consideration of the many other tasks that DEQ is asking the permittee to undertake simultaneously is a far overreach of from the Clean Water Act MEP standard. Gresham would be unable to comply with this standard given all its other O&M procedures. Moreover, based on Gresham's 23 year implementation of its program, spending so many resources on this activity would not yield beneficial returns. Therefore, some flexibility on establishing performance benchmarks should be afforded to the permittee. If DEQ reviews a permittees SWMP, staffing, rates, and finances and determines that a particular BMP is inadequate, that is an appropriate use of DEQ's authority. Rather, DEQ should request an analysis of the permittee system (age, material type, zoning) so that priority inspection areas can be identified for EACH permit cycle. Permittees should be able to determine what percentage of their system to inspect as a balance of all other priority activities. As noted above, if DEQ finds the analysis as inadequate based on its assessment of the overall approach to pollution reduction, that is an appropriate use of DEQ's authority. The concept of a community prioritizing based on factors is described in the EPA MS4 Improvement Guide.

197. Comment from City of Gresham

Suggest that DEQ allow permittees to conduct an analysis of the cost benefit of performing rigorous IDDE efforts in their community. If the permittee demonstrates that funding is better spent on another BMP, in that IDDE does not result in finding illicit discharges that some scaling of the activity per permitted in the future with approval from DEQ such that a permit modification is not needed.

198. Comment from City of Keizer

Consider rewriting to “evaluate at least 20% of the piped MS4, measured in linear feet”

The two techniques only apply in specific instances (areas of uncharacterized illicit discharge, and low density residential/no sewer connection). But if an MS4 doesn't have 100% in one or the other of the ‘two system evaluation techniques’, will these percentages still work out? E.g. if there is only 30% of an MS4 in one of these two areas, how to comply?

By deleting this language, the previous section can now make sense (since all MS4 footage would be ‘in the pool’ to investigate for illicit discharges).

If an illicit discharge is identified (and has been isolated to a specific section of storm drain), an on-site investigation must be performed to find the specific source of the discharge

199. Comment from City of Portland

The requirement to evaluate at least 20% of the MS4 as measured in linear feet does not comport with the two evaluation methods described in the permit (on-site investigations and septic system investigations). On-site investigations are triggered only after an illicit discharge has been identified at a specific property and septic systems are not physically connected to the MS4 so it's unclear how a permittee is supposed to measure these activities in terms of linear feet. Also, if the source has already been identified then the permittee can and should require the responsible party to perform the needed investigations and corrective

actions. Please remove the 20% evaluation requirement or modify it to allow permittees to determine what is practicable for their respective MS4.

Further, the required investigation techniques (line TV'ing, smoke testing, etc) are incredibly costly and resource-intensive, particularly for large communities that have a more extensive storm conveyance network. These techniques are often not necessary to confirm a chronic illicit discharge or connection. Over the years, Portland has identified most illicit connections through field observations, site inspections and desktop property research. Please change the language in this section to "The on-site investigation ~~must~~ may use one of the following techniques...or other effective methods as identified by the registrant."

200. Comment from Rogue Valley Sewer Services

System evaluation is to be measured in linear feet, including the areas in which septic systems are located? It does not make sense to measure areas with septic systems in linear feet since they are not connected to the public stormwater system.

201. Comment from Clackamas County Water Environment Services

Specify in the permit (or PER) which technologies and/or methodologies can be used to comply with the linear feet evaluation requirement. Do permittees need to run a TV camera down 1000s of feet of storm sewer system piping? The requirements are different for Large Communities (LC) and Small Communities (SC)...the LCs must "...evaluate at least 20% of the MS4, measured in linear feet..." for illicit discharges while the SCs "...must conduct dry weather screening of at least 40% of their MS4 outfalls..."

202. Comment from City of Springfield

Unclear language – not implementable – Requires Large Communities to evaluate at least 20% of the MS4, measured in linear feet, no later than Jan.1, 2022, and an additional 10% each year thereafter (on average) for chronic illicit discharges. The two system evaluation techniques included in the permit are Septic System Investigations and On-site Investigations. There are many concerns with this Section:

How do you measure linear feet for septic system investigation? Homeowner surveys and surface conditions are not measured in linear feet; they are measured by a location.

Additionally, septic systems are private so there is no MS4 footage to measure.

As defined in Sch. D: MS4 is defined in 40 CFR §122.26(b) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains).

An MS4 is not limited to a piped or open channel system; so what is measured?

Springfield has 206 miles piped storm system and 30 miles of open channel. If only these numbers were used to define the "MS4" that would mean Springfield would need to do 47.2 miles in 3 years (15.8 miles per yr). That is an impossible metric to meet and thus not implementable.

At the workshop on Dec 7, 2017 the DEQ offered no rational or explanation as to why and how septic system investigation, at drafted, would be implemented and only stated that in their opinion it could be done; which was not an appropriate response.

... DEQ should address and clarify the following items in the draft permit:

What is measured to get the MS4 total?

What is measured when performing the task(s) to get the 20% of the total?

Septic system investigation is not implementable as linear footage.

Septic "drive by" (windshield survey) serves no purpose.

Remove ineffective investigation techniques such as smoke testing.

Do not prescribe how an MS4 manages and inspects its infrastructure.

...Impracticable - administratively burdensome with no apparent water quality benefit - The on-site investigation must use one of the following techniques (when searching for chronic or continuous illicit discharges), closed circuit TV equipment, dye, smoke testing and/or emerging on-site investigation techniques. The DEQ should not be telling an MS4 how to manage its infrastructure, including how to investigate and inspect. Smoke testing is not conducted on storm systems; there would be smoke everywhere.

Typically older concrete public storm infrastructure used an “open joint” or un-gasketed joint installation process to allow ground water to enter the piped storm system.

Why is grab sampling not allowed or included? A grab sample is one of the best ways to determine if a discharge is septic.

What is the point of a windshield survey for a septic system investigation? What information is gained by doing a “drive by”?

DEQ Response

Please see Section 1.10, regarding comments pertaining to the tiered structure of the permit.

In response to comments received, DEQ removed the System Evaluation for Chronic Illicit Discharges and replaced the section with a Dry Weather Screening Program for all permit registrants. The System Evaluation for Chronic Illicit Discharges section included the removal of the On-site Investigation and Septic System Investigation in the proposed permit.

3.3.3.6.1 System Evaluation for Chronic Illicit Discharges (continued)

203. Comment from Oregon Association of Clean Water Agencies

Under (B) Dry Weather Outfall Screening Program for Small Communities, the cities with <10,000 in population and counties that are sole permittees would be subject to requirements that are similar to those the MS4 Phase I permittees have been undertaking--dry weather screening—for many years. To require communities this small to develop their entire stormwater program and permit requirements and to implement the requirement to conduct dry weather screening for 40% of their MS4 outfalls by 2022 is not practicable. Moreover, the Septic System Investigation requirements under subsection (B)1. are neither possible for communities to implement, nor legal for DEQ to impose, and therefore, must be eliminated.

REQUEST: The draft permit language in Schedule A.3.c.vi.(A) and (B) should be replaced by requirements to develop and implement system evaluations based on dry weather screening that is prioritized to focus on known and highest probability areas for illicit discharges first (as is the case in the Phase I individual permits). A targeted, prioritized program that can identify problem areas and inform follow-up activities for discharge elimination, combined with required development of Standard Operating Procedures, would be more effective and efficient, and would produce earlier water quality benefits than the system-wide evaluations contemplated in the draft permits. The level of programmatic activity required in the permit should reflect MEP for differing community conditions, which could be accomplished by issuing three or four general permits with differing requirements.

DEQ Response

The *System Evaluation for Chronic Illicit Discharges* conditions were removed from the final permit, to align all regulated MS4s in the state. The final permit requires all registrant to develop and implement a *Dry Weather Screening Program*.

Regarding the implementation timeline for New Registrants, the permit allows New Registrants up to 4½ years to develop a dry weather screening. See Section 3.3, *Stormwater Management Program Controls Measures* for further discussion.

3.3.3.6.2 System Evaluation for Chronic Illicit Discharges (continued)

204. Comment from Polk County

Not per year, but 40% by Jan. 1 2022.

[PER] Small Communities are required to conduct dry weather outfall identification and screening to identify nonstormwater flows of at least 40% outfalls per year, and on average 10% each year thereafter.

205. Comment from City of Springfield

Unclear language and over burdensome - Small Communities must conduct dry weather screening of at least 40% of their outfalls and If the permit coverage area includes either lower density residential areas or if portions of the coverage area are known not to be served by sanitary sewers septic system, the permit registrant must include septic system investigations of at least 20%. The way this reads, the Small Communities are doing potentially more than the Large.

Additionally, this could cause problems for permittees that have IGA's for NPDES Services if one is a Large Community and the other is a Small. A large community may not have the additional resources to continue the agreement(s) leaving the activity to the small MS4 who entered into the agreement in the first place due to lack of resources. The large community would most likely be unable to implement for both communities due to the high percentage per year requirements.

The same concerns as stated in the septic investigation section pertain here as well: What is measured to get the MS4 total? What is measured when performing the task(s) to get the 20% of the total? Septic system investigation is not implementable as linear footage.

In addition to the concerns and issues stated above, it is unreasonable to require an MS4 operator to spend resources doing random investigations of its jurisdiction when resources could be better spent on a focused program for their community that uses identified targeted pollutants, identified discharges, and priority locations. Requiring the MS4 operator to randomly investigate 20% of its system is not a focused effective IDDE program.

The DEQ should consider replacing the proposed draft requirement under A.3.c.vi.(A) and A.3.c.vi.(B) and drafting requirements that are more in line with the current MS4 Phase I community and provides an effective illicit discharge investigation program.

DEQ Response

As noted above, DEQ removed the System Evaluation for Chronic Illicit Discharges and replaced the section with a *Dry Weather Screening Program*. The *Dry Weather Screening Program* is a required condition for all permit registrants. This modification aligns all regulated MS4s in the state. Removal of the *System Evaluation for Chronic Illicit Discharges* section included the removal of the *On-site Investigation* and *Septic System Investigation* in the proposed permit.

DEQ acknowledges that the permit conditions in the Phase II permit may not be equivalent to those of the expired MS4 Phase II individual permits. This change is necessary as DEQ must develop permits that meet the regulations at the time a permit is issued. This permit was drafted to comply with the MS4 permit standard.

3.3.3.6.3 System Evaluation for Chronic Illicit Discharges – On-Site and Septic investigations

206. Comment from Oregon Association of Clean Water Agencies

...Septic System Investigation. There are several reasons this section of the draft permit is problematic and impracticable for MS4 Phase II permittees. First, it should be noted that the requirement for inspecting 20% of the linear feet of the MS4 within three years and 10% per year thereafter (A.3.c.vi.(A)1.) extends well beyond the requirements of the MS4 Phase I communities, which are currently required to conduct dry-weather inspection activities at priority downstream/outfall locations. Inspecting the linear system is far more time and resource intensive than conducting prioritized spot inspections at downstream points. Moreover, this requirement would result in both inefficient/ineffective use of public resources inspecting areas that pose little to no risk of containing illicit discharges just to implement a linear percentage requirement. For example, depending on the type of inspection (smoke testing or closed-circuit television), cost estimates are as high as \$25,000 per mile inspected. For closed-circuit television inspections, the lines must be cleaned prior to inspection. Base cleaning and closed-circuit television inspections cost about \$2.00 per foot, with additional charges of up to \$0.65 for heavy cleaning and landfill disposal fees. Simple math demonstrates that such a program would be impracticable for most if not all of the MS4 Phase II communities. Not only would that result in gross waste of public stormwater funds, it would also likely result in the lack of identification of actual chronic illicit discharges, which could otherwise be identified and addressed with a risk-based prioritized schedule of inspections and investigations, which the MS4 operator is best equipped to determine. The end result of this requirement would be misspent funds and lack of targeted water quality benefits.

The requirement to conduct septic system investigations (A.3.c.vi.(A)2.) is not permissible by state law and must be removed from the permit. ORS 454.635 places the responsibility for enforcing septic system requirements squarely on DEQ, while ORS 454.640 allows contract agents to take enforcement action. ORS 454.725 allows DEQ to enter into contracts with local governments to perform enforcement, inspections, permitting and the collection of fees. The statutes are implemented by DEQ in OAR Chapter 340 Division 71. OAR 340-071-0120 states:

“DEQ may enter agreements with local governmental units authorizing those units to become DEQ’s agents for permitting onsite systems, including receiving and processing applications, issuing permits, enforcing, and performing required inspections for onsite systems that do not require WPCF permits. DEQ retains those responsibilities for systems in nonagreement counties and for all systems that require WPCF permits.”

As a practical matter, in numerous areas of the state, DEQ is the entity administering the Onsite Wastewater Program meaning that they review, approve and issue permits for installation of onsite systems. The local jurisdictions are not involved in the process and have no record of where or when systems are installed. The draft permit language requires windshield surveys of properties with septic systems to initially assess system condition. Again, as a practical matter, you cannot determine information about a septic system by driving by in a car. This would be a wasteful and unproductive exercise.

Moreover, many systems are likely located on portions of the property not visible from public roads, meaning access to the property will be required to assess system condition. Local jurisdictions have limited legal authority, subject to Constitutional restrictions, to enter private property and conduct inspections of onsite systems. Even for counties that do have an agreement with the DEQ to administer the Onsite Wastewater Program, the requirement to conduct surface condition analysis is not possible. Unless a septic system is visibly surfacing onto the ground, into Waters of the State, or county ditches county employees cannot access a property without permission. While a jurisdiction could attempt to conduct a home owner survey through a mailed or a door-to-door survey, a surface condition analysis will not be possible without property owner permission or legal authority.

In addition, conducting a septic investigation including surface condition analysis is a significant cost to counties. In Marion County, for example, existing system evaluations, which include a surface assessment, can cost between \$435 -- \$730 dollars per site.

REQUEST: The draft permit language in Schedule A.3.c.vi.(A) and (B) should be replaced by requirements to develop and implement system evaluations based on dry weather screening that is prioritized to focus on known and highest probability areas for illicit discharges first (as is the case in the Phase I individual permits). A targeted, prioritized program that can identify problem areas and inform follow-up activities for discharge elimination, combined with required development of Standard Operating Procedures, would be more effective and efficient, and would produce earlier water quality benefits than the system-wide evaluations contemplated in the draft permits. The level of programmatic activity required in the permit should reflect MEP for differing community conditions, which could be accomplished by issuing three or four general permits with differing requirements.

207. *Comment from Cities of Millersburg, Oregon City, Springfield, Jackson County, Marion County, Clackamas County Water Environment Services*

Septic system regulation is a DEQ program and DEQ has the authority to enforce its own regulations. DEQ may only delegate certain of its duties (including permitting and enforcement) under the statute to municipalities by agreement. ORS 454.725(1). Unless DEQ has such an agreement with a Phase II community, the community does not have the authority to inspect septic systems nor to enforce septic system regulations. Moreover, DEQ is in the best position to enforce its own regulations.

[Clackamas County Water Environment Services] As currently drafted in permit Schedule A.3.c.vi., some form of septic system investigation is required for all permittees, regardless of whether an illicit discharge has been reported or is suspected of being present. Phase II MS4 communities should not be required to conduct septic system evaluations or investigations until or unless an illicit discharge has been reported, by a citizen, for example, or detected in the MS4 during dry weather or other screening processes.

[Jackson County] does not have such an agreement with DEQ. The permit should require no more than a windshield survey from the public right-of-way and that any areas of concern be referred to DEQ.

[Marion County] “Surface Condition Assessment” is not defined. Entering private property to assess a system that may or may not be failing is not currently possible without property owner permission. This would make the compliance with this requirement impossible. Septic programs run by County agents are typically permit fee driven. This requirement does not pay for itself and therefore would require additional external sources of funding to comply. The requirement should be removed.

[City of Millersburg] The on-site septic system investigation requirements of the draft permit require Millersburg employees to gain access to private property to determine whether private septic systems are in good working order. Millersburg, like most permit most permit registrants, does not have legal authority to enforce the DEQ septic system program. Jurisdiction over septic systems resides with Linn County.

[Oregon City] As currently drafted, some form of septic system investigation portion of the permit is required for all permittees, regardless of whether an IDDE condition has been detected. Schedule A.3.c.vi. Phase II MS4 communities should not be required to conduct septic system evaluations or investigations until or unless an illicit discharge condition has been detected in the MS4 during dry weather or other screening processes.

The [City of Springfield] should not be required to conduct septic system evaluations or investigations unless an illicit discharge condition has been detected during dry weather or other screening processes.

208. *Oral Comment from City of Albany*

The Department has also included requirements for permit registrants to conduct on-site investigations of private septic systems. Septic systems are regulated by DEQ and most permit registrants have no legal authority to regulate septic systems. This requirement must be removed from the draft permit.

209. Comment from City of Bend

The City does not have any known septic systems in its MS4 area. Regardless, the section would be improved by focusing on the storm sewer system as the point of inspection, and referral to the owner and appropriate regulatory agency if septic system illicit discharges are noted because cities are not the appropriate regulatory agency for onsite septic systems. Currently, if a septic system in the City of Bend is failing, Deschutes County Environmental Health makes them correct it. If the failure were in a manner that may go to a stormwater system, Deschutes County contacts the City and we both work together to pursue enforcement to correct the failure; and likewise if we were to notice septic sewage in a stormwater facility we contact Deschutes County. Windshield surveys can be used to examine open drainage ditches, but would not be effective for reviewing onsite systems, as many are located in the back yards and are underground so they are not easily visible. Requiring onsite septic systems is overreaching and overlapping regulation.

In regards to the homeowner surveys, is this a technique that the DEQ onsite group has used to obtain information, and to what degree of success have they been using it? If the technique has not already been used, why not? The risks of an onsite septic system affecting the stormwater system is very low and is already addressed by the DEQ onsite wastewater rules. Adjust the permit to remove administrative burdens without adequate water quality benefit.

210. Comment from City of Gresham

DEQ is heavily focused on septic tanks as a potential source of bacteria. However, most permittees will not have regulatory authority in the prescriptive ways mentioned within the permit.

Recommendation: Require permittees to estimate the number of septic tanks within their community as part of their SWMP development and describe their process for doing so. Potential better program options for permittees include: 1) conducting education and outreach to this population, if it is determined to be significant, related to proper care and maintenance 2) developing a program to incentivize maintenance 3) developing code requiring hook up to the permittee's wastewater system upon failure 4) developing a loan program to finance hook up.

Again, each program or BMP should be left to the permittee to be considered as part of an overall community strategy and the overall prioritization of various types of pollutant sources they are trying to control.

...We disagree that "windshield" surveys are a good use of staffing a resources. We do not believe that failing septic systems are highly likely to be seen from the public rights-of-way given that many will be located behind fences and that water ponding or smell will not be noticeable from a distance. It is unclear how surveys will be useful, especially if education of this population is already mandatory. Moreover, surface condition analysis is outside of the expertise and legal authority of most permittees and is in the legal authority and oversight from a program perspective of DEQ itself. If DEQ is delegating authority, it should seek appropriate legal channels to do so rather than circumventing this via permit language.

DEQ must use appropriate legal channels to delegate its authority. A more appropriate requirement is to require permittees to develop code or ordinances that require owners of failing septic systems within an established distance of the municipal system to connect rather than reinstall a septic system.

211. Comment from City of Millersburg

Millersburg does not have authority to inspect septic systems. They are under the County's jurisdiction. Also, "investigation" is not defined. Is this the "windshield" survey, homeowner survey, and/or surface condition analysis? Are "investigation" and "evaluation" the same thing in this paragraph?

212. Comment from Clean Water Services

This permit term requires the registrant to perform septic system investigations. Upon certain findings, the registrant must implement a detailed septic system inspection program covering the performance and function of the septic system. This provision is in conflict with Oregon law regarding the regulation of

septic systems, which places the responsibility for enforcing septic system requirements squarely on DEQ. DEQ may enter into contracts with local governments to perform enforcement, inspections, permitting and the collection of fees, but there is no provision allowing DEQ to transfer its responsibility by permit. Most counties in Oregon have agency agreements with DEQ (including Washington County). The requirement that MS4 permittees regulate septic systems is in conflict with Oregon law and should be deleted from the permit.

213. Comment from City of Portland

The requirement to undertake a septic system investigation is outside the scope of an MS4 permit and is often outside the scope of an MS4's jurisdictional authority. If the goal is to identify sources of bacteria to the MS4, such as failing sewer systems, there are a number of other tools that would be sufficient for this purpose. By explicitly requiring a septic system investigation, DEQ has prescribed a specific methodology that is inflexible, a potentially poor use of resources and that ignores other types of pollutant sources. This would be better suited as a discussion point in the PER.

214. Comment from City of Springfield

The DEQ should consider replacing the proposed draft requirement under A.3.c.vi.(A) and A.3.c.vi.(B) and drafting requirements that are more in line with the current MS4 Phase I community and provides an effective illicit discharge investigation program. [The following is] Summarized existing language for the Illicit discharge detection investigation program under the current Oregon MS4 Phase I Permit:

- Develop or identify pollutant parameter action levels that will be used as part of the field screening. The action levels will identify concentrations for identified pollutants that, if exceeded, will require further investigation, including laboratory sample analyses, to identify the source of the illicit discharge.
- Conduct annual dry-weather inspection activities during the term of the permit. By [DATE], the dry-weather inspection activities must include annual field screening of identified priority locations documented by the co-permittee. The dry-weather field screening activities must occur after an antecedent dry period of at least 72-hours. The dry-weather field screening activities must be documented and include:
 - General observations, including visual presence of flow, turbidity, oil sheen, trash, debris or scum...
 - Field Screening - If flow is observed, and the source is unknown, a field analysis must be conducted to determine the cause of the dry-weather flow. The field analysis must include sampling for pollutant parameters that are likely to be found based upon the suspected source of discharge...
 - Laboratory Analysis-If general observations and field screening indicate an illicit discharge and the presence of a suspected illicit discharge cannot be identified through other investigatory methods, the co-permittee must collect a water quality sample for laboratory analyses for ongoing discharges...

Suggested metrics for this type of an illicit discharge investigation program would be to identify or develop:

- pollutant parameter action levels [By date]
- priority locations [By date]
- documented process [By date]
- annual field screening [After date]

215. Comment from Rogue Valley Sewer Services

The permit requires registrants to perform septic system investigations to include windshield surveys, homeowner surveys and/or surface condition analysis. However, DEQ has the authority to regulate septic systems through ORS 454.635 and may enter into contracts with local governments to perform permitting and inspections through ORS 454.725. For registrants that do not have contracts with DEQ to manage a septic system program, they are not involved in the process and have no record of where or when systems are installed. As such, registrants do not have legal authority to enter private property to conduct inspections of onsite systems. The permit language requires windshield surveys of properties with septic systems to initially assess system condition, however many systems are located on portions of the property not visible from public roads, rendering this activity minimally useful. While a registrant could attempt to conduct a home owner survey through a mailed or a door-to-door survey, a surface condition analysis will not be possible without property owner permission or legal authority.

Suggested Change: DEQ cannot transfer its responsibility for septic system permitting to MS4 registrants through the MS4 permit as it is not a contract and is not voluntarily entered into. These requirements should be removed from the MS4 permit.

DEQ Response

As noted above, DEQ removed the System Evaluation for Chronic Illicit Discharges and replaced the section with a *Dry Weather Screening Program*. The *Dry Weather Screening Program* is a required condition for all permit registrants. This modification aligns all regulated MS4s in the state.

This permit condition was removed from the final permit.

3.3.3.6.4 System Evaluation for Chronic Illicit Discharges – On-Site and Septic investigations (continued)

216. Comment from City of Keizer

This will require the purchase of new equipment that many permit registrants will have to budget for.

[If the source tracking and field screening are unable to characterize the illicit discharge and/or source, the permit registrant must collect a water quality sample for laboratory analyses...]

This is an example of why permittees are REALLY concerned with the ‘contribute to’ language, especially if that includes any 303(d) or TMDL pollutant. If turbidity is above 10% of background in the downstream waterway, are we now reporting a violation? If the downstream waterway has a turbidity of 10NTUs (not visible to naked eye) and runoff is 12NTUs does that trigger the reporting required under the ‘contribute to an exceedence’?

E. coli; total phosphorus; turbidity; temperature

217. Comment from City of Springfield

Procedures for Investigating and Resolving Illicit Discharges. Unclear language – Date conflict – This section states the permittee must develop procedures for investigating and resolving illicit discharges and submit the procedures in the third Annual Report. It appears this should be the fourth annual report since Table 1 and the MCM implementation dates both say 2022. DEQ should change the language in A.3.c.vi.(C) to be the fourth annual report.

In the last sentence, where the DEQ dictates what parameters should be used to identify an illicit discharge, there is a lapsus. (...The permit registrant should use following as indicator constituents: pH;...). Need to add “the”.

DEQ Response

This permit condition was modified to align all regulated MS4s in the state. The final permit includes the following language:

If flow is observed, and the source is unknown, a field analysis must be conducted to determine the cause of the dry-weather flow. The field analysis must include sampling for pollutant parameters that are likely to be found based upon the suspected source of discharge or by other effective investigatory approaches or means to identify the source or cause of the suspected illicit discharge. Where appropriate, field screening pollutant parameter action levels identified by the permittee must be considered. Suspected sources of discharge include, but are not limited to, sanitary cross-connections or leaks, spills, seepage from storage containers, non-stormwater discharges or other residential, commercial, industrial or transportation-related activities.

Please see Section 3.1.2 for response to the “cause or contribute” permit language.

3.3.3.6.5 System Evaluation for Chronic Illicit Discharges – On-Site and Septic investigations (continued)

218. Comment from City of Millersburg

What if the source of dry weather flows cannot be determined? Dry weather flow alone is not necessarily an illicit discharge. For example, all of last year (2017) Millersburg had very high groundwater (as observed in construction excavations). This groundwater may show up in some stormwater outfalls and there is nothing the City can do to address or “correct” the issue.

DEQ Response

The permit’s allowable non-stormwater discharges include “raising groundwater.” Therefore, groundwater would be categorized and an allowable non-stormwater discharge and not an illicit discharge.

3.3.3.6.7 System Evaluation for Chronic Illicit Discharges – On-Site and Septic investigations (continued)

219. Comment from City of Albany

Who defines “significant?”

If the permit registrant identifies septic systems as a significant contributor to the MS4 system, the permit registrant must implement a detailed system septic inspection program that inspections of the performance and function of the septic system, and must be completed by a certified professional in the next iteration of this permit.

[Septic System Regulation and Inspection] This does not represent MEP for each community – existing, or new permit registrants.

[Procedures for Investigating and Resolving Illicit Discharges] Too prescriptive. Permit registrant should decide what to sample and test.

220. Comment from Polk County

Define lower density, this will mean something different for a county vs a city.

Does not make sense. Delete the word "not"?

DEQ Response

DEQ modified the permit and removed the permit language associated with these comments.

3.3.3.7 IDDE Training and Education

221. Comment from City of Keizer

- iv. “The permit registrant must ensure that all persons responsible for investigating, identifying and eliminating illicit discharges and illicit connections into the MS4 are appropriately trained to conduct such activities. At a minimum, the permit registrant's construction inspectors, maintenance field staff, and code compliance staff must be sufficiently trained to conduct dry weather screening activities and to respond to reports of illicit discharges and spills into the MS4.”

Recommendation: The specificity in this language would require training for individuals within the organization that are not assigned to IDDE issues. Please consider allowing the permit registrant to decide who should receive the required training.

Perhaps more importantly, the requirements for source tracking and field screening will require a change to existing job descriptions and department structures. For example, if operations personnel do not have the appropriate educational or occupational background, agencies will be forced to hire staff with a more comprehensive technical background. Hiring additional staff will be the most costly impact of this permit. Please consider reducing the requirements for investigating and resolving illicit discharges in regard to sampling for illicit discharges.

This requirement would require many agencies to hire new personnel since these practices would not generally be carried out by the average municipal worker.

At a minimum, the permit registrant's construction inspectors, maintenance field staff, and code compliance staff must be sufficiently trained to conduct dry weather screening activities and to respond to reports of illicit discharges and spills into the MS4.

There are ongoing training costs associated with this measure.

222. Comment from City of Portland

The second sentence in this section is very problematic because it confuses the roles and responsibilities of different types of field staff. For example, construction inspectors are not typically responsible for conducting IDDE dry weather screening activities. Please amend the statement to read “At a minimum, the permit registrant's construction inspectors, MS4 maintenance staff, and code compliance staff must be sufficiently trained to identify and report illicit discharges. All staff directly responsible for conducting dry weather screening activities and to responding to reports of illicit discharges and spills into the MS4 must be properly trained to conduct such activities.”

223. Comment from City of Springfield

Unclear language – this section states that the permittee “must provide orientation and training to all new staff working to implement the IDDE program within 30 days of their assignment to this program and at least once during the permit term”. This differs from the PER and may just be a missed typed sentence. The way it is drafted means only new staff are trained at least once during the term. Note that this statement is consistently repeated in all of the MCM sections that require training.

224. Comment from Polk County

Nowhere in the permit does it say this, only refers to the 30 days

225. Comment from City of Turner

Annual training requirements is another added program management time and cost.

DEQ Response

DEQ modified the language in this section and the PER to address these comments. The permit does not require annual training, rather requires that staff receive training at least once during the permit term and follow-up, as necessary.

3.3.3.8 Tracking and Assessment

226. Comment from Rogue Riverkeeper

This minimum control measure should include an assessment provision as demonstrated in A(3)(a)(vi) where permittees are required to identify and evaluate at least one key activity in the minimum control measure. DEQ should strengthen this section by evaluating other MS4 Phase II General Permits to improve clear, specific, and measurable terms and conditions in the 2017 proposed permit, as required by the EPA.

DEQ Response

DEQ reviewed EPA's *Compendium of MS4 Permitting Approaches, Part 1* and determined that the permit includes several of the permit provisions that have been determined to qualify as "clear, specific, and measurable" requirements. The approach in developing permit conditions is also consistent with the Remand Rule.^{75, 76}

The permit maintains the condition that the permit registrants perform a compliance evaluation each year (in Schedule B.1):

At least once per year, the permit registrant must evaluate their compliance with the requirements of this permit using the DEQ Annual Report template. This self-evaluation includes assessment of progress toward implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D (Special Conditions for Discharges to Impaired Waters).

3.3.4 Construction Site Runoff Control

227. Comment from Rogue Riverkeeper

DEQ has not provided clear, specific, and measurable terms and conditions for the provisions of this section. Under Schedule A(3)(d)(iii) Construction Site Runoff Control Specifications, DEQ effectively defers to the permittees:

"The permit registrant must require construction site operators to use erosion, sediment, and waste material management controls at construction project sites that results in land disturbance of 5,000 square feet or more. The permit registrant may define appropriate controls for different types and/or sizes of construction activity occurring in their coverage area." Schedule A(3)(d)(iii).

Similarly, under Schedule A(3)(d)(iv) Construction Site Plan, DEQ defers to permittees to determine the contents of the plan:

"The permit registrant must maintain written specifications that address the proper installation and maintenance of such controls during all phases of construction activity occurring in their jurisdiction." Schedule A(3)(d)(iv).

By failing to establish the necessary requirements for these measures, DEQ does not provide clear, specific, and measurable terms and conditions that will reduce discharges of pollutants to the maximum extent practicable or protect water quality. DEQ must establish the allowable minimum requirements for this control measure and look to examples from other MS4 Phase II General Permits.

⁷⁵ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

⁷⁶ *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016).

DEQ should consider the model of the Tennessee Phase II permit, which requires permittees to align standards with the state handbook, or the Western Washington Phase II permit, which establishes minimum standards within the permit. In line with EPA’s MS4 Permit Improvement Guide, construction site runoff control specifications should reference state standards when possible. DEQ should strengthen this section by evaluating other MS4 Phase II General Permits to improve clear, specific, and measurable terms and conditions in the 2017 proposed permit, as required by the EPA.

... As discussed previously, the 2017 proposed permit should be amended to ensure that the implementation timelines for Existing Registrants is in compliance with the Clean Water Act. The final permit remand rule allows new permittees up to five years to implement their SWMPs. For Existing Registrants, however, Section 402(p) of the Clean Water Act states that “any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.” 33 CFR §1342(p)(4)(A), (B). DEQ must amend the proposed permit to ensure that the final permit will result in compliance within the three-year timeline required under the statute.

DEQ Response

DEQ reviewed EPA’s *Compendium of MS4 Permitting Approaches, Part 1* and determined that the permit includes several of the permit provisions that have been determined to qualify as “clear, specific, and measurable” requirements. The approach in developing permit conditions is also consistent with the Remand Rule.^{77, 78}

The permit maintains the condition that the permit registrants perform a compliance evaluation each year (in Schedule B.1):

At least once per year, the permit registrant must evaluate their compliance with the requirements of this permit using the DEQ Annual Report template. This self-evaluation includes assessment of progress toward implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D (Special Conditions for Discharges to Impaired Waters).

Comments regarding compliance timelines are addressed in Section 3.3, *Stormwater Management Program Control Measures*.

3.3.4.1 Implementation Dates

228. Comment from City of Albany

This sentence does not make sense. I deleted assuming it is old language and already covered in the preceding sentences.

All registrants must update its existing construction site runoff control requirements to enact control measure components in Schedule A.3.d.ii-ix.

229. Comment from City of Springfield

There is a conflict in the Schedule. The Schedule (Schedule A.3.d.ii-ix.) should only go to “vii” since “viii” is Training and Education and “ix” is Tracking and Assessment; which both require annual implementation or reporting starting the first year and due Sept 30 2019 not by the “no later than date” of Jan. 1 2023.

⁷⁷ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

⁷⁸ *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016).

DEQ Response

DEQ disagrees with the comment that Schedule A.3.d.i should not include Schedule A.3.d.viii and ix. The requirements in Schedule A.3.d.i address the implementation date for full compliance with the Construction Site Runoff Control program; if iterative progress is made the permit registrant must document this in their Annual Report.

DEQ deleted the duplicate language in this section.

3.3.4.2 Ordinance and/or Other Regulatory Mechanism

230. Comment from Oregon Association of Clean Water Agencies

The federal requirements for construction site runoff control apply to projects that disturb one or more acres (or that disturb less than one acre but are part of a common plan of development), which is the same threshold in DEQ’s own requirements for the 1200C permit program. Schedule A.3.d. of the draft permit includes requirements for construction site runoff control at a significantly lower threshold of 5,000 square feet of land disturbance. DEQ states in the PER that the one-acre threshold is “insufficient to protect water quality” (see PER p.28), and goes on to state that “DEQ is using its discretion to require the permit registrants to establish specifications for construction site runoff controls at sites disturbing 5,000 square feet or more.” This requirement is a substantial reach beyond the federal minimum requirements, and therefore, DEQ is not empowered with the discretion to make this determination (see the General Comments section above). Moreover, in the PER, DEQ does not provide any scientific basis for its 5,000 square foot threshold determination, nor has DEQ presented any evidence that it is implementable for all of the MS4s. Implementing construction site runoff control program requirements at the 5,000 square foot land disturbance threshold is beyond the capacity for most of new and smaller-sized MS4 Phase II communities, and would be impracticable, as this threshold would require new regulatory processes for every single-family home constructed.

REQUEST: This section of the draft permit is a prime example of where three or four general permits are needed. A clear, specific, measurable, enforceable, and implementable, approach to a construction site runoff control program would be to require the permittees, within a certain period of time, to submit program “SOPs” with a regulatory program developed by the permittee, to include land disturbance thresholds and requirements, with community-specific justifications for the land disturbance threshold and the means of achieving performance-based requirements.

231. Oral Comment from City of Albany

The proposed permit includes requirements that have not been adequately explained in the Permit Evaluation Report. For example, for Construction Site Runoff, the Permit Evaluation Report does not include any scientific basis for reducing the action threshold from the EPA required 1-acre down to 5,000 square feet.

Simply stating that a lower threshold is better than a higher threshold is not a scientific basis. And, if the lower threshold is better and has some scientific merit, why is this lower threshold not required in the 1200-C permits administered by the Department?

232. Comment from City of Albany

The “triggers” for construction and post-construction stormwater control in Schedule A.3.d. and A.3.e. also impermissibly exceed federal rules. The requirement for construction stormwater controls on land disturbance over 5,000 square feet is far more stringent than EPA’s trigger of one acre. How can DEQ justify the imposition of this permit condition in the draft Phase II MS4 Permits when it did not include this standard in the recently renewed 1200-C (construction stormwater) general permit?

233. Comment from Marion County

For smaller communities a 5,000 sq. ft. is not implementable.

234. Comment from Oregon Home Builders Association

Adopting a 5000 square foot disturbance threshold is extreme. While it may be appropriate for large metropolitan Phase I communities such as D.C. or Portland where rates of redevelopment and population density are both higher than average, this proposal is inappropriate and unworkable for small MS4 communities. This mandate will impose new regulations on numerous small, low-risk sites with little potential for environmental harm.

We recommend removal of this provision.

235. Comment from City of Gresham

The City of Gresham's experience is that an Erosion Prevention and Sediment Control (EPSC) program is one of the most effective strategies a municipality can implement with regard to overall pollution prevention and also one of the most labor resource intensive. Because some applicants may not have a preexisting erosion program the prescribed threshold ignores the MEP standard. It is worth noting that unlike many other BMPs, EPSC inspection costs can be passed onto the private sector, which will aid smaller communities in developing a more comprehensive program as compared to other elements within the permit, but any initiation of fees requires community input and approval by a local governing body which takes time.

Recommendation: each permittee should be allowed to conduct an analysis of its rate of development and project size in order to determine what the appropriate threshold is for their community and what estimated timeframe and resources would be needed in order to achieve DEQ's desired goal of 5,000 sq. ft.

236. Comment from Polk County

This does not necessarily make sense from the County's standpoint because typically there are much larger minimum parcel size requirements. 5,000 square feet may only be a small portion of land disturbance compared to the parcel size. Maybe the metric should be a ratio of disturbance vs parcel size.

Alternative could be only require the construction site plan if disturbance is within a certain distance of an MS4. This again relates to how it would not always make sense to require a construction site plan if the project is already contained by a large yard area due to parcel size.

As an alternative, have different disturbance "trigger" numbers for small vs large communities. For example: small communities- 10,000 sq ft. vs large communities- 5,000 square feet.

Not true for Polk County's permit area. We are more likely to issue permits for large vacant parcels and have little or no opportunity to further divide the property. Majority of the small lots are already developed and subdivisions are prohibited.

DEQ Response

Please see Sections 1.1, for comments pertaining to MEP and conditions that exceed federal requirements, 1.6 for comments pertaining to the differences between the 1200-C and MS4 permits, and 1.10 for comments and responses pertaining to the tiered structure of the permit.

Bases on comment received, this permit condition was modified. As discussed further in this section, the final permit includes the following language:

The permit registrant must require construction site operators to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites that results in a minimum land disturbance of:

- (A) *For Large Communities: 7,000 square feet or more.*

(B) For Small Communities: 10,000 square feet or more.

Comments Questioning the Need for a Lower Threshold

During the development of the permit, DEQ determined it was necessary to evaluate whether the one-acre threshold was protective of water quality. As discussed in PER, all the permit registrants discharge to receiving waterbodies with one or more TMDL or waterbodies that are on DEQ's 303(d) list for water quality impairments needing a TMDL. The intent of the threshold in the final permit is to prevent the further degradation of these water quality limited waterbodies.

DEQ's reduction of the one-acre threshold is intended to prevent harm to aquatic habitat and water quality in many urban areas due to the cumulative impacts of unregulated stormwater from these sites. In a study, performed in the State of Washington, Booth and Jackson reported that six years of permit activity in King County showed that about one quarter of the impervious area added to local watersheds fell below a one-half acre impervious area regulatory threshold that was in place at the time.⁷⁹ The need to address the increase of impervious areas associated with development is further supported by EPA's *Urban Storm Water Preliminary Data Summary* which states the following:

The amount of runoff generated within a watershed increases steadily with development. The presence of impervious areas such as roofs, parking lots and highways limits the volume of rain water infiltrated into the soil, and increases the amount of runoff generated. Urbanized areas also tend to have reduced storage capacities for runoff because of regrading, paving, and the removal of vegetative cover. Decreases in infiltration and evapotranspiration and an increase in runoff are the result of urbanization, with runoff volume linked to the percent of impervious area.

*...Schueler and Claytor (1995) also suggest a direct relationship between watershed imperviousness and stream health (Figure 4-11), and found that stream health impacts tend to begin in watersheds with only 10-20 percent imperviousness (the ten percent threshold). As shown, sensitive streams can exist relatively unaffected by urban storm water with good levels of stream quality where impervious cover is less than 10 percent although some sensitive streams have been observed to experience water quality impacts at as low as 5 percent imperviousness. Impacted streams are threatened and exhibit physical habitat changes (erosion and channel widening) and decreasing water quality where impervious cover is in the range of 10 to 25 percent. Streams in watersheds where the impervious cover exceeds 25 percent are typically degraded, have a low level of stream quality, and do not support a rich aquatic community.*⁸⁰

Preventing the discharge of sediment and other pollutants from smaller sized construction sites is documented to increase water quality protection and is more cost effective than end of pipe treatment of runoff from the MS4.⁸¹ Several studies have identify stormwater runoff from construction sites as a transport mechanism to carry a variety of pollutants, such as sediment, bacteria, organic nutrients, hydrocarbons, zinc, copper, cadmium, mercury, iron, nickel, and oil and grease, to receiving waterbodies:⁸²

*...the net result of human alteration of the landscape to date has resulted in a degradation of the conditions in downstream watercourses...*⁸³

⁷⁹ *Urbanization of Aquatic Systems: Degradation Thresholds, Stormwater Detection, and the Limits Of Mitigation*, Derek B. Booth C. Rhett Jackson, Journal of the American Water Resources Association, 2007.

⁸⁰ *Preliminary Data Summary of Urban Storm Water Best Management Practices*, EPA (August 1999).

⁸¹ *NPDES Storm Water Phase II Regulations Final Rule* (64 FR 68722, Dec. 8, 1999), pages 68758-68759; *Development Document For Final Effluent Guidelines And Standards For The Construction & Development Category*, November 2009. https://www.epa.gov/sites/production/files/2015-06/documents/construction_development_dd_2009_chapters_1-11.pdf, pages 7-3 through 7-26.

⁸² *Water Quality and Quantity Impacts of Highway Construction and Operation: Summary and Conclusions*, Barrett, M.E., J.F. Malina Jr., R.J. Charbeneau, and G.H. Ward, Center for Transportation Research, The University of Texas at Austin, 1996.

⁸³ *Urban Stormwater Management in the United States*, National Research Council. Oct. 2008, page 15

*There is a direct relationship between land cover and the biological condition of downstream receiving waters...*⁸⁴

It is widely acknowledged that nutrients and various other pollutants bind to sediment particles and are transported into the water column via erosion and sedimentation. Therefore, effective erosion and sedimentation controls, (such as techniques for construction sequencing, and vegetative or non-vegetative stabilization) at smaller sized construction projects t. This approach is consistent with applicable TMDL WQMPs, see PER section 7.1.3.. Additionally, research has shown a significant fraction of bacteria is associated with soil and soil erosion from unvegetated areas; stormwater runoff with newly eroded and suspended sediment can serve as a secondary source of higher E. coli concentrations in receiving waterbodies.⁸⁵ Erosion and subsequent sedimentation and delivery of these pollutants can negatively affect and impact work implemented by the permit registrants to address their Bacteria TMDL.⁸⁶

The lower threshold will enhance and extend the current erosion and sediment control activities that are being applied to urban areas and to mitigate the adverse effects of this stormwater runoff from disturbed soils. For these reason DEQ determined it was necessary to evaluate whether the one-acre threshold was protective of water quality from stormwater runoff discharged from construction sites.

Condition is Not Implementable

The thresholds in the final permit represents DEQ’s effort to address the fundamental challenge of balancing the impact of urbanization with the cost of regulating this impact. During the evaluation DEQ reviewed the following:

1. Thresholds being used by Phase I permittees in Oregon (note that Clackamas Counties has several co-permittees with populations less than then Phase II communities), see table below.
2. Thresholds being used by this permit’s Existing and New Registrants, see table below.
3. Thresholds being used by other states small Phase IIs.
4. Management strategies presented in the WQMPs of the TMLDs that apply to permit registrant’s MS4 discharge.
5. The references for construction stormwater management in the National Menu of Stormwater BMPs, this provided a baseline for the development of the six minimum control measures in the federal Phase II rules.
6. DEQ’s 2009 guidelines on threshold development provided to Phase I permittees.
7. Scientific literature concerning the impacts of construction activities on water quality.

⁸⁴ *Hydrologic, Geomorphic, and Biological Effects of Urbanization on Watersheds*, page 195.

⁸⁵ *Characterization of Escherichia Coli for Sediment Basin Systems at Construction Sites*, Sawyer, C.B., J.C. Hayes, and W.R. English. 2010, World Environmental and Water Resources Congress 2010, May 16-20, 2010.

⁸⁶ The City of Bend discharges to an impaired waterbody listed for sedimentation and turbidity

MS4 Phase I Permittees	Population⁸⁷	Construction Threshold (sq. ft.)
Clean Water Services Watershed permit	--	--
City of Banks	1,775	500
City of Beaverton	95,385	500
City of Cornelius	11,915	500
City of Durham	1,880	500
City of Forest Grove	23,555	500
City of Gaston	650	500
City of Hillsboro	101,540	500
City of King City	3,630	500
City of North Plains	2,980	500
City of Sherwood	19,350	500
City of Tigard	50,985	500
City of Tualatin	26,960	500
Clackamas County Group	--	--
Clackamas Co. Dept. of Transportation and Development	N/A	1,000
Water Environment Services	25,615	1,000
Clackamas County Service District #1	74,294	1,000
Surface water Management Agency of Clackamas County	N/A	1,000
City of Gladstone	11,840	1,000
City of Happy Valley	19,985	1,000
City of Johnson City	565	1,000
City of Lake Oswego	37,490	1,000
City of Milwaukie	20,550	1,000
Oak Lodge Sanitary District	33,000	1,000
City of Oregon City	34,610	1,000
City of Rivergrove	500	1,000
City of West Linn	25,695	1,000
City of Wilsonville	24,315	1,000
City of Eugene	167,780	1,000
Gresham Group	--	--
City of Fairview	8,975	1,000
City of Gresham	109,820	1,000
Multnomah County	N/A	1,000
Portland Group	--	--
City of Portland	639,100	500
Portland Group - Port of Portland	N/A	500
City of Salem	163,480	1,000

⁸⁷ PSU Population Research Center Certified Population Estimates 2017

Current MS4 Phase II Registrants	Population	Construction Threshold (sq. ft.) ⁸⁸
City of Ashland	20,700	--
City of Bend	86,765	1 acre ^a
City of Corvallis	58,735	2,000 ^b
City of Keizer	38,345	2,000 ^c
City of Medford	79,590	1 acre
City of Philomath	4,710	1 acre
City of Springfield	60,655	See note ^d
City of Troutdale	16,070	--
City of Turner	2,005	5 acres
City of Wood Village	3,920	1,000 ^f
Benton County	N/A	1 acre
Lane County	N/A	Adopted regulations from Springfield and Eugene
Marion County	N/A	1 acre
Polk County	N/A	1 acre
Rogue Valley Sewer Services	--	--
Jackson County	N/A	1 acre
City Central Point	17,700	1 acre
City of Phoenix	4,605	1 acre
City of Talent	6,325	1 acre
Rogue Valley Sewer Services	N/A	1 acre
Phase II MS4 Permittees	Population	Construction Threshold (sq. ft.)
City of Albany	52,710	2,000 ^g
City of Eagle Point	8,930	1 acre
City of Grants Pass	37,135	1 acre
City of Millersburg	1,835	--
City of Rogue River	2,220	2,000 ^h
Josephine County	N/A	1 acre
Linn County	N/A	1 acre
<p>Excerpts from available online ordinances::</p> <ul style="list-style-type: none"> a. City of Bend - These provisions apply to any new development or redevelopment site within the City that meets one or more of the following criteria: Projects adding 5,000 square feet or more of impervious area or disturbing one or more acres. b. City of Corvallis - An erosion prevention and sediment control (EPSC) permit is required before commencing ground disturbing activity affecting 2000 square feet or greater, cumulatively, throughout the duration of the development. c. City of Keizer - An erosion control permit issued by the Public Works Director or Inspector shall be required prior to conducting any activities which may singly or cumulatively cause greater than 2,000 square feet of disturbance. d. City of Springfield - Unless exempted herein, no person shall perform any grading work without first having obtained a permit as provided for herein... Excavate, grade or place fill material on or within any property, whether or not a permit is required under the provisions of this code, so as to cause or allow dirt 		

⁸⁸ DEQ acknowledges that some of the local ordinances have an exemption (e.g., single-family homes).

or debris to be washed, eroded or carried from said property by natural or artificial means onto other property or on to a public road or street. The depositing of earth, soil, rock, mud or litter upon the public roads either by grading operations or by hauling equipment is prohibited, except as otherwise provided for street improvements and/or stockpiling for which a permit has been issued.

- e. City of Troutdale
- f. City of Wood Village - These standards apply to any construction activity disturbing 1,000 or more square feet of land.
- g. City of Albany (New Registrant) - An EPSC permit is required for all land-disturbing activities affecting an area of two thousand square feet or greater, cumulatively.
- h. City of Rogue River (New Registrant) - No permit for construction of new development or tenant improvements that result in impervious cover greater than 500 square feet within the city and urban growth boundary shall be issued until effects on erosion prevention and sediment control are evaluated. The level of review varies according to the affected area:
 - i. Level 1: 500 – 1,999 square feet. No erosion prevention and sediment control measures beyond any mitigation measures for pollution reduction or flow control are required.
 - ii. Level 2: 2,000 – 4,999 square feet. Conceptual plans that conform to the erosion prevention and sediment control best management practices shall be submitted and approved.
 - iii. Level 3: 5,000+ square feet. A comprehensive erosion prevention and sediment control study that conforms to RRMC 17.95.050 shall be submitted and approved.

Additionally, DEQ reviewed available online municipal codes for the Existing and New Registrants to evaluate the potential impact of reducing the one-acre threshold. As illustrated in the above table, several of the communities recognize the importance of managing stormwater in urban areas at sites smaller than one acre.

DEQ concluded the following:

1. A lower threshold (less than one acre) is more protective of water quality, as documented in the scientific literature presented in the document, in addition to the PER.
2. A lower threshold (less than one acre) will aid the permit registrant's attainment of the TMDL(s) and TMDL requirement(s).
3. A lower threshold (less than one acre) is implementable, as demonstrated by the following:
 - a. Small municipalities, such as City of Johnson City and City of Rivergrove, operating under the Clackamas Group MS4 Phase I are currently implementing a construction stormwater runoff control threshold of 1,000 square feet.
 - b. Several of the Existing Registrants are currently implementing a program with a threshold less than 1 acre (see table above).
 - c. Two of the New Registrants are currently implementing a program with a threshold less than 1 acre (see table above).

With a threshold less than one acre, the State of Oregon joins many other states such as Maryland and Washington, as well as, numerous municipalities who use this threshold or a more protective one. The widespread use of this threshold and lower thresholds among states and municipalities are indicators that it is practicable.

Each Registrant Should Determine Threshold

DEQ considered several options in establishing the threshold values, including having each registrant analyze their MS4 coverage area. This was weighted against the request from several permit registrants and commenters that the permit minimize the administrative work needed to implement permit conditions. In light of this, DEQ utilized its discretion in determining the threshold values.

Conditions Effecting Single-Family-Homes

DEQ reviewed data prepared by the US Census Bureau to determine the average lot size for new single-family-homes to determine the impact of this condition on single family home construction sites. The data is summarized below:⁸⁹

Year	Number of houses (in thousands) by lot size (in square feet)					
	Total	Under 7,000	7,000 to 8,999	9,000 to 10,999	11,000 to 21,999	22,000 and over
United States						
2009	494	125	80	51	90	148
2010	473	121	73	54	92	132
2011	427	110	66	46	93	113
2012	464	127	87	52	94	104
2013	544	160	91	58	113	122
2014	593	162	109	62	125	134
2015	628	185	115	61	125	141
2016	720	218	140	64	141	157
2017	775	238	162	66	143	165

Year	Number of houses (in thousands) by lot size (in square feet)					
	Total	Under 7,000	7,000 to 8,999	9,000 to 10,999	11,000 to 21,999	22,000 and over
West¹						
2009	111	47; (42) ²	21	10	12	21
2010	97	46; (47) ²	18	8	11	15
2011	86	36; (42) ²	16	8	12	14
2012	95	41; (44) ²	20	10	13	11
2013	122	58; (48) ²	23	10	18	12
2014	130	53; (41) ²	28	14	18	17
2015	140	57; (41) ²	29	15	20	19
2016	158	72; (46) ²	31	17	20	19
2017	174	81; (46) ²	36; (21) ¹	14; (8) ¹	20; (11) ¹	23; (13) ¹

¹ West Region states: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

² Percent distribution

The data illustrates that the majority of new single-family-homes are on lots less than 7,000 square feet (46% of new single-family-home builds in 2017). Based on this review the final permit establishes a modified threshold for permit registrants to manage stormwater runoff from construction project sites.

The 7,000 square feet threshold for Large Communities was selected to exclude the majority of single-family homes. The 10,890 square feet threshold for Small Communities was selected to capture approximately 70-75% of new single-family home construction sites.

⁸⁹ <https://www.census.gov/construction/chars/pdf/lotsize.pdf>

While DEQ has increased the above noted thresholds from the draft permit, DEQ considers the lower threshold in the final permit necessary to protect water quality and aquatic habitat from the cumulative impacts from small construction sites (less than one acre), especially in the primarily urban areas covered by this permit.

3.3.4.3 Compliance with Other NPDES Permit Requirements (relocated from Schedule A.3.d.ii)

237. Comment from City of Albany

To clarify what is expected this has been rewritten to show that plans are required for all regulated projects. Site specific plans are required for some while use of templates would be appropriate for others.

At a minimum, the permit registrant’s ordinance or other regulatory mechanism must require construction site operators to maintain stormwater controls as required in Schedule A.3.d.iii to reduce pollutants in stormwater discharges to the MS4 from construction sites. The permit registrant must require construction site operators to submit construction site plans. Site specific plans must be required for projects disturbing one or more acres. For projects disturbing less than one acre, or for subsequent phases of a common plan of development that are separately permitted, the permit registrant can require either site specific plans or make use of a template. (or that disturb less than one acre but are part of a common plan of development) for review. The permit registrant must use inspections and enforcement actions to ensure compliance with the Construction Site Runoff Control program.

(A) Compliance with Other NPDES Permit Requirements

For construction projects that disturb one or more acres (or that disturb less than one acre but are part of a common plan of development), the permit registrant must refer project sites to DEQ to obtain a NPDES Construction Stormwater General Permit. The DEQ permit requirements are in addition to the permit registrant’s construction

The permittee cannot be expected to screen all development applications and building permits for DEQ to determine which projects may require separate authorizations under the 1200-C program. Delete.

238. Comment from City of Gresham

The industry term is Erosion and Sediment Control Plan. EPSC Plan--Not Construction Site Plan. The latter connotes a document that contains all building, plumbing, drainage, utilities, public works standards, easements, roads, etc. Not an appropriate term for this permit.

239. Comment from City of Keizer

While this should be worded differently, the compliance section can be interpreted to mean that the permittee is responsible for making certain a 1200-C is obtained.

240. Comment from City of Springfield

The use of “construction site plans” as “erosion and sediment control plans” is inappropriate and confusing. Construction site plans and erosion and sediment control plans are two different things; do not use site plans, use erosion and sediment control plans (ESCP).

Under section (A), the DEQ requires that “the permittee must refer project sites to DEQ to obtain a NPDES Construction Stormwater General Permit”. It should be noted that the Permittee would not refer if they were an agent for the DEQ. Need to clarify language.

241. Comment from Clackamas County Water Environment Services

“The permit registrant must require contractor site operators to submit construction plans for projects disturbing one or more acres (or that disturb less than an acre but are part of a common plan of development). The permit registrant must use inspection and enforcement actions to ensure compliance...” Further, subsection (A) states these projects must be referred to DEQ for a 1200-C. This

does not address the jurisdictions that are 1200-C Agents or those that are 1200-CN participants. Is the permit registrant responsible for tracking and reporting of each site that is referred to DEQ for a 1200-C?

242. Comment from City of Turner

Schedule (3)(d), (ii) and (ii): This section is very confusing as to what requirements are being applied, to whom and at what levels.

DEQ Response

DEQ replaced the term “construction site plan” with “erosion and sediment control plan” or “ESCP” throughout the permit and PER. Additionally, DEQ modified the permit language to address DEQ’s 1200-C agents and 1200-CN jurisdiction which implement the 1200-C permit on DEQ behalf.

In accordance with 40 § CFR 122.26(b)(14), ((15), construction activities including clearing, grading, and excavating that results in a land disturbance greater than one acre must obtain a NPDES Construction Stormwater General Permit or equivalent (DEQ’s 1200-C or coverage under a 1200-CN permit). The MS4 Phase II General Permit does not require that the permit registrant to track a construction project’s 1200-C permit application status. The permit requires that the permit registrants inform the construction site owner/operator of the requirement to apply for 1200-C permit coverage (or equivalent). This permit condition ensures that the construction site owner/operator is informed of this permitting requirement as the permit registrant is responsible for all discharges from their MS4. The requirement to inform the construction site owner/operator of the possible multiple permitting requirements is designed to aid with overall compliance from construction projects within the permit registrant’s jurisdiction.

While permit registrant is not required to educate construction site owners/operators about the 1200-C permit requirements, it is in each permit registrant’s best interest to educate or refer developers to the 1200-C permit for coverage as permit registrant is responsible for pollutants that are discharged into and from their MS4. This includes pollutants from construction site that may have coverage under the 1200-C permit.

It should be noted that the MS4 Phase II permit and the 1200-C permit both require an ESCP. Approval of the ESCP by the MS4 permit registrant does not also equal approval of the ESCP for the 1200-C permit, nor does the permit registrant’s approval authorize the discharge of stormwater under the 1200-C permit (unless that authority has been delegated to the permit registrant by DEQ).

3.3.4.4 Erosion and Sediment Control Plans

243. Comment from Oregon Association of Clean Water Agencies

This section under Schedule A.3.d. is misplaced, and confuses the reader as to the land disturbance threshold and applicability of the requirements for all of the remaining requirements of Scheduled A.3.d. If DEQ intends to set different requirements for sites with a land disturbance threshold of 5,000 square feet than for one acre, the requirement currently in A.3.d.iii. should be moved elsewhere in the document.

Schedule A.3.d.iv. of the draft permit, as written, confuses the term construction “site plan” with what we understand the DEQ to intend, which is a construction site management plan for erosion and sediment control. This confusion needs to be fixed in order to avoid confusion between Erosion and Sediment Control Plans (ESCPs), which are required as part of local governments’ building or land/drainage alteration permit processes, and site plans, which are land use plans that are required by local governments as part of the limited land use (or Type II) decision processes established under state land use statutes and administrative rules. Approval of ESCPs does not involve a state-mandated land use approval process. Rather, the approval of ESCPs, falls under a state-defined ministerial (Type I) approval process, which provides for the application of clear and objective standards established by local governments through ordinances and their implementing engineering design manuals.

While DEQ may have derived the “site plan” terminology from other states’ permits (such as the EPA draft permit for the state of Idaho), DEQ must recognize and understand that other states do not have statewide land use planning laws and rules that are similar to Oregon’s, so the issue raised here may be unique to Oregon.

The confusion associated with this error in permit language could have significant and costly implications for MS4 permittees, and would not be practicable.

In subsection (A), DEQ staff has erred in requiring that the MS4 permit registrant to “provide the construction site plan to the construction site operators...” The MS4 operator would not provide the plan to the site operators—the MS4 operator would provide guidance, such as a checklist or template, outlining the requirements of the ESCP.

In the definition of “Construction Site Plan” found at Schedule D.2.i., ESCP is used (but not spelled out) to describe what DEQ staff has termed a Construction Site Plan. This is confusing, the ESCP is not defined (which it should be) and the use of “construction site plan” to describe an ESCP serves no helpful purpose in clarifying the requirement.

REQUEST: Alternate language recommendation (new language underlined):

Change the title of this section to “iv. Erosion Prevention and Sediment Control

Eliminate all references to “construction site plan” and replace with Erosion and Sediment Control Plan (ESCP).

In subsection A.3.d.iv.(A), change the sentence to read: “Provide the ESCP checklist (or template) to the construction site operators prior to beginning construction”

Eliminate Schedule D.2.i.—“Construction Site Plan” as the title, replace with “Erosion and Sediment Control Plan”(ESCP)” and move it to the appropriate alphabetical location in the definitions.

244. Comment from City of Albany

It is not the permittee’s responsibility to create checklists and require the operator to use them. Compliance is demonstrated through site performance

...This is not appropriate to include on the plan. This should be in the specifications. Language has been relocated and includes suggested edits.

The construction site plan must, at a minimum consist of Specification should include, as applicable, sizing criteria, performance criteria, design specifications, and guidance on selection and placement of controls, and specifications for long term operation and maintenance, including appropriate inspection intervals ~~and self-inspection checklists for use by the construction site operator.~~

245. Comment from City of Ashland

In general, this section is overly prescriptive and inconsistent. It is recommended that his entire section be replaced with the required Erosion and Sediment Control Plan that most cities comply with.

246. Comment from Clackamas County Water Environment Services

Requires controls for 5,000 sq. ft. or more of disturbance. This is confusing as to which threshold takes precedence. If the permit registrant must require controls for all projects that disturb 5,000 sf, then this should be listed first and then followed by text that requires sites with 1 acre of more of disturbance must also obtain a 1200-C thru DEQ, its applicable local Agent or a 1200-CN if within a participating jurisdiction.

The instances of the use of the term Construction Site Plan throughout this section are confusing. In the first paragraph, change: “...must include a template, worksheet or similar document...” to “...must

include a template document...” In subsection (A), change “...construction site plan...” to “...construction site plan template...”

247. Comment from City of Gresham

A minimum checklist of EPSC BMPs for wet and dry weather will be just as effective and MORE efficient than an EPSC site plan at the small lot level. Drawn plans most frequently look like chicken scratch (even on templates) and are fairly useless. Plan reviews for small sites is an administrative burden with no relationship to the desired outcome. A more appropriate DEQ requirement would be that Permittees should obtain the legal authority to require additional controls if minimum standards do not result in EPSC control and BMPs must be maintained and in place until the finished landscaping and or seed has germinated and erosion risks from development have been alleviated.

(A) This requirement does not make sense. Suggest; "Inform those obtaining permits to develop/build of the EPSC requirements and the expectations that EPSC controls will be installed prior to earth disturbing construction."

(B) See comment above. Not useful or practical for small sites.

(C) Only useful for large sites. Should not be a requirement for sites under 1 acre.

These elements [sizing criteria, performance criteria, design specifications, and guidance] are commonly articulated in a manual and at the permit application process. The requirement for a plan with these things articulated is an administrative burden and an ineffective way to go about achieving the desired results. Furthermore, much of this language is referring to Post Construction information not included in an EPSC site plan.

248. Comment from City of Keizer

Template rather than Plan, to avoid confusion with 1200-C and other permits with similar wording.

249. Comment from City of Millersburg

It is unclear whether sites down to 5,000 sf are required to submit a Construction Site Plan, or if this requirement is only for projects disturbing one or more acres. For projects disturbing between 5,000 square feet and one acre, reviewing, approving, and inspecting site-specific construction site plans is not feasible. Because of lot size standards in Millersburg, every residential building lot will fall into this category. For Millersburg, adopting erosion control standards and implementing a general erosion control permit for some sites down to 5,000 sf may be practicable, but the appropriate threshold within Millersburg should not be dictated by DEQ. The Permit should require compliance with the EPA threshold of one acre or greater, and communities can decide if they want to implement a more restrictive threshold. Requiring, reviewing, and inspecting site-specific construction site plans for each project disturbing between 5,000 sf and one acre is not practicable.

In addition, the public comment period described in Schedule A.3.d.v. Construction Site Plan Review is problematic and impractical if it applies to sites between 5,000 sf and one acre, due to the timeline required to issue building permits. The City of Millersburg contracts with Linn County for review and inspection of building permits. A site plan review and public comment period for erosion protection associated with residential building permits will adversely impact the processes, procedures, and timelines associated with issuance of building permits.

250. Comment from Oregon Home Builders Association

We recommend the simple expedient of replacing this entire section with a copy and paste of EPA’s 2014 Effluent Limit Guidelines (ELG) for construction stormwater. The regulated community worked over many years with EPA to negotiate this simple, baseline list of best management practices. Adopting ELG language word for word in this permit would increase both clarity and legal defensibility of the permit.

Section 3.d.iv.(D) Construction Site Plan; This section is vague and should be brought in line with existing EPA 2017 permit language. Recommended language change:

3.d.iv.(D) - Require construction site plan be kept on site, and be ~~made available~~ upon request made available for review by the permit registrant, DEQ, or other administrating entity.

251. Comment from City of Portland

Definition and use of the term “Construction Site Plan” is slightly confusing in this section. It is unclear if the term refers to the MS4 permittee’s erosion control manual, as suggested by item iv.(A) or the individual site’s erosion control plan. The definition provided in Schedule D is also confusing in this manner and references an “ESCP” which is not further defined. Please separate and clarify language to distinguish the MS4’s construction specification plan/manual from the construction site plan. Also, it would be more straightforward to use the term “erosion control plan” because “construction site plan” can relate to other aspects of a development activity.

252. Comment from Rogue Valley Sewer Services

This section requires construction site operators of sites down to 5,000sf to prepare site-specific construction site plans. This is in conflict with the language in the 4.3.4.3 of the PER that states “...construction site operators are required to complete the template/worksheet...” A site-specific plan is appropriate for sites one acre or more in area and differs greatly from a template or worksheet, which is appropriate for sites under an acre. Furthermore, subsection v. Construction Site Plan Review, only requires review of plans for sites one or more acres in area, so there is no purpose in preparing a plan for a site under one acre.

Suggested Change: Require construction site operators to complete an erosion prevention and sediment control plan for their site, this may be a template.

253. Comment from Polk County

Is there an existing standard template that DEQ considers “acceptable” for meeting this criteria?

DEQ Response

Please see Section 1.1 for comments pertaining to MEP and conditions that exceed federal requirements, 1.6 for comments pertaining to the differences between the 1200-C and MS4 permits, and 3.3.4.2 for comments regarding the construction site runoff thresholds.

As discussed in the PER, the permit registrant is not required to review or approve ESCPs for sites that disturb less than one acre, unless they are part of a common plan of development. The following is a citation from the PER:

To address concerns associated with cost of plan review, inspection, and enforcement of controls at a greater number of sites, the permit only requires the permit registrant to review plans, inspect or actively enforce erosion, sediment and waste management control requirements on sites resulting in land disturbance of one or more acres (or that disturb less than one acre but part of a common plan of development) unless sediment is visible in stormwater discharge or if a complaint or report is received for that contraction site. DEQ expects that permit registrants will use their discretion to prioritize and scale their applicable site plan review procedures, site inspections, and enforcement activities as appropriate to their jurisdiction

DEQ agrees with the commenter who stated that compliance is “demonstrated through site performance”.

Based on input provided during permit development, DEQ determined that the use of an ESCP template, worksheet or similar document would provide the permit registrants the most flexibility to regulate discharge of stormwater from constructions sites. The condition allows the permit registrants to use/modify an existing checklist or template, or to create their own checklist or template that is specific to their needs. As ordinances and surface runoff conditions vary between the registrants, DEQ did not identified a specific ESCP template as being adequate to meet this permit condition.

In the PER DEQ identified several ESCP templates, including EPA’s Small Residential Lot SWPPP Template and ACWA’s Construction Site Stormwater Guide. These templates could be used as a starting point in developing an ESCP. This provides permit registrants with flexibility in the development of an ESCP that will meet their specific needs, and also meets the permit’s goal of minimizing the discharge of pollutants from construction sites and to protect the receiving waterbodies.

Relocation of Language and Edits per Commenter

DEQ determined that the inclusion of the permit language addressing “sizing criteria, performance criteria, design specifications, and guidance on selection and placement of controls, and specifications for long term operation and maintenance...” was needed. These elements are not in reference to the Post-Construction Control Measures but rather the selection criteria and for appropriate maintenance of construction runoff control BMPs.

3.3.4.5 ESCP Review

254. Comment from Oregon Association of Clean Water Agencies

The same comments provided above under Schedule A.3.d.iv. apply to this section. The confusion between the administrative approval of ESCP’s or other similarly titled plans/permits (such as the Land and Drainage Alteration Permit issued in the City of Springfield), and the Type II—limited land use decision process used by cities to review and approve site plans, must be eliminated.

In the second paragraph of this section, the following language is not appropriate to the application of city codes, ordinances, and engineering design manuals to the process of reviewing building and land alteration plans and associated ESCPs: “and, in accordance with applicable state and local public notice requirements, must provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required.” This language is misleading to the public, confusing to the MS4 operator and should be eliminated. As a practical matter, the process of reviewing ESCP’s falls under the “Type I” ministerial application of clear and objective code requirements and does not include a public notice or review process. Information submitted by the public regarding compliance would occur through the complaint process.

Moreover, this public input requirement is well beyond the federal minimum and creates an impracticable review process. The federal rule does not require public review of individual construction site plans (ESCPs) to determine their compliance with the local ordinance, nor is this necessary to meet the “clear, specific, and measurable” standard. Additionally, this provision has the potential to cause small MS4s to violate Oregon’s building code for residential development, ORS 455.467(1)(a), which requires a jurisdiction to approve or disapprove building permit applications within 10 days of receipt. It is impracticable to include public comment period within the statutory 10-day requirement. Finally, MS4 staff are in the best position to review construction site plans (ESCPs) to determine their conformation with local ordinances.

REQUEST: Alternate language recommendation: The terminology in Schedule A.3.d.v. needs to eliminate the term “construction site plan” and replace it with “Erosion and Sediment Control Plan.”

255. Comment from City of Albany

Even if templates are used staff would have to review to make sure the appropriate template is being applied. Simplified language.

At a minimum, the The permit registrant must review construction site plans from construction projects that will result in land disturbance of one or more acres (or that disturb less than one acre but are part of a common plan of development) using a checklist to determine compliance with the ordinance or other regulatory mechanism required. Construction site plan review

~~procedures must include consideration of the construction activities' potential water quality impacts, and, in accordance with applicable state and local public notice requirements, must provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required.~~

Doesn't seem appropriate for DEQ to dictate use of a checklist.

This should all be deleted. The review procedure needs to be focused on compliance with specifications. The specifications would be the place to define what special controls are necessary for certain water quality impact concerns.

~~"ESCP review procedures must include consideration of the construction activities' potential water quality impacts, and, in accordance with applicable state and local public notice requirements."~~

A public comment period will have significant negative impacts on development and has the potential to significantly increase staff time and cost for each project.

Recommend language be changed. Need to also consider that single family residential building permits are required to be issued within 10 days (per ORS 455.467(1), 455.467(6) and 455.160).

256. Comment from City of Bend

The construction and post-construction control standards as written has public review requirements that would cause undue hardship on our development community and community development department with little gain given it does not fit with our normal public involvement procedures. Here, again, we refer to analysis by Cable Huston, LLC:

Pre- and Post-Construction Plan Approvals. The portions of the permit addressing pre- and post-construction plan approvals contain a number of impracticable provisions that also exceed the federal MEP standard. ...

Pre-construction requirements include a provision requiring MS4s to "provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required." Draft Permit, at p. 19. This requirement is well beyond the federal minimum of "consideration of information submitted by the public" and creates an impracticable review process. The federal rule does not require public review of individual construction site plans, nor is this necessary to meet the "clear, specific, and measurable" standard. Second, this provision has the potential to cause small MS4s to violate Oregon's building code for residential development, ORS 455.467(1)(a), which requires a jurisdiction to approve or disapprove building permit applications within 10 days of receipt. It is impracticable to include public comment period within the statutory 10-day requirement. Finally, MS4 staff are in the best position to review construction site plans to determine their conformation with local ordinances. Small MS4s should not have to conduct additional public review of construction plans beyond the existing requirements in Oregon law.

Post-construction permit conditions also provide a more specific legal burden for small MS4 communities: the requirement to comply with permit conditions while avoiding potential unconstitutional takings of property. Constitutional takings considerations arise from requirements for permittees to have mitigation programs or "in-lieu" fees for stormwater discharge from new development. A recent U.S. Supreme Court case, Koontz v. St. Johns River Water Management Dist., 570 U.S. 595 (2013), evaluated the constitutionality under Nollan/Dolan's nexus and proportionality test for an exaction involving stormwater discharge. In Koontz, a property owner wishing to develop his site was required to not only give up a portion of his property for a conservation easement, but was also required to pay for watershed-related improvements to publicly owned land. The Court determined that such "in-lieu-of" payments

could be considered an unconstitutional exaction, depending on the facts of the case. While each Nollan/Dolan evaluation is intensely factual, Koontz puts permit-issuing agencies on notice that such exactions can easily run afoul of the Nollan/Dolan test for unconstitutional takings. More importantly, small MS4s may have to thread a very fine needle to comply with their prescriptive permit terms while avoiding a taking. The post-construction exactions, such as those at Schedule A.3.e.iv.D, should be eliminated to avoid unconstitutional and impracticable conditions in the permit.

Also, please clarify confusion as to structural and non-structural controls.

257. Comment from City of Gresham

It is DEQ's job to review 1200-C site plans and ensure compliance. Requiring permittees to review DEQ 1200-C permit documents without an MOA is an unfunded mandate. As a matter of best practice, DEQ should provide site plans to local municipalities so that they can help "keep an eye" on permitted sites and notify DEQ of concerns.

Requiring public comment for sites under an acre is an administrative burden and will not result in the desired outcome. Minimum requirements are clear and can be inspected for effectiveness. The examination of even a thorough EPSC plan does not always predict BMP performance in its application. Moreover, the sheer number and lack of understanding of the how and why related to EPSC BMPs make this an exercise in futility. For large sites DEQ does the public comment, which is appropriate.

258. Comment from Jackson County

This section includes a provision requiring MS4s to "provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required." This requirement is well beyond the federal minimum and creates an impracticable review process. The federal rule does not require public review of individual construction site plans, nor is this necessary to meet the "clear, specific, and measurable" standard. Second, this provision has the potential to cause small MS4s to violate Oregon's building code for residential development, ORS 455.467(1)(a), which requires a jurisdiction to approve or disapprove building permit applications within 10 days of receipt. It is impracticable to include public comment period within the statutory 10-day requirement. Finally, MS4 staff are in the best position to review construction site plans to determine their conformation with local ordinances. This public review provision should be stricken.

259. Comment from City of Keizer

Please consider removing this language. Most municipalities provide an opportunity for a public hearing for subdivisions and large scale development. This requirement adds a layer of redundancy.

260. Comment from Oregon City

The portions of the permit addressing pre- and post- construction plan approvals contain a number of impracticable provisions that also exceed the federal MEP standard. These provisions are discussed in more detail in the individual comment letters provided by other ACWA members, with the following highlighted issues.

Pre-construction requirements include a provision requiring MS4s to "provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required." Draft Permit, at p. 19. This requirement is well beyond the federal minimum of "consideration of information submitted by the public" and creates an impracticable review process. The federal rule does not require public review of individual construction site plans, nor is this necessary to meet the "clear, specific, and measurable" standard. Second, this provision has the potential to cause small MS4s to violate Oregon's building code for residential development, ORS 455.467(1)(a), which requires a jurisdiction to approve or disapprove building permit applications within 10 days of receipt. It is impracticable to include public comment

period within the statutory 10-day requirement. Finally, MS4 staff are in the best position to review construction site plans to determine their conformation with local ordinances. Small MS4s should not have to conduct additional public review of construction plans beyond the existing requirements in Oregon law.

261. Comment from Oregon Home Builders Association

Plan review is not a panacea for protecting water quality, and it is ridiculous to require individual reviews for each single-family home site within a larger subdivision. It will simply cause MS4s to incur high administrative costs for no demonstrable gain and present builders with unnecessary and expensive project delays – likewise with no net gain for water quality. Moreover, DEQ seems to assume that each MS4 has the capacity to conduct these reviews in a timely manner, which is, to be generous, unlikely.

EPA's 2017 Construction General Permit does not include any such provision for plan review, making DEQ's inclusion of such a requirement an unnecessary overreach. If any language on plan review is included in the final permit, we recommend including a trigger-stop review time of 30 days, after which builders assume automatic approval of an NOI.

We recommend removal of this provision.

...Review of Single Family Sites w/in Subdivisions is Unreasonable: It is particularly troubling to envision single-family home plans being reviewed in the manner suggested by the Draft Permit. U.S. EPA published the Small Lot SWPPP Template in December 2015 to acknowledge that compliance on small lots could be greatly simplified. The streamlined SWPPP template contains a list of less than 20 BMPs to choose from, followed by pages of pre-populated installation and maintenance specifications and a space for a small, hand-drawn site map.

There is simply no need to require review of homogenous/repetitive data (identical specifications, identical BMPs) for small sites. It does not provide value to either the public or MS4 staff, especially considering the burden to small operators to submit and adjudicate plans under review. We respectfully suggest that any extra staff time could be better spent on other efforts, such as developer education.

This provision should be deleted.

...Requiring Public Comment on Individual SWPPP Plans is Equal to an Individual Permit, and Cannot be Required. Section 3.d.v requires, "opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required." Again, EPA's 2017 general permit contains no such public notice provisions, and there is no valid policy basis for such a requirement. In fact, it runs directly contrary to Oregon's housing and land use planning objectives.

Requiring public comment on each individual site plan is equivalent to asking municipalities to administrate an individual permit and must be removed.

DEQ Must Clarify that Individual Details of Construction Site Pollution Prevention Plans Are Not Enforceable. In their 2017 CGP, EPA acknowledged that individual details of a stormwater pollution prevention plans or SWPPPs are not directly enforceable. If a SWPPP ceases to reflect activity on a site, it must be modified within a certain timeframe. It follows that EPA enforcement by law can only hold site operators accountable for permit requirement violations, not specific details contained within daily compliance plans.¹⁰ Section 7 of EPA's recently released CGP emphasizes that SWPPPs are intended to serve as a flexible "external tool" to carry out permit responsibilities and that the SWPPP itself does not create new permit terms or conditions. NAHB worked extensively with EPA on the CGP and is satisfied that EPA listened to builders' concerns, clarifying years of confusion in the field over whether individual specifications in a SWPPP create or equate to permit limits.

DEQ should include a similar clarification in their Phase II permit to improve targeting enforcement of actions towards violations causing real environmental harm.

262. Comment from City of Portland

This section states that “Construction site plan review procedures must...provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required.” This condition is highly impracticable and does not comport with 40 CFR § 122.34(b)(4) (D) and (E), which require procedures for site plan review that consider potential water quality impacts (D), and procedures for receipt and consideration of information submitted by the public (E). These provisions are clearly related to public input about the MS4’s construction site runoff *program*, not individual site plans. Please amend the condition accordingly.

263. Comment from City of Springfield

Unclear language – Administratively burdensome - Is the DEQ really asking the MS4 to put every proposed project out for public comment? “...must provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other...”. Additionally, the public does not have the training or background to determine if the site plans demonstrates compliance.

264. Comment from Clackamas County Water Environment Services

The requirement to provide opportunity for public review is only for those sites that disturb 5 acres or more. Therefore, that specific threshold should be stated here rather than “...in accordance with applicable state and local public notice requirements...”.

265. Comment from Polk County

What would constitute soliciting public input, posting it on our website? What are we supposed to do with public comments received, just consider them? This requirement may do more harm than good if we ultimately decide not to incorporate the public’s suggestions.

DEQ Response

Please see Section 1.1 for comments pertaining to MEP and conditions that exceed federal requirements, 1.6 for comments pertaining to the differences between the 1200-C and MS4 permits, and 3.3.4.2 for discussion of the construction site runoff thresholds. Based on comments, DEQ removed the following language:

...must provide an opportunity for the public to submit information about whether the site plan under consideration demonstrates compliance with the ordinance or other regulatory mechanism required.

As discussed in the PER, the permit does not require that construction site owners/operators for every single family home undergo an ESCP review. If a single-family home is part of a construction project that will disturb one or more acres or that disturb less than one acre but are part of a common plan of development, the ESCP is required to undergo a review by the permit registrant. During a review, the permit registrant must determine if the ESCP is adequate to minimize the potential for discharge of pollutants from the site to their MS4. As previously discussed, both the MS4 Phase II general permit and the 1200-C permit require an ESCP. See response and discussion in *Erosion and Sediment Control Plans*, Section 3.3.4.4 above.

As previously stated, DEQ is not requesting permit registrants to review and approve ESPC’s associated with 1200-C permit coverage. The 1200-C permit’s ESCP review, permit issuance and inspections will continue be administrated by DEQ or DEQ Agents.⁹⁰ The permit registrant’s construction site runoff program must include the requirements for all construction sites that will result in land disturbance of one or more acres or that disturb less than one acre but are part of a common plan of development be reviewed.

⁹⁰ If the permit registrant is a Qualified Local Program or CN-Jurisdiction, the construction project activity will be automatically covered under the 1200-CN Construction Stormwater General Permit. The ESCP approval, inspections and compliance evaluations would be performed by the 1200-CN local jurisdiction.

DEQ disagrees with the comments that it is inappropriate for the permit to require the use of a checklist or similar tool for the review of an ESCP. As there must be an acceptable criteria for determining compliance and in general the standard practice is for a municipality to review an ESCP against a checklist. This condition is intended to provide the permit registrant, DEQ and the public (such as construction site operators, homeowners, and interested parties) a clear understanding of what is needed to satisfy the permit registrant's ESCP requirement in each permit registrant's jurisdiction.

3.3.4.6 Construction Site Inspections

266. Comment from Oregon Association of Clean Water Agencies

In subsection (B)1. of this section, eliminate “construction site plan” for the reasons described above.

In subsection (B)4. Of this section, any “additional stormwater practices” should be linked with the need to comply with an ESCP approved by the MS4 operator.

In subsection (C), the requirement for “Large Communities” to conduct an additional 25% of sites, draws an arbitrary distinction between cities >10,000 in population and cities <10,000 in population along with counties that are sole permittees without regard to organizational resources, capability, etc. In other words, this distinction does not relate to what would be MEP in all communities over 10,000 in population.

REQUEST: Alternate language recommendation: In A.3.d.vi.(B)1. Replace “construction site plan” with ESCP

In A.3.d.vi(B)4. Append the sentence to include “...if needed, to comply with the site operator's approved ESCP.”

The rate and number of inspections provided by any given community will need to be related to MEP for that community.

267. Comment from City of Albany

How will the registrant know if sediment is visible if an inspection has not been conducted?

Please clarify what is expected here – permit registrant should not be required to respond to the same site with multiple complaints for the same event.

All jurisdictions do not operate this way. A suggestion might be offered if the contractor asks or through discussion. Once a problem is identified, the contractor is responsible for proposing and implementing solutions that work. Enforcement action will be taken if the proposed solution is not effective. [Schedule A.3.c.vi.B.3]

Same as previous comment. The registrant would certainly help someone understand the program requirements but the registrant won't be instructing the contractor. [Schedule A.3.c.vi.B.4]

If development of this system is supposed to be based on the findings of inspections (experience), how is a New Registrant that isn't required to have the program implemented until 2023 going to have gained any of the required experience to submit the system at the same point in time? [Schedule A.3.c.vi.C]

268. Comment from Clackamas County Water Environment Services

Since the sentence starts with “In addition to...”, remove the redundant “...an additional...” that is found later in that sentence to reduce confusion.

As permit registrants will not know the total number of sites that disturb less than one or more acres in the permit term until the end of the permit term, this may make it difficult to ensure they meet the minimum inspection number. Suggest an alternative wording: “In addition to Schedule A.3.d.vi, Large

Communities must inspect at least 25% of the new sites each year that disturb less than one or more acres to ensure compliance with the Construction Site Runoff Control Specifications requirement.”

269. Comment from City of Gresham

See previous comment: "EPSC Plan" not CS plan

Mandatory and arbitrary 25% standard is not consistent with the MEP standard of the CWA. Suggest that DEQ allow permittees to identify the percent of active sites that will be inspected during a given month depending total number of permits. I.e., 1-5 sites =100% 6-10 sites =80%, 11-20 sites = 60%, etc. Not only will this allow for a permittee to analyze work load v. staffing resources, but also will allow permittees to touch upon more sites over a several month building period. They will be able to go to new active sites and/or revisit problem sites.

See comment above, this type of analysis [Inspection Prioritization System] is consistent with our recommendations for a range of monthly inspections based upon overall development activity within a community. Phase I permittees were required to develop a standard operating procedure which is helpful for ensuring program implementation consistency when staffing changes happen. DEQ should require that all high priority sites be inspected at least 72 hours prior to a predicted heavy rainfall (intensity or volume appropriately selected based upon typical weather patterns). This allows for Friday inspections before a late Sunday/early Monday storm.

270. Comment from City of Millersburg

What is the required frequency of inspection? Once during the life of the project, more frequently? Who determines the frequency? It would be best if this is left up to the permit registrant to determine inspection frequencies based on site conditions.

271. Comment from Oregon Home Builders Association

This section is overly prescriptive and does not allow for MS4s to appropriately focus resources on high-risk construction sites or fly-by-night operators that never file for permit coverage. In addition, procedures should be set in place to instruct inspectors on how to approach sites with visible sediment in their discharge. The Draft Permit states that permit registrants must perform an inspection, "If sediment is visible in stormwater discharge." The Clean Water Act is not a zero discharge statute, and it is unreasonable to ask MS4s to (during a rain event for example) inspect every construction site exhibiting sediment in a discharge.

272. Comment from Polk County

What if an inspection is required based on a complaint, but the construction site plan was never reviewed (less than an acre). How can we enforce on a construction site plan that was never reviewed/approved in the first place.

The wording of this is very confusing. This should only be required for the Large Communities because they must inspect an additional 25% of the smaller site. A prioritization list would be beneficial to them to determine which 25% will be inspected.

273. Comment from Clackamas County Water Environment Services

Recommend remove the Inspection Prioritization System requirement.

The proposed permit states the minimum thresholds for inspection. Therefore, a further requirement requiring an Inspection Prioritization System is unnecessary and is overly prescriptive.

274. Comment from City of Albany

Page 31 of the PER says “Existing Large Communities” – who does this requirement apply to?

How will the permittee know what 25% of the total volume is until the time period is over and total number is known.

Is DEQ meaning once during the total NPDES MS4 permit term here?

275. Comment from Jackson County:

How is the 25% requirement calculated?

DEQ Response

Based on several comments DEQ modified the language regarding the additional inspection 25%, required for only Existing Large Communities, deleted the Inspection Prioritization System requirements, and modified language in the section to provide clarity. DEQ also added language to the final permit, clarifying that each site which will result in land disturbance of one or more acres or that disturb less than one acre but part of a common plan of development must be inspected at least once during the permit term.

How will the registrant know if sediment is visible if an inspection has not been conducted?

Examples of how sediment discharge can be reported include the following:

- by the public through the illicit discharge complaint hotline (or equivalent complaint system),
- reported by the permit registrant's staff, or
- any other reporting mechanism established by the permit registrant (or agency that receives complaints regarding pollutant discharges to surface waterbodies, such as DEQ).

Cost of Plan Reviews, Inspections, and Enforcement

To address concerns associated with cost of plan reviews, inspections, and enforcement of controls at the greater number of sites that the permit condition will apply to, the permit only requires permit registrant to inspect construction sites that will result in land disturbance of one or more acres or that disturb less than one acre but part of a common plan of development. For sites that do not meet this qualification, the permit only requires that the permit registrant's ordinance or other regulatory mechanism require that an ESCP is completed by each site operator prior to the beginning construction. The permit also requires that all site update their ESCP as needed to prevent the discharge of sediment or other pollutants as site conditions change. DEQ expects the permit registrant to use their escalating enforcement procedure to gain compliance with sites that are in violation of the permit or the permit registrant's ordinance or other regulatory mechanism, as needed.

Frequency of Inspection during a rain event

DEQ agrees with the commenter who states that NPDES permits are intended to eliminate the discharge of pollutants. The permit does not require the permit registrants inspect every site. The permit states that the permit registrants must inspect a construction site if a complaint is received or sediment is visible or reported in stormwater discharge or dewatering activities. It does not specify that the inspection must occur during that rain or storm event. Sediment in construction stormwater discharge was identified as a trigger for a construction stormwater site inspection, as sediment discharging offsite it is an indicator that the stormwater controls implemented at the construction site are not adequate for preventing the discharge of sediment into the MS4; therefore the permit registrant must perform a site inspection to assess the ESCP and control measures at the site.

3.3.4.6 Construction Site Inspections (continued)

276. Comment from Rogue Riverkeeper

The 2017 proposed permit represents an improvement from the 2016 draft by providing a required frequency and minimum number of inspections for large communities under Schedule A(3)(d)(vi)(C). However, this section would be further strengthened and more protective of water quality by requiring all construction sites to be inspected at least once within the permit term. Further, the 2017 proposed permit should require the permittees to develop and maintain an inventory of all active public and private construction sites within the first year of the permit term that is updated based on the inspection data collected. The permittees can then use this information to conduct inspections. The combination of an inventory and inspections over a prescribed frequency will help to ensure that construction site runoff controls are correctly implemented and maintained.

DEQ Response

DEQ determined that the requirement for all construction projects that disturb more than the established thresholds be inspected at least once during the permit term may be beyond the capacity for some of the registrants and therefore did not include this requirement.

DEQ agrees with the commenter that this inventory may provide the registrant a better understanding of the various projects within their jurisdiction and this information could be utilized to prioritize areas of inspections. DEQ did not include this requirement in the final permit as it may be beyond the capacity of some of the registrants.

3.3.4.7 Enforcement Procedures

277. Comment from City of Gresham

The enforcement procedure should include the ability to issue a stop work order, the highest incentive for compliance.

278. Comment from City of Springfield

Unclear language – date conflict – “The escalating enforcement procedure must be submitted with the third Annual Report”. It appears this should be the fifth annual report since the by date in section A.3.d.i. and Table 1 is Jan 1 2023. DEQ should change the language in A.3.d.vii to be fifth annual report.

279. Comment from Rogue Riverkeeper

Similar to the changes made to enforcement procedures for the IDDE minimum control measure, the 2017 proposed permit removes the requirement to use the Center for Watershed Protection guidance manual and language included in the 2016 draft permit that outlines the required continuum of enforcement tools. This is less clear, specific, and measurable than requiring compliance with an established procedure under the Center for Watershed Protection guidance manual.

DEQ Response

DEQ clarified that the escalating enforcement procedure must be submitted with the third annual report for Existing Registrants and with the fourth annual report for New Registrants.

DEQ agrees that the stop work order is a very useful enforcement tool and encourages permit registrants to include this as an enforcement option. DEQ maintained the permit language regarding the escalating enforcement procedure as drafted. The permit language provides the permit registrant flexibility to establish an escalating enforcement procedure that can best utilize their resources, codes and specific concerns, while still being “clear, specific, and measurable.”

3.3.4.8 Construction Runoff Control Training and Education

280. Comment from Oregon Association of Clean Water Agencies

Eliminate the term “construction site plan” for the first paragraph, for the reasons described above.

REQUEST: Alternative language recommendation: Replace “construction site plan” with “ESCP”

281. Comment from City of Springfield

Unclear language – this section states that the permittee “must provide orientation and training to all new staff working to implement the Construction Runoff Control program within 30 days of their assignment to this program and at least once during the permit term”. This differs from the PER. The way it is drafted means only new staff are trained at least once during the term. Note that this statement is consistently repeated in all of the MCM sections that require training.

DEQ Response

See section 3.4.4.3, Compliance with Other NPDES Permit Requirements.

DEQ modified the language in this permit condition and the PER to address the comment related to the timing of training.

3.3.4.9 Tracking and Assessment

282. Comment from City of Gresham

DEQ should be clear what elements need to be reported. Typical would be total active sites (1200-C v. not) total sites inspected (1200-C v. not), total number of sites corrected, total of enforcement actions taken and resolution).

DEQ Response

The Annual Report will outline the components that must be tracked.

3.3.5 Post-Construction Site Runoff for New Development and Redevelopment

283. Comment from Oregon Association of Clean Water Agencies

This entire section is overly prescriptive, leap frogs over what is required of Phase I permittees would preclude partnering between Phase IIs and Phase Is in implementing their respective post-construction programs, reflects a lack of understanding of hydrologic/hydraulic design methods and processes, and is technically infeasible and impracticable for the reasons more specifically outlined in our comments below. Additionally, the requirements for off-site mitigation raise legal questions related to private property takings.

With respect to the retention standard itself, MS4 Phase II permittees will not be able to rely on the significant work that has already been conducted by the Phase I communities, who have developed and implemented post-construction site run-off programs for decades. The Phase I communities do not have a retention standard requirement in their permits, yet their permits implement the required water quality protection measures of the federal MS4 stormwater program. Holding MS4 Phase II permittees to an additional retention standard, which does not relate to treating stormwater to achieve water quality standards makes no sense, and requires them to develop programs that differ from the Phase I programs. Because of this inconsistency, developers would be subject to widely differing standards between the Phase I and Phase II communities in which they work. Additionally, Phase II communities would not be able to effectively and efficiently take advantage of significant existing resources and lessons learned from Phase I programs.

... The PER, as written, shows a lack of understanding in general regarding what is included in the Phase I permits for post-construction stormwater management. As an example, in the fourth paragraph on page 36 of the PER, it states that “as a result of the flexibility in selecting a methodology for establishing a retention requirement, permit registrants who are currently using the annual average runoff-based method can minimize adjustments to their post-construction site runoff requirements when complying with this condition.” Permittees that are using the annual average runoff-based method are using a capture and treat method, not a retention standard. These two types of standards are very different.

284. Oral Comment from City of Albany

Similarly, requiring stormwater retention for all development or redevelopment above the threshold identified in the Post-Construction Site Runoff Control section goes beyond the permit requirements for the larger and more capable Phase I communities. This will significantly impact development in Phase II communities, may subject us to constitutional takings claims, and will impact any affordable home efforts in our communities.

285. Comment from City of Albany

Similarly, requiring stormwater retention (rather than capture and treatment prior to release) for all development or redevelopment above the threshold goes beyond the permit requirements for the larger and more capable Phase I communities. This will significantly impact development in Phase II communities, may subject us to constitutional takings claims, will drive up the cost of housing, and impact affordable housing development efforts in our communities.

286. Comment from City of Portland

This section is highly problematic partly due to circular references and requirements far exceeding Phase I permits. The Phase II retention requirements are not equivalent to the Phase I capture and treat requirements. Keeping the language consistent between the two permits would allow small communities to adopt development standards of larger communities and allow Phase I communities to assist (or continue to assist) Phase II communities with design specification, development review and inspection approaches.

If DEQ keeps the retention requirement in the Phase II permit, it should clearly articulate a post-construction runoff hierarchy that recognizes the infeasibility of infiltration in many geographies. The hierarchy should be as follows: First, implement either a retention or a flow duration matching method. If this first tier is infeasible due to site constraints, then a capture and treat method should be prescribed. If onsite management of runoff using any of those methods is still infeasible, the final tier should trigger the off-site mitigation program

DEQ Response

Please see Section 1.1 for discussion of MEP, beyond federal requirements, and permitting approach and 1.22 for leapfrog of Phase I permits.

Retention Requirement Beyond Phase I Permit Requirement & MEP

DEQ reviewed the preamble of the 1999 Phase II Stormwater Rule, several Phase I individual permits, their administrative records, and applicable TMDLs during the development of this permit. In the 1999 preamble, EPA states that the following:

...the NURP [Nationwide Urban Runoff Program] study and more recent investigations indicate prior planning and designing for the minimization of pollutants in storm water discharges is the most cost effective approach to stormwater management.⁹¹

⁹¹ 64 Federal Register 68759, December 8, 1999; EPA Stormwater Phase II Final Rule.

More recent research, referenced in Section 4.3.5.4 of the PER, adds additional support to this statement.

In the preamble reproduced below, EPA goes on to explain to regulated MS4s how to achieve cost savings when complying with the post-construction runoff requirements:

*If potential adverse water quality impacts are considered from the beginning stages of a project, new development and redevelopment provides more opportunities for water quality protection. For example, minimization of impervious areas, maintenance or restoration of natural infiltration, wetland protection, use of vegetated drainage ways, and the use of riparian buffers have been shown to reduce pollutant loadings in storm water runoff from developed areas.*⁹²

Stormwater retention was prioritized in the development of the MS4 Phase I individual permits and factored into the development of this general permit. As discussed in Section 4.3.5.4 of the PER, Phase I permits contain a retention requirement.

*Capture and treat 80 percent of annual average runoff volume, based on a documented local or regional rainfall frequency and intensity.*⁹³

During the drafting of the Phase I permits, DEQ anticipates that developers would achieve this retention standard using site design methods and approaches that retain predevelopment hydrology by applying a low impact development approach and using green infrastructure.

To ensure consistency between the Phase I and II permits, this permit's retention requirement draws on the Phase I permit but also gives the Phase II permit registrants the flexibility to use several methods to establish the retention requirement. To provide quantifiable assurance of pollutant load reduction, this permit requires the permit registrant to track the retention volume should alternative compliance be necessary due to constraints at the development site. As discussed later in this document, stormwater mitigation is also an option for the Phase I permittees, referred to as "equivalent pollutant reduction measures such as off-site stormwater quality management." Additionally, permit registrants are required to meet a retention requirement, in accordance with 40 CFR §122.34(e)(1) and 40 CFR §122.44(d)(1). DEQ has included this retention requirement in the general permit to ensure that permit registrant's actions or implementation of their post-construction stormwater program will reduce stormwater pollutants, and to meet the MS4 permit standard. As discussed in Sections 4.3.5.3 and 4.3.5.4 of the PER, the retention requirement represents the best available technology to reduce pollutant loading in both a reliable and effective approach.

The retention requirement is also closely tied to TMDL load allocations summarized in Section 7.1.3 of the PER. For example, the WQMP of the Willamette Basin TMDL presents stormwater retention as an effective management strategy for meeting bacteria and mercury load allocations and for implementing programs to reduce runoff pollutant loads in runoff and volumes from existing development and redevelopment using controls promoting infiltration. For new development, the Willamette TMDL WQMP cites a management strategy that allows for site designs that clusters homes into a smaller portion of a site to maintain natural features such as open space containing landscape depressions, wetland, and riparian areas to avoid generating stormwater carrying pollutants and retaining and treating stormwater from development. The Rogue TMDL cites similar stormwater management strategies for bacteria as highlighted in Section 7.1.3 of the PER.

The retention requirement requires permit registrants to review and revise local development-related standards to allow for this type of site design.⁹⁴ This is because current land use development standards typically lack the

⁹² 64 Federal Register 68759, December 8, 1999; EPA Stormwater Phase II Final Rule.

⁹³ From the Clackamas Group MS4 Phase I permit.

⁹⁴ The Clackamas Group MS4 Phase I permit included the following, which is similar this permit: "The co-permittee must identify, and where practicable, minimize or eliminate ordinance, code and development standard barriers within their legal authority that inhibit design and implementation techniques intended to minimize impervious surfaces and reduce stormwater runoff (e.g., Low Impact Development, Green Infrastructure)."

flexibility to accommodate site designs that allow the developer to use these cost-effective natural features to manage stormwater.

Using a site design that leverages the natural drainage features is done with the intent to use stormwater retention as the method to reduce stormwater pollutant loads. As illustrated by the small municipality, City of Florence, which is comparable in size to the Phase II permit registrants, a retention requirement is implementable by small MS4s.

The Intent of the Phase I Permit Was Not to Require Stormwater Retention

In Section 4.3.5.4 of the PER, DEQ provided excerpts of the administrative record of the Phase I's PERs, as well as, Phase I permit language supporting DEQ's assertion that the permit is a continuation of the Phase I permits approach on stormwater retention. This permit also provides clear, specific and measurable permit conditions.

An example of the Phase I administrative record discussed in Section 4.3.5.4 of the PER is presented as follows:

...Ultimately, most development sites may achieve the requirement to capture and treat 80% of the annual average runoff by using site design methods and approaches that mitigate the volume, duration, time of concentration and rate of stormwater runoff, such as Low Impact Development and Green Infrastructure.⁹⁵

As noted in the PER, the language in the Phase I permits uses the term onsite retention. The following is an excerpt from the Clackamas Group permit's post-construction site runoff performance standard:

Incorporate site specific management practices that target natural surface or predevelopment hydrologic functions as much as practicable. The site specific management practices should optimize on-site retention based on the site conditions.⁹⁶

Like this permit, the Phase I permits include allowances for alternative compliance, if site conditions prevent or limit onsite retention, as illustrated in the Phase I permit language below:

Where a new development or redevelopment project site is characterized by factors limiting use of on-site stormwater management methods to achieve the post-construction site runoff performance standards, such as high water table, shallow bedrock, poorly-drained or low permeable soils, contaminated soils, steep slopes or other constraints, the Post-Construction Stormwater Management program must require equivalent pollutant reduction measures, such as off-site stormwater quality management. Off-site stormwater management may include off-site mitigation, such as using low impact development principles in the construction of a structural stormwater facility within the sub-watershed, a stormwater quality structural facility mitigation bank or a payment-in-lieu program.

If, as suggested by the commenter, onsite retention is optional DEQ would not require Phase I permittees to provide off-site stormwater quality management.

Capture and Treat vs. Retention

DEQ understands that phrases and terms such as "capture and treat" and "retention" may have created confusion without further clarification in a PER for the Phase I permits and in the defining of terms such as LID, green infrastructure, non-structural stormwater controls, and structural stormwater controls. Retaining or capturing stormwater at a site (onsite) where it infiltrates into the soil made available through better site design

⁹⁵ From the Clackamas Group MS4 Phase I permit PER.

⁹⁶ From the Clackamas Group MS4 Phase I permit.

(non-structural stormwater control) is stormwater treatment. Retaining or capturing stormwater in a structural stormwater control designed to remove pollutants is also stormwater treatment. However, when taken into the context of the entire permit condition, the intent of the Phase I post-construction runoff condition was to have the developer first attempt to retain the runoff onsite to the maximum practicable, given site conditions, before moving to off-site stormwater management quality such as a mitigation bank or payment-in-lieu program.

In an effort to be more clear and specific in this permit DEQ strove to: (1) avoid using different phrases and terms with similar meanings; (2) rely on defined terms for requirements; and (3) reference general permit language used elsewhere in this permit when it is pertinent to a requirement

Other States

EPA published the following statement:

Overall, 28 states and DC and PR have some type of retention standard, 10 states have a treatment only standard (with no retention requirements) and 12 states only have a narrative standard.⁹⁷

As indicated by the above reference document, DEQ's inclusion of a retention requirement in this Phase II permit is consistent with approaches taken other states. For example, the West Virginia's MS4 Phase II general permit contains the following requirement:

11) To manage the impact of stormwater on receiving waters, the program shall include site and neighborhood design elements implemented in tandem with watershed protection elements.

(a) The permittee must implement and enforce via ordinance and/or other enforceable mechanisms the following requirements that keep and manage onsite the first 1 inch of rainfall from an average 24-hour storm preceded by 48 hours of no measurable precipitation or that provide equal benefits for quality water.

(b) The first 1" of rainfall must be 100% managed with no discharge to surface waters except when the permittee allows an alternative approach as described below:

(i) Stormwater is treated before release to surface waters via extended or engineered infiltration. Extended filtration practices that are designed to capture and manage up to one inch of rainfall may discharge through an underdrain system.

(ii) The permittee develops and implements a program to collect payment in lieu of on-site retention, provided in-lieu funds are used for stormwater projects only.

iii) The permittee develops and implements an off-site mitigation program.

(iv) The permittee develops and obtains approval of an alternative method of managing the first 1" of rainfall. The method must be equally protective of water quality as the methods spelled out in the permit.⁹⁸

Virginia's MS4 Phase II general permit excerpts below references design criteria for water quality and quantity that are in Virginia's administrative code under its Stormwater Management Program Regulation (9VAC25-870):

5. Post-construction stormwater management in new development and development on prior developed lands.

⁹⁷ Comprehensive Summary of State Post Construction Stormwater Standards, EPA, Office of Water Office of Wastewater Management Water Permits Division, Updated July 2016.

⁹⁸ State of West Virginia. 2014. *General National Pollution Discharge Elimination System Water Pollution Control Permit*. Permit No. WV0116025. Department of Environmental Protection. Division of Water and Waste Management

a. *Applicable oversight requirements. The operator shall address post-construction stormwater runoff that enters the MS4 from the following land-disturbing activities:*

- (1) New development and development on prior developed lands that are defined as large construction activities or small construction activities in [9VAC25-870-10](#);*
- (2) New development and development on prior developed lands that disturb greater than or equal to 2,500 square feet, but less than one acre, located in a Chesapeake Bay Preservation Area designated by a local government located in Tidewater, Virginia, as defined in § [62.1-44.15:68](#) of the Code of Virginia; and*
- (3) New development and development on prior developed lands where an applicable state regulation or local ordinance has designated a more stringent regulatory size threshold than that identified in subdivision (1) or (2) above.*

b. *Required design criteria for stormwater runoff controls. The operator shall utilize legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to require that activities identified in Section II B 5 address stormwater runoff in such a manner that stormwater runoff controls are designed and installed:*

- (1) In accordance with the appropriate water quality and water quantity design criteria as required in Part II ([9VAC25-870-40](#) et seq.) of [9VAC25-870](#);*
- (2) In accordance with any additional applicable state or local design criteria required at project initiation; and*
- (3) Where applicable, in accordance with any department-approved annual standards and specifications.*

Upon board approval of a Virginia Stormwater Management Program authority (VSMP Authority) as defined in § [62.1-44.15:24](#) of the Code of Virginia and reissuance of the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities, the operator shall require that stormwater management plans are approved by the appropriate VSMP Authority prior to land disturbance. In accordance with § [62.1-44.15:27](#) M of the Code of Virginia, VSMPs shall become effective July 1, 2014, unless otherwise specified by state law or by the board.⁹⁹

Under Virginia's rules, municipalities under a Phase II permit use the Virginia Stormwater Management Handbook to guide compliance with these rules. Specifically, Chapter 10 of this Stormwater Management Handbook describes the required onsite retention approach for a development site using the term "treatment volume" to refer to the runoff reduction volume in acre feet as follows:

In fact, Virginia's new way to approach stormwater management involves a paradigm shift, establishing on-site runoff volume reduction as the main priority. In conjunction with that shift, the term Treatment Volume (Tv) will replace the term Water Quality Volume to represent the volume of runoff that must be reduced and/or treated to achieve compliance with the water quality criteria in the Virginia Stormwater Management Regulations. These concepts are integrated in Virginia's new Runoff Reduction Method (RRM) compliance calculation spreadsheet (see Section 10.1.2 below).

This chapter presents an updated, more effective unified approach for sizing stormwater BMPs in Virginia to meet pollutant removal goals, maintain groundwater recharge, reduce channel erosion, prevent overbank flooding, and pass extreme floods. For a summary, please consult Table 10.1 below.

⁹⁹ State of Virginia. 2013. *General VDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems Authorization to Discharge Under the Virginia Stormwater Management Program and Virginia Stormwater Management Act*. General Permit No. VAR04

The remaining sections describe the applicable sizing issues and the associated criteria in detail and present guidance on how to properly compute and apply the required storage volumes.¹⁰⁰

The purpose of Virginia’s Stormwater Management Handbook is to “provide guidance on measures and to comply with the Virginia Stormwater Management Law and Virginia Stormwater Management Permit (VSMP) Regulations.”

Retention Requirement Subjects Permit Registrant to Takings Claim

Regarding the potential for a retention requirement subjecting permit registrants to a constitutional takings claim, DEQ considered this possibility during the development of the permit. DEQ recognizes that a permit that regulates land use via post-construction runoff requirements may not be appropriate for some development sites and deprive the landowner of all viable economic use of a particular site or, in other words, create a “regulatory taking.” Additionally, the retention requirement in the permit has the potential to create a regulatory taking as permit registrants implement their post-construction site runoff program required in the permit. For example, on a small development site, a regulatory taking may arise as a developer complies with the permit requirement to use a Low Impact Development approach prioritizing non-structural stormwater controls such as protecting riparian areas and wetlands to retain stormwater on the site.

In considering this potential “takings” scenario described above, the protection of natural landscape features to retain the stormwater volume in the retention requirement may not, in some cases, provide sufficient space for the building footprint(s). As a result, the permit requires that permit registrant must establish a pathway for compliance. This pathway involves off-site mitigation when factors such as cost and site constraints would restrict development as the developer attempts to comply with the retention requirement. DEQ integrated this flexibility into the permit to allow the permit registrant to create options for the development community to choose from when designing a stormwater management system to meet the post-construction site runoff retention requirement.

With the options noted above involving non-structural and structural stormwater controls to manage stormwater, the development community has opportunities to not only economize its compliance response but also avoid development scenarios creating a potential for a regulatory takings. For example, the permit’s requirement for the permit registrant to review and revise local development codes or requirements to accommodate Low Impact Development will provide the development community flexible planning and zoning techniques to make the best use their parcels while minimizing water quality impacts.

3.3.5 *Post-Construction Site Runoff for New Development and Redevelopment (continued)*

287. *Comment from Oregon Association of Clean Water Agencies*

From an organizational standpoint, the numbering system in the DEQ-revised red-line version of the draft permit is incorrect, beginning at A.3.e.ii. because the information at the new ii. should be the information under i. Additionally, there are deadline requirements that do not match up with the Tables. The document needs to be corrected to fix mis-numbering and other typos.

288. *Comment from Rogue Valley Sewer Service*

Numbering of this section needs to be corrected and needs to be matched to the PER.

DEQ Response

DEQ acknowledges that there were errors with the section numbering, those errors were corrected in the final permit. In an effort to provide opportunity for clarifications, DEQ provided an 85-day public comment period (exceeding the required 35-day period), publicly announce availability of staff to answer questions, provided a

¹⁰⁰ State of Virginia, *Virginia Stormwater Management Handbook*. Second Edition, 2013.

redline versions of the permit and PER, and responded to several inform requests for clarifications. This was in addition to the informal workshop hosted by DEQ on Dec. 7, 2017. Furthermore, based on the comments received, the commenters provided meaningful comments in DEQ’s determination.

3.3.5 Post-Construction Site Runoff for New Development and Redevelopment (continued)

289. Comment from Oregon Association of Clean Water Agencies

...The PER refers to how some of the smaller Phase I permittees (e.g., Clackamas County co-permittees) can meet the rigorous Phase I post-construction requirements as an example of how Phase II permittees should be able to meet the requirements of this draft Phase II permit. Yet, this draft Phase II permit is very different from, and more rigorous and resource-intensive than, the Phase I permit language. In addition, the Phase I communities have been developing their programs for the past 20 years+ and are in proximity to large urban areas where they can rely on resources developed by others such as the City of Portland.

DEQ Response

The Clackamas Group co-permittees, as well as the municipalities collaborating within the Rogue Valley Sewer Services, provide an excellent model for how New and Existing Registrants can leverage their administrative capacity to comply with the permit requirements.

By developing similar post-construction requirements to Phase I permits and providing permit registrants the flexibility to use a methodology to establish their retention requirements, DEQ is providing the foundation for registrants to work together where appropriate.

3.3.5.1 Implementation Deadline

290. Comment from City of Springfield

Unclear language – There is a conflict in the Schedule. The Schedule A.3.e.ii-ix. Should not include the “Training and Education” section or the “Tracking and Reporting” section. - Both viii (training and Education) and ix (Tracking and Reporting) require annual reporting and should not be referenced as subject to a “by date”. Note the numbering will be off in this section as mention above.

291. Comment from Rogue Riverkeeper

Similar to the Construction Site Runoff minimum control measure, the 2017 proposed permit should be amended to ensure that the implementation timelines for Existing Registrants is in compliance with the Clean Water Act. The final permit remand rule allows new permittees up to five years to implement their SWMPs. For Existing Registrants, however, Section 402(p) of the Clean Water Act states that “any such permit shall provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit.” 33 CFR §1342(p)(4)(A), (B). DEQ must amend the proposed permit to ensure that the final permit will result in compliance within the three-year timeline required under the statute.

292. Comment from Rogue Valley Sewer Services

No deadlines are provided here, please provide the deadline.

DEQ Response

Please see Section 3.3 for discussion of the *3-Year Implementation Deadline*.

As previously discussed in sections 3.3.1.1, 3.3.2.1, 3.3.31, and 3.3.4.1, the permit registrant must ensure that the training and education requirements specified in the permit are implemented by the implementation schedule A.3.e.i. The requirement in Schedule A.3.e.i addresses the implementation date for full compliance with the Post-Construction Site Runoff for New Development and Redevelopment program requirements.

Progress made implementing these SWMP control measure(s) must best document this progress in the Annual Report.

DEQ confirmed that the final permit includes an implementation deadline.

3.3.5.2 Ordinance and/or Other Regulatory Mechanism

293. Comment from City of Albany

As written [see below] the requirements are not feasible to implement. Small properties are difficult, if not impossible, to accommodate SWQ on a site by site basis. This will significantly impact the ability to infill property or intensify densities in the urban centers to avoid future UGB expansions. Additionally, tracking O&M activities on these small sites will become onerous and cost prohibitive over time. The majority of new SFR development will be through subdivisions on property greater than one acre in size. As will most significant commercial and industrial development. The burden placed on developers and the municipality to lower the threshold significantly outweighs the perceived benefits.

Through ordinance or other regulatory mechanism to the extent allowable under state law, for project sites on parcel(s) one (1) acre and larger and that are creating more than a permit registrant-defined area of impervious surface, discharging stormwater to the MS4 ~~which create or replace 5,000 square feet or more of new impervious surface area~~, the permit registrant must require

This seems [see below] to contradict Federal Register Volume 64, Number 235 (page 40). EPA notes that “today’s rule relating to pre-development conditions are intended as recommendations to attempt to maintain pre-development runoff conditions.” EPA goes on to discuss intent and suggest that each municipality evaluate what is appropriate to protect water quality and recognize that improvements might not be installed at every site.

The requirement for treatment at every site for the water quality storm volume, or mitigated offsite, might be workable when the threshold is increased to one acre, but not always the requirement to mimic predevelopment hydrologic function.

A site-specific stormwater management approach that targets ~~natural surface or~~ predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls.

Clarification is needed as to whether or not targeting predevelopment hydrologic function is for all rain events or only the storm/volume (numeric standard) calculated under iv.A.

294. Comment from City of Springfield

Excessive wording – Remove “*at qualifying sites*”; already talking about qualifying sites.

DEQ Response

Please see Section 1.1 for discussion of *Comprehensive General Permit approach* and DEQ’s role is drafting a permit that satisfies the MS4 permit standard.

DEQ reviewed the comment and Federal Register citation provided by the commenter and determined the permit condition does not contradict EPA’s intent. Specifically, as each of the permit registrants discharge to waterbodies that have been identified as impaired,¹⁰¹ these permit conditions are determined to be necessary to be protective of water quality and to prevent further degradation of the receiving waterbodies. The requirement

¹⁰¹ Impaired means any waterbody that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants, included those listed on DEQ’s 3030(d) list as needing a TMDL or that that have an established TMDL.

to protect water quality is further discussed in Section 3.3.5 above under the topic *Retention Requirement Beyond Phase I Permit Requirement & MEP*.

The establishment of a 5,000 square foot threshold represents DEQ's effort to address the fundamental challenge of balancing the impact of impervious surfaces with the cost of regulating this impact.¹⁰² The federal rules require a minimum threshold of one acre, but a permit with a one acre threshold would compound the current challenges facing the permit registrants on managing the increase of untreated impervious surface discharging to impaired waterbodies. As discussed here and in the scientific literature noted in the PER, a one acre threshold will not support the permit registrant's efforts to comply with their TMDL load allocations. Additionally, this permit conditions of a 5,000 square foot threshold, were deemed necessary to satisfy the MS4 permit standard.

DEQ disagrees with the comment that it is impossible to implement a site-specific stormwater management approach on small properties. It is DEQ's determination that the final permit requirement for a site-specific stormwater management approach that targets natural surface or predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls is necessary to minimize the discharge of pollutants in post-construction stormwater runoff and to satisfy the MS4 permit standard.

To clarify, the permit only requires a post-construction stormwater runoff approach that targets natural surface or predevelopment hydrological function for sites that create or replace 5,000 square feet or more of new impervious surface area, not all project sites that create or replace impervious surfaces.

As noted in the Section 3.3.5.2.1 below and Section 4.3.5.4 of the PER, there are a number of municipalities in Oregon using a similar threshold. Other states have adopted a similar or more protective threshold. DEQ retained the phrase "at qualifying sites" as drafted.

3.3.5.2.1 Ordinance and/or Other Regulatory Mechanism - 5,000 sf Threshold

295. Comment from City of Albany

DEQ's requirement of post-construction controls on 5,000 square feet of new impervious surface goes well beyond the federal requirement of one acre of disturbed land. While EPA allows for more stringent triggers in its guidance, it also makes clear that "permit writers should review available construction and planning data from the MS4 to determine an appropriate project size threshold." MS4 Permit Improvement Guide, at 40. That review has not occurred as part of the draft Phase II MS4 Permit. More importantly, the guidance makes clear that such review and adjustment to threshold size should be done on a community-by-community basis. DEQ's application of the 5,000-square-foot threshold for all Phase II permittees for construction and post-construction controls lacks the flexibility that is required by the MEP standard.

The threshold of 5,000 square feet of new impervious area that requires the implementation, installation, and long-term maintenance of permanent stormwater controls (runoff retention) at new development or redevelopment project sites is unacceptable because it cannot be realistically implemented, and it goes far beyond MEP for Albany. The scientific basis for the proposed threshold size reduction from EPA-required one acre of land disturbance to 5,000 square feet of new impervious area has not been adequately explained in the Permit Evaluation Report (PER). The PER generally states that a lower threshold is better than a higher threshold and does not address the need to evaluate permit conditions based on the MEP standard. Applying this standard on single-family infill lots or on lots with zero lot line setbacks will not be possible and is not practicable.

¹⁰² Page 288 on *Trade-offs Between Stormwater Control Goals and Costs* in the National Research Council's *Urban Stormwater Management in the United States* (2009).

296. Comment from City of Gresham

As a city that developed predominantly prior to the implementation of water quality controls, the City of Gresham believes that having development standards are tantamount to a successful stormwater management program. In our experience, the development and implementation of design standards and requirements as a Stormwater Manual has been extremely difficult to get “right” because the stormwater science was new and ever evolving. Subsequent iterations of a Manual require extensive amounts of time and resources and are often highly politically charged. The threshold of disturbance that is necessary to protect water quality is as low as 500 sq. ft for Portland and others and is 1,000 sq. ft for the City of Gresham. Obviously, a community analysis of what is appropriate to protect the water resources in other communities is necessary, and if DEQ intends to prescribe a threshold, it should allow the permittee to offer a timeframe that is needed to satisfy that objective due to the number of plan reviewers and stormwater engineers needed as the threshold drops.

297. Comment from City of Millersburg

It is difficult to understand the requirements of this section. Do the requirements apply to sites disturbing more than 5,000 sf of area or to sites creating more than 5,000 sf of new impervious area? Implementing the requirements of this section, as currently written, is beyond the MEP for the City of Millersburg.

298. Comment from Oregon Home Builders Association

We suggest replacing the proposed 5000 square feet impervious size threshold with disturbance thresholds more common to Phase II permits throughout the United States. Such a small disturbance threshold would capture many low-risk projects that, while important in major metropolitan areas with high redevelopment rates or sensitive coastal areas, are not the priority for small municipalities. See below for a sampling of national Phase II disturbance thresholds.

Table 1: Comparison of State Post-Construction Size Thresholds (2016)

Post-construction size threshold	States
1 acre disturbed area	CT, ME, MA, NH, RI, VT, NJ, NY, PR, PA,VA, WV, AL, GA, KY, MS, NC, SC, TN, IL, IN, MI, MN, OH, WI, AK, LA, NM, OK, TX, IA, KS, MO, NE, CO, MT, ND, SD, UT, WY, AZ, HI, NV, AK, ID, OR
5,000 sf disturbed area	DE, MD, DC (Phase 1)
4,000 sf impervious area	FL
5,000 sf IC (<i>DEQ proposed</i>)	CA
2000 sf of new and/or replaced IC or 7000 sf disturbed area	WA

Source: EPA Summary of State Stormwater Standards (2016)

299. Comment from Polk County

Unclear how redevelopment is considered "new" impervious surface.

PER: Specifically, DEQ requires permit registrants to establish a regulatory trigger for this condition’s post-construction site runoff requirements when a development or redevelopment creates 5,000 square feet or more of new impervious surfaces.

Would an example be redeveloping a driveway from a gravel surface to asphalt? Gravel is pervious while asphalt is impervious. Don't see how this should apply for replacing impervious surface, as the term is defined

DEQ Response

Please see Section 1.1, for comments pertaining to MEP and conditions that exceed federal requirements, 1.6 for comments pertaining to the differences between the 1200-C and MS4 permits, and 1.10 for comments pertaining to the tiered structure of the permit.

Regarding the question of redeveloping a driveway from a gravel surface to asphalt, if the project site discharges stormwater to the MS4 and creates or replaces 5,000 square feet or more of new impervious surface area, the project site would be required to implement the conditions of the Post-Construction Stormwater Program.

Lower Threshold than Required in Phase II Rules

The portion of the MS4 Permit Improvement Guide that the commenter is referring pertains the Construction Site Runoff control measures, not the Post-Construction Site Runoff for New Development and Redevelopment control measures. It should be noted that within the portion of the MS4 Permit Improvement referenced EPA states that the following:

However, some states may have more stringent requirements that apply to some permittees, or the permit writer may have discretion to lower the one acre threshold if this threshold is too high for particular permittees.

The Remand Rule also addressed DEQ’s authority to specify or require permit conditions that are necessary to protect water quality:

The final rule gives permitting authorities some discretion to decide how much specificity to include in the permit and how much flexibility to leave to the MS4 when working out the details of how it will comply with permit terms...

The new § 122.34(c)(1) states that the permit will include, as appropriate, more stringent terms and conditions, including permit requirements that modify, or are in addition to, the minimum control measures, based on an approved total maximum daily load (TMDL) or equivalent analysis, or where the NPDES permitting authority determines such terms and conditions are needed to protect water quality. EPA replaced the term “effluent limitations” with “terms and conditions” to be consistent with changes made to § 122.34(a). In a minor change from the proposal, the paragraph now more clearly indicates that the permitting authority has the discretion to require additional measures to protect water quality, not limited to requirements based on a TMDL or equivalent analysis. This change reflects the authority granted by the statute to protect water quality in section 402(p)(6) of the CWA.

Scientific Basis for the Proposed Threshold Size and Not Implementable

In Section 4.3.5 of the PER DEQ summarized scientific support considered in developing this permit condition. The information below supports the reduction of the one acre threshold.¹⁰³ As discussed in the PER, EPA recognized the need for improved stormwater control measures and requested that National Research Council (NRC) review the then current NPDES stormwater permitting programs. To summarize the findings, NRC stated that impervious surfaces from urbanization impacts the quality of stormwater, among other impacts. NRC provided detailed descriptions of the mechanism of this impact and stressed the overarching importance of minimizing impervious surfaces as it relates to stormwater quality and treating the discharge from new impervious surfaces is critical for meeting TMDL load allocations and achieving water quality standards.

As summarized in the PER, DEQ reviewed the following:

¹⁰³ 64 Federal Register 68722, 68754 (December 8, 1999); EPA Stormwater Phase II Final Rule.

- 1 Scientific literature concerning the impacts of impervious surfaces on water quality
- 2 Post-Construction thresholds being used by current Phase I municipalities in Oregon, (note that Clackamas Counties has several co-permittees with populations less than then Phase II communities), see table below.
- 3 Post-Construction thresholds being used by this permit's Existing and New Phase II Registrants, see table below.
- 4 Post-Construction thresholds being used by other states small Phase II municipalities.
- 5 Management strategies presented in the WQMPs of the TMLDs that apply to the permit registrants' stormwater discharge.
- 6 Post-construction stormwater management practices in the National Menu of Stormwater BMPs.
- 7 DEQ's 2009 guidance on threshold development provided to the Phase I permittees titled *Guidelines for Determining the Post-Construction Impervious Area Minimum Threshold for the Municipal Separate Storm Sewer System (MS4) Phase I Permits*.

MS4 Phase I Permittees	Population¹⁰⁴	Post-Construction Threshold (sq. ft.)
Clean Water Services Watershed permit	--	--
Washington County	N/A	1,000
City of Banks	1,775	1,000
City of Beaverton	95,385	1,000
City of Cornelius	11,915	1,000
City of Durham	1,880	1,000
City of Forest Grove	23,555	1,000
City of Gaston	650	1,000
City of Hillsboro	101,540	1,000
City of King City	3,630	1,000
City of North Plains	2,980	1,000
City of Sherwood	19,350	1,000
City of Tigard	50,985	1,000
City of Tualatin	26,960	1,000
Clackamas County Group	--	--
Clackamas Co. Dept. of Transportation and Development	N/A	5,000
Water Environment Services	25,615	5,000
Clackamas County Service District #1	74,294	5,000
Surface water Management Agency of Clackamas County	N/A	5,000
City of Gladstone	11,840	5,000
City of Happy Valley	19,985	5,000
City of Johnson City	565	5,000
City of Lake Oswego	37,490	3,000
City of Milwaukie	20,550	1,000
Oak Lodge Sanitary District	33,000	1,000
City of Oregon City	34,610	5,000
City of Rivergrove	500	5,000
City of West Linn	25,695	1,000
City of Wilsonville	24,315	5,000
City of Eugene	167,780	1,000
Gresham Group	--	--
City of Fairview	8,975	1,000
City of Gresham	109,820	1,000
Multnomah County	N/A	1,000
Portland Group	--	--
City of Portland	639,100	500
Portland Group - Port of Portland	N/A	500
City of Salem	163,480	single-family: 1,300

¹⁰⁴ PSU Population Research Center Certified Population Estimates 2017

Current MS4 Phase II Registrants	Population	Post-Construction Threshold (sq. ft.) <small>105</small>
City of Ashland	20,700	1 acre
City of Bend	86,765	5,000 ^a
City of Corvallis	58,735	1 acre
City of Keizer	38,345	All permitted projects ^b
City of Medford	79,590	1 acre
City of Philomath	4,710	1 acre
City of Springfield	60,655	1 acre
City of Troutdale	16,070	1 acre
City of Turner	2,005	1 acre
City of Wood Village	3,920	1,000 ^c
Benton County	N/A	1 acre
Lane County	N/A	1 acre
Marion County	N/A	1 acre
Polk County	N/A	1 acre
Rogue Valley Sewer Services	--	--
Jackson County	N/A	2,500 ^d
City Central Point	17,700	2,500 ^d
City of Phoenix	4,605	2,500 ^d
City of Talent	6,325	2,500 ^d
Rogue Valley Sewer Services	N/A	2,500 ^d
Phase II MS4 Permittees	Population	Post-Construction Threshold (sq. ft.)
City of Albany	52,710	8,100 ^e
City of Eagle Point	8,930	1 acre
City of Grants Pass	37,135	1 acre
City of Millersburg	1,835	--
City of Rogue River	2,220	500 ^f
Josephine County	N/A	1 acre
Linn County	N/A	1 acre
<p>Excerpts from available online ordinances::</p> <ul style="list-style-type: none"> a. City of Bend - These provisions apply to any new development or redevelopment site within the City that meets one or more of the following criteria: Projects adding 5,000 square feet or more of impervious area or disturbing one or more acres. b. City of Keizer - An erosion control permit issued by the Public Works Director or Inspector shall be required prior to conducting any activities which may singly or cumulatively cause greater than 2,000 square feet of disturbance. c. City of Wood Village - To prevent the adverse impacts of stormwater runoff, the City has developed a set of performance standards that must be met at new development sites. These standards apply to any construction activity disturbing 1,000 or more square feet of land. d. RVSS: Projects that will develop or redevelop more than 2,500 square feet of impervious surfaces (buildings, roads, parking lots, etc.) on a site must manage stormwater runoff in compliance with the Rogue Valley Stormwater Quality Design Manual 		

¹⁰⁵ DEQ acknowledges that some of the local ordinances have exemptions (e.g., single-family homes).

- e. City of Albany (New Registrant) - (1) A development may be exempted from the requirement of AMC 12.45.030 when one or more of the following conditions exist:
 - (a) The development is for the construction of not more than three single-family or duplex dwelling(s) on an existing lot(s) of record.
 - (b) The development creates and/or replaces less than 8,100 square feet of impervious surface, cumulatively.
 - (c) The Director has determined that physical characteristics of the site (including current development) make effective on-site construction of the facilities impractical; and that an off-site post-construction stormwater quality fee has been paid per AMC 12.45.100.
 - (d) The Director has determined that the site topography or soils makes it impractical or ineffective to construct the facilities on site or within planned improvements in the public right-of-way; and that an off-site post-construction stormwater quality fee has been paid per AMC 12.45.100.
 - (e) The proposed development activity is being constructed under a valid land use approval where the application for said development activity was submitted prior to January 1, 2015. (Ord. 5841 § 3, 2014)
- f. City of Rogue River (New Registrant) - No permit for construction of new development or tenant improvements that result in impervious cover greater than 500 square feet within the city and urban growth boundary shall be issued until effects on erosion prevention and sediment control are evaluated. The level of review varies according to the affected area:
 - Level 1: 500 – 1,999 square feet. No erosion prevention and sediment control measures beyond any mitigation measures for pollution reduction or flow control are required.
 - Level 2: 2,000 – 4,999 square feet. Conceptual plans that conform to the erosion prevention and sediment control best management practices shall be submitted and approved.
 - Level 3: 5,000+ square feet. A comprehensive erosion prevention and sediment control study that conforms to RRCM 17.95.050 shall be submitted and approved.

From this review, DEQ determined:

1. A threshold less than one acre for Post-Construction Site Runoff Control measures will aid permit registrant’s TMDL allocations/requirements and is more protective of water quality
2. A threshold less than one acre is implementable as demonstrated by:
 - a. Small municipalities operating under the Clackamas County NPDES MS4 Phase I
 - b. Several of the Existing Registrations currently implementing a program with a threshold less than 1 acre
 - c. Two of the New Registrations currently implementing a program with a threshold less than 1 acre
 - d. Several other states implementing or are proposing to implement a similar threshold

Additionally, DEQ reviewed available online municipal codes for the Existing and New Registrants to evaluate the potential impact of reducing the one-acre threshold. As illustrated in the above table, several of communities recognize the importance of managing stormwater in urban areas and have implemented a post-construction stormwater threshold at sites smaller than one acre. Four Existing Registrants and two New Registrants either have or require local permits for projects that create or replace less than one acre (see table above). These results indicated that several of the Phase II jurisdictions recognize the importance of managing stormwater in urban areas and have implemented a post-construction stormwater threshold at sites smaller than one acre.

DEQ disagrees with the comments that developers and/or the permit registrants cannot implement the post-construction site runoff program in the permit. One example of the long term implementation of a similar post-construction site runoff requirements is Prince Georges County, Maryland. This municipality has similar requirements that have been in place since the early 1990s, subsequently adopted and adapted by the state of Maryland.

The final permit's lower threshold ensures that more of the costs of urban development is address by the source rather than the downstream users of public waters. Oregon joins many other states who use a threshold that is more protective that one acre.

Unclear How Threshold Was Established and Not Implementable

As previously discuss, the 5,000 square foot threshold represents DEQ's effort to address the fundamental challenge of balancing the impacts from of impervious surfaces with the cost of regulating this impact.¹⁰⁶ While the federal rules require a minimum threshold of 1 acre, the rules do not limit that a more protective threshold cannot be used. Given the scientific literature noted in this document and PER, and the water quality impairments of the receiving waterbodies, a one acre threshold would not support permit registrant's efforts to comply with TMDL allocations.

A one acre threshold of land new impervious area would compound the current challenge for permit registrants by creating more untreated impervious surface discharging to waterbodies under a TMDL and/or on DEQ's 303(d) list. To illustrate this:

- One acre development with 10,000 square feet of impervious surface would have an approximately 23% total impervious surface area
- 8,000 square feet of imperious surface would has approximately 18% total impervious surface area
- 5,000 square feet of impervious surface would has appreciably 11 % total impervious surface area

This level of total impervious surface area is well above the threshold noted below that is protective of stream function.

DEQ determined that the 5,000 square feet threshold would minimize the increase of pollutants from untreated impervious surface areas and enable the permit registrants to comply with their load allocations.

Each Permit Registrant Should Develop Post-Construction Thresholds

When drafting the permit, DEQ considered requiring each permit registrant to develop a post-construction threshold for their jurisdiction, but determined it was not appropriate for the comprehensive general permit approach. DEQ used this approach during the development of the Phase I Individual permits.¹⁰⁷

In this approach, DEQ required Phase I permittees to analyze the current trends in development to ensure that the minimum threshold selected captured the type (residential, commercial, industrial), size, and distribution of development among the land use types. Even though there may not be a change in land use or level of pollutant loading in redevelopment projects, the Phase I permittees had to consider retrofitting existing developments lacking stormwater treatment controls or having inadequate treatment controls. Retrofitting was necessary to meet TMDL load allocations as new and infill development continue in both Phase I and II permittees. For the Phase I municipalities, this threshold analysis produced regulatory triggers for post-construction runoff requirements ranging from 500 square feet in Portland to 10,000 square feet for new and redevelopment of parcel-based projects in Salem (Salem's threshold for single-family developments was determined to be 1,300 square feet).

¹⁰⁶ *Trade-offs Between Stormwater Control Goals and Costs* in the National Research Council's *Urban Stormwater Management in the United States* (2009) page 288.

¹⁰⁷ This approach is summarized in a DEQ document entitled *Guidelines for Determining the Post-Construction Impervious Area Minimum threshold for the Municipal Separate Storm Sewer System (MS4) Phase I Permits* (June 3, 2009).

The Threshold Goes Beyond MEP

Several commenters have stated that the inclusion of a threshold that is less than one acre is beyond MEP for their community and/or beyond what is required in the Stormwater Phase II Final Rule. EPA provided an example of a Phase II general permit that included a threshold of 5,000 square feet in its *Compendium of MS4 Permitting Approaches* and also addressed this claim in the Remand Rule, stating that:

...the permitting authority is responsible for establishing permit requirements that meet the [MS4 permit] standard.¹⁰⁸

As EPA further stated in the preamble to the Phase II rule, “MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards.”¹⁰⁹

The final rule retains modifications from the proposed rule that clarify that it is the permitting authority’s responsibility, and not that of the small MS4 permittee, to establish permit terms and conditions that meet the MS4 regulatory standard and to delineate the requirements for implementing the six minimum control measures, other terms and conditions deemed necessary by the permitting authority to protect water quality, as well as any other requirement.¹¹⁰

EPA emphasizes that the minimum control measures do not restrict the permitting authority from regulating additional sources of stormwater pollutant discharges, not specifically mentioned in the minimum control measure language.¹¹¹

It is DEQ’s determination that this permit condition is necessary to satisfy the MS4 Permit Standard.

...This does not mean that the requirement is more stringent than the minimum control measures, but rather it constitutes what is needed in the permitting authority’s view to satisfy the MS4 permit standard.¹¹²

The TMDL WQMPs

The 5,000 square foot threshold requirement is incorporated into this permit to implement these WQMP management strategies and address the water quality impacts from impervious surfaces. Section 7.1.3 of the PER highlights strategies presented in the TMDL WQMPs that apply to a permit registrant’s MS4 discharge. Of note, the WQMPs identify a strategy of limiting the increase in impervious surfaces. Given the limits to this strategy in an urbanizing area, DEQ recognizes that runoff reduction and treatment is critical for stormwater from new impervious surfaces when the MS4 is subject to a TMDL.

The Remand Rule addressed this issue when discussing establishing water quality-based requirements:

The new § 122.34(c)(1) states that the permit will include, as appropriate, more stringent terms and conditions, including permit requirements that modify, or are in addition to, the minimum control measures, based on an approved total maximum daily load (TMDL) or equivalent analysis, or where the NPDES permitting authority determines such terms and conditions are needed to protect water quality.¹¹³

... the permitting authority has the discretion to require additional measures to protect water quality, not limited to requirements based on a TMDL or equivalent analysis. This change reflects the authority granted by the statute to protect water quality in section 402(p)(6) of the CWA. It also responds to a

¹⁰⁸ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89333.

¹⁰⁹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89323.

¹¹⁰ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89326.

¹¹¹ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

¹¹² NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89342.

¹¹³ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) pages 89342-3.

*comment that due to the time it takes for TMDL development, permitting authorities should not be limited to consideration of only TMDL or equivalent analyses before imposing water quality based requirements.*¹¹⁴

Using the discretion delegated to DEQ as the permitting authority, DEQ established a post-construction threshold designed to address water quality impacts from the MS4 discharges.

Land Disturbance vs. Impervious Area

As urban stormwater pollutant loading is generally a function of increased stormwater runoff volume from impervious surfaces, DEQ determined that impervious area was appropriate.

3.3.5.3 Low Impact Development Code-Related Requirements

300. Comment from City of Albany

Throughout this section it is difficult to understand what the expectations are for predevelopment hydraulic function vs. retention vs. detention vs. treatment vs. LID vs. GI. Difficult to provide helpful and constructive comments to the DEQ without having a clear description of what the requirements are and how they interrelate.

...This is too prescriptive and open to challenge. The requirement should be to conduct a review, identify barriers, and consider alternatives. Otherwise, the language requires a municipality to prioritize GI or LID over all other community goals and objectives, which may not always be appropriate.

“Minimize” will mean different things to different people. This sentence is problematic and should be deleted.

This section is written such that it tries to make development codes the regulating structure. That is not necessarily the only, or correct, approach. The development standards should be able to accommodate LID approaches whereas the requirements to meet specific criteria can lie elsewhere such as in a municipal code or separate document. In that case, this language can be more flexible. The requirements should be spelled out in 1v. while this section should only need to clarify that the development code should not create an obstacle to meeting those standards and requirements. In other words, all the codes and regulatory documents need to work together to meet the minimum requirements. This is important for Albany as it impacts our ability to modify our existing program vs. starting over.

...This [LID Code Updates implementation date] is outside the permit window and should not be included. If something similar were to stay it would need to be rewritten such that only those determined by the permit registrant as being appropriate to change would be made.

DEQ Response

DEQ modified the permit condition to align with similar conditions in other MS4 permits.

The post-construction runoff requirement in the permit are consistent with ORS 197.712(2)(g)(A)-(B) to satisfy local and rural need for residential and industrial development and economic activities; and to provide reasonable opportunities for urban residential, commercial and industrial needs through changes to urban growth boundaries. The requirements in the permit do not prohibit urban growth in any way. The Low Impact Development Code-Related condition in the post-construction runoff requirements will provide for land use development standards that support the efficient use of buildable land within a municipality by minimizing impervious surfaces. For example, minimizing building setbacks and street widths and allowing mixed use creates compact development allowing more residential, commercial, and/or industrial units per unit of land.

¹¹⁴ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89343.

Additionally, the post-construction runoff requirements in this permit do not prohibit nor require DEQ approval of the expansion of an urban growth boundary.

The LID approach is more effective at reliably reducing pollutant loads, as noted in NRC’s 2009 review of urban stormwater management.¹¹⁵ This approach is highlighted in the TMDL WQMPs applying to permit registrants’ MS4 discharge. For example, in Section 7.1.3 of the PER, DEQ notes that the Rogue Basin WQMP provides examples of management strategies to address bacteria from new development that includes passage of a LID ordinance to protect riparian, wetland, and vegetated areas; to manage and treat stormwater; and to limit the increase in impervious surfaces. The LID approach is designed to implement these management strategies for permit registrants stormwater discharge in accordance with 40 CFR §122.34(e)(1) and 40 CFR §122.44(d)(1).

Too Prescriptive

DEQ disagrees with the comments that this permit condition is too prescriptive, open to challenge, or the word “minimize” is problematic.

3.3.5.3 Low Impact Development Code-Related Requirements (continued)

301. Comment from City of Gresham

Terminology is being incorrectly used. DEQ should retitle this section to (A) Prioritization of LID AND Nonstructural controls and then provide examples in the text (some are listed) others include: cluster development, protect and utilize natural drainage ways, minimize point sources, prioritize dispersed overland conveyance into natural systems, etc.

302. Comment from City of Keizer

Delete this language. DEQ is requiring that the stormwater management approach must prioritize LID. This section is too prescriptive.

The permit registrant must review ordinance, code and development standards for barriers to LID and appropriately modify ordinance, code or development standards to accommodate LID by July 1, 2023. If an ordinance, code or development standard barrier is identified at any time subsequent to July 1, 2023, the applicable ordinance, code or development standard must be modified within three years.

303. Comment from Polk County

Beak up into multiple sentences. Run on sentence.

304. Comment from Oregon Environmental Council

We very much support the requirement that permittees must review and modify their codes and standards to remove barriers to LID, and that LID must be prioritized for post-construction runoff control where practicable. We recommend, however, that clear standards for expected onsite infiltration and an enumeration of limitations that would render LID not practicable should be included in the Permit.

305. Comment from City of Springfield

Unclear language – Date conflict – In the sentence: “barriers to LID and appropriately modify ordinance, code or development standards to accommodate LID by July 1, 2023. The permittee has until July, but in Table 1 and (A.3.e.i or ii) it’s January.

¹¹⁵ *Urban Stormwater Management in the United States*. The National Academies Press. Washington, D.C., National Research Council. 2009.

306. Comment from Rogue Riverkeeper

Rogue Riverkeeper supports the provisions under Schedule A(3)(e)(ii) to require the use of stormwater controls, a site-specific stormwater management approach, and long-term operations and maintenance of controls for both new and redevelopment project sites. Requiring stormwater controls for both new and redevelopment is aligned with comparable MS4 Phase II General Permits, including but not limited to New Mexico, Wisconsin, Montana, and Maryland. Further, we strongly support the prioritization of Low Impact Development (LID) approaches throughout this minimum control measure. These practices help to protect and restore water quality by infiltrating rainwater where it falls to reduce polluted runoff. Although this language is a critical first step to addressing post-construction stormwater, we urge DEQ to add more prescriptive provisions to ensure water quality is protected.

DEQ Response

DEQ reviewed the terminology used, no corrections were required.

As previously stated, DEQ is requiring permit registrants to use an LID approach in accordance with 40 CFR §122.34(e)(1) and 40 CFR §122.44(d)(1).

The following overview provides the process for regulating post-construction site runoff as captured in Schedule A.3.e.iii and vi (to provide additional clarity):

- Step 1: Establish regulatory authority to require the prioritization of an LID approach.
- Step 2: Establish site performance standards to mimic predevelopment hydrologic function using a retention requirement.
- Step 3: Establish a treatment requirement when discharging that portion of the retention requirement which cannot be fully met on a site.
- Step 4: Allow the retention requirement or a portion of it to be met off-site (when full compliance cannot be met onsite) and establish mitigation options for alternative compliance.

When drafting the permit, DEQ reviewed the Phase I permits to ensure consistency among MS4s and in some cases to improve upon past requirements (to meet the clear, specific and measureable requirement of the Remand Rule). For example, in the City of Portland's permit, the process for managing stormwater at a site is presented in four sections Schedule A.4.f.i, iii, and v. These sections in this Phase I permit are comparable in their intent to the sections in this permit. To ensure clarity in the final permit DEQ avoided rephrasing information either by using the same phraseology presented in another section of the permit and/or by referencing the pertinent section where the requirement is originally presented.

The final permit addressed the comment regarding the implementation timeline.

3.3.5.4 Post-Construction Stormwater Management Requirements

307. Comment from Clackamas County Water Environment Services

Reusing stormwater is another way to accomplish stormwater retention.

DEQ Response

DEQ agrees, the permit does not preclude reuse of stormwater as a form of retention.

3.3.5.4 Post-Construction Stormwater Management Requirements (continued)

308. Comment from Oregon Association of Clean Water Agencies

Schedule A.3.e.v. is not implementable as written. The following comments refer to Figure 1 that is provided below to illustrate why the draft permit language is unworkable. The language as written shows

a lack of understanding of hydrologic/hydraulic design methods and processes. It is difficult to even comment on the substance of what is required when the mechanics are not correct.

309. Comment from City of Gresham

The section containing the design standards for retention, LID and TSS % treatment standards should be re-written for clarity and implementability. While we advocate for flexibility in the permit to allow for addressing local conditions, it is important to ensure that DEQ is establishing targets that permittees can develop standards to meet the intended outcomes related to both pollutant removal/water quality goals and flow control. The flow of the requirements in section A.3.e is a little confusing, but we would assume that something along the lines of the stormwater management hierarchies that Oregon Phase I communities have already developed is what DEQ is envisioning.

- 1) Full on-site infiltration.
- 2) Partial on-site infiltration.
- 3) On-site filtration using vegetated facility.
- 4) On-site filtration using proprietary device. Having a performance based TSS removal standard is appropriate for this step
- 5) Off-site management using vegetated facility. Maximize on-site treatment first, then meet flow control requirements using a surface vegetated facility.
- 6) Off-site management using other facility. Maximized on-site treatment, then detain and meet flow control requirements using a subsurface facility (e.g. detention pipe/vault)
- 7) Payment in-lieu. If all of the above on-site and off-site treatment options are deemed infeasible, allow payment of an in-lieu fee.

For all these steps, the local municipality can develop and provide guidance for when infiltration facilities are feasible – avoiding slopes, high groundwater, poorly infiltrating soils, setbacks from buildings and property lines, maximum amount of lot space a facility might require (e.g. >10%), etc. This hierarchy also ensures that on-site management of stormwater is maximized before off-site management (which includes both water quality treatment and flow control) is proposed. DEQ seems to be trying to provide the same options in their draft permit language, but as currently written, the draft permit doesn't adequately convey these as the process for reaching the desired outcome for post-construction stormwater management.

...The level of effort that a permittee will need to engage in to fulfill the Post Construction minimum measure cannot be overstated. In our city-wide development observations of what works "best" includes: 1) preservation of land to build larger, more natural regional facilities that support wildlife and mimic natural functions, 2) creation of a mandatory riparian buffers (suggest 50 to 75 feet ideally), 3) code that preserves tree groves and mature trees and that allows for mitigation of degraded riparian buffers in exchange for stormwater sizing credits, 4) designs that avoid point source outfalls and promote dispersed conveyance overland, and 5) require source controls for industrial and commercial development including the planning of covered areas for outdoor storage and waste areas.

Recommendation: DEQ should allow for an entire permit cycle for the development of a design standard manual that is inclusive of the community members, urban planners, developers and builders that also analyzes the appropriate design storm based upon local weather conditions that demonstrates how it will limit stormwater volume and velocity impacts to streams. Further, additional time should be allowed for Stormwater Mitigation Options as this actually requires the creation of an inventory-again, heavily burdensome. Consider just allowing the options without the development of an inventory. Permittees will always be able to identify applicable mitigation sites at the time of request.

310. Comment from Oregon Home Builders Association

The design standard proposed in this section is confusing and vague to the point of not being implementable on the ground. Several of the design standard options listed under the "retention" standard approach are not considered to be forms of retention by environmental engineers (e.g., flow duration matching method, etc.).

Moreover, this section ignores the fact that in most of western Oregon, it will be a practical impossibility to comply with the on-site detention requirement due to the heavy clay soils.

We recommend revising this section to take a clear, simple approach to design standards that will not confuse municipalities and not result in a patchwork of complicated post-construction ordinances across the state.

311. Comment from City of Springfield

Beyond MEP – Not implementable – Unclear language – Sections (A) – (D). The level of detail and the requirements in these sections are much stricter than a Phase 1 Permittee. The DEQ should not expect a Phase 2 community to perform above a Phase 1 community or even at the same level. It is financially impracticable. Some sections are not implementable for a smaller community, and in fact raise legal concerns related to private property takings.

Changing some of the language to allow a permittee more flexibility in developing a program for their community would be better served. Some section comments are noted below.

DEQ Response

Comments stating that these conditions are beyond MEP have been previously addressed, see Section 1.1 and 3.3.5.2.

While DEQ made some edits to the Post-Construction Stormwater management requirements of the permit, DEQ disagrees that the entire section needed to be rewritten. When drafting this permit, DEQ reviewed the Phase I individual permits to ensure consistency among MS4 permits and to improve upon past requirements.

See Section 3.3.5.3 *Low Impact Development Code-Related Requirements (continued)* above for comment pertaining to regulating post-construction site runoff.

DEQ acknowledges that permit registrants will need time to develop and establish enforceable post-construction stormwater management requirements in ordinance or other regulatory mechanism; therefore the permit allotted Existing Registrants up to four years to update their program and up to 4.5 years for New Registrants to develop their programs. This timeline is consistent with the Remand Rule.¹¹⁶

As previously discussed, to ensure consistency, this permit's retention requirement draws on this Phase I Permit requirement and gives Phase II permit registrants the flexibility to use several methods to establish the retention requirement.

Clay Soils

EPA addresses the concern of clay soils in several guidance documents.¹¹⁷ The runoff rate for clay soils is typically high, and this high runoff rate should be reflected in the determination of the volume of stormwater to be retained onsite to target predevelopment hydrologic function. The permit does not require the permit registrant or developer to retain more stormwater than would have been retained during undisturbed conditions. Additionally, for low permeability soils, there are several options available to the developer's designer to address this site constraint and, because of these options, the presence of low permeability soils

¹¹⁶ NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule (81 FR 89320, Dec. 9, 2016) page 89333.

¹¹⁷ EPA's Soil Constraints and Low Impact Development, Careful Planning Helps LID Work in Clay Soils, LID Barrier Busters Fact Sheet Series, 841-R-14-004A, October 2014.

should not automatically trigger the allowance for alternative compliance as discussed elsewhere in this document. Stormwater management approaches such as soil amendments using gypsum and compost to improve infiltration rates, selection of plant species to facilitate infiltration through root structures, and/or design and placement of overflow, bypass and an underdrain system in bioretention facilities can be used to meet the retention requirement.¹¹⁸ Additionally, controls such as plastic chamber systems and underground injection controls are available for low permeability soils to meet a retention requirement at a site.¹¹⁹

3.3.5.4.1 Site Performance Standard

312. *Comment from Oregon Association of Clean Water Agencies*

Schedule A.3.e.v.(A) states that the “permit registrant must establish a site performance standard with a numeric stormwater retention requirement to target natural surface or predevelopment hydrologic function...” A retention standard does not target predevelopment hydrologic function. The retention standard, as written, specifies a single design storm that must be retained. It does not take into account or consider the pre-development conditions of a site. That is one of the reasons that a retention standard is not appropriate.

See box #5 in Figure 1: In Schedule A.3.e.v.(A), it states that if full compliance with the retention requirement cannot be met, and alternative compliance will be used, the proposed development must:

- treat the portion of the rainfall that was not retained to remove at a minimum 80% of TSS, prioritizing the use of green infrastructure to provide this treatment before considering other structural controls, and
- target pre-development hydrologic function for runoff discharged off-site, unless discharging to a fourth order or larger stream

...The retention and treatment requirements in Schedule A.3.e.v.(A) should refer to retaining and treating “runoff” not “rainfall.” In addition, there is language that says that off-site discharge of precipitation should be minimized. Again, the word used here should be “runoff,” not “precipitation.”

313. *Comment from Clean Water Services*

The permit registrant must meet both the narrative requirement to “target natural surface or predevelopment hydrologic function” and numeric retention requirements. In many cases, such as development of formerly bare agricultural land or redevelopment of a paved urban site, the predevelopment hydrology may not be a desirable target. It is not clear if one standard supersedes the other. To avoid confusion, if the permit contains a requirement for a numeric retention standard, it should not also contain a narrative standard.

314. *Comment from Rogue Valley Sewer Services*

The text states that the Registrant must establish a numeric retention requirement to target natural surface or predevelopment hydrologic function. This is a combination of quantitative (e.g. Retain first 1 inch of a 24 hour storm) and qualitative (e.g. Post development peak flow \leq pre-development peak flow) requirements and it will be difficult to write a standard that meets both.

Suggested Change: Eliminate one of the standards, or modify the language so that it is clear that the standard is to be numeric. Additionally, it would be helpful to add a definition of Retention so that Registrants clearly understand what DEQ means by this term.

¹¹⁸ EPA’s *Soil Constraints and Low Impact Development, Careful Planning Helps LID Work in Clay Soils, LID Barrier Busters Fact Sheet Series*, 841-R-14-004A, October 2014.

¹¹⁹ *Virginia Stormwater Management Handbook* First Edition 1999 VOLUME II and I.

Flow duration matching method is listed as an option for choosing a retention standard, but flow duration matching is not a retention standard.

The placement of the following quoted text does not make sense as exceptions to the standard have not been mentioned or defined at this point in the permit. This section should follow a description of the exceptions and in fact similar language is repeated in A.3.e.vi.(C).

“Exceptions to ~~this retention requirement in the site performance standard~~ may be allowed by the permit registrant in instances where full compliance with this requirement cannot be achieved due to criteria established.”

DEQ Response

DEQ disagrees that a retention standard is not an appropriate permit condition. EPA provides examples of several other states that utilize a retention standard¹²⁰ and addressed this topic in the Remand Rule (also see Section 1.1 and 1.13 of this document for further discussion).

DEQ included the reference to “target natural surface or predevelopment hydrologic function” to serve as a narrative standard to prevent stream bank and bed erosion and the pollutants discharged by this erosion. This retention requirement gives the permit registrant flexibility in selecting the method used to comply with the retention volume. The intent of this narrative standard is to ensure that the retention volume derived from one of several methodologies approximates the volume of stormwater that would have been retained on a specific site prior to development or redevelopment. DEQ retained the narrative standard in the permit since it provides guidance to the permit registrant for developing the retention volume and is more protective of the waterbody.

Reference to Exceptions to the Retention Requirement Duplicative

Regarding the duplicative language referencing exceptions to the retention requirement, DEQ intentionally restated permit language for clarity and for ease of understanding the permit. The goal of this approach is to minimize cross referencing. DEQ retained this language as originally drafted.

Flow Duration Matching

DEQ reviewed the numerous comments pertaining to flow duration matching. Based on these comments DEQ deleted the flow duration matching conditions from the permit and PER.

3.3.5.4.1 Site Performance Standard (continued)

315. Comment from Oregon Association of Clean Water Agencies

Schedule A.3.e.v.(A) describes what one is required to do with the amount of the retention standard that cannot be met. This reference is confusing and redundant because that requirement (although specified differently) is also provided in the alternative compliance section (Schedule A.3.e.v.(C)). For clarity, and to eliminate confusion, please provide what is required for the unmet portion of the retention standard in only one of those two sections, or preferably, eliminate that part of the retention requirement and make the permit conform to the PER.

...If you choose an actual retention performance standard (performance standard options 1 through 3 in Schedule A.3.e.v.(A)), the language still doesn't make sense in terms of how to handle the unmet portion of the retention standard. Say your retention standard is a requirement to retain runoff from a 1" storm and you can only feasibly retain runoff from 0.5" of the storm. Then, what this requirement is saying is

¹²⁰ See EPA's *Compendium of MS4 Permitting Approaches*

that you are required to conduct flow duration matching for the remaining 0.5.” The design process for conducting flow duration matching is not based on a single design storm amount. It is based on continuous simulation of peak flows within specified thresholds. Flow duration matching cannot be used to size a facility based on a set amount of rainfall.

... The permit evaluation report (PER) states that you must treat the remaining portion of the retention standard that cannot be retained. It does not discuss or suggest that a user must also target predevelopment hydrologic functions or conduct flow duration matching as the draft permit language does. The single reference to flow duration matching in the PER is only in conjunction with listing it as one of the four performance standard options. The draft permit language is inconsistent with the PER with respect to what is required for the unmet portion of the retention standard.

See box #6 in Figure 1: Schedule A.3.e.v.(C) (Allowance for alternative compliance) is confusing because it describes what is required if compliance with the retention standard cannot be achieved. However, that has already been described in A.3.e.v.(A).

DEQ Response

DEQ disagrees that the permit language is confusing and redundant. To ensure clarity in the final permit DEQ avoided rephrasing information either by using the same phraseology presented in another section of the permit or by referencing the pertinent section where the requirement is originally presented.

DEQ reviewed the numerous comments pertaining to flow duration matching. Based on these comments DEQ deleted the flow duration matching conditions from the permit and PER.

DEQ added language to the PER to address the comment that the PER lacks a discussion of target predevelopment hydrologic functions.

3.3.5.4.1 Site Performance Standard (continued)

316. Comment from City of Albany

Is it intended that this entire volume be retained or only that fraction that stayed on site during pre-developed conditions? Or is that what the intended difference is between the flow duration matching method and the others? If that is what is intended, is it intended that permit registrants do flow duration matching for all storm events or just those that would be calculated in the first three options? This should be clarified.

Retention does not make sense as an outright requirement. Not only may some jurisdictions not have reasonable means of providing retention within their boundaries, retention may not be necessary. Certainly not 100% of the design storm, and why shouldn't it be acceptable to not retain in situations where the water has been treated and isn't anticipated to have significant impact on the receiving water body?

Does this mean that if it is retained and infiltrated on site then no treatment is required prior to infiltration? That appears to contradict the next paragraph that talks about treating runoff.

More appropriate to include in the actual section discussing alternative compliance and mitigation options.

This seems out of place. Why wouldn't this be up in the ordinance section where it defines what the overall program requires? Suggest restructuring as shown throughout regardless of which section this ends up in.

DEQ Response

Flow duration matching conditions have been removed from the permit.

DEQ disagrees that this permit language is unclear or is contradictory. If a site can retain and infiltrate onsite, treatment is not required prior to infiltration. The permit requires project sites that are unable to fully meet the retention requirement onsite to treat the remainder of the runoff prior to discharge with structural stormwater controls.

Regarding the comment “why shouldn’t it be acceptable to not retain in situations where the water has been treated”, a retention standard that targets the predevelopment hydrologic function protects the banks and beds of streams from erosion and pollution arising from this erosion as well as the loss of stream function that improves stream water quality. With urbanization and its increasing impervious surface area, hydromodification impacts on stream function and water quality are documented and take place at a very low threshold of percent imperviousness for a subwatershed.¹²¹ This is also noted elsewhere in this response to comments and in Section 4.5.3.4 of the PER.

3.3.5.4.1 Site Performance Standard (continued)

317. Comment from Polk County

Seems like Phase II is basically being held to the same standard as Phase I. Allows some flexibility, but still very specific requirements.

Ideally we would have Salem implement this. Are there any incentives for Phase I registrants to collaborate with Phase II. Otherwise it may be difficult to convince Salem to implement this for us, or any measures.

318. Comment from City of Springfield

Beyond MEP - This section requires permittees to develop a “Site Performance Standard” with a numeric retention requirement, which is impermissible and extends well beyond congressional intent related to the Maximum Extent Practicable Standard. EPA requires post-construction standards to mimic pre-development conditions via low impact development or green infrastructure to the maximum extent practicable. The EPA and OAR do not requiring a “retention” standard, they state that there needs to be a requirement to develop standards for each community that can meet pre-development conditions though detention, infiltration, or retention.

The Site Performance standard that DEQ has inserted into the draft permit (A.3.e.iv(A)) is very concerning. As written, MS4 Phase II permittees will not be able to rely on work that has been completed by Phase I permittees who have already established and implemented post-construction site runoff programs. In fact, Phase 1 permittees (as referenced above) do not have a retention standard specified in their permits, yet their permits implement the required water quality components of the federal MS4 stormwater program.

The retention standard as written into the draft permit does not target predevelopment hydrologic function. In fact, what it does is require a specific design storm that must be retained onsite without accounting for the predeveloped conditions of the site.

Beyond MEP – The retention standard as written is not practical or implementable. DEQ should redraft the permit to include Maximum Extent Practicable language and change the retention language to be

¹²¹ *The Importance of Imperviousness*, Schuler, Watershed Protection Techniques. 1(3): 100-111

consistent with: to mimic pre-development conditions via low impact development or green infrastructure to the maximum extent practicable.

DEQ Response

Disagrees that the permit condition is not practical or implementable, see Section 3.3.5.2.1 above. Also see Sections 1.1 and 3.3.5.2.1 for conditions that are implemented to MEP, and Sections 3.3.5 and 3.3.5.2.1 regarding the Phase I “work already done”.

DEQ encourages all MS4 communities to work together in any way(s) that are deemed appropriate by the entities at the local level. The incentive could be in shared resources, shared technical expertise or collaboration on watershed wide stormwater approach or watershed wide stormwater manual.

3.3.5.4.1 Site Performance Standard (continued)

319. Comment from Rogue Riverkeeper

DEQ fails to establish the necessary requirements to manage post-construction site runoff that are clear, specific, and measurable to meet the MS4 permit standard. As one example, under Schedule A(3)(e)(iv)(A) Site Performance Standard...

The language of this provision effectively leaves the performance standard up to the permittee, which is not aligned with the requirements of the final permit remand rule to include clear, specific, and measurable permit terms and conditions under the Comprehensive General Permit Approach. The final permit remand rule clearly describes terms and conditions that are not considered “clear, specific, and measurable.” For example, permit terms and conditions that lack a measurable component do not meet this definition. The final permit remand rule states:

EPA also retains the examples provided in the proposed rule preamble of permit language that would generally not qualify as clear, specific, and measurable, which is included here, with minor edits: ...

Permit requirements that lack a measurable component. For instance, permit language implementing the construction minimum control measure that requires inspections “at a frequency determined by the permittee” based on a number of factors.”

DEQ’s requirement to develop a site performance standard from the enumerated list, without requiring a minimum standard, would not be considered clear, specific, or measurable. Although this provision requires a performance standard, DEQ effectively allows permittees to choose their own standard and establish any threshold for retention. Hypothetically, a permittee could establish a site performance standard to retain 20% of annual average runoff. Further, Schedule A(3)(e)(iv)(A) goes on to state that:

Exceptions to this retention requirement in the site performance standard may be allowed by the permit registrant in instances where full compliance with this requirement cannot be achieved due to criteria established.” Schedule A(3)(e)(iv)(A)

It is unclear who would establish the criteria that would allow a permittee to effectively waive this standard and what the criteria would be based upon. DEQ should establish these criteria in the terms and conditions of the permit.

We urge DEQ to strengthen this provision by specifying a particular standard for each listed option of a volume-based method, a storm event percentile-based method, or an annual average runoff-based method rather than providing examples of standards for each approach. For example, permittees should be required to adopt the 95th percentile storm event as the standard if pursuing a storm event percentile-based approach. The EPA recommends the 95th percentile storm event in a formal technical guidance memo regarding implementation of Section 438 of the Energy Independence and Security Act (EISA).

Further, this sub-section should clarify that these standards should ensure that post-development hydrology does not exceed the predevelopment hydrology at the site, in line with the EPA's suggested permit language in its MS4 Improvement Guide.

DEQ Response

DEQ disagrees that the permit conditions are not clear, specific and measurable. DEQ reviewed the final permit and EPA's *Compendium of MS4 Permitting Approaches, Part 1: Six Minimum Control Measures*, and determined that the final permit includes several of the permit provisions that have been determined to qualify as "clear, specific, and measurable" requirements under the Remand Rule and is consistent with 40 CFR 122.34(a).

The permit establishes the requirement for the permit registrants to develop a site performance standard, the permit allows for flexibility in how permit registrants chooses the most appropriate path for meeting this requirement. DEQ retained three of the retention requirement options in the draft permit.

DEQ is unable to respond to the hypothetical statement provided.

Hypothetically, a permittee could establish a site performance standard to retain 20% of annual average runoff.

The permit addresses when and on what basis the permit registrant can allow for an exception to this retention requirement:

Such feasibility or constraint factors may include, but are not limited to shallow bedrock, high groundwater, groundwater contamination, soil instability as documented by geotechnical analysis, and/or a land use that is inconsistent with capture, reuse and/or infiltration of stormwater. The determination that full compliance cannot be achieved at the project site must be based on review criteria considering multiple factors and cannot be based solely on the difficulty or cost.

3.3.5.4.1 Site Performance Standard - % TSS removal requirement

320. Comment from Oregon Association of Clean Water Agencies

Having a treatment standard that references a percentage removal requirement is problematic (see 80% removal requirement in Schedule A.3.e.v.(A)). Percent removal standards are not valid across a range of influent concentrations and penalize sites with good pre-treatment controls. The effectiveness of two identical water quality facilities can be widely variable depending on the quality of the runoff influent from each storm event. In other words, if water entering a facility is relatively clean, 80% TSS reduction cannot be achieved. It is also problematic if the influent to the BMP is loaded with TSS. For example, 90 percent removal of 1000 mg/l influent is not that protective, unless there is another treatment system downstream of that one to address the still high TSS.

The Water Research Foundation's International Stormwater BMP database www.bmpdatabase.org, for example, shows effectiveness in terms of effluent quality together with statistical testing to determine if the BMP had an effect as opposed to percent removals, as that is a more consistent and reliable metric for evaluation.

Based in part on the BMP database effort, EPA has recommended against the use of percent removal (see <https://www.epa.gov/npdes/three-keys-bmp-performance-concentration-volume-and-total-load> and see the related article in the January/February 2008 volume of Stormwater entitled 15 Reasons You Should Think Twice Before Using Percent Removal to Assess BMP Performance, available here: <http://www.wrightwater.com/assets/19-15-reasons-you-should-think-twice-before-using-percent-removal-stormwater.pdf>).

Finally, the 80% TSS removal requirement is technically and physically impossible to consistently meet (for example for a BMP receiving relatively clean inflow, it may be almost impossible to achieve 80

percent TSS removal), and therefore could result in permit violations by an arbitrary standard, regardless of the quality of the stormwater discharged. On the other hand, reducing an inflow of 1000mg/l TSS to 100 mg/l (i.e., 90 percent removal) would not result in appropriate control/water quality protection. When requiring treatment, DEQ should replace the approach taken in the draft permit with a requirement to capture and treat (or manage via infiltration, etc.), using BMPs the community has found to be effective, a percentage (80%) of average annual runoff.

321. *Comment from Clean Water Services*

The permit allows for exceptions to the retention requirements based on technical infeasibility or site conditions and requires alternative means of compliance in such cases. However, any site that is unable to meet the retention requirements and must therefore use alternative compliance is subject to treatment standards on the portion of runoff that is not retained on site, up to the retention standard. This treatment must be by structural control and must remove 80 percent of suspended solids. There are two problems with this approach.

First, if site characteristics do not allow construction of on-site retention sufficient to meet the retention standard, it is probably infeasible to construct the required structural control for treating the runoff. Second, percent removal standards are recognized as unworkable in stormwater treatment. Treatment BMPs cannot perform to the same percent removal standard over the range of influent concentrations encountered in stormwater. Relatively clean runoff from a site with effective controls cannot be treated to the same percent removal standard as runoff that has higher sediment concentration.

Not only is percent removal an unfavorable approach in general, the imposition of the 80 percent removal standard is not supported by the cited source. The PER (at 4.3.6.3) provides the source for the 80 percent TSS removal standard as an EPA guidance document (EPA-840-B-92-002) from January 1993. In that document, the EPA is specific that the 80 percent TSS removal standard is to be determined on an average annual basis. The permit does not include this specification, giving the impression that the standard must be met in every storm. The EPA guidance document also presents the 80 percent TSS removal standard as one alternative, the other being matching predevelopment average annual TSS loading. The permit omits the alternative choice. In addition, critical examination of the data in the EPA guidance shows that it does not support including the 80 percent TSS removal standard in the permit.

The District has analyzed data from the international BMP database and found the only stormwater treatment BMP that reliably achieves 80 percent TSS removal is the media filter. These complex mechanical devices present many problems that preclude their use, including reliability, maintenance and expense. The 80 percent TSS removal standard should be deleted. If the permit contains a runoff treatment standard, it should be a design standard based on effluent concentration or load, not a numeric limit.

322. *Comment from City of Gresham*

Stormwater controls have varying rates of ability to remove TSS. Further, if water is relatively clean, it is impossible to remove 80% of TSS from CLEAR, CLEAN water unless you are a drinking water plant. The 80% removal standard is typically applied ONLY to proprietary devices which have TAPE or TARP protocols. This acts as a trade-off and disincentive for avoiding LID controls which also have infiltration capabilities, whereas proprietary devices do not. It is appropriate for DEQ to apply this to proprietary devices, if used, but not to all stormwater controls.

323. *Comment from City of Portland*

This section lists four standards that the permittee must choose from as its “retention requirement”. However, item #4 (Flow duration matching method) is not a retention standard. Including and referencing this item as such presents conflicts further down in the post-construction requirements, as noted below, and is inconsistent with the narrative in the PER. This section then includes language about treating the un-retained portion of the runoff for sites that are unable to meet the retention requirement. Those details would be more appropriate under Schedule A.3.e.iv.C (Allowance for Alternative Compliance).

Furthermore, imposing an 80% TSS removal requirement is problematic because that removal rate is generally not achievable in relatively clean runoff. This is described in a 2008 *Stormwater* article entitled *15 Reasons You Should Think Twice Before Using Percent Removal to Assess BMP Performance*. The EPA has even advised against using a “percent removal” metric and Washington State’s Technology Assessment Protocol for stormwater technologies also acknowledges this issue by imposing different removal requirements for low versus high influent TSS concentrations. It is highly recommended that DEQ instead specify the capture and treatment of a percentage of average annual runoff.

The final sentence “The runoff discharged off-site must target pre-development hydrologic function unless discharging to fourth order or larger stream” should be stricken or moved as noted previously because it conflicts with the Site Performance Standard options as listed.

DEQ Response

DEQ determined that the treatment requirement to remove 80% of the total suspended solids is an appropriate initial treatment standard. The Cities of Portland and Bend use 70% and 80% percent removal of TSS, respectively. DEQ recognizes percent removal as a measure of structural stormwater control performance is primarily a function of stormwater influent quality and that an 80% removal of TSS may not be achievable when influent quality is high. However, DEQ’s inclusion of the requirement to remove 80% TSS from the stormwater discharge is based upon the percent TSS removal from stormwater discharge approximating the median event mean concentration for TSS for a particular land use.

For example, permit registrants may use the median event mean concentrations for TSS by land use from the Nationwide Urban Runoff Program¹²² and/or the Oregon Association of Clean Water Agencies’ Analysis of Oregon Urban Runoff Water Quality Monitoring Data from 1990 to 1996. As the City of Bend has done with the Central Oregon Stormwater Manual, permit registrants may include an upper and lower bound to their treatment requirement by indicating, for example, 80% removal of TSS for typical influent concentration ranging from 30 mg/L to 100 mg/L to better reflect both the practical limits of an engineered control.

DEQ determined that establishing this treatment requirement provides an additional incentive to lower compliance cost by using non-structural stormwater controls to retain the water quality design storm onsite to avoid engineered structural stormwater controls or reduce their size and number. As noted elsewhere in this document, the treatment requirement is essential for ensuring a positive trend for meeting TMDL allocations.

3.3.5.4.1 Site Performance Standard – Flow Duration Matching

324. Comment from City of Gresham

This approach [flow duration matching] is desired by some communities, but it is not a retention standard and needs to be described accurately Post-Construction Stormwater Management Requirements.

325. Comment from Oregon Association of Clean Water Agencies

Flow duration matching is not a retention standard. To meet a flow duration matching requirement, one could install a facility that meters out flows over a long period of time after a storm and doesn’t require retention at all. While we would like to maintain the option of implementing a flow duration matching requirement, placing it here, and referring to it as a numerical retention requirement is inappropriate with respect to the remaining post-construction draft permit language as described in following comments.

326. Comment from Oregon Association of Clean Water Agencies

With respect [target pre-development hydrologic function for runoff discharged off-site, unless discharging to a fourth order or larger stream] a later section (Schedule A.3.e.v.(C)) refers back to the requirement in this section to “target predevelopment hydrologic function” using the term “flow duration matching.” If flow duration matching is one of the four retention options (under site performance

¹²² *Results of the Nationwide Urban Runoff Program*; Volume I – Final Report, EPA, 1983.

standards), why would it again be referenced as alternative compliance, as this makes no sense? In other words, the language as written essentially says that if you can't meet the flow duration matching requirement (i.e., performance standard option 4), then you must meet a flow duration matching requirement. That is a "double jeopardy" type of requirement, and again, it makes no sense.

DEQ Response

Flow duration matching has been removed from the permit and PER.

3.3.5.4.2 Structural Stormwater Control Design and Specifications

327. Comment from City of Albany

This [below] isn't something a permittee would provide a description of and should be deleted. It would be inherent in the design standards and the defined O&M requirements. So the concept is already covered in the other listed items.

design requirements that do not inhibit maintenance...

Per the definition on page 33, is DEQ referring to the "neighborhood scale" or the "scale of cities and counties"?

DEQ Response

DEQ disagrees that the identified permit language should be deleted. The maintenance of stormwater controls is critical to their capacity, functionality and their long term compliance with the permit's treatment requirement. This upfront planning is designed to minimize the ease of maintenance and minimize the increased level of effort for maintenance or retrofits or replacement of the control.

The Green Infrastructure permit condition is referring to both the neighborhood or site scale and the city or county scale. As noted in the permit definitions, these scale refer to different stormwater management systems. In order for the permit registrant to identify conditions where the implementation of Green Infrastructure or equivalent approaches may be impracticable the registrant must evaluate both scales.

3.3.5.4.3 Allowance for Alternative Compliance

328. Comment from Oregon Association of Clean Water Agencies

Schedule A.3.e.v.(C), 2nd paragraph states that "where alternative compliance is utilized, runoff from the developed site must comply with the treatment standard including its flow duration matching requirement in Schedule A.3.e.v." Reference to flow duration matching here is inconsistent with the definition of targeting predevelopment hydrologic function. Schedule A.3.e.v.(A) does not specifically call out a flow duration matching requirement for the unmet portion of the retention standard, but it requires targeting of the predevelopment hydrologic function. Those two requirements are not exactly the same. You can target predevelopment hydrologic functions without conducting flow duration matching. This inconsistency should be resolved by removing the requirement in both places – consistent with the PER.

Schedule A.3.e.v.(C) states that "if the permit registrant agrees that alternative compliance with the retention requirement is necessary, the permit registrant must require that the site operator use one or more of the stormwater mitigation options outlined in Schedule A.3.e.v.(D)." This language does not make sense as written. The permit has already stated that if the retention requirement cannot be met, then alternative compliance is necessary. Schedule A.3.e.v.(A) defines alternative compliance as providing treatment and targeting predevelopment hydrologic function. It seems that this section should say that if the retention standard or alternative compliance cannot be met, then one or more of the mitigation options

is required. As a result of this language, alternative compliance is basically described in three sections A.3.e.v.(A), (C), and (D), and it is described inconsistently in each one. This needs to be fixed/clarified.

DEQ Response

Flow duration matching has been removed from the permit and PER.

DEQ disagrees that the permit language is confusing and redundant. To ensure clarity in the final permit DEQ avoided rephrasing information either by using the same phraseology presented in another section of the permit or by referencing the pertinent section where the requirement is originally presented.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

329. Comment from City of Albany

This permit should not penalize property owner whose site is not conducive to meeting standards if they contribute to or complete compensatory improvements off site.

Flow duration matching isn't a requirement, and shouldn't be. It is one of the listed available options.

Many landscape architects are trained in and capable of designing stormwater quality facilities. They should be allowed to submit these analysis as well.

...If the obstacle is something like a land use issue, why should a developer have to hire an engineer to write a report for them? Such a requirement on an issue like that provides no value and wastes time and money for a developer.

330. Comment from City of Keizer

Based on what was heard at the explanatory meetings from DEQ, this could be "may", if the MS4 ensures they will never need it (e.g. make sure everyone complies with previous standards).

331. Comment from Oregon Home Builders Association

We applaud DEQ for mentioning off-site and alternative compliance options in the Draft Permit. These can be important avenues for developers to reduce cost of compliance and strive for better "bang for buck" environmental outcomes in areas with difficult soils, low depth to bedrock, or other limiting conditions, but the options must be workable on the ground to provide a meaningful alternative.

The options in the draft permit, however, are not workable. They are very prescriptive and risk over burdening municipal flexibility to administer programs in a cost-effective manner. Requiring each municipality to maintain an arsenal of "shovel ready" mitigation sites on public property, for example, is unreasonable. In many states regional, rather than municipal entities are far better suited to coordinate mitigation and alternative compliance options. See below for alternative Phase II permit language from states we feel have launched successful mitigation/off-site compliance programs.

Ohio EPA may authorize off-site mitigation of post-construction control via its 2014 Phase II permit on a case-by-case basis, provided: (1) a maintenance agreement or policy is established to ensure operation and treatment in perpetuity; (2) the off-site location discharges to the same HUC-14 watershed unit; and (3) the mitigation ratio of the water quality volume is 1.5 to 1 or the water quality volume at the point of retrofit, whichever is greater. Requests for off-site mitigation must be received prior to receipt of the NOI application.

Tennessee's 2016 Phase II permit allows MS4s to propose off-site mitigation and/or payment into a fund for public stormwater projects. Each MS4 must develop and apply criteria for determining the circumstances under which these alternatives will be available. A determination that the standards cannot be met on-site may not be based solely on cost of implementing measures. Examples include "lack of available area to create the necessary infiltrative capacity, or physical conditions that preclude use of

these practices." Mitigation must occur within the same HUC-12 watershed, if practicable, and treat a minimum of 1.5 times the portion water quality treatment volume not treated on site.

Mississippi's 2016 Phase II permit does not mention off-site compliance, but instead sets three criteria for determining when sites may claim a "waiver" from meeting permit standards.: (1) A potential for introducing pollutants into the groundwater exists unless pre-treatment is provided; (2) Preexisting soil contamination is present in areas subject to contact with infiltrated runoff; or (3) Sinkholes or other karst features are present.

The Virginia Stormwater Management Handbook provides an option for phosphorus offset fees. Fee amounts are typically driven by the market and are based on the difference between the target reduction and the actual site reduction after a designer makes his or her best effort to apply runoff reduction and pollutant removal practices.

332. *Comment from City of Millersburg*

Many locations within the City of Millersburg may not have the ability to comply with the retention requirements due to site constraints of high groundwater and soil types that are inconsistent with infiltration of stormwater. However, the alternative compliance options provided in the permit may not be feasible either. What happens if none of the alternative compliance measures are feasible; a moratorium on development?

333. *Comment from City of Portland*

As noted above, please move language about treatment requirements to this section for clarity and amend the second sentence in the second paragraph of sub-part (C) to read: "Where alternative compliance is utilized, runoff from the developed site must comply with the treatment standard ~~including its flow duration matching requirement in Schedule A.3.e.iv.A.~~"

334. *Comment from City of Springfield*

Unclear language – The requirement: "...where alternative compliance is utilized, runoff from the developed site must comply with the treatment standard including its flow duration matching requirement in Schedule A.3.e.iv." reads like it would be double jeopardy. The developer would be required to do off-site mitigation and still be required to meet the flow duration matching requirement on site. Detailed comments on this section are provided in the attached letter.

335. *Comment from Rogue Valley Sewer Services*

"Where alternative compliance is utilized, runoff from the developed site must comply with the treatment standard including its flow duration matching requirement in Schedule A.3.e.iv."

Use of the term flow duration matching here is confusing as in A.3.e.vi.(A) the term used is predevelopment hydrologic function. They are not necessarily the same thing. Predevelopment hydrologic function may refer exclusively to matching peak flow volume, while flow duration matching refers to matching the duration of the peak flow. Consistent terminology for alternative compliance should be used throughout so that the requirements of the Registrant are clearly understood.

The permit states that exceptions to the retention requirement are allowed, and goes on to state that rainfall that cannot be retained on site must be treated to remove 80% of the TSS and discharged at a rate that meets predevelopment hydrologic function. This means that a developer would need to install both treatment and detention facilities for any rainfall that cannot meet the performance standard for retention on-site. This seems reasonable. However, the permit goes on to say in A.3.e.vi.(D) that in addition to treating and detaining the runoff from the project site, the developer must also comply with one of the outlined mitigation options.

One mitigation option is to provide retention at another location. If the developer is already required to retain as much rainfall on site as possible and to treat and detain any runoff from their project site in A.3.e.vi.(A), requiring them to then retain the same volume of any runoff at another site is onerous,

expensive and frankly asking too much. Another option is “Treatment equivalent to the Retention Requirement...using a continuous simulation hydrologic model...” It is unclear what this option is requiring. Does this refer to treatment at another location by removing 80% of TSS and matching predevelopment hydrology, as is already required in A.3.e.vi.(A)? If so, this seems to be double jeopardy. If in fact, this option is just referring back to the same requirement stated in A.3.e.vi.(A) to treat and detain runoff from the original site, then subsections A-D should be rewritten to remove redundancy and improve clarity. The reference to continuous simulation hydrologic model is problematic as well. This is a sophisticated methodology different from those listed in A.3.e.vi.(A). The Phase 1s in Oregon are not utilizing continuous simulation modeling. Due to fewer resources inherently available to Phase 2s, they generally look to Phase 1s for guidance, at this point there is no guidance that could be provided on developing or using this methodology. Therefore, this is an impractical requirement for Phase 2s and should be removed.

In addition, the Registrant is required, prior to allowing alternative compliance, to have an approved inventory of alternative projects. If alternative compliance is treating and detaining any runoff from a project site that is not retained, as RVSS feels it should be, then alternative project sites are not needed. Furthermore, establishing an inventory of approved projects that meet the criteria outlined in subsection D would require considerable time and effort, well beyond the Registrant’s capacity, goes beyond MEP, and would end up stifling development.

336. Comment from City of Springfield

Sub-watershed is not defined. As an example, is the McKenzie River its own watershed or is it part of the Willamette Watershed. DEQ should define what is meant by sub-watershed.

DEQ Response

Flow duration matching has been removed from the permit and PER.

To clarify, the permit does not penalize project sites that cannot meet the site performance standard onsite if they opt for alternative compliance and offsite mitigation.

DEQ disagrees that the permit registrants may not be suited to coordinate mitigation and alternative compliance options. It is DEQ’s assessment that the permit registrants are regional experts in their SWMP, which is evident in the several Existing and New Registrants that are already implementing a similar permit condition. The permit does not require the permit registrant to have “shovel ready” projects, the permit registrant can opt for a payment-in-lieu program or one of the other mitigation options in the permit.

DEQ previously included landscape architects as reviews of the written technical justification and received comments to limit the review to either an Oregon registered Professional Engineer or Oregon Certified Engineering Geologist. DEQ agrees that some landscape architects may be capable of the review, but to ensure a qualified reviewer DEQ retained the language as drafted.

DEQ modified the permit language, changing “must allow alternatives” to “may allow alternatives” as requested by the commenter.

What happens if none of the alternative compliance measures are feasible; a moratorium on development?

DEQ disagrees that site factors within a community will prevent development in MS4 Phase II communities under the retention requirement. Phase I communities and municipalities in other states have not raised this as an issue in their efforts to comply with permits requiring the permittees to:

- “optimize onsite retention based on site conditions”
- with the development of post-construction runoff program that “must require equivalent pollutant reduction measures, such as off-site stormwater quality management”

There are Phase I permittees located in the Willamette Basin where there are areas of “high groundwater” and “tight soils”. As noted in Section 4.3.5.4 of the PER, 28 states use a retention requirement. In its evaluation of efforts in other states, DEQ has found that these retention requirements are in statewide stormwater design manuals that apply to all municipalities within states. These states also have areas of clay soils and high water tables.

Stormwater Mitigation Outside of Subwatershed

The permit allows stormwater mitigation to take place within the same subwatershed. A subwatershed, on average, is a 40 square mile area, providing the permit registrants or developers with a relatively large geographical area to identify opportunities for off-site mitigation. With the boundary of a subwatershed for stormwater mitigation, even small permit registrants close to drainages and waterways – where water tables are typically higher can find opportunities meet the retention requirement off-site.

The permit does not require the permit registrant or developer to retain more stormwater than would have been retained during undisturbed conditions. For low permeability soils, there are several options available to the developer’s designer to address this site constraint and, because of these options, the presence of low permeability soils should not automatically trigger the allowance for alternative compliance as discussed elsewhere in this response to comments. Stormwater management approaches such as soil amendments using gypsum and compost to improve infiltration rates, selection of plant species to facilitate infiltration through root structures, and/or design and placement of overflow, bypass and an underdrain system in bioretention facilities can be used to meet the retention requirement.¹²³ Additionally, controls such as plastic chamber systems and underground injection controls are available for low permeability soils to meet a retention requirement at a site.¹²⁴

Treatment Equivalent to the Retention Requirement

DEQ’s intention regarding the stormwater mitigation option for a “treatment equivalent to the retention requirement” is that the annual mass pollutant removal efficiency for the structural stormwater control needs to ensure that there is no net increase in pollutant load from development or redevelopment. In other words, the structural stormwater control must be designed to provide a post-development pollutant load equal to or less than the pre-development pollutant load. The intent of this permit’s retention requirement is to retain onsite 100% of the pollutants that would be discharged from a developed or redeveloped site. After considering all the mitigation options, the permit registrant may choose to use a structural stormwater control to meet the retention by designing a treatment control to maintain the pollutant load at a site to a predevelopment. This is how treatment control can be a mitigation option for meeting the retention requirement.

~~For an example of how a similar requirement is addressed in another state, the Commenter may want to review the *Evaluation of Current Stormwater Design Criteria within the State of Florida* for a pollutant.¹²⁵ In addition, the structural stormwater treatment control would need outlet controls designed to “target natural surface or predevelopment hydrologic function as much as practicable” to address this narrative retention requirement in the general permit’s site performance standard if discharging to a stream smaller than a fourth order stream.~~

¹²³ EPA’s *Soil Constraints and Low Impact Development, Careful Planning Helps LID Work in Clay Soils, LID Barrier Busters Fact Sheet Series*, 841-R-14-004A, October 2014.

¹²⁴ *Virginia Stormwater Management Handbook* First Edition 1999 VOLUME I and II.

¹²⁵ Harper, Harvey H. and David M. Baker, *Evaluation of Current Stormwater Design Criteria within the State of Florida (Final Report)*. Florida Department of Environmental Protection. FDEP Contract No. S0108, 2007.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

337. Comment from Rogue Riverkeeper

Under Schedule A(3)(e)(iv)(C), DEQ should specify the criteria under which a permittee would be considered unable to comply with the established performance standard. DEQ should reinstate the language from the 2016 draft permit that clarifies that alternative compliance can't be based solely on cost or difficulty. Further, DEQ should require specific criteria, such as technical infeasibility, to ensure that other factors are considered. When stormwater mitigation options for alternative compliance are considered, under sub-section A(3)(e)(iv)(D), DEQ should require off-site mitigation to occur within the same 12-digit HUC watershed or in another prioritized area, based on factors such as 303(d) impaired waters listings. Where mitigation is infeasible, DEQ should consider requiring permittees to pay into a public stormwater fund established by the MS4.

DEQ Response

The permit includes language stating that the alternative compliance cannot be solely based on difficulty or cost. DEQ agrees regarding the importance of the technical infeasibility criteria and the language was kept as drafted.

DEQ agrees that the stormwater mitigation should be within the same area of the mitigation site, to allow the permit registrants some flexibility in establishing an inventory of acceptable alternative project site the permit retains the language that the mitigation site must be within the same subwatershed.

Drawing on the EPA's Terms of Environment Dictionary, DEQ defined the term subwatershed in Schedule D.2. as the topographic perimeter of the catchment area of a stream tributary. According to the U.S. Geological Survey, a subwatershed on average is 40 square miles with a range of 15.6 to 62.5 square miles and this is the scale for a subwatershed that is applicable to the permit.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

338. Comment from Oregon Association of Clean Water Agencies

Finally, the PER does not have a section that describes the Alternative Compliance section (A.3.e.v.(C)) from the permit.

DEQ Response

Section 4.3.5.4.4, Condition A.3.e.iv.D – Allowance for Alternative Compliance was added to the PER.

3.3.5.4.3 Allowance for Alternative Compliance - Nollan/Dolan

339. Comments from Oregon Association of Clean Water Agencies, City of Albany, City of Bend, City of Oregon City

The post-construction conditions also provide a specific legal burden for small MS4 communities that are impracticable: the requirement to comply with permit conditions while avoiding potential unconstitutional takings of property. These takings considerations arise from requirements for permittees to have mitigation programs or "in-lieu-of" fees for stormwater discharge from new development. A recent U.S. Supreme Court case, *Koontz v. St. Johns River Water Management Dist.*, 570 U.S. 595 (2013), evaluated the constitutionality under *Nollan/Dolan*'s nexus and proportionality test for an exaction involving stormwater discharge. In *Koontz*, a property owner wishing to develop his site was required to not only give up a portion of his property for a conservation easement, but was also required to pay for watershed-related improvements to publicly owned land. The Court determined that such "in-lieu-of" payments could be considered an unconstitutional exaction, depending on the facts of the case. While each *Nollan/Dolan* evaluation is intensely factual, *Koontz* puts permit-issuing agencies on notice that such

exactions can easily run afoul of the Nollan/Dolan test for unconstitutional takings. More importantly, small MS4s may have to thread a very fine needle to comply with their prescriptive permit terms while avoiding a taking. A better approach would be to allow more flexible post-construction standards for small MS4s. This is especially relevant given that the federal MS4 program contains no requirements related to retention standards.

REQUEST: The requirements for alternate compliance with the retention requirement should be eliminated. They are not practicable, and they are not required by the EPA to meet “clear, specific, and measurable” standards under the remand rule. Therefore, no alternative provisions are recommended.

340. *Comment from City of Albany*

This is placing a burden on a development that is disproportionate to its impact and may be challenged under Nolan/Dolan court decision. This puts a jurisdiction at risk of legal challenge which, when over turned, will result in non-compliance with the permit.

341. *Comment from Clean Water Services*

Stormwater Mitigation Options: The permit requires the registrant to establish "stormwater mitigation options" for alternative compliance where on-site methods are not feasible. Before allowing a project to use one of these options for alternative compliance, the permit requires the registrant to have an inventory of alternative projects or sites within the same subwatershed as the site proposed for development. This requirement is problematic.

The options for alternative compliance are provided in MS4 permits to avoid a situation where technical infeasibility or site conditions would preclude development of a site, leading a developer to claim that the requirement constitutes a regulatory taking. Development in urbanized areas often includes infill and redevelopment where all other land is developed, leaving no "projects or sites" available within the same subwatershed. Even in a large greenfield development, a regional retention project may be in the same watershed, but not necessarily the same subwatershed as sites that may need to use alternative compliance to meet the retention standard. This requirement could preclude development of a site if such options are unavailable, constituting a regulatory taking.

342. *Comment from Jackson County*

We have serious concerns with this section regarding the mandate to prioritize retention and the associated requirements which financially penalize projects unable to provide retention. While we believe ORS 468B may provide DEQ authority to regulate storm water quantity, such authority is also subject Article XI, section 15, of the Oregon Constitution regarding unfunded mandates. Local Agency roadway projects are very sensitive to the land requirements of retention. Often the only way to provide the land needed for retention is to purchase it, which can be very expensive. Jackson County believes such an expenditure forced by this provision would also be subject to the unfunded mandate provision.

...These takings considerations arise from requirements for permittees to have mitigation programs or “in-lieu” fees for stormwater discharge from new development. A recent U.S. Supreme Court case, *Koontz v. St. Johns River Water Management Dist.*, 570 U.S. 595 (2013), evaluated the constitutionality under Nollan/Dolan’s nexus and proportionality test for an exaction involving stormwater discharge. In *Koontz*, a property owner wishing to develop his site was required to not only give up a portion of his property for a conservation easement, but was also required to pay for watershed-related improvements to publicly owned land. The Court determined that such “in-lieu-of” payments could be considered an unconstitutional exaction, depending on the facts of the case. While each Nollan/Dolan evaluation is intensely factual, *Koontz* puts permit-issuing agencies on notice that such exactions can easily run afoul of the Nollan/Dolan test for unconstitutional takings. More importantly, small MS4s may have to thread a very fine needle to comply with these prescriptive permit terms while avoiding a taking

DEQ Response

To address the TMDL allocations integrated into this permit, DEQ required both a retention and, if needed, a treatment requirement to meet the percent load reductions in applicable TMDLs. As noted elsewhere in this document and the PER, the retention requirement is the most cost-effective and reliable approach to addressing the federal statutory requirement to reduce the discharge of pollutants to the maximum extent practicable [33 USC §1342(p)(B)(iii)]. New development and redevelopment can increase impervious surface area and this, in turn, can increase pollutant loads when stormwater from impervious surfaces is not treated as discussed NRC's 2009 urban stormwater report on. The site performance standard of this permit meets the test arising from Supreme Court's decision in *Dolan vs. City of Tigard*. As discussed below, the site performance standard satisfies the test based on the following: (1) an essential nexus between the exaction (or retention and treatment requirement) and the proposed development and (2) a rough proportionality between the exaction and the projected impact of the proposed development.

Under this permit the water quality of the waterbodies receiving MS4 discharge would decline without the retention of pollutants onsite using, for example, infiltration and evapotranspiration and/or removing stormwater pollutants prior to its discharge. This decline in water quality associated with urban development without the site performance standard would be a violation of the antidegradation policy of the Clean Water Act. To comply with this policy, the portion or volume of the water quality design storm that cannot be retained onsite must meet this permit's treatment requirement prior to discharge to prevent lowering of water quality in a water quality limited waterbody. This permit's treatment requirement of the removal of 80% of the total suspended solids for 5,000 square feet of new or redeveloped impervious surfaces is roughly proportional and directly connected to the potential impact on water quality of these impervious surfaces. The permit only requires the treatment of stormwater that would have been retained (or treated) onsite that targets natural surface or predevelopment hydrological function. As discussed below, stormwater mitigation using alternative compliance will off-set the incomplete treatment of stormwater discharged from the developed site under this treatment requirement and the impact of additional impervious surfaces in a subwatershed.

DEQ also does not agree with the comment that allowance of alternative compliance requires the permit registrant or developer to provide a "disproportionate improvement" to meet the retention requirement. The change in the predevelopment hydrology resulting from urban development with its increase in impervious surface area and corresponding bed and bank erosion in the receiving waters leads to pollutant discharge as discussed elsewhere in this document and the PER. To maintain or re-establish the natural hydrology, the permit registrant or developer must address offsite discharge of the unmet portion/volume of the retention requirement in the same subwatershed if full compliance with this requirement is impracticable onsite. The required stormwater to be retained at another location in the same subwatershed is equivalent or roughly proportional to the stormwater displaced by a proposed development triggering this general permit's retention requirement. Additionally, the allowance in this permit for meeting all or a portion of the retention requirement elsewhere in the same subwatershed is directly connected to the impact from impervious surfaces from new development and redevelopment triggering post-construction runoff requirements in this general permit.

This permit provides the permit registrant and/or the developer's designer with flexibility to design a stormwater management system to meet the retention requirement. DEQ developed this permit to give the permit registrant and the developer's designer the opportunity when necessary to use the general permit's alternative compliance pathway. If the retention requirement cannot be met at a single lot in a development, the retention requirement can be met at the development scale or partial development scale. The flexibility allow this as an option to consider before utilizing the alternative compliance condition. It may be more cost-effective for the developer's designer to convey stormwater from lots with site factors limiting onsite retention to an infiltration basin designed to manage stormwater from the entire development.¹²⁶

With the flexibility to minimize compliance costs, the developer's designer will likely weigh the land, design, and construction costs associated with this infiltration basin relative to the cost of stormwater mitigation at

¹²⁶ Oregon Department of Transportation. 2014. *Appendix C – Media Filtration Facilities*. Hydraulics Manual

another location within the subwatershed. Given the discussion above, the permit registrant in this general permit has the flexibility to develop stormwater mitigation options that address a concern raised in the Supreme Court's decision in *Dolan vs. City of Tigard* regarding the "rough proportionality" relationship of the post-construction runoff requirement and an essential nexus between the this requirement and the development project's impact.

3.3.5.4.4 Stormwater Mitigation Options

343. Comment from Oregon Association of Clean Water Agencies

Schedule A.3.e.v.(D)1. requires meeting the retention requirement at another location, within the same watershed. DEQ discusses in the PER that this will "provide the Development Community with a more cost-effective compliance approach when site constraints make compliance with the retention standard infeasible." The PER further discusses that the inventory of alternative sites "may be provided by the Development Community."

It appears DEQ feels that requiring privately owned offsite property to satisfy the mitigation requirement will allow for greater flexibility for the developer. This is simply not the case. Any owner of property to be mitigated must be a co-applicant to the land-use approval process (siting stormwater facilities on private property is considered development and therefore a land use action) as required by Oregon land use law. In addition, a formal agreement would need to be recorded with the permittee and county for use of the offsite property. There would also be added costs associated with surveying, engineering, securing easements, and/or the purchase of the property. Furthermore, it is entirely possible that no private property owners within the same sub-watershed would be willing to allow use of their sites for mitigation purposes). At a minimum, these factors will not provide for a more cost-effective compliance approach as DEQ discusses in the PER, but will add significant time, complexity and burden to the development process. This leaves the burden of acquiring off-site mitigation properties to the permittee. Even assuming properties are available for purchase in the same sub-watershed, the amount of time, effort, and resources associated with doing so would extend well beyond what is practicable for communities that do not have this program in place, and would not be implementable during the life of the proposed permit.

344. Comment from City of Springfield

... The proposed draft permit language requires meeting the retention requirement at another location, within the same subwatershed. DEQ discusses in the PER that this will "provide the Development Community with a more cost effective compliance approach when site constraints make compliance with the retention standard infeasible." The PER further discusses that the inventory of alternative sites "may be provided by the Development Community."

It appears DEQ feels that requiring privately owned offsite property to satisfy the mitigation requirement will allow for greater flexibility for the developer. This is simply not the case. Any owner of property to be mitigated must be a co-applicant to the land-use approval process (siting stormwater facilities on private property is considered development and therefore a land use action) as required by Oregon land use law. In addition, a formal agreement would also need to be recorded with the permittee and County for use of the offsite property. There would also be added costs associated with surveying, engineering, securing easements, and/or the purchase of the property. Furthermore, it is entirely possible that no private property owners within the same sub-watershed would be willing to allow use of their sites for mitigation purposes. At a minimum, these factors will not provide for a more cost effective compliance approach as DEQ discusses in the PER, but will add significant time, complexity and burden to the development process.

This leaves the burden of acquiring off-site mitigation properties to the permittee. Assuming properties are available to purchase in the same sub-watershed, the amount of time, effort, and resources associated with doing so extends well beyond the MEP standard and is not implementable during the life of the proposed draft permit

DEQ Response

Privately held land can offer opportunities for offsite mitigation for a land owner who may want to generate revenue from their land while still retaining ownership through a conservation easement. To meet the retention requirement offsite developers or permit registrants need land that has the potential for increase hydrologic function, such as increased soil permeability using amendments, increased tree canopy cover to intercept more rainfall, or land that may accommodate an infiltration basin. This land can be under private or public ownership and, due to constraints such as presence of wetlands or poor drainage, may be more suitable for stormwater management than for supporting a building pad. DEQ would like to stress that simply protecting an existing wetland or riparian area does not meet the retention requirement. The developer or permit registrant must augment the capacity of a mitigation site to retain stormwater by, for example, increasing vegetation to increase interception or designing a constructed wetland to increase stormwater retention on a mitigation site. Given this, mitigation sites are not restricted to area with just wetlands and/or riparian areas. Any site with open space that can be modified to store and/or prevent runoff is a potential mitigation site.

3.3.5.4.3 Stormwater Mitigation Options (continued)

345. Comment from Oregon Association of Clean Water Agencies

The draft permit should be revised to say that reuse of stormwater is another way to accomplish stormwater retention (for example, capture in a cistern to use for toilet flushing).

DEQ Response

DEQ disagrees with this comment regarding the need to revise the permit. The permit does not preclude reuse of stormwater as a form of retention.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

346. Comment from Oregon Association of Clean Water Agencies

...The three mitigation options provided in Schedule A.3.e.v.(D) include: off-site mitigation, groundwater replenishment projects, and treatment equivalent to the retention requirement. With respect to groundwater replenishment, please clarify what is meant here? UICs? A meaningful comment on this cannot be provided without clarification. With respect to the third option, you have already specified treatment under alternative compliance. So, this second “double jeopardy” requirement as it is saying that if you can’t retain it all, then treat it, and if you can’t treat it, then treat it again. Then, in this section (A.3.e.v.(D)), if you choose treatment as a mitigation option, it is required to be designed using continuous simulation modelling or other evaluation tool. In the context of development, continuous simulation modelling is typically used to address peak flow issues. ACWA is not aware of anyone around the country using continuous simulation in this context for development. What DEQ is saying here is that if the retention standard is a 1-inch storm, then you have to figure out how much pollutant load is in the runoff from that 1-inch storm (or the unmet portion), and then you would have to conduct continuous simulation and model outflows from a selected facility and evaluate loads in the outflows until the loads were reduced by the amount calculated in runoff from a 1” storm (or unmet volume). That is essentially water quality modelling. Again, we have not found one example of where that is being done anywhere in the Country by a private developer, and it goes far beyond what can reasonably be expected as practicable. Even the Western Washington Hydrology Model which was provided by the State and has continuous simulation embedded in the background does not deal with loading estimates.

DEQ Response

Groundwater Replenishment Projects

Groundwater replenishment projects do not solely refer to a UIC, but can include the use of a UIC as part of the project. Groundwater replenishment projects was presented in EPA’s *Compendium of MS4 Permitting Approaches*:

Alternative compliance measures are allowed where meeting the standard is shown to be technically infeasible or where a project has been determined to provide an opportunity to replenish regional groundwater supplies at an off-site location. Alternative compliance measures include on-site biofiltration, off-site infiltration, a proposed ground water replenishment project, an off-site retrofit project such as green streets, parking lot retrofits, green roofs, and rainfall harvest and use, or participate in a regional stormwater mitigation program.

The Compendium references the 2015 Los Angeles County MS4 permit. The following is an excerpt from that permit’s fact sheet:

The Regional Water Board has included the alternative for regional ground water replenishment in recognition of the multiple benefits it can provide. In addition to providing similar water quality benefits as compared to on-site retention, analysis by NRDC and UCSB found that implementing low impact development practices that emphasize retention at new and redeveloped residential and commercial properties in the urbanized areas of southern California and limited portions of the San Francisco Bay area has the potential to increase local water supplies by up to 405,000 acre-feet of water per year by 2030. This volume represents roughly two-thirds of the volume of water used by the entire City of Los Angeles each year. In addition, the same study notes potential energy savings and reductions in CO2 emissions.

Treatment Equivalent to the Retention Requirement

Also see Section 3.3.5.4.4, *Stormwater Mitigation Options - Treatment Equivalent to the Retention Requirement* for further discussion.

As the emphasis of this mitigation option is the use of structural stormwater controls, DEQ anticipates this option may be more costly and, therefore, the least used option. However, this option was included to provide an additional path to compliance.

The treatment equivalent to the retention does not require the use on the continuous simulation hydrologic model, it allow for other evaluation tools.

Regarding the comment, “...we have not found one example of where that is being done anywhere in the Country...” The continuous simulation hydrologic model is referenced in the following stormwater documents:

- City of Gilroy, City of Morgan Hill and County of Santa Clara’s Stormwater Management Guidance Manual For Low Impact Development and Post-Construction Requirement
- Washington State Department of Transportation Hydraulics Manual

DEQ retained the permit conditions as drafted.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

347. Comment from City of Albany

What happens in small communities where the issue that prevents retention on site also prevents it from being viable anywhere else in the community---e.g. high groundwater and tight soils? It is likely not

practicable for them to develop a continuous simulation model. Some of them may not even have engineers on staff to review a model someone else created.

DEQ Response

Please see response to comment *What happens if none of the alternative compliance measures are feasible; a moratorium on development?* in Section 3.3.5.4.3 above.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

348. Comment from City of Albany

The expectations are not clear for meeting each of the listed requirements. [below]

...as well as institutional standards and management systems to value, estimate, and account...

DEQ Response

DEQ incorporated flexibility to meet requirements such as the retention requirement in the permit's site performance standard. This flexibility minimizes the impact on the developer while protecting water quality. The requirement to provide stormwater mitigation options for a developers provides the permit registrant with a range of options to minimize the impact to water quality. For example, if site constraints make offsite mitigation necessary, the developer can meet the retention requirement in an area of existing development with no stormwater treatment controls.

The area of existing development can be selected based on the ease and low cost of retrofitting the site with a treatment control. A management could integrate both off-site mitigation the long-term maintenance O&M requirements in the post-construction runoff control measure. This tracking system can be integrated into the permit registrant's asset management program, or it may prompt the development of an asset management program to support the financial planning for stormwater capital improvements.

Alternatively, the permit registrant can establish a payment-in-lieu program to allow the developer to provide funds to meet this retention requirement at another location in the future. The permit registrant can use these payment-in-lieu funds to help fund the implementation of a stormwater master plan developed, in part, to identify areas in existing development where a stormwater retrofit project could be used to address the unmet portion of the stormwater retention volume. As with the previous example, the permit registrant required tracking for of long operation and maintenance provide a management system to account for the developer's compliance with the retention requirement.

Regarding the institutional standards for valuing off-site mitigation projects, the unmet portion of the retention volume that cannot be retained on a project site serves as the standard for meeting the retention requirement. The management system highlighted in the examples above can serve as the mechanism for accounting for the compliance with this requirement. If the permit registrant establishes a mitigation bank either directly or through a third party, the standard of the unmet portion of the retention volume noted above can become the "transferable credit" in the general permit's definition of a stormwater mitigation bank program.

DEQ retained the permit conditions as drafted.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

349. Comment from City of Albany

If the primary requirement is for retaining water onsite and infiltrating, why is it important that the compensatory infiltration site be within the same subwatershed – which per definition is a tributary stream. Wouldn't it be more appropriate to have it within the same groundwater impact area? Seems like this would justify some flexibility given the groundwater impact zone is likely bigger than the subwatershed.

The intended path forward is not clear. Infiltrating on site and treating then releasing are totally different. Are you trying to say that you can demonstrate that your post- construction release is done in the same manner as predevelopment and therefore will not negatively impact a receiving stream? Is it intended that under this scenario a developer could treat their stormwater onsite and detain such that the release rates did not create additional damage under the design storm/volumes previously identified? DEQ's intentions/expectations need to be made more clear throughout in order to provide the most clear and constructive comments.

DEQ Response

Allowing Alternative Compliance in the Next Closest Subwatershed

Also see Section 3.3.5.4.3, *Allowance for Alternative Compliance*.

Allowing stormwater mitigation in the next closes subwatershed would contribute, over time, to the degradation of water quality due to hydromodification from discharges from new development and redevelopment in the subwatershed where the impacts of urbanization occur. The increased impervious surface area increases the stormwater flow to a receiving water. This modified hydrology leads to streambank and bed erosion resulting in pollutant discharge and loss of stream function.

Permit Appears to Distinguish a Surface Watershed from a Groundwater Watershed

Given that the Clean Water Act serves as the basis for this permit, DEQ's focus is on protecting and, where needed, restoring the quality of surface water. DEQ recognizes that surface water and groundwater are one resource physically connected by the hydrologic cycle, yet are independent, as surface water and groundwater may be hydraulically connected or disconnected. Additionally, DEQ recognizes that the boundaries of a surface water and groundwater watershed do not always coincide. Regardless the interdependence and specifics of the interaction between surface water and groundwater, the use of term subwatershed in this general permit pertains to the subwatershed of the surface waterbody.

The primary purpose of the retention requirement in this permit is to move the first flush of stormwater carrying the most significant mass load of pollutants from impervious surfaces into the soil for treatment via bioretention. Although the retention requirement may also support the natural function of the groundwater watershed, its secondary purpose in this general permit is to prevent stream bed and bank erosion by protecting the predevelopment hydrologic function. By greatly increasing the volume and rate of stormwater discharge, urbanization dramatically alters the hydrology within the surface water subwatershed, and this hydromodification impacts surface water quality directly. In addition, maintaining the pre-development hydrology helps protect the base flow and its influence on the surface water quality for a subwatershed.

DEQ retained the permit conditions as drafted.

3.3.5.4.3 Allowance for Alternative Compliance (continued)

350. Comment from Clean Water Services

The District has implemented a successful fee-in-lieu program for many years that allows developers to meet runoff control requirements off site if on-site facilities are infeasible. The District's programs allow prioritized implementation of projects using fee-in-lieu funds to create multiple ecological benefits. Narrowing the use of fee-in-lieu funds to an existing inventory of projects or sites within the same subwatershed would severely limit the program. The requirement should be deleted.

351. Comment form City of Gresham

Requiring permittees to develop an inventory of hypothetical projects that may never happen is an administrative burden and serves no beneficial outcome. If a permittee and developer want to utilize this option, they will identify an appropriate location to conduct mitigation.

352. *Comment from Jackson County*

Stormwater Mitigation Options, requires that projects not providing on-site retention must, in addition to on-site water treatment, provide additional off-site measures from a list of options. This essentially requires the project proponent to treat double the volume of water required. In addition to just being unfair on its face, the proposed permit conditions also provides a more specific legal burden for small MS4 communities: the requirement to comply with permit conditions while avoiding potential unconstitutional takings of property...

We believe, and recommend, that as a better approach, instead of requiring specific retention standards, the general permit should encourage retention standards but also allow permit registrants to create their own post construction standards without the mitigation requirements of subsection v.D. Owners of properties that cannot reasonably provide retention should not be penalized. On sites that can reasonably provide retention, retention is usually the most cost effective solution. If retention is not used (for any reason) then current water quality requirements should be required to be met. As noted above, on sites that can reasonably provide retention, retention is usually the most cost effective solution. However, this is not well known in the development industry. This should be a focus of education and outreach to developers and design professionals. We believe this approach will achieve what DEQ and EPA are trying to achieve, but within a much more reasonable framework.

353. *Comment from City of Millersburg*

This option would seem to require the City to own a “bank” of stormwater retention facilities within the same subwatershed as the development in order to allow for alternative compliance. However, if the City does not currently own property within the subwatershed or all available property is subject to the same physical constraints as the development property, this mitigation option is not possible.

354. *Comment from Polk County*

Reword to "...establish at least one stormwater mitigation option..."

Don't know of any available off-site location within the permit area. Mostly privately owned SR zoned properties. There is only have one county park 1.6 acres in size. No inventoried open space.

355. *Comment from City of Portland*

Language in the first paragraph in sub-part (D) is problematic because it assumes that the first of the three subsequent options has been chosen as the mitigation approach. The statement currently reads as: “Before allowing alternative compliance with the retention requirement, the permit registrant must have an inventory of appropriate alternative projects or sites as well as institutional standards and management systems to value, estimate, and account for how these mitigation projects retain the unmet volume of the stormwater specified in this retention requirement. This inventory of alternative projects or sites must be within the same subwatershed as the site undergoing development.” Permittees should only be required to maintain such an inventory if they choose to implement a stormwater mitigation bank program under option #1. Please move or remove this language for clarity and consistency with the PER (page 38).

356. *Comment from City of Springfield*

This paragraph states “The permit registrant must establish stormwater mitigation options for alternative compliance. Before allowing alternative compliance with the retention requirement, the permit registrant must have an inventory of appropriate alternative projects or sites as well as institutional standards and management systems to value, estimate and account for how these mitigation projects retain the unmet volume of the stormwater specified in this retention requirement. This inventory of alternative projects or sites must be within the same subwatershed as the site undergoing development. Stormwater mitigation options must include one or more of the following for alternative compliance:”

This proposed draft permit language differs from what DEQ notes in the PER, which states that “permit registrants are – at a minimum – required to offer one of these mitigation options to site operators.

However, DEQ has concluded that providing more options will give the permit registrant and the development community greater flexibility to economize permit compliance.” DEQ goes on further in the PER to state that these options will provide “potential economic benefits” and “support compliance with the MEP standard.”

DEQ’s language in the PER is consistent with language used in other NPDES permits around the country, and provides flexibility as intended in the Clean Water Act under the MEP standard. The draft permit language provides no flexibility, and is prescriptive in requiring a mitigation bank for retention. DEQ has acknowledged a mitigation bank would be administratively burdensome on the permittee in the PER and the PER language is written that a mitigation bank is optional and not a requirement. DEQ should change the language in Section A.3.e.iv (D) of the draft permit to reflect the language and intent contained in the PER.

...Beyond MEP – Not implementable - There is no argument that the permit registrant’s ordinance or regulatory mechanism must allow alternatives for projects to comply with a performance standard that targets natural surface or predevelopment hydrologic function to MEP at a project site based on factors of technical infeasibility, and/or site constraints. But requiring an inventory and institutional standards and management systems to value, estimate, and account for how these mitigation projects retain the unmet volume of the stormwater specified in this retention requirement and basically requiring a mitigation bank, goes beyond MEP for phase2 committees. Administratively burdensome and may not be able to acquire resources to manage such a program (sites, staff, \$\$).

Sub-watershed is not defined. As an example, is the McKenzie River its own watershed or is it part of the Willamette Watershed. DEQ should define what is meant by sub-watershed.

DEQ Response

Please see Section 1.1 for responses to comments pertaining to MEP.

Allowing Alternative Compliance in the Next Closest Subwatershed

See above responses in Section 3.3.5.4.3, *Allowance for Alternative Compliance (continued) to Allowing Alternative Compliance in the Next Closest Subwatershed and Permit Appears to Distinguish a Surface Watershed from a Groundwater Watershed.*

Existing Inventory and Hypothetical Projects

DEQ agrees with the commenters that the limiting stormwater mitigation to an existing inventory of projects could be too narrow for effective implementation of the alternative compliance requirements. Based on these comments, DEQ removed the requirement that “[b]efore allowing alternative compliance with the retention requirement, the permit registrant must have an inventory of appropriate alternative projects or sites.” The permit retains the requirement that the permit registrant has in place “institutional standards and management systems to value, estimate, and account for how these mitigation projects retain the unmet volume of the stormwater specified in this retention requirement” before allowing stormwater mitigation.

Inventory, Institutional Standards, and Management System is Out of Reach for Established MS4s

DEQ disagrees that the stormwater mitigation requirement is “out of reach” for the Existing and/or New Registrants, see response in Section 3.3.5, *Post-Construction Site Runoff for New Development and Redevelopment.*

As with the Phase II permit holders in West Virginia, permit registrants can develop one or more of the stormwater mitigations options included in this permit. The level of effort required for stormwater mitigation

may be scaled to the capacity of the permit registrant. The permit language provides the permit registrant multiple paths to meet this requirement. For example, permit registrants may choose to collaborate in a subwatershed to economize compliance and reduce the administrative burden of this requirement since this stormwater mitigation requirement can be met anywhere in the same subwatershed including in another municipality.

To clarify, the permit does not state that the inventory, institutional standards, or management system has to be developed for the permit registrant's jurisdiction. Alternatively, as noted in Section 4.3.5.4 of the PER, the inventory can be created by the development community and may include land owned or developers. Alternatively, permit registrants may leverage the existing Statewide Planning Goal 5 (open spaces, natural resources) and/or 11 (Public Facilities) inventory to minimize the burden of this requirement and shorten the length of time needed to meet this requirement. If a watershed council has performed an inventory or assessment of sites for stormwater treatment and some of these sites can achieve treatment through stormwater retention, permit registrants with limited administrative capacity could rely on this inventory. A management system may be as simple as, a spreadsheet documenting critical information about the mitigation, such as the volume stormwater retained at this site, the geographical coordinates for the site, and the entity responsible for its long-term maintenance.

Remove Mitigation from the Permit; a Mitigation Bank is Required

To ensure consistency, the retention requirement draws on the Phase I permit requirements, and allows Phase II permit registrants the additional flexibility to use one of several methods to establish the retention requirement. To provide quantifiable assurance of pollutant load reduction, the permit clearly requires the permit registrant track the retention volume should alternative compliance (i.e., stormwater mitigation) be necessary. The permit strives to make the need for and the connection to, if necessary, offsite stormwater mitigation clear, specific, and measurable.

The allowance for stormwater mitigation is an integral part of the implementation of the Post-Construction Site Runoff for New Development and Redevelopment SWMP and required for a permit registrant to account for sites that cannot meet the retention requirement. DEQ retained the mitigation requirements in the permit.

No Available Area for Mitigation within Subwatershed

Please see response to comment *What happens if none of the alternative compliance measures are feasible; a moratorium on development?* above.

3.3.5.4.4 Stormwater Mitigation Options - Mitigation Bank

357. Comment from Oregon Association of Clean Water Agencies

This proposed draft permit language differs from the PER, which states that “permit registrants are—at a minimum—required to offer one of these mitigation options to site operators. However, DEQ has concluded that providing more options will give the permit registrant and the development community greater flexibility to economize permit compliance.” DEQ goes on further in the PER to state that these options will provide “potential economic benefits” and “support compliance with the MEP standard.” DEQ’s language in the PER is consistent with language used in other NPDES permits around the country, and provides flexibility as intended in the Clean Water Act under the MEP standard. The draft permit acknowledged a mitigation bank would be administratively burdensome on the permittee in the PER and the PER language is written that the mitigation bank is optional and not a requirement. DEQ should change the language in Schedule A.3.e.v.(D) of the draft permit to reflect the language and intent contained in the PER.

...See box #7 in Figure 1: Schedule A.3.e.v.(D) (Mitigation Options) is infeasible as written. The paragraph states “The permit registrant must establish stormwater mitigation options for alternative compliance. Before allowing alternative compliance with the retention requirement, the permit registrant must have an inventory of appropriate alternative projects or sites as well as institutional standards and management systems to value, estimate, and account for how these mitigation projects retain the unmet volume of the stormwater specified in the retention requirement. This inventory of alternative projects or sites must be within the same subwatershed as the site undergoing development. Stormwater mitigation options must include one or more of the following for alternative compliance:”

...Basically, this language in Schedule A.3.e.v.(D), by using the word “must” in the above paragraph, is requiring a mitigation bank for retention. That is a very sophisticated and onerous program as clearly acknowledged by DEQ in the PER. This program goes beyond what is required of MS4 Phase I permittees, and would be impracticable for some, if not all, MS4 Phase II permittees. The PER language states that this type of program is administratively burdensome (top of page 39 of the PER) and suggests that it is an option – not a requirement. The draft permit language is inconsistent with the PER, and should be revised to conform with the PER.

DEQ Response

DEQ agrees with the commenters that establishing a stormwater mitigation bank may be an administratively burdensome process, see Section 4.3.5.4.4 of the PER. A mitigation bank is not a requirement in the permit and the PER is consistent on the topic. The stormwater mitigation options in this condition are offsite mitigation, groundwater replenishment projects, and developing a treatment equivalent to the retention requirement in the site performance standard. The permit registrant has the flexibility to choose any one of these three options for stormwater mitigation offsite.

358. *Comment from Oregon Association of Clean Water Agencies*

This mitigation option language refers to meeting the retention requirements at another location, and per Schedule A.3.e.v.(A), would be the unmet volume of stormwater specified in the retention requirement. The unmet volume of stormwater specified in the retention requirement was already addressed with treatment and targeting predeveloped hydrologic function per alternative compliance, so, why is it being referenced again?

The draft permit language in Schedule A.3.e.v.(D) states that “stormwater mitigation options must include one or more of the following for alternative compliance...”. Again, alternative compliance has already been referenced in Schedule A.3.e.v.(A) so this is confusing.

DEQ Response

The goal of this approach is to minimize cross referencing, recognizing that cross-referencing is unavoidable given the interrelationships between the general permit conditions. DEQ retained this language in the permit condition as drafted.

3.3.5.4.4 *Stormwater Mitigation Options - Groundwater replenishment projects*

359. *Comment from City of Springfield*

The draft permit language states that if the developer cannot meet the retention requirement onsite due to high groundwater, clay soils, etc. then it will not be possible to replenish the groundwater onsite, and off-site mitigation will be necessary. The same issues as identified in the off-site mitigation section above would apply here. Furthermore, DEQ is not the regulatory authority on replenishing offsite groundwater supply, and should not attempt to do so through this permit.

DEQ Response

For discussion of clay soils, please see response to comment *What happens if none of the alternative compliance measures are feasible; a moratorium on development?* above.

Onsite retention and infiltration of stormwater are the preferred retention standard for minimizing the off-site impact of increases of impervious area. The permit condition allows for compliance with the retention requirement through groundwater replenishment projects. DEQ acknowledges that this might not be necessary or feasible for each permit registrant or at all projects sites but retained this as an option.

3.3.5.4.4 Stormwater Mitigation Options - Treatment Equivalent to the Retention Requirement

360. Comment from City of Millersburg

It is not clear what would be acceptable for this option. It was previously stated that structural controls are not preferred and may only be used to treat stormwater when full compliance with retention requirements cannot be achieved. Alternative compliance is in addition to structural controls. What treatment methods are allowable for this option?

361. Comment from City of Springfield

Requiring treatment equivalent to the retention requirement as one of the stormwater mitigation options doesn't make sense because DEQ has already specified this as a requirement in the Alternative Compliance section (A.3.e.iv.C) above. How is a permittee supposed to treat all the runoff on site, and then treat it all again?

Suggested permit language for A.3.e.iv. (D)

The permit registrant must establish stormwater mitigation options for alternative compliance to mitigate water quality impacts and reduce pollutant loading to support compliance with the MEP standard. The permittee must offer options for alternative compliance, which may include:

1. Off-Site Mitigation – includes meeting the retention requirement at another location
2. Stormwater Mitigation Bank Program
3. Stormwater Payment-in-lieu Program

DEQ Response

Please see Section 1.1 for discussion of permit conditions that are implemented to MEP and compliance with the MEP standard.

DEQ's intention regarding the stormwater mitigation option of treatment equivalent to the retention requirement is that the annual mass pollutant removal efficiency for the structural stormwater control needs to ensure that there is no net increase in pollutant load from development or redevelopment. In other words, the structural stormwater control must be designed to provide a post-development pollutant load equal to or less than the pre-development pollutant load. The intent of the permit's retention requirement is to retain 100% of the pollutants onsite from a developed or redeveloped site. Since retention is not possible at all project sites, DEQ included flexibility to ensure there are multiple ways to meet the outcome of minimizing the impact from the increase impervious area.

The treatment equivalent to the retention requirement requires that the permit registrant's or the project site's designer to estimate the annual mass pollutant removal efficiency needed to achieve a zero net increase in pollutant loading following development or redevelopment (compared with the loading from pre-development

conditions). The *Evaluation of Current Stormwater Design Criteria within the State of Florida* offers one example of a similar requirement in another state.¹²⁷

In the final permit DEQ retained the permit conditions for three mitigations options, offsite mitigation, groundwater replenishment projects, and treatment equivalent to the retention requirements.

3.3.5.5 Post-Construction Site Runoff Plan Review

362. Comment from City of Albany

How can a permit registrant get out of reviewing plans for all of the projects required to implement various controls? Compliance with all the requirements of the permit will require review of essentially all of the runoff plans. Especially when there are O&M requirements that will have to be imposed and enforced.

363. Comment from Polk County

Post-construction requirements should be triggered by impervious surface, not disturbance.

How would we require this; withhold building permits unless the property owner grants the County an easement? What about requiring the property owner to submit an inspection report from a qualified engineer as an alternative to the permit registrant being responsible for physically doing the inspections. Would this only apply to new stormwater controls?

There is no "2", I think this should be "B"?

DEQ Response

DEQ understands the value of reviewing all post-construction runoff plans. DEQ did not require that all post-construction runoff plans be reviewed based on the feedback received regarding the administrative burden of this requirement.

Based on these comments the permit was modified to require the permit registrants' post-construction site runoff plan review for projects sites that use alternative compliance to meet the retention requirement.

At a minimum, the permit registrant must review and approve plans for structural stormwater control at new development and redevelopment sites that result from land disturbance of one or more acres (or that disturb less than one acre but part of a common plan of development) and sites that use alternative compliance to meet the retention requirement, before the start of the project.

3.3.5.6 Long-Term Operation and Maintenance

364. Comment from Oregon Association of Clean Water Agencies

In Schedule A.3.e.vii.(C), the draft permit uses the term "nonstructural stormwater controls" when referring to vegetated structures with soil which require Operation and Maintenance (O & M). Since these types of structures are actually "STRUCTURAL stormwater controls," DEQ should correct this incorrect terminology in the final permit.

In Schedule A.3.e.vii.(E) the draft permit states: "The location of all public and private stormwater controls as installed in compliance with this permit must be included with the MS4 map." Please clarify that this is intended to apply to new stormwater controls installed after the effective date of the permit.

The PER, as written, shows a lack of understanding in general regarding what is included in the Phase I permits for post-construction stormwater management. As an example, in the fourth paragraph on page 36

¹²⁷ Harper, Harvey H. and David M. Baker. 2007. *Evaluation of Current Stormwater Design Criteria within the State of Florida (Final Report)*. Florida Department of Environmental Protection. FDEP Contract No. S0108

of the PER, it states that “as a result of the flexibility in selecting a methodology for establishing a retention requirement, permit registrants who are currently using the annual average runoff-based method can minimize adjustments to their post-construction site runoff requirements when complying with this condition.” Permittees that are using the annual average runoff-based method are using a capture and treat method, not a retention standard. These two types of standards are very different.

365. Comment from City of Albany

Refer to DEQ definition of structural and nonstructural controls. DEQ is describing structural controls here.

I believe that structural and non- structural stormwater controls are being misused in this section. Based on the provided definitions this section is not implementable. It appears that the writer assumed that structural controls were mechanical type treatment systems whereas non-structural was more traditional green infrastructure such as swales, planters, etc. That conflicts with the definitions.

366. Comment from City of Gresham

DEQ's use of the term "nonstructural control" is inconsistent with industry standards. Generally BMPs related to development are structural (rain gardens, swales, ecoroofs, ponds, pervious pavement). Nonstructural controls are typically things associated with NOT doing something such as open space preservation, cluster development to limit footprint, effective impervious reduction techniques, minimizing soil compaction, etc.

367. Comment from Oregon Home Builders Association

The draft permit assumes away significant post-construction issues. For example, responsibility for post-construction maintenance and operation of stormwater facilities, since the developer or builder will have moved on once the project is sold and the home owners whether or not there is an organized community association will not have the necessary expertise to keep even the most rudimentary stormwater facility functioning properly.

368. Comment from City of Keizer

This will require hiring new staff with specialized skills. Specialized training means additional training costs.

This goes far beyond the existing skills level for the average municipal utility worker.

For nonstructural stormwater controls that include vegetation, the O&M requirements must at minimum include requirements to maintain and/or replace vegetation to ensure the functionality of this control. For nonstructural stormwater controls that include soils in the treatment process, O&M requirements must at minimum include requirements to maintain soil permeability.

369. Comment from City of Millersburg

Compliance with the inspection, maintenance, and operation requirements of this section, as written, is beyond MEP for the resources of a small city. The statement “...ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.v.A.” puts the city at risk for 3rd party litigation for things that are beyond the City’s control and/or beyond MEP. Many residential developments include stormwater facilities which remain the property of a homeowners’ association. Operation and maintenance of these facilities can be challenging to enforce and the City will likely end up responsible for the operation and maintenance of these private systems in order to avoid a permit violation. This is also problematic because the operation and maintenance activities would require work by City staff on private property.

370. Comment from Polk County

Would a spreadsheet be sufficient? [*This can take the form of a computerized maintenance management system or asset management system that allows for the electronic logging of O&M tasks.*]

371. Comment from City of Portland

Please amend the first sentence to read as “The permit registrant must maintain an inventory and implement a strategy to ensure that all stormwater controls installed under Schedule A.3.e are operated and maintained...” The language as currently written implies that the permittee has authority over pre-existing controls or those that were installed for purposes outside the scope of the MS4 post-construction requirements. Please make subsequent items consistent with this recommended change.

Schedule A.3.e.vi.C: This section references “nonstructural controls” in a manner that is inconsistent with its definition, which states that they are controls “in the form of development standards or other regulatory mechanisms.” Please review all permit references to both “structural” and “nonstructural” controls and ensure that the permit requirements comport with how these terms are defined.

372. Comment from City of Springfield

Redundant and listed in the wrong section - The requirement to map the location of all public and private stormwater controls as installed in compliance with this permit is in the wrong section; this is the O&M section, not mapping. Furthermore, this requirement is already listed under the mapping requirement section. Remove (E).

“The location of all public and private stormwater controls as installed in compliance with this permit must be included with the MS4 map.” Does this require only the mapping of those controls that were installed after the date of issuance of this permit?

373. Comment from Clackamas County Water Environment Services

“Non-structural” meaning & should “site performance standards” be “maintenance standards.” How will permit registrant assess that the performance of all facilities will continue to meet the site performance standard? For example, in the years following construction of a stormwater detention pond, is permit registrant required to measure or have owner/operator of the control measure the current infiltration rate of the pond? (3.e.vii)

Change “nonstructural” to “structural” in both instances. (3.d.ii.C)

Reference doesn’t exist. (3.e.vii.D)

“The location of all public and private stormwater controls as installed in compliance with this permit must be included with the MS4 map.” Does this require only the mapping of those controls that were installed after the date of issuance of this permit? (3.e.vii.E)

374. Comment from Rogue Riverkeeper

Operations and maintenance (O&M) is essential to the long-term effectiveness of LID and other stormwater management technologies. DEQ should consider strengthening this provision by requiring permittees to develop or adopt an existing O&M handbook that includes LID practices. Under Schedule A(3)(e)(vi), DEQ should add a requirement for permittees to develop or adopt existing inspection checklists that can be integrated into an electronic database. Following the model of the Western Washington Phase II permit, DEQ should require annual inspections and establish a compliance level of 80% for scheduled inspections.

DEQ Response

A spreadsheet is a sufficient tracking document for documentation of inspections and the O&M requirements.

Registrant Cannot Assure O&M Compliance by Other Entities

Privately operated stormwater controls in new development or redevelopment that discharge into the permit registrant’s MS4 are covered under 1999 Phase II rule. Privately-owned stormwater controls that discharge into the permit registrant’s MS4 can influence the pollutant loads discharged from this MS4. Specifically, the

rule states the permit registrant “must develop, implement, and enforce a program to address storm water from new development and redevelopment projects.”¹²⁸ This rule includes the requirement for the “use of an ordinance or other regulatory mechanism to address post-construction runoff” as well as the requirement to “ensure adequate long-term operation and maintenance of BMPs.” The guidance provided in this rule recommends the following to:

*...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.*¹²⁹

The permit requires not only the development of operation and maintenance standards for each control but the development of the legal authority to “inspect and require effective operation and maintenance of stormwater controls owned and operated by the permit registrant and by other entities.” To ensure that stormwater controls are contributing to the compliance with TMDL allocations and reducing pollutant loads, DEQ clarified this requirement to ensure compliance with O&M standards is essential as inadequate O&M of stormwater controls can reduce their pollutant removal capabilities.

O&M Requirements Should Not Apply to Existing Stormwater Controls

This permit authorizes discharges from small regulated MS4s in Oregon. The pollutant loads from these regulated small MS4s are influenced by both existing stormwater controls and controls installed under this permit. Therefore, these discharges are subject to the conditions in the final permit, which was developed to implement the federally required minimum stormwater control measures. The O&M of new stormwater controls installed in response to this permit, in addition to existing stormwater controls, are critical for addressing TMDL allocations and meeting water quality standards in waterbodies impaired by pollutants in DEQ’s 303(d) list.¹³⁰

To clarify, the 1999 Phase II rule required small MS4s to “develop and implement an operation and maintenance program.” In the guidance included with this rule, EPA recommends that, at a minimum for an O&M program a small MS4s consider developing the following:

*...maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers...*¹³¹

In accordance with this rule, DEQ is requiring the establishment of an O&M program for new and existing stormwater controls as a baseline minimum control measure. The permit requires, at minimum, an O&M strategy for existing controls that includes the long-term O&M requirements in the post-construction runoff condition. The permit also requires tracking of the installation of stormwater controls to meet TMDL allocations and water quality standards. This tracking is required to ensure that these stormwater controls are operated as designed for pollutant reduction and are maintained to ensure their performance in reducing pollutants.

¹²⁸ 40 CFR§122.34(a)(b)(5)(i) – (iii)

¹²⁹ 40 CFR§122.34(a)(b)(5)(ii)

¹³⁰ As noted by a California panel, the lack of maintenance is one of the principle reasons for the failure of stormwater control performance (see  California Water Resources Board).

¹³¹ 40 CFR§122.34(b)(6)(ii)

Requirement to Map Stormwater Controls Installed Before Permit Issuance

DEQ has clarified this permit condition to require that all known stormwater control be included on the MS4 map. This change aligns this permit condition with the MS4 map requirements in Schedule A.3.c.ii.C of the permit.

Misuse of the Term Non-structural Stormwater Control

DEQ has removed non-structural stormwater controls from this section of the permit.

Specialized Training for O&M Staff

DEQ acknowledges that having qualified personnel to inspect stormwater controls may pose an additional cost to permit registrants. As indicated throughout the permit, PER and this document, properly functioning stormwater controls is an integral component to minimize the impact of urbanization on the receiving waterbodies.

Request for Inspection Checklist and Electronic Database

DEQ agrees with the commenter that the integration of an inspection checklists with an electronic database would be a useful tracking mechanism for this permit conditions. The final permit does not include this condition or a numeric inspection requirement of the permit registrant's structural control measures. DEQ understands it may not be feasible for permit registrants but the permit does not preclude permit registrants from tracking in the method described by the commenter.

3.3.5.7 Training and Education

375. Comment from City of Springfield

Unclear language - As noted under IDDE and Construction comments above, this training requirement would only apply to new staff and not existing staff. DEQ needs to clarify who this training requirement applies to.

DEQ Response

Regarding the unclear permit language, DEQ modified the permit language to the following:

The permit registrant must provide orientation and training to all new staff working to implement the post-construction runoff control program within 30 days of their assignment to this program. All staff must receive training at least once during the permit term. Permit registrant must provide follow-up training as procedures and/or technology utilized in this program change.

3.3.5.8 Tracking and Assessment

376. Comment from Clackamas County Water Environment Services

What records are to be maintained?

DEQ Response

DEQ reviewed the permit and determined that permit conditions that require the permit registrant to maintain records are clearly outlined in the permit (such as, projects utilizing alternative compliance, stormwater mitigation options, plan reviews, long term O&M inspections, and training and education).

3.3.6 Pollution Prevention and Good Housekeeping for Municipal Operations

377. Comment from Rogue Riverkeeper

Similar to the previous minimum control measures, we urge DEQ to establish more specific and measurable requirements throughout this section. More specifically, DEQ should require the development and implementation of pollution prevention and good housekeeping programs within the permit term and preferably within the first two years of the permit. As discussed in the post-construction site runoff minimum control measure, operations and maintenance (O&M) is critical to the long-term effectiveness of best management practices to address runoff. This section should be revised to require the establishment of maintenance standards, as demonstrated in the Western Washington Phase II permit. We support the requirements under Schedule (A)(3)(f)(ii)(A) Inspection and Cleaning of Catch Basins and Inlets for permittees to inspect at least 50% of the permit registrant-owned or operated catch basins and inlets within the MS4 at least once every five years.

DEQ Response

All of the required control measures for New and Existing Registrants must be implemented within the permit term. DEQ developed the implementation schedule base on input received during the MS4 permit development advisory group meetings. The intent was to allow the registrants flexibility in prioritizing the development of their SWMP.

3.3.6.1 Implementation Date

378. Comment from City of Springfield

There is a conflict in the Schedule. The Schedule A.3.e.ii-ix should be “f” not “e”, and should not include the “viii Stormwater Infrastructure Staff Training” section or the “ix Tracking and Assessment” section. - Both “viii” and “ix” require annual implementation or reporting and should not be included with a “by date” of Jan 1 2022.

DEQ Response

DEQ disagrees that Schedule A.3.e.i should not include Schedule A.e.d.ix and x. The requirement in Schedule A.3.e.i address the implementation date for full compliance with the Pollution Prevention and Good Housekeeping for Municipal Operations programs. If iterative progress is made implementing the SWMP control measure(s) the permit must document this progress in the Annual Report.

3.3.6.2 Operation and Maintenance Strategy for Existing Controls

379. Comment from City of Albany

Albany would not develop and implement an operation and maintenance strategy for others – others will be required to follow the O&M agreement however they choose and the City will inspect to confirm.

Clarify that there is no expectation that quantity removed from each catch basin will be tracked individually.

380. Comment from City of Gresham

This section prescribes a cleaning threshold which may or may not be relevant to water quality protection and is inconsistent with the MEP standard. See Recommendation above. Gresham’s analysis of its system has revealed that because there are so many catch basins (public and private) and this service can be cost effectively performed in house or as a contracted service, this maintenance activity yields a high return on

investment. Alternately, main pipe cleaning/detention pipe cleaning, after an initial number of years, has diminishing returns on investment. Further, requiring the private side to clean its catch basins has proven to be a very cost effective staff investment of time, especially when compared to other education activities that yield little to no measurable effects.

Recommendation: Require the permittee to conduct an analysis of its system assets to determine the overall best O&M program investments and describe in its SWMP.

... We cannot think of an example where we would track or maintain a nonstructural control. These are more typically planning practices that once in place help preserve and protect natural resources like small drainageways, trees, open spaces, etc. and do not result in corresponding maintenance.

381. Comment from City of Keizer

To what scale? This could mean developing an O & M strategy for residential property owners.

Delete first 4 words.[Except for catch basins]. The permit definition of Structural Controls seems NOT to include catch basins (e.g. catch basins are not generally designed to ‘prevent or reduce the discharge of pollutants*’)

382. Comment from City of Portland

This section requires an O&M strategy for both permittee-owned controls *and controls owned and operated by another entity discharging to the MS4*. Again, this is problematic for controls that fall outside the scope of A.3.e. Please amend the language as previously noted in item A.3.e.vi.

383. Comment from City of Springfield

Unclear language – this section is laying out the requirements for structural controls; not sure if the intent is to include “non-structural” controls when this section is addressing water quality catch basins, and water quality facilities which are structural controls.

Unclear language – In regards to the sentence: “Except for catch basins, the permit registrant must inspect and maintain, as needed, the structural stormwater controls yearly unless the inspection and maintenance schedule specifies otherwise.”, catch basins are not stormwater controls.

384. Comment from City of Turner

Programs like Schedule {3}(f)(ii) will force the creation of an O&M manual and strategy when as a small city we don't have money to deal with general maintenance anyway.

DEQ Response

Please see discussion of *Inspection and Cleaning of Catch Basins* for comments in Section 3.3.6.3 below.

Privately-owned stormwater controls that discharge into the permit registrant’s MS4 can influence the pollutant loads discharged from this MS4. When these privately-owned stormwater controls are used to satisfy a permit requirement, the permit registrant must ensure that stormwater controls are operated and maintained to meet the site performance standard. The permit states that the permit registrant must develop and implement an operation and maintenance strategy for both permit registrant-owned controls and controls owned and operated by another entity discharging to their MS4. And as stated by the commenter, “others will be required to follow the O&M agreement ... and the City will inspect to confirm.”

DEQ encourages permit registrant to work together or adopt a previously developed O&M strategy by another community. As indicated throughout the permit, PER and this document, properly functioning stormwater controls is an integral component to minimize the stormwater impact of urbanization on the receiving waterbodies.

The O&M of stormwater controls installed during implementation of this permit is critical for addressing TMDL allocations and meeting water quality standards in waterbodies impaired by pollutants in DEQ’s 303(d)

list. The O&M of existing stormwater controls are also integral in preventing degradation of the receiving streams' water quality. This is stated clearly in both the Phase II stormwater regulations and the Remand Rule:

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...

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...¹³²

3.3.6.3 *Inspection and Cleaning of Catch Basins*

385. *Comment from City of Albany*

Clarify that there is no expectation that quantity removed from each catch basin will be tracked individually.

DEQ Response

The permit does not require the permit registrant to quantify the amount of material removed from catch basins.

3.3.6.3 *Inspection and Cleaning of Catch Basins (continued)*

386. *Comment from City of Gresham*

Some permits in the nation have asked that permittees try to identify areas for high priority catch basin cleaning (i.e., high road volumes = greater source loading for metals and grease from cars, as well as sediment.) Many other types of stormwater BMPs do not benefit from annual inspection, as they function just fine sometimes for years without intensive maintenance. Even then, a lot of maintenance is more for aesthetics (weeds) than water quality. DEQ dictating inspection rates is less helpful than requiring an assessment of the types of controls and their age and then an analysis of planned O&M and inspection for the system.

(A) Catch basins are an example of a BMP that benefits from frequent (annual or biennial/every other) cleaning. See comment above. Permittees should be given a requirement to assess their inventory of stormwater controls and maintenance needs and staffing resources across the permit cycle such that the water quality benefits and the MEP are dictated and enhanced by the community, rather than arbitrarily by DEQ

(B) It is unclear what DEQ means by an inlet inspection. An inlet of the catch basin? This is a normal part of an overall inspection and does not need to be called out, if so, it is confusing.

387. *Comment from City of Portland*

(A) Inspection and Cleaning of Catch Basins and Inlets, There is no discussion in the PER of the requirement to inspect and clean 50% of the catch basins/inlets. Please provide background documentation and DEQ's rationale for this metric in the PER.

¹³² 40 CFR§122.34(a)(b)(5)(ii)

388. Comment from City of Springfield

According to the definition section in Sch. D and in the quoted Federal Register, regular catch basins are not storm water controls. The catch basin requirement should be moved to its own section since they are not defined as stormwater controls.

Unclear language – For Section (A), “...must inspect at least 50% of the permit registrant-owned or operated catch basins and inlets within the MS4 at least once every five years...”, it reads like this is in addition to the 20% of the MS4 as listed under the IDDE section, but if you read the IDDE section, catch basins are part of the MS4 and would be 20% a year.

If DEQ can clarify what the 20% of the MS4 is referring to then this question might get answered; are catch basins parts of the MS4?

To provide clear language, the DEQ needs to define “inlets” in the definition section.

DEQ Response

DEQ deleted term “inlet” from these conditions and also deleted the catch basin and Inlet Metric requirements. Additionally, DEQ removed the 20% System Evaluation requirement referred to by commenters.

DEQ agrees with the commenter that catch basins can benefit from frequent cleaning. The permit retained the condition which requires. This is to set the minimum inspection frequency and allow the permit registrant flexibility to determine if more frequent inspections are needed.

3.3.6.4 Pollution Prevention in Facilities and Operations

No comments received.

3.3.6.5 Registrant-owned NPDES Industrial Stormwater Permit Facilities

389. Comment from City of Albany

There does not need to be a condition in this Permit that says we have to comply with another permit issued to the City. Delete

DEQ Response

DEQ determined that this permit condition is appropriate for the permit. This condition is intended to clarify that for permit registrant-owned facilities, coverage under and compliance with DEQ’s NPDES Industrial Stormwater General Permit can be used to satisfy Condition A.3.f.iv.

3.3.6.6 Requirements for Pesticide and Fertilizer Applications

390. Comment from Oregon Association of Clean Water Agencies

This section prohibits “application of pesticides, herbicides and fertilizers during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by National Oceanic and Atmospheric Administration (NOAA) in order to minimize polluted runoff to the MS4.” While the concept of minimizing leaching or runoff of chemicals from a site during rain events or related to excessive irrigation is a worthy objective, this requirement may run counter to proper and effective application procedures for some chemicals, such as fertilizers that rely on watering and absorption prior to volatilization/loss of nitrogen in the air. Employees who are charged with applying these chemicals are already legally bound by federal labeling laws without any DEQ regulations by way of this permit. This

requirement is unnecessary and should be eliminated or revised to simply say that these products must be applied in accordance with federal labeling laws.

391. *Comment from City of Albany*

Clarify that this only applies to municipal operations.

Tying permit compliance to the probability of rainfall in a NOAA forecast seems overly complicated. Requiring compliance with the federal label is adequate. Requiring permit registrants to track and document NOAA forecasts is an overreach by DEQ.

392. *Comment from City of Gresham*

Requirements for Pesticide and Fertilizer Applications. The City of Gresham's experience has been that the implementation of an Integrated Pest Management Plan creates more importance on the use of alternative management strategies. The permit language "establish practices to prevent the discharge of pollutants..." could be interpreted to mean an IPMP, but would be more protective if this were explicitly stated.

Recommendation: Include the use of an IPMP as an expectation for minimizing pesticide and fertilizer applications. Allow permittees a generous timeframe (5 plus years) to do so, as with other similar manuals described in this comment letter, it takes a significant amount of time, research and stakeholder involvement to do so.

Some pesticide formulas require water to be effective, as prescribed on the label. We object to a prescriptive standardization of weather prediction. Gresham's pesticide applicators are licensed professionals who disagree with this requirement. First, weather is not accurately predicted at the 48 hour range on the west side of the Cascades. Second, most labels require a dry period of 24 hours. The 50% NOAA probability has nothing to do with local realities. There are trends and patterns seen the Portland-Gresham area that allows us to understand probabilities and moving radar maps of rain cells that will or will not fall within our area within a specific timeframe for work. This type of prescriptive requirement prevents us from doing our work efficiently and as allowed by pesticide label law and sets up the permittee for a third party lawsuit over something that hasn't actually caused a water quality issue or risk.

393. *Comment for City of Keizer*

Some fertilizers REQUIRE a wetting down in order to work. Are we saying those can never be used? How do we prevent? NOAA tracking is also onerous. Better to require cleanup of over-spread onto hard surfaces?

394. *Comment from City of Millersburg*

What if employees and contractors are already following all label requirements for application of pesticides, herbicides, fertilizer, and rinsate and following the requirements for application within 48 hours of predicted rainfall events? Is the permit registrant expected to look for additional ways to further reduce the discharge of pollutants, or is following these requirements the intent of this section?

395. *Comment from City of Portland*

The second paragraph in this sub-part is highly problematic and impracticable. It states that the permittee must "prevent their application of pesticides, herbicides and fertilizers during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by NOAA..." This condition conflicts with the first paragraph in this section and EPA requirements regarding pesticide application and label adherence. Most labels have a stated "rainfast" period, which is the time it takes the product to dry on the plant surface or absorb into the plant tissue. This time period varies by product but in general is anywhere from 1 to 6 hours. In addition, some pesticide labels **require** the product to be irrigated into the soil for effectiveness. For example, a pesticide label for white grubs explicitly states to "Irrigate turf immediately after application or allow rainfall to move the product into the soil." Furthermore, many of the fertilizers used on recreational turfs are slow-release products intended to absorb over time, which again, conflicts

with the timing requirements listed in the Phase II permit. Given these factors, in areas like Portland with frequent and persistent rainfall, it would be nearly impossible to meet this permit requirement in the spring, fall or winter. The requirement also conflicts with EPA pesticide application regulations. Please remove the second paragraph under item v.

396. Comment from City of Springfield

Redundant and inappropriate – As stated in the first paragraph, “employees or contractors of the permit registrant applying pesticides must follow all label requirements”, by laying out an additional application processes and referring to NOAA the DEQ is overriding manufactures directions. All pesticide and fertilizers come with an application process and directions; last sentence is not needed and should be removed.

397. Comment from Clackamas County Water Environment Services

This section prohibits “application of pesticides, herbicides and fertilizers during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by National Oceanic and Atmospheric Administration (NOAA) in order to minimize polluted runoff to the MS4.” While the concept of minimizing leaching or runoff of chemicals from a site during rain events or related to excessive irrigation is a worthy objective, this requirement may run counter to proper and effective application procedures for some chemicals, such as fertilizers that rely on watering and absorption prior to volatilization/loss of nitrogen in the air. Employees who are charged with applying these chemicals are already legally bound by federal labeling laws without any DEQ regulations by way of this permit. This requirement is unnecessary and should be eliminated or revised to simply say that these products must be applied in accordance with federal labeling laws.

398. Comment from City of Turner

Having spent the years tracking faulty weather reports regarding potential flood conditions, the City will never sign a permit that connects NOAA weather guidance with City permit compliance.

DEQ Response

As indicated by several commenters, this condition provides implementation challenges. The permit language in this section has been modified to the following:

All employees or contractors of the permit registrant applying pesticides must follow all label requirements, including those regarding application methods, rates, number of applications allowed, and disposal of the pesticide/ fertilizer and rinsate.

Regarding the request for further clarification of the applicability of this condition, DEQ determined that the permit clearly establishes who must comply with this permit condition:

The permit registrant must implement methods to reduce litter within its jurisdiction. The permit registrant must work cooperatively with other departments, organization, or other entities to control litter on a regular basis and after major public events, in order to reduce the discharge of pollutants and litter to the MS4

3.3.6.7 Litter Control

399. Comment from City of Albany

Litter control is not an appropriate permit condition. The Education and Outreach section allows for litter control training. Delete.

400. Comment from Clackamas County Water Environment Services

Recommend the deletion of the second sentence. This section is redundant with O&M of pollution prevention controls and education and outreach.

401. Comment from City of Keizer

In general, most Oregon municipalities and agencies have robust recycling programs that are used throughout the community and at local events. Please consider removing this requirement

402. Comment from City of Turner

Connecting water quality BMP's in a federal permit with a general requirement to control litter is overreach.

DEQ Response

DEQ determined that this permit condition is appropriate for the permit. In response to several comments, DEQ agrees that the second sentence is not a necessary permit requirement and therefore deleted this portion of the permit language.

3.3.6.8 Materials Disposal

403. Comment from City of Albany

This permit should not require that we have to comply with what the law already requires. Delete

404. Comment from City of Gresham

Street sweeping water collected during active routes is decanted in small slowly dripping amounts that allow for efficient work. This is the same sediment laden runoff water that was on the road before it was collected by the street sweeper being dispersed in a non-point source manner. It is unclear if this typical practice would be disallowed by this language. If street sweepers were not allowed to slowly decant, the financial impact to taking trucks on and offline and drive to a location where they could decant would be significant and for no additional water quality gain.

DEQ Response

Based on these comments, DEQ modified the following permit language:

All collected material or pollutants removed in the course of maintenance, treatment, control of stormwater, or other wastewaters must be managed and disposed of in a manner such as to prevent such pollutants from entering the waters of the state in accordance with state and federal rules.

If street sweepings are not screened for trash and debris are considered solid waste, they must be disposed of at a permitted solid waste facility that can accept the waste.

3.3.6.9 Stormwater Infrastructure Staff Training

No comments received.

3.3.6.10 Tracking and Assessment

No comments received.

4.0 SCHEDULE B - MONITORING AND REPORTING REQUIREMENTS

4.1 *Compliance Evaluation*

405. *Comment from City of Albany*

The SWMP is the city's document which is not part of Schedule A and is not part of the permit. The SWMP is the Registrant's plan for compliance with the permit. Delete SWMP in this phrase.

DEQ Response

*[P]*progress toward implementing the SWMP control measures in Schedule A refers to implementation of the Stormwater Management Program and not the permit registrants SWMP document. As previously discussed, permit registrants are required to develop and maintain a SWMP Document as a permit requirement.

4.2 *Annual Report*

406. *Comment from City of Albany*

Not enough time following the end of the reporting period to properly prepare the template and supporting documents – should be extended two to three months – end of November or December.

407. *Comment from Jackson County*

We support the proposed annual report schedule, which coincides with the TMDL annual reporting schedule, increasing the efficiency of preparation for both reports.

408. *Comment from City of Springfield*

The DEQ has shortened the reporting timeframe; this shortens the amount of time that the permittee has to gather information from the various divisions and departments and draft the annual report (or fill out the DEQ form). It can take months to gather the information from each department or division at the year end.

The Phase I communities have until Dec 1st to submit the same information and DEQ has not presented a valid reason why Phase II permittees should have less time. DEQ should rewrite the draft permit language such that Phase II permittees reporting timeframe is due on Dec. 1, consistent with Phase I permittees.

409. *Comment from Rogue Riverkeeper*

Under this section of the proposed MS4 Phase II GP, DEQ should ensure that permittees evaluate the implementation of the six minimum control measures. The EPA recommends that Annual Reports, at the minimum, summarize activities conducted within the year for each minimum control measure, describe the effectiveness of those activities, and discuss planned activities for the next year. The Annual Report should describe how and when prescribed standards were met to assess compliance with permit terms. The report should directly refer to specific permit requirements and describe the status of actions that the permittees have taken to comply with those requirements. As discussed previously, the 2017 proposed permit is lacking in clear, specific, and measurable requirements, particularly for the IDDE, Construction, and Post-Construction minimum control measures.

Additionally, we strongly urge DEQ to require assessments of effectiveness of these activities. These evaluations should help to inform permittees where there are potential issues with a particular program and what is working effectively. Monitoring activities under sub-section B(1) should inform the assessment of each minimum control measure in Schedule A. Specifically, DEQ should consider requiring a comprehensive tracking system to monitor and assess program implementation. This program should be designed following the EPA's guidelines in its MS4 Improvement Guide to assess permit compliance; measure the effectiveness of stormwater programs; evaluate the chemical, physical, and biological impacts to receiving waters; characterize stormwater discharges; identify source pollutants;

assess long-term trends in water quality; and identify and remedy illicit discharges and illegal connections to the MS4.

410. Comment from Rogue Valley Sewer Services

The timelines in the text and table in this section do not match, or make sense, please correct these.

i.e. "...reporting period for the Annual Report is from June 1 through June 31 of the following year (e.g., July 1, 2019 through July 31, 2020)."

Please keep the report due date November 1st of each year. Staff are busy during the summer months conducting outfall screening and maintenance inspections and need the extra month to prepare the annual report.

411. Comment from City of Turner

The new annual report template is over 20 pages long. For 10 years Turner has submitted a 3-4 page report and believes this new process will require far more administrative time.

DEQ Response

Based on comments received, DEQ changed the Annual Report submission deadline to Nov. 1 of each year and the submission summary table was modified to reflect this change.

DEQ developed the Annual Report template that includes specific permit requirements that are in the final permit. For conditions that are not fully implemented, the permit registrant is required to provide an implementation status, and if applicable, implementation timeline.

DEQ reviewed EPA's *Compendium of MS4 Permitting Approaches* and determined that the permit includes several of the permit provisions that have been determined to qualify as "clear, specific, and measurable" requirements under the final MS4 General Permit Remand Rule consistent with 40 CFR 122.34(a). Additionally, DEQ reviewed the permit requirements to "streamline" the administrative processes and determined that the final permit strikes the appropriate balance of meeting the MS4 permit standard and reporting requirements that demonstrate the permit registrants' compliance with the permit.

DEQ understands that the required Annual Report template will require more administrative time than a 3-4 page report. DEQ determined that

4.2.1 Annual Report Deadlines

4.3 Monitoring Requirements

412. Comment from Oregon Association of Clean Water Agencies

This section requires permit registrants discharging to a water body for which a TMDL has been approved, or is listed on the 303(d) list, to comply with all monitoring requirements in Schedule D. The rest of this section, however, including a. through c., could be interpreted to relate to any sampling the permit registrant conducts at outfalls regardless of whether there are requirements to do so. The permit should be clear that this provision does not apply to volunteer monitoring or monitoring such as illicit discharge response. The DEQ needs to make it clear that this type of monitoring applies to any outfall or in-stream monitoring that is conducted as part of a permittee's program evaluation efforts. It is impracticable, beyond MEP, and would be unnecessarily resource-intensive with no water quality benefit, for both the DEQ and the permittees to submit water quality data to the DEQ that is collected for random reasons, or reasons that do not fall under the requirements of this permit.

Please allow the option to submit a hardcopy annual report to local DEQ office as well by the due date, or to base the submission deadline by postmark date to allow equity for Phase IIs farther away from the Valley and subject to long and sometimes inconsistent mailing times.

413. Comment from City of Albany

What does this mean? Is this the title for the next section requiring reporting in the Annual Report?

414. Comment from City of Bend

Many Phase II municipalities also have permits for their stormwater UICs. These systems are often integrated and interspersed within the MS4 as well, so where it makes sense to coordinate the two permits we request that be done. For instance, the due date of the WPCF-UIC permit annual report was set to November 1 to coincide with the traditional MS4 Annual Report due date. It makes sense to keep these due dates the same to avoid the need for duplicative reports.

415. Comment from Jackson County

We support the proposed annual report schedule, which coincides with the TMDL annual reporting schedule, increasing the efficiency of the preparation of both reports.

416. Comment from City of Keizer

Please move due date back to November 1st. It takes time for the various departments to compile and submit program metrics. Once the Annual Report written (even in template form), it must go through management review as well. Please move back to November 1st to give enough time for these steps.

417. Comment from Polk County

Evaluation report says small MS4s may choose to do monitoring. This language needs changed to indicate that monitoring is not mandatory.

Permit language implies that monitoring is mandatory (see notes in permit).

DEQ Response

The permit does not require monitoring or sampling of stormwater discharge. If the permit registrant chooses to collect stormwater discharge at either an outfall or at an in-stream location, regardless if the sampling was performed per Schedule D or on a voluntary basis, the permit registrant must comply with the monitoring requirements of Schedule B.3 and the monitoring results must be submitted with the corresponding Annual Report. The permit states the following:

If the permit registrant discharges to a water body for which a TMDL has been approved or is listed on the 303(d) list, the permit registrant must comply with all monitoring requirements under Schedule D.2.

In Schedule D.2, the permit does require Wood Village to provide a summary of their evaluation of control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs. This is the only permit registrant identified in the permit as having a monitoring requirement.

Any future TMDLs that require monitoring for a permit registrant, the permit registrant would be required to sample per the TMDL and those monitoring results are required to be submitted as part of the Annual Report.

It should be noted that the following is stated in the PER:

“...federal regulations governing the NPDES permit program for small MS4s do not require monitoring of effluent from stormwater outfalls or ambient water quality monitoring of receiving streams”

4.4 Submissions

418. Comment from City of Albany

Is the permittee required to submit electronically too?

419. Comment from City of Springfield

Unclear language - DEQ is allowing for electronic submission of annual reports, but what about Signatory Requirements? In the PER it is mentioned: Such submittals must be sent to the Addresses listed in Schedule B.4.a, and include a hard copy cover letter that identifies the permit registrant name, unique

permit identification number, staff contact information, content of the submittal, and the permit registrant’s certification and signature as required by Schedule F.D.8 (Signatory Requirements). DEQ needs to make clear that Schedule F.D.8 (Signatory Requirements) would still be applicable or would no longer be necessary.

DEQ Response

The permit registrant is required to submit the Annual Report in both an electronic and hardcopy format to DEQ at the listed contact address. If e-Reporting is approved by DEQ during this permit term, the permit registrant would no longer be required to submit hardcopies to DEQ.

4.5 Recordkeeping

4.5.1 Records Retention

420. Comment from City of Albany

From the start of the permit? The end of the permit?

“at any time” leaves the permit registrant potentially unprepared. If DEQ intends to extend the document retention schedule, it needs to be done with at least 180 days notice prior to the expiration of the permit.

DEQ Response

The records retentions timeframe refers either five years after a specific permit compliance date or five years after the permit has been terminated, renewed, or another similar DEQ actions related to a permit renewal.

If DEQ requests a change in the records retention schedule before the end date of the records retentions requirement in the permit, DEQ would require that the permit registrant comply with that request. If the request is made after the expiration date of a specific records retentions timeframe, then DEQ would not require compliance if that request.

4.5.2 Availability of Records

421. Comment from City of Albany

DEQ does not need to restate how public entities comply with public records law.

DEQ Response

DEQ included this records availability requirement because it is in the Remand Rule.

5.0 SCHEDULE C - COMPLIANCE CONDITIONS AND DATES

No comments were received.

6.0 SCHEDULE D - SPECIAL CONDITIONS

6.1 **Requirements for Waterbodies with CWA Section 303(d) Listed Pollutants and TMDLs**

422. *Comment from Oregon Environmental Council*

It is noted in Schedule D that DEQ will not require permit registrants to evaluate progress towards meeting applicable TMDL waste load allocations during this permit term. We understand the need for sufficient data and research to determine the appropriate models for estimating pollutant load reductions of stormwater controls, both structural and nonstructural, but urge DEQ to conduct this research as soon as possible and build allowance into the Permit to require permittees to evaluate progress toward their pollutant reduction benchmarks once the models are available, rather than waiting until the next permit cycle.

423. *Comment from Rogue Riverkeeper*

Without clear, specific, and measurable permit terms and conditions; clear reporting requirements; consistent and comprehensive inspections; and implementation deadlines that comply with the Clean Water Act, the 2017 proposed permit will not effectively ensure that the discharge of pollutants is reduced to the maximum extent practicable, water quality is protected, and the appropriate water quality requirements of the Clean Water Act are satisfied. Further, DEQ must ensure that the permit does not authorize discharges that will cause or contribute to violations of water quality standards. Where total maximum daily loads (TMDLs) exist for 303(d) listed water quality impaired waters, all NPDES permits must contain requirements “consistent with the assumptions and requirements of any available wasteload allocation.” MS4s discharging to impaired water bodies with a TMDL are assigned a wasteload allocation (WLA) that should be translated into numeric limits or measurable, objective BMP-based limits. In other words, the permit must be consistent with and implement the TMDL.

Without clear, specific, and measurable requirements, particularly for the IDDE, construction, and post-construction minimum control measures, it is difficult to ensure consistency with applicable TMDLs. Further, it is concerning that DEQ states in the Permit Evaluation Report that:

DEQ will not require permit registrants evaluate progress towards load and wasteload allocation during this permit term... This delay of the quantitative evaluation of progress towards wasteload and load allocations will also give permit registrants time to implement these Performance Measures as well as document the stormwater controls that were installed during this permit and prior to it.

We are concerned that, not only will it be difficult to evaluate compliance with the MS4 permit standard, but it will also be difficult to evaluate compliance with TMDLs if permittees are not required to track progress towards meeting LAs and WLAs. Without more prescriptive requirements in the minimum control measures in Schedule A, it is unclear that this section would effectively provide greater protections for these waters or provide more clarity for permittees to understand and implement any additional requirements. Finally, while the Permit Evaluation Report provides specific information regarding each TMDL applicable to permittees and specific reductions required, these reductions are not translated in numeric limits or measurable, objective BMPs that are clear, specific, and measurable in the permit terms and conditions.

DEQ Response

DEQ agrees that the permit must include clear, specific, and measurable requirements. DEQ reviewed the final permit and EPA’s *Compendium of MS4 Permitting Approaches, Part 1: Six Minimum Control Measures*, and determined that the final permit includes provisions sufficient to determine compliance with the permit, which must meet the MS4 permit standard.¹³³

Waiting Until the Next Permit Cycle

As discussed in Section 3.1.2, *Water Quality Standards*, the permit includes the following modified text:

If the permit registrant complies with all the terms and conditions of this permit, it is presumed that the permit registrant is not causing or contributing to an excursion of the applicable water quality standards as established in OAR 340-041.

Additionally, the permit states the following in Schedule D.2:

Compliance with the permit’s terms and conditions is presumed to be compliance TMDL allocations.

It is DEQ’s determination that the MS4 permit standard is satisfied by the permit, including the appropriate water quality requirements. DEQ will continue to work with the TMDL program to ensure that subsequent permits are meeting DEQ’s goal of “restoring, maintaining and enhancing the quality of Oregon’s air, land and water.”

How to Evaluate Compliance with the MS4 Permit Standard

The Annual Report was designed to capture the implementation progress of each permit registrant, the tracking components of the permit (e.g., number of inspections, dry weather screening outfalls, ESCPs reviewed, approved Post-Construction alternative compliance projects), and status of the SWMP implementation. One of the goals of the Annual Report is to provide the permit registrants a uniform tool to illustrate compliance with the MS4 Permit Standard.

How to Evaluate Compliance with the TMDL

The permit requirements are not intended to be a for the permit registrants to track compliance with their progress of the TMDL’s Implementation Plan. The permit attempts to remove barriers or inconsistencies that may be created when a permit registrant is working to implement one of these two programs separately. The permit does not replace the TMDLs role in addressing water quality impairments.

6.1.1 Applicability

424. Comment from City of Albany

What happens when these TMDLs get thrown out by the courts?

Using language such as “indicates that urban stormwater may be a reasonable source” to create enforceable conditions in a permit is not acceptable. Indications and reasonableness can all be argued in court and are not enforceable. This language should be removed.

Again, this seems out of place given that no TMDL process has been completed to determine whether or not stormwater is a pollutant source, and no wasteload allocation has been determined for 303(d) listed streams. This language should be removed.

¹³³ *Compendium of MS4 Permitting Approaches Part 1: Six Minimum Control Measures*, Office of Wastewater Management-Water Permits Division, Nov. 2016. EPA-810-U-16-001

425. Comment from Clackamas County Water Environment Services

The Integrated Report and 303(d) list change regularly over time. To comply with this requirement, the permit holder will need to know which Integrated Report and 303(d) list to use. The DEQ should provide the name of the Integrated Report and 303(d) list which permit holders are expected to use. For example, the current Phase I MS4 permit issued to 13 units of local government in Clackamas County in 2012 has Integrated Report and 303(d) list requirements and this permit states the 2004/2006 list is the one to use for compliance with this MS4 permit.

DEQ Response

DEQ modified and removed the permit language to address the comment referring to “reasonable source.”

What if the TMDLs are thrown out?

If a TMDL or other water quality standard is invalidated, the pollutant and waterbody in question would remain on the 303(d) list and therefore be listed as an impaired waterbody. In that case, the permit registrant would still be discharging to an impaired waterbody. The permit does not attempt to replace the TMDL or the implementation of the TMDL by permit registrants.

Is stormwater a pollutant source?

DEQ disagrees with this comment and has identified stormwater as a source of pollutant in several of the TMDL Water Quality Management Plan (WQMP), the excerpt below is from the Willamette Basin TMDL WQMP, dated Sept. 2006:

Part 2: TMDL Specific Implementation Requirements

This part of the WQMP describes TMDL implementation requirements that are unique to this TMDL. It covers expectations related to storm water management (to address mercury and bacteria), basin-specific measures for implementing the temperature TMDL, and specific actions that ODEQ and selected point sources will carry out as part of the “path forward” to the development of a final mercury TMDL in 2011.

ODEQ expects DMAs to demonstrate they are addressing these measures through their TMDL Implementation Plans or other mechanisms as described below, or through an alternative approach if agreed to by ODEQ. ODEQ encourages DMAs to work cooperatively to address these requirements when such an approach would be advantageous.

Storm Water Management to Control Bacteria and Mercury

Storm water discharges from both point source and nonpoint source discharges can be a significant source of bacteria and mercury found in surface waters. Storm water can also be a source of other 303(d) listed pollutants as well as nonlisted pollutants. For these reasons, ODEQ has established the following requirements for storm water management in the Willamette Basin. These measures will help address the bacteria and mercury load reductions required by this TMDL as well as provide additional pollution prevention benefits.

The requirements differ depending on whether or not a municipality is covered (or will be covered) by a Municipal Separate Storm Sewer System (MS4) NPDES permit.

DMAs Covered by a MS4 Permit (including those that have applied to be covered under a Phase II permit)

An MS4 permit requires a municipality to develop a storm water management plan that addresses a number of control measures as specified in the permit. An MS4 permit also requires the municipality to

establish pollution load reduction benchmarks for relevant TMDL pollutants and collect water quality data to evaluate progress toward meeting those benchmarks...

6.1.2 Performance Measures

426. Comment from City of Albany

Are these “key performance measures” called out in these sections? I did not see them identified specifically. Is compliance with these sections adequate for compliance with D.1? How do those MS4s with TMDLs have different requirements from those without? If the permit requirements are the same regardless of whether an MS4 discharges to an impaired waterbody, is that appropriate?

427. Comment from City of Keizer

This is good language... would like to see something like this applied to the permit in general.

DEQ Response

DEQ modified the permit language based on comments received. The key performance measures, which were described in detail in the draft PER, were removed from the final permit and the PER.

In response to the comment that the permit treats all permit registrants the same, given that the MS4 discharge are under EPA-approved TMDL, and the City of Bend discharges to a waterbody on DEQ’s 303(d) list, the permit intentionally addresses this issue and applies this same standard to all permit registrants.

6.1.3 Tracking and Reporting

428. Comment from Oregon Association of Clean Water Agencies

This section is overburdensome and goes beyond MEP for most MS4 Phase II communities. For example, the requirement to track the impervious surface for what is managed by a water quality facility so DEQ can run a model is highly resource intensive, with no water quality benefit. It would cause the permittees to be inundated with ongoing data collection and data entry, taking away resources that can be geared to pollution prevention, IDDE elimination, and good housekeeping practices. Similarly, the requirement to “document and report any near future actions to integrate non-structural and structural controls into stormwater capital improvement projects, projects to mitigate local flooding, projects to repair systems damaged by flooding, transportation system improvements, and any other infrastructure projects where stormwater is a component” would be highly labor intensive to compile, and would have absolutely no water quality benefit and provide no measurement of or accountability for the MS4’s program performance. There is no point in wasting public dollars on production of volumes of information that will not be used for the purpose of demonstrating compliance with the six minimum measures. These requirements should be eliminated and the requirements of this section should be streamlined to require tracking and reporting that is practicable.

429. Comment from City of Albany

Why is this information required, and how will the information be used? Complying with this requirement will be costly and, over time as things change, permittees may be vulnerable to permit violation for a paperwork error. This language should be removed.

Is the DEQ going to incorporate this information into their “model” to estimate pollutant reductions? The permittee cannot be expected to do this.

Capital Improvement Plans are planning documents and actual construction activities often deviate from the 5-year plan as needs arise and conditions change. Is the implementation of the permit registrant’s 5 year stormwater CIP a measure of permit compliance? It should not be.

Non structural controls are not appropriate for inclusion in stormwater capital improvement programs. Delete this reference.

Not sure what form is being referenced here. Please clarify and specify location of this “form.”

430. Comment from City of Springfield

Administratively burdensome – beyond MEP - In this section the DEQ is requiring the permittee to track the impervious surface area managed by structural stormwater controls installed in compliance with Schedule A.3.e.

The requirement to track the impervious surface for what is managed by a water quality facility so the DEQ can run a model is administratively burdensome and would cause the permittee to be inundated with a backlog of data collection and data entry. This kind of information is submitted during the site plan review process in order to size a facility, but inventorying and mapping of these facilities typically has not incorporated “impervious surface area served”.

Additionally, only collecting such information from this point forward would be insufficient data for a model, and thus would return inaccurate results. Meaning you have to gather and enter past data for the model to run correctly.

Additionally, the DEQ states that the tracking information will be used in subsequent permit terms to evaluate progress towards reducing TMDL and 303(d) listed pollutants using a DEQ-approved model.

This is setting the permittee up for having to comply with numeric performance limits under the next permit which is not required for Phase 2 communities.

DEQ can only have requirements in the permit that are limited to the current 5 years of the permit, and cannot list requirements outside of the 5 years of the permit.

Tracking and Training, Unclear language – This section requires tracking and reporting but does not state a timeline for reporting. For the type of requirements in this section I would assume it would be a onetime reporting done during the permit renewal process. DEQ needs to add a reporting timeline.

431. Comment from Rogue Valley Sewer Services

The Registrant is required to report any actions within the next five years that would manage stormwater. What is the reason for requiring this reporting? Plans and timelines can change. Registrants should not be held to a future projection of projects and timelines, in which case there is no reason to report this to DEQ. Remove this requirement from the permit.

DEQ Response

The based on comments DEQ modified the permit language pertaining to the key performance to the following:

DEQ incorporated performance measures in Schedule A.3.c, d, e, and f to address water quality impairments and EPA-approved TMDL allocations issued to date. Compliance with the permit’s terms and conditions is presumed to be in compliance with TMDL allocations issued before the effective date of this permit...

6.2 Definitions

432. *Comment from Oregon Association of Clean Water Agencies*

All definitions that rely on definitions from the Center for Watershed Protection or their guidance manuals should be changed, per ACWA's comments on the Center for Watershed Protection found on p. 3 above.

"Bioretention" is not used in the permit, so does not need to be defined.

"Chronic illicit discharges" are defined as being "continuous" and resulting from sanitary/wastewater connections to an MS4, sanitary wastewater inflows into an MS4 and unpermitted industrial wastewater discharges to the MS4. This is overly restrictive and could limit enforcement. In permittees' experience, on-going illicit discharges may be repeated frequently, but not continuously, and they are often not related to sanitary wastewater or industrial discharges. Many chronic illicit discharges involve repeated dumping to catch basins or discharges from homes and commercial establishments. The definition should encompass a broader understanding of chronic illicit discharges.

"Construction activity" is not helpful, just defining it as including but not limited to site prep work, without providing criteria for what constitutes construction activity other than site prep work. Some expression of what constitutes construction would be helpful, such as "creation of improvements to real property." (It is acknowledged that the federal stormwater rules (40 CFR 122.26(b)) do not define construction activity.)

"Construction site plan." This term should not be used in an MS4 permit, and it should be changed to an Erosion and Sediment Control Plan (ESCP).

"Dry weather screening" is listed, but not defined. Since dry weather screening is a program that is fully described in the body of the permit, it does not need to be defined.

"Erosion." The definition, ending in "or other process" is too open ended and could include legitimate processes of "carrying away" soil particles that do not constitute erosion, such as grading. DEQ's 1200-C construction stormwater general permit defines erosion as "the movement of soil particles or rock fragments by water or wind." Since other means of soil movement should also be regulated at construction sites, a better definition would be "the movement of soil particles resulting from the flow or pressure from water, or wind, or from tracking by vehicles or foot traffic."

"Field screening" does not need to be defined since it is a program, not a technical term. Any critical additions to the program requirements should be in the body of the permit, not in the definitions. It is also inappropriate to delegate the definition of a permit-required program to another source that is neither a governmental agency nor a recognized developer of technical standards. All permit requirements must be in the permit.

"Final Stabilization" is really a set of requirements and not really a definition. It is misplaced here. The last sentence in the "definition" relates to the requirements in the first part of the "definition." DEQ should not be burying permit requirements in the Definitions section.

"Impaired waters" are defined only as those that do not meet applicable water quality standards. To be recognized as not meeting water quality standards, waters must be designated as such by DEQ and the designation must be approved by EPA for addition to the 303(d) list. Federal regulations use the term "water quality limited segment," which is preferred. Whether the federal term or "impaired" is used, the definition must include the formal designation process and must not suggest that a single instance of excursion from water quality standards renders a water body "impaired."

"Illicit connections" needs to be revised. First, pipes, etc. are conveyances, not connections. Second, every connection to the MS4 has the potential to result in an illicit discharge. Accidental spills and illegal dumping typically reach the MS4 through legal catch basins. A better definition would define illicit

connections as those that are made to the MS4 in violation of the regulating authority's requirements. This would cover illegally made ("outlaw") connections, as well as inadvertent cross connections.

"On-site investigation." Much like "dry weather screening" or "field screening," on-site investigation is not a technical term, but is a program whose requirements should be included in the body of the permit instead of a definition. It is also inappropriate to delegate the definition of a permit-required program to another source that is neither a governmental agency nor a recognized developer of technical standards. All permit requirements must be in the permit.

"Plant intercept" is not used in the permit, so does not need to be defined.

"Post-Construction Site Runoff Plan." The description of this document should be in the body of the permit rather than as a defined term.

"Septic System Investigation." Septic System Investigation is not a technical term, but is a procedure whose requirements should be included in the body of the permit instead of a definition. It is also inappropriate to delegate the definition of a permit-required program to another source that is neither a governmental agency nor a recognized developer of technical standards.

"Small MS4" is defined twice. If needed, a single, combined definition is preferable.

"Stormwater or stormwater runoff" includes three definitions: one by quoting part of a federal regulation, one by citing the federal regulation, and one entirely separate. The third definition is problematic for two reasons. First, because some stormwater percolates into the ground other than through natural processes, such as via an injection system or through soils whose permeability has been artificially enhanced. Second, because the definition requires stormwater to flow into a defined surface water channel or constructed infiltration facility. This is not true; stormwater is stormwater even if it never reaches surface water.

"Stormwater Master Plan" is not used in the permit, so does not need to be defined.

"Stormwater Payment-in-Lieu Program" is not a technical term, it is a program that is included in the body of the permit. Program descriptions or requirements are better placed in the body of the permit rather than in definitions.

"Structural Stormwater Control Demonstration Project" is not used in the permit so does not need to be defined.

"Subwatershed" is incorrectly defined. A watershed (or subwatershed) is an area, not a perimeter.

"Wastewater Master Plan" is not used in the permit so does not need to be defined.

433. Comment from City of Albany

Chronic Illicit Discharges are continuous... May not always be continuous.

Construction Site Plan: Site Plan may be a confusing term with regard to other local government activities related to land use planning.

Added ESCP Definition: "For the purposes of this permit, an ESCP means a document that identifies potential sources of pollution, describes practices to reduce pollutants in stormwater discharges from the site, and identifies procedures or controls that the operator will implement to reduce impacts to water quality and comply with applicable Permit requirements."

... This definition of an ESCP should not be buried inside a definition of Construction Site Plan. Further, the term the ESCP is not used in Schedule A.3.d, so why is it needed?

Dry Weather Screening: Missing definition.

Evaporate is a verb, not a noun. Is rainfall the only that can evaporate?

Field Screening: This definition needs to be clarified to ensure that this manual is used only for guidance purposes and that the permit registrant is NOT required to carry out each and every aspect of the Guidance Manual suggestions for field screening approach. This definition should be modified to generically include other possible appropriate guidance manuals as references such as Washington Stormwater Center IC/ID Field Screening and Source Tracing Guidance Manual.

Final Stabilization: This definition needs to be clarified to ensure that this manual is used only for guidance purposes and that the permit registrant is NOT required to carry out each and every aspect of the Guidance Manual suggestions for field screening approach. This definition should be modified to generically include other possible appropriate guidance manuals as references such as Washington Stormwater Center IC/ID Field Screening and Source Tracing Guidance Manual.

... This definition is very confusing, where did this come from? Can it be clarified and shortened meaningfully?

...Does this mean that authorized discharges are no longer authorized? What if there are authorized discharges that continue after construction has been completed? Could discharges be authorized by other permits (1200C)?

Impaired water means any water body that does not meet applicable water quality standards, as determined by DEQ, for one or more beneficial uses by one or more pollutants (as determined by DEQ added).

Impervious Surface: edits to definition.

Low Impact Development (LID): edits to definition.

Minimize: Achievable should be replaced by practicable to include all relevant factors including cost. This needs to be reviewed to ensure that, as used in the permit, it does not exceed MEP. ...this goes too far. Delete.

Municipality: Other governing bodies may have responsibility for SW management and not have responsibility for these things and they are not covered by Section 208 of the CWA. Very poor definition.

Nonstructural Stormwater Controls: BMPs are previously defined. BMPs can include structural controls. Very confusing. Deleted ...edits to definition, ... Superfluous.

On-site investigation: This definition needs to be clarified to ensure that this manual is used only for guidance purposes and that the permit registrant is NOT required to carry out each and every aspect of the Guidance Manual suggestions for on-site investigation approach.

Septic system Investigation: This activity is NOT appropriate for most MS4 communities because lack of jurisdictional control previously discussed in the IDDE section of the permit.

...This definition needs to be clarified to ensure that this manual is used only for guidance purposes and that the permit registrant is NOT required to carry out each and every aspect of the Guidance Manual suggestions for septic system investigation approach. See previous comment regarding use of other appropriate manuals.

Small Communities: How was 10,000 selected? Is it referenced somewhere as a definition of a small community? How does this population level affect water quality?

Small MS4: These definitions are duplicative and need to be revised to represent a single definition.

SWMP Document: Does this mean that if a registrant does not have unique or cooperative means to comply with the permit, then this is not required?

Stormwater Mitigation Bank Program: This language is not used anywhere in the draft permit and it should be deleted

This definition is very expansive, not just simply a list or map of available mitigation sites. Developing a market place, buying and selling credits, etc., are all onerous requirements. Why are the requirements of the program delineated in the permit and then repeated in the definition?

Stormwater Payment-in-Lieu Program: Why is DEQ defining the basis for the fee – again, overreach – this should be Registrant’s decision. How can a registrant apply fees to codes, policies, and procedures? Another example of the confusion between structural and non-structural controls.

Structural Stormwater Control Demonstration Project: This language is not used anywhere in the draft permit and it should be deleted

Wastewater Master Plan: This language is not used anywhere in the draft permit and it should be deleted.

434. Comment from City of Bend

Schedule D.2.k: No definition provided. Also, general section is missing key definitions.

435. Comment from City of Keizer

Nonstructural Stormwater Controls or BMPs: This is confusing language, specifically in regards to the Good Housekeeping (subsection (f)(i) requiring a ‘maintenance strategy’ for non-structural BMPs. How do you create a maintenance strategy for a regulatory mechanism or development standard? The definition would be much less confusing by leaving only the first two sentences, and putting the rest of the explanation in the PER.

On-site investigation: First two sentences might be better in PER? Better wording would be to ‘discover any connections’.

Permittees are required to cover a definite percentage of their MS4 with one of the two approved methods -- but each method is only useable in specific cases (e.g. in the case of a known cross connection, or in areas of low residential density or lack of sewer service.

Rewording to allow On-Site Investigations to also ‘find’ connections (not just pinpoint already discovered ones) allows the permit requirements to make sense.

Structural Stormwater Controls or BMPs: Based on this definition, it would be important to note that catch basins would NOT be structural controls (despite the implication in paragraph (ii) under the Good Housekeeping section).

436. Comment from City of Portland

Dry Weather Screening. The definition for this term is absent.

Field screening is defined in the Center for Watershed Protection’s (CWP) IDDE – A Guidance Manual...” A succinct definition of the term “field screening” should be listed and associated requirements should be articulated directly in the permit. It is inappropriate to reference an outdated manual developed by a private organization as the basis for a permittee’s MS4 compliance. The CWP’s manual might be changed in any manner at any time, which could then drive major changes to a permittee’s IDDE program outside of the scope of the MS4 permit. Reference to the CWP manual is better suited as a recommendation in the PER.

Illicit Connections. This definition states that Illicit Connections “include, but are not limited to, pipes, drains, open channels, or other conveyances that have the potential to result in an illicit discharge.” This definition is unsuitable and far too broad in scope. As written, every pipe qualifies as an illicit connection because it has the potential to convey an illicit discharge, such as turbidity from a construction site. Please amend the definition to read as: “include, but are not limited to, pipes, drains, open channels, or other conveyances that are connected to the MS4 but were constructed for, or are currently being used for, conveying non-stormwater have the potential to result in an illicit discharges.

An on-site investigation is defined in the Center for Watershed Protection’s (CWP) IDDE – A Guidance Manual...”: As mentioned under item “q” above, a succinct definition of the term “on-site investigation” should be listed and associated requirements should be articulated directly in the permit. The reference to the CWP manual should be removed.

A septic system investigation is defined in the Center for Watershed Protection’s (CWP) IDDE – A Guidance Manual...”: As mentioned under items “q” and “hh” above, a succinct definition of the term “septic system investigation” should be listed and associated requirements should be articulated directly in the permit. The reference to the CWP manual should be removed.

437. *Comment from City of Springfield*

Construction Site Plan - This is not the correct definition of what construction site plans are. This would be the definition of an erosion and sediment control plan.

Dry Weather Screening - This is not a definition; don’t point to another source to define it. Also this definition goes off the topic of what field screening is and into the steps on conducting.

Illicit Discharge - Should be A.1.c.

Stormwater Master Plan - Not used in the permit so why is it in the definition?

Wastewater Master Plan - Not used in the permit so why is it in the definition?

Waters of the State - If WOTS definition changes, which it might since it is currently being debated in the courts; which version would be binding? Add a sentence clarifying which version would be applicable.

438. *Comment from Clackamas County Water Environment Services*

2.k: Incomplete definition “is...” ?

2.n: Evaporate goes beyond just rainfall.

2.p: DEQ exceeds federal rules and guidelines in multiple parts of the permit by requiring the use of the Center for Watershed Protection’s (CWP) guidelines and manuals. CWP is a private, non- profit organization; it is not a government agency and does not have rulemaking authority to modify the definition of MEP. CWP requires organizations to purchase a membership to gain full access to its documents. This is an impermissible permit condition and is well outside the scope of the MEP standard.

439. *Comment from Polk County*

Redevelopment: There are some inconsistencies throughout the permit for how this term is used. For example page 24 talks about redevelopment related to disturbance, not impervious surface. “Replacing” existing impervious surface should not trigger all of these requirement, only new impervious surface seems reasonable. By including the term “replacement” this may detract a property owner from making necessary improvements to their property that would ultimately have no additional impact on water quality.

The definition of redevelopment should not include “replacement”.

440. *Comment from Rogue Valley Sewer Services*

Bioretention: Not included in the permit, so does not need to be included here.

Construction Site Plan: includes a definition of ESCP. This should be separated out as its own definition. The Construction site plan definition does not seem to be distinct from ESCP in which case it should be deleted. Will need to update the use of this term in the Construction Runoff Management section.

Dry Weather Screening: no definition provided

Illicit Discharge: The reference to A.4.a.xii is incorrect.

Plant Intercept: Not included in the permit, so does not need to be included here.

Stormwater Master Plan: Not included in the permit, so does not need to be included here.

Subwatershed: The definition used here refers to a perimeter when it is actually an area.

Wastewater Master Plan: Not included in the permit, so does not need to be included here.

441. Comment from City of Turner

There is currently no definition of land disturbance. Since this concept is used as a metric that determines various permit activities, a definition is warranted.

DEQ Response

DEQ has remove CWP references from all definitions.

“Final Stabilization” was retained as drafted.

“SWMP Document,” requirements to maintain a written SWMP Document are discussed in this document, Section 3.2.3 above SWMP Document and in the PER.

The following definitions have been deleted:

“Bioretention” “Chronic illicit discharges” “Construction site plan” “Evaporate” “Field screening” “Plant Intercept” “On-site investigation” “Septic System Investigation” “Stormwater Master Plan” “Stormwater Mitigation Bank Program” “Structural Stormwater Control Demonstration Project” “Stormwater Payment-in-Lieu Program” “Wastewater Master Plan”

DEQ determined that the following definitions are adequate and did not require modification:

“Impervious Surface” “Low Impact Development (LID)” “minimize” “Post-Construction Site Runoff Plan.” “Redevelopment” “Waters of the State”

The following definitions have been modified based on comments:

“Construction activity” includes, but is not limited to, clearing, grading, excavation, and other site preparation work related to the construction of residential buildings and non-residential buildings, and heavy construction (see 40 CFR 122.26(b)).

“Dry weather screening” definition reference was deleted (consistent with other MS4 DEQ permits and other states)

Or

“Dry weather screening” means

“Erosion” means the movement of soil particles or rock fragments by water or wind.

“Impaired waters” are defined only as those that do not meet applicable water quality standards. To be recognized as not meeting water quality standards, waters must be designated as such by DEQ and the designation must be approved by EPA for addition to the 303(d) list. Federal regulations use the term “water quality limited segment,” which is preferred. Whether the federal term or “impaired” is used, the definition must include the formal designation process and must not suggest that a single instance of excursion from water quality standards renders a water body “impaired.”

or

“Impaired waters” means any water body that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants. For the purposes of this permit, impaired waters includes those waterbodies identified by a State or EPA pursuant to Section 303(d) (Category 5) of the Clean Water Act as not meeting applicable State water quality standards for one or more pollutants. This may include both waters with approved TMDLs (Category 4), and those for which a TMDL has not yet been approved.

“Illicit connections” are defined as those that are made to the MS4 in violation of the regulating authority’s requirements.

“Land disturbance” or land disturbing activity means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures. (from WA)

“Small Municipal Separate Storm Sewer System” means an MS4 that is not defined as “large” or “medium” pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

“Stormwater” means stormwater runoff, snow melt runoff and surface runoff drainage. See 40 CFR 122.26(b)(13) or means runoff during and following precipitation and snowmelt events, including surface runoff, drainage or interflow.

“Subwatershed” is the land area or topographic region that drains into a particular stream, river or lake.

7.0 SCHEDULE F - NPDES PERMIT GENERAL CONDITIONS

442. *Comment from Oregon Association of Clean Water Agencies*

Schedule F presents problems to the degree that some of the specific conditions, monitoring and reporting requirements are only pertinent to wastewater systems. Although ACWA recognizes that Schedule F must be included in all NPDES permits, it should be made clear that only provisions applicable to stormwater and MS4s apply to this permit. This problem can be remedied by the addition of clarifying language

REQUEST: Alternate (supplemental) language recommended: The following sentence should be inserted at the beginning of the preamble to Schedule F: “The following General Conditions shall apply to the extent the condition or conditions relate to the MS4 activities specified in the Permit.”

443. *Comment from City of Albany*

These General Conditions need to be reduced to eliminate all the non-appropriate conditions that do not specifically apply to stormwater systems such as B3, B4, B5, and many more sections.

444. *Comment from City of Bend*

Much in Schedule F does not apply to MS4s; rather it applies to sanitary sewer. Whereas DEQ is required to put this language in, ultimately at some point the state and federal government needs to create an MS4-specific Schedule F. In the meantime, DEQ needs to specify which sections apply to the MS4s in order for the permit to be “clear” and “implementable.”

445. *Comment from City of Keizer*

It says NPDES General Conditions, but is full of wastewater treatment references.

B3: Whole sections related to wastewater treatment plans, not MS4.

[additional comments were noted on red-line permit submitted]

DEQ Response

These conditions are standard to NPDES stormwater general permits and include language regarding operation and maintenance of facilities, monitoring and record keeping, and reporting requirements.