CITY OF ASHLAND

Council Communication
October 18, 2016, Business Meeting

Municipal Stormwater Discharge Permit Update

FROM:
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SUMMARY
Like many communities in Oregon, Ashland's current municipal stormwater discharge permit (MS4) has expired. The Oregon Department of Environmental Quality (DEQ) is in the process of creating new MS4 permit rules that will increase each community's responsibilities. This update provides Council with information on the proposed permit regulations governing small municipal stormwater systems. The final permit was scheduled to be issued by DEQ on September 30, 2016, however they recently delayed implementation for an indefinite period of time.

BACKGROUND AND POLICY IMPLICATIONS:
The City of Ashland has an existing comprehensive stormwater program to limit the amount of pollutants that enter local streams in compliance with our current MS4 permit. Many municipalities throughout the state of Oregon are required to have a permit which regulates the discharge of stormwater into local streams. The permit requires that multiple actions be taken to ensure that water discharged into streams from storm drains and runoff is safe and does not harm water quality or people's health. The City of Ashland is an active participant in regional efforts to meet compliance standards. DEQ is the governing authority for enforcing the requirements outlined in the permit.

For the past couple of years DEQ, with direction from the Environmental Protection Agency (EPA), has been amending the permit and adding more prescriptive public education, monitoring and reporting requirements. Although the requirements in the permit are intended to protect our water ways, public health, and adapt to the changing climate, the new proposed regulations pose significant financial implications to many municipalities.

The City of Ashland, along with other municipalities and interested parties including representatives from the Association of Clean Water Agencies (ACWA), have been active participants in the new permit development process, providing comments, concerns and questions to DEQ on each draft permit revision. The final permit was scheduled to be issued with the new requirements on September 30, 2016 with a compliance deadline of July 1, 2017. However, DEQ recently announced that the new MS4 rulemaking process was on hold for an undetermined amount of time.

If the new MS4 regulations are approved as currently written, Ashland will have to provide sufficient funds and staffing to meet the new requirements, those additional tasks are as follows:

Additional Tasks	Workload	Notes
Visual inspection, mapping and cleaning of 20% of the entire stormwater conveyance system every 5 years	Clean and televise 20% of the conveyance system every 5 years. Detailed reporting on each site (picture, location, hazards, trouble spots etc.) Requires purchasing a new stormwater sewer cleaning vacuum truck	Costs to be shared 50% stormwater 25% water, and 25% electric
Implement construction inspection program which includes inspecting construction sites greater than 5,000 square feet	Conduct pre, during, post construction inspections (= 3 inspections per site) and storm event site inspections	Currently have O&M for properties over an acre. Will have to develop a template that can be modified to be site specific
Ongoing pollution prevention and illicit discharge detection and elimination	Sample and test all outfalls and potential selected catch basins. In addition, inspect all stormwater control systems (bio swales, infiltration basins etc.)	Annual
Educate city staff, developers and contractors on new requirements	Increased workload (over the counter time, field time, classes and educational brochures). Partner with RVCOG (we already pay them $6,000 a year to help with outreach)	Annual
Code review and update to incorporate Low Impact Development (LID)	LID working group through SWAT is working to simplify the template to make it specific to the Rogue Valley. It use to be more general and now it will be site specific	Could evolve into 50 – 60 hours a year to maintain

COUNCIL GOALS SUPPORTED:

N/A

FISCAL IMPLICATIONS:

If and when these new regulations are adopted, the City of Ashland will be required to implement them into the current stormwater management program. Staff have been closely following the process for the newly proposed rules. The following table outlines new tasks associated with the proposed changes including the staff time/workload necessary for implementation.

Potential new costs to meet the new MS4 rules are as follows:

Resources Needed	Expense	Fund	Frequency
Vacuum Truck	$45,000	Street Collections	Annual
Vacuum Truck Equipment (hoses jets, etc.)	$10,000	Street Collections	Annual
1 Water Resources Staff	$80,000	Street Collections transfer to Engineering	Annual
1 Engineering Vehicle	$10,000	Street Collections transfer to Engineering	Annual
Pipe / Slurry / Repairs	$60,000	Street Collections	Annual
Annual Subtotal	**$205,000**		
1 Office Space	$5,000	Street Collections transfer to Engineering	One Time
Large diameter storm line Camera Equipment	$18,000	Street Collections	One Time
One-time Subtotal	**$23,000**		
Combined Total	**$228,000**		

Notes:

- Existing Water Resource Technician is dedicated ½ time to NPDES & TMDL and the other half to Federal Energy Regulatory Commission (FERC) related compliance issues for Reeder Reservoir.
- The total cost for a new VAC truck is estimated at $450k and would be on a 10 year replacement schedule. Cost for proposed new VAC Truck split 50% stormwater, 25% water and 25% electric.

STAFF RECOMMENDATION AND REQUESTED ACTION:
N/A

SUGGESTED MOTION:
N/A

ATTACHMENTS:
National Pollution Discharge Elimination System Draft General Permit
ACWA Letter

State of Oregon
Department of
Environmental
Quality

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGE PERMIT

Oregon Department of Environmental Quality
811 SW Sixth Avenue, Portland OR 97204
Telephone: (503) 229-5279 or 1-800-452-4011 (toll free in Oregon)

Issued pursuant to ORS 468B.050 and Section 402 of the Federal Clean Water Act

REGISTERED TO:

MAJOR RECEIVING STREAMS:

WASTE LOAD ALLOCATIONS (if any):

SOURCES COVERED BY THIS PERMIT:
In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.), this permit authorizes discharge from existing and new sources of stormwater from the Permit Registrant's small municipal separate storm sewer systems to waters of the State in accordance with the conditions and requirements set forth herein

_____
Lydia Emer, Operations Administrator

Effective: January 1, 2017
Expiration Date: December 31, 2021

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to discharge municipal stormwater to waters of the state only in conformance with the requirements and conditions set forth in the attached schedules. Where conflict exists between specific conditions (found in Schedules A-D) and general conditions (Schedule F), the specific conditions supersede the general conditions.

Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES permit or a WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharges to waters of the state is prohibited, including discharges to an underground injection control system.

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APPLICABILITY AND NOTIFICATION REQUIREMENTS

1. Eligibility

This permit authorizes discharges of stormwater from small municipal separate storm sewer systems (MS4s). Owners or operators (hereafter referred to as "operators") of small MS4s are authorized to discharge stormwater under the terms and conditions of this permit, if they meet the following criteria:

a. Own or operate a small MS4, as defined in 40 CFR § 122.26(b)(16) (see Schedule D for definition);

b. Are located fully, or partially, within an Urbanized Area, as determined by the latest Decennial Census conducted by the U.S. Bureau of Census as defined by 40 CFR §122.32(a)(1); and

c. Discharge stormwater from the MS4 to surface waters of the State.

In addition, any small MS4 designated by DEQ as being a significant contributor of pollutants to waters of the United States pursuant to 40 CFR §122.26(a)(1)(v) and/or 122.32(a)(2) is eligible for permit coverage.

2. Permit Coverage Area

Permit coverage applies to the area served by the small MS4 located fully, or partially, within an Urbanized Area in the State of Oregon as defined by the latest Decennial Census conducted by the U.S. Bureau of Census. If the small MS4 is not located entirely within an Urbanized Area, only the portion that is within the Urbanized Area is considered the minimum permit coverage area, as defined in 40 CFR § 122.32(a)(1).

3. Operators of Small Municipal Separate Storm Sewer Systems (MS4s)

All operators of a small MS4 that meet the Eligibility requirements identified above must apply for and obtain coverage under this general permit or obtain coverage under a separate individual permit, unless the small MS4 has qualified for and obtained waiver in accordance with condition 40 CFR §122.32.

a. Existing Permittees

The operators of the small MS4s listed below are currently covered by individual NPDES MS4 stormwater discharge permits and have met the eligibility requirements of this general permit. These MS4s submitted a complete renewal application and are not required to submit a new-permit Application for coverage. Hereafter the following small MS4s are referred to as "Existing Permittees":

i. City of Ashland
ii. City of Bend
iii. Benton County
iv. City of Corvallis
v. City of Keizer
vi. Lane County
vii. Marion County
viii. City of Medford
ix. City of Philomath
x. Polk County
xi. Rogue Valley Sewer Services - Co-Permittees (Jackson County, City of Central Point, City

of Phoenix, City of Talent)
xii. City of Springfield
xiii. City of Troutdale
xiv. City of Turner
xv. City of Wood Village

b. New Permittees

Any operator of a small MS4 not identified as an Existing Permittee, who seeks coverage under this general permit must submit a timely and complete new-permit application to DEQ, in accordance with the Application Requirements listed below. Any MS4 operators that have not previously been covered by a NPDES MS4 stormwater discharge permit are hereafter referred to as "New Permittees".

The following New Permittees have met the eligibility requirements for this permit based on the latest Decennial Census, have not previously been covered under a MS4 stormwater discharge permit, and must submit a complete new-permit Application by December 28, 2016 in order to obtain permit coverage:

i. City of Albany
ii. City of Eagle Point
iii. City of Grants Pass
iv. City of Millersburg
v. City of Rogue River
vi. Josephine County
vii. Linn County

4. Individual Permit

Any small MS4 operator may request to be covered under an individual NPDES MS4 permit in accordance with the procedures in OAR 340-045-0033.

a. Permit Registrant Request for Individual Permit

Any small MS4 operator requesting to be covered under an individual permit must submit an individual NPDES MS4 permit application, with reasons stating why coverage under the general permit is not appropriate, to DEQ no later than 90 days after the issuance date of this permit. If the MS4 has obtained coverage under this general permit, coverage will be automatically terminated on the effective date of the individual permit.

b. DEQ Individual Permit Decisions

DEQ may refuse to authorize or may revoke coverage under this general permit and require the MS4 operator to apply for and obtain an individual MS4 NPDES permit in accordance with the procedures in OAR 340-045-0033(10). In such a case, the applicant or permit registrant will be notified in writing by DEQ that an individual permit is required, and will be given a brief explanation of the reasons for the decision.

5. Discharge Authorization

DEQ will notify the Permit Registrant in writing when permit coverage has been granted and discharge is authorized by this permit in accordance with 40 CFR §122.28(b)(2).

6. Application Requirements

Any small MS4 operator seeking authorization to discharge under this permit must submit a timely and complete Application to DEQ as outlined below.

a. Application Deadlines

i. MS4 operators seeking authorization to discharge under this permit must submit a complete Application to DEQ within 180 days after the effective date of this permit unless the DEQ notifies the applicant of a later application deadline.

ii. A MS4 operator whose operational control commences after the effective date of this permit must submit a complete Application to DEQ no later than 180 days prior to assuming operational control of the MS4 discharge, unless the DEQ notifies the applicant of a later application deadline.

iii. Operators of newly eligible MS4s who are notified by DEQ after the effective date of the permit must submit a complete Application to DEQ no later than 180 days after the date of DEQ's notification, unless the DEQ notifies the applicant of a later date.

b. Application Form

New Permittees seeking authorization to discharge under this permit must use the DEQ supplied application form, signed in accordance with the signatory requirements of Schedule F.

c. Application Submittals

Complete applications must be submitted to DEQ at the following address:

Oregon Department of Environmental Quality
Attention: MS4 Coordinator
700 NE Multnomah St., Suite 600
Portland, OR 97232

d. Co-Permittees Under a Single Permit Application

A co-Permittee is any small MS4 operator that is applying for this permit, in a cooperative agreement with at least one other applicant for coverage under this Permit. Co-Permittees own or operate a small MS4 located within or in proximity to another regulated small MS4.

Small MS4 operators may seek to obtain coverage under this permit as a co-Permittee with one or more small MS4s eligible for this permit. In such instances, a single, joint application, that includes all required information and certification signatures for each co-Permittee, must be submitted to DEQ. See Schedule A.2 for Permittee Responsibilities.

e. MS4 Permit Renewal Application

To continue permit coverage for stormwater discharges a complete renewal application must be submitted to DEQ 180 days prior to permit expiration.

SCHEDULE A - EFFLUENT LIMITATIONS, CONDITIONS, AND STORMWATER MANAGEMENT PROGRAM

1. Authorized Discharges

Subject to the terms and conditions of this permit, the Permit Registrant is authorized to discharge stormwater to waters of the State from its MS4, within the defined Permit Coverage Area.

This permit also conditionally authorizes discharges from the Permit Registrant's MS4 which are categorized as allowable non-stormwater discharges in Schedule A.1.c.

a. Limitation of Coverage

The permit does not authorize:

i. Stormwater discharges associated with industrial activities [as defined in 40 CFR §122.26(b)(14)] or stormwater associated with construction activities [as defined in 40 CFR §122.26(b)(14)(x) and (b)(15)]. Such discharges are regulated through DEQ's NPDES Industrial Stormwater General Permits; DEQ's NPDES Construction Stormwater General Permits; or another appropriate NPDES permit.

ii. Stormwater discharges that will cause, or have the reasonable potential to cause or contribute to, an excursion above the State water quality standards.

iii. Stormwater discharges to underground injection control (UIC) systems. Any owner or operator of any type of Class V UIC system must permit through Rule Authorization, a General Permit, or through a Water Pollution Control Facilities (WPCF) individual permit, and must comply with 40 CFR parts 144-146, and other measures required in Oregon's UIC rules (OAR 340-044).

b. Non-Stormwater Discharges

The permit does not authorize discharge of non-stormwater from the MS4, unless such discharges satisfy one of the following conditions:

i. The non-stormwater discharge is currently covered under another NPDES permit.

ii. The non-stormwater discharge is from emergency fire fighting activities.

iii. The non-stormwater discharges resulting from a spill, and/or resulting from an unusual and severe weather event where reasonable and prudent measures have been taken to prevent and minimize the impact of such discharge; or consists of emergency discharges required to prevent imminent threat to human health or severe property damage, provided that reasonable and prudent measures have been taken to prevent and minimize the impact of such discharges.

iv. The non-stormwater discharge is an authorized non-stormwater discharge listed in Schedule A.1.c.

c. Authorized Non-Stormwater Discharges

Unless the following non-stormwater discharges are identified in a particular case as a significant source of pollutants to waters of the State, they are considered allowable non-stormwater discharges by this permit:

i. Uncontaminated water line flushing.
ii. Landscape irrigation (provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions).

iii. Diverted stream flows.
iv. Rising groundwaters.
v. Uncontaminated groundwater infiltration (as defined at 40 CFR § 35.2005(20)) to separate storm sewers.
vi. Potable water sources.
vii. Uncontaminated pumped groundwater or spring water.
viii. Foundation, footing and crawlspace drains (where flows are not contaminated with process materials).
ix. Uncontaminated air conditioning or compressor condensate.
x. Irrigation water.
xi. Springs.
xii. Water from crawl space pumps.
xiii. Footing drains.
xiv. Lawn watering.
xv. Individual residential car washing.
xvi. Charity car washing.
xvii. Flows from riparian habitats and wetlands.
xviii. Dechlorinated swimming pool discharges.
xix. Fire hydrant flushing.
xx. Discharges of treated water from investigation, removal and remedial actions selected or approved by DEQ pursuant to Oregon Revised Statute (ORS) Chapter 465.

2. Permittee's Responsibilities

Each Permit Registrant is responsible for compliance with the terms of this permit for the coverage area related to the MS4 operated by the Permit Registrant, or where this permit requires the Permit Registrant to take a specific action.

a. Coordination Among Permittees and Joint Agreements

i. If MS4 operators elect to submit a joint Application, each Co-Permittee is jointly responsible for permit compliance.

ii. A Permit Registrant may elect to work with or delegate to another Permit Registrant or entity, to satisfy one or more of the permit conditions. The Permit Registrant remains responsible for permit compliance if the other Permit Registrant or entity fails to implement these permit condition(s).

iii. If a Permit Registrant elects to work with or delegate 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. Stormwater Management Program

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 the discharge of pollutants from their MS4 to the maximum extent practicable (MEP), to protect water quality in receiving waters, and to satisfy the appropriate water quality requirements of the Clean Water Act and Oregon Administrative Rules.

For MS4 discharges to waterbodies subject to a TMDL and/or listed on DEQ’s 303(d) list, the

Permit Registrant must comply with the more stirgent requirements in the Special Conditions identified in Schedule D.2 in accordance with 40 CFR §122.34(e)(1) and 122.44(d)(1)(vii)(A) - (B).

b. SWMP Plan Document

The Permit Registrant must prepare written documentation of its SWMP, called the Stormwater Management Program Plan (SWMP Plan). The SWMP Plan must be written to inform the public of how the required SWMP minimum control measures are implemented and to describe the implementation schedule of any program components that will be developed over the permit term. The SWMP Plan must be organized according to the program components listed in Schedule A.4 and Schedule D (Special Conditions). The SWMP Plan must be kept up-to-date during the permit term; the Permit Registrant must annually review its SWMP Plan and activities as part of the preparation of the Annual Report. The SWMP Plan must be submitted with the first Annual Report.

The SWMP Plan document must include:

i. The organizational structure, administrative units and primary contacts responsible for SWMP implementation.

ii. If applicable, a summary description of any joint implementation agreements with other co-Permittees or shared implementation responsibilities (see Schedule A.2).

iii. For each SWMP minimum control measure, a brief narrative description of the manner in which the Permit Registrant implements the specific measure or component.

1. Where a specific SWMP minimum control measure or its component(s) are not yet in place, the Permit Registrant must summarize its intended implemtation schedule, including interim milestones, associated with full implementation of the specific control measure or component.

iv. A summary of specific actions and activities conducted by the Permit Registrant to comply with any additional special conditions associated with Schedule D.2.

c. SWMP Minimum Control Measures Implementation Dates

Implementation dates for Existing Permittees are established within the SWMP Minimum Control Measures, Schedule A.4.a - f. All Permittees must begin development and implementation of the SWMP minimum control measures no later than the effective date of this permit. New Permittees must implement all SWMP minimum control measures no later than the permit expiration date in accordance with 40CFR §122.34(a). New Permittees may use the implementation dates cited in Schedule A.4.a - f as interim milestone dates to ensure full implementation of the SWMP minimum control measures before the permit expires.

d. SWMP Resources and Assessment

The Permit Registrant must provide adequate finances, staff, equipment and other support capabilities to implement the SWMP minimum control measures and other requirements outlined in this permit. In each Annual Report, the Permit Registrant must summarize and report on their total operational costs associated with SWMP implementation during the 12 month reporting period.

The Permit Registrant must also maintain a method of gathering, tracking, and using SWMP information to set priorities, and assess permit compliance. Permit Registrant must track activities and document completion of measureable goals for the respective SWMP minimum control

measure (e.g., the number of inspections, official enforcement actions, and/or types of public education actions, etc.).

4. SWMP Minimum Control Measures

In accordance with 40 CFR §122.34(b), the Permit Registrant must implement and enforce the SWMP minimum control measures outlined in Schedule A.4.a - f, including all control measure components, to reduce the discharge of pollutants from its MS4 and protect water quality in receiving waters.

a. Education and Outreach

The Permit Registrant must implement an ongoing education and outreach program about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. The education and outreach program must be designed to address stormwater issues of significance within the Permit Registrant's community.

i. Implementation Dates

No later than January 1, 2018 the Permit Registrant must begin implementation of the required components described in Schedule A.4.a.ii - vi.

ii. Conduct an Education and Outreach Program

The education and outreach program must include coordination and educational efforts targeting the four audiences listed in Schedule A.4.a.iv. The goals of the education and outreach program are to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts on receiving waters by raising awareness of actions the public can take to prevent pollutants in stormwater.

iii. Stormwater Education Activities

The Permit Registrant must distribute a minimum of two (2) educational messages over the permit term to each target audience category identified in Schedule A.4.a.iv. Education materials include, but are not limited to:

1. Printed materials such as brochures or newsletters;.
2. Electronic materials such as websites, e-newsletters, or other electronic messages.
3. Newspaper articles or public service announcements.
4. Presentations or workshops.

iv. Target Audiences and Topics.

The Permit Registrant must, at a minimum, consider the topics listed below each target audience when developing their education and outreach program. Topics listed are not exclusive; the Permit Registrant must focus on those topics most relevant to the community.

1. General Public (e.g., school children, homeowners, homeowner's associations)
    a. General impacts of stormwater flows into surface water, and appropriate actions to prevent adverse impacts.
    b. Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts.
    c. Yard care techniques protective of water quality.
    d. Best management practices for proper use, application and storage of pesticides, herbicides, and fertilizers.
    e. Litter and trash control and recycling programs.
    f. Best management practices for power washing, carpet cleaning and auto repair and maintenance.

g. Low Impact Development/green infrastructure techniques, including site design, pervious paving, retention of mature trees/vegetation, landscaping and vegetative buffers.
h. Appropriate maintenance of landscape features providing water quality benefits.
i. Source control best management practices and environmental stewardship.
j. Impacts of illicit discharges and how to report them.
k. Actions and opportunities for pet waste control/disposal.
l. Water wise landscaping, water conservation, water efficiency.

2. Business/Commercial/Institutions (e.g., landscapers, property managers, educational institutions)

a. General impacts of stormwater flows into surface water, and appropriate actions to prevent adverse impacts.
b. Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts.
c. Best management practices for use and storage of automotive chemicals, hazardous cleaning supplies, vehicle wash soaps and other hazardous materials.
d. Best management practices for power washing, carpet cleaning and auto repair and maintenance.
e. Best management practices for proper use, application and storage of pesticides, herbicides, and fertilizers.
f. Low Impact Development/green infrastructure techniques, such as site design, pervious paving, retention of mature trees/vegetation, landscaping and vegetative buffers.
g. Appropriate maintenance of landscape features providing water quality benefits.
h. Impacts of illicit discharges and how to report them.
i. Litter and trash control and recycling programs.
j. Water wise landscaping, water conservation, water efficiency.

3. Construction/Development (e.g., engineers, contractors, developers, landscape architects, site design professionals)

a. General impacts of stormwater flows into surface water, and appropriate actions to prevent adverse impacts.
b. Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts.
c. Stormwater treatment and flow/volume control practices.
d. Technical standards for stormwater site plans; including appropriate selection, installation, and use of required construction site control measures.
e. Low Impact Development/green infrastructure techniques, such as site design, pervious paving, retention of mature trees/vegetation, landscaping and vegetative buffers.
f. Appropriate maintenance of landscape features providing water quality benefits.
g. Water wise landscaping, water conservation, water efficiency.

4. Local Elected Officials, Land Use Policy and Planning Staff (e.g., mayor, council members, city planner)

a. General impacts of stormwater flows into surface water, and appropriate actions to prevent adverse impacts. Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts.

b. Low Impact Development/green infrastructure techniques, such as site design, pervious paving, retention of mature trees/vegetation, landscaping and vegetative buffers.

v. Assessment

The Permit Registration must evaluate at minimum one (1) education and outreach activity during each year of the permit term. The activity selected should be the one that the Permit Registrant considers the most successful in increasing awareness and potentially affecting behavior. In the Annual Report the Permit Registrant must address the following topics:

1. A brief description of the event.
2. Narrative summary why the selected event was successful.
3. Indicators used to measure success (e.g., attendance, participane response, pre and post event survey, etc.);
4. Impact of this activity to influence or change future education and outreach activities.

b. Public Involvement and Participation

The Permit Registrant must implement a public involvement and participation approach that provides opportunities for the public to effectively participate in the development, implementation, and modification of the SWMP. The Permit Registrant must comply with applicable state and local public notice requirements when implementing a public involvement participation program.

i. Implementation Dates

The Permit Registrant must begin implementation of the required components described in Schedule A.4.b.ii – iii upon permit effective date.

ii. SWMP Website

The Permit Registrant must post the SWMP Plan and the Annual Report(s) on a publicly-accessible website. The Permit Registrant's website must be updated as needed and include the following:

1. Illicit discharge communication channel(s) as required Schedule A.4.c.v.1.
2. Appropriate contact information, such as phone numbers for relevant staff, telephone hotline(s), or other communication channels.
3. Education material relevant to the target audiences.

iii. Stewardship Opportunities

The Permit Registrant must, at a minimum, create or partner in the development of one (1) stewardship opportunity during the permit term. The Permit Registrant may consider one of the following stewardship opportunities or a more locally relevant opportunity:

1. Stream team activities.
2. Storm drain marking;
3. Volunteer monitoring;
4. Riparian plantings/facility enhancement;
5. Neighborhood LID activities.

c. Illicit Discharge Detection and Elimination

The Permit Registrant must implement the following actions to prohibit, prevent, detect, investigate, and eliminate illicit discharges into and from their MS4. In complying with these requirements, the Permit Registrant must use the Center for Watershed Protection's IDDE – A

Guidance Manual for Program Development and Technical Assessments (2004) and the update to this manual provided in the Illicit Discharge Detection and Tracking Guide (2011) as the primary reference for procedure development. Hereafter, theses two documents are referred to as the CWP Manual.

The Permit Registrant may choose to use equivalent illicit discharge detection and tracking techniques in lieu of those techniques presented in the CWP Manual for prioritizing of investigations; however, the Permit Registrant must determine that the techniques are at minimum equivalent to those in the CWP Manual. The Permit Registrant may also use emerging techniques in conjunction with on-site and septic system investigative techniques described in the CWP Manual. These emerging techniques must have documentation demonstrating they enhance the efficacy of the established investigative techniques. The terminology used in this condition reflects the terminology used in the CWP Manual.

i. Implementation Dates for New Actions

No later than January 1, 2021, the Permit Registrant must develop or revise, as needed, its existing Illicit Discharge, Detection, and Elimination (IDDE) program to include the required components described in Schedule A.4.c.ii - v.

ii. Storm Sewer System Map or Digital Inventory

Permit Registrant must develop a storm sewer system map(s) or digital inventory. Permit Registrant must make these map(s) or digital inventories available to DEQ upon request. If in digital format, the Permit Registrant must fully describe mapping standards in the SWMP Plan. At a minimum, the map(s) or digital inventories must include the following:

1. Outfall Location

   The location of all MS4 outfalls, including the unique identifier for each outfall, any geographic information such as streets necessary to locate these outfalls in the field, and the names of the receiving water.

2. Conveyance System and Stormwater Control Location

   The location of the MS4 collection system and structural stormwater controls including any geographic information such as streets, manholes, and milepost markers necessary to locate this system in the field. The Permit Registrant must delineate the MS4 by storm sewer drainage basin as appropriate.

3. Septic System Investigation Information

   If applicable, the location of the portion of the MS4 inspected using a septic system investigation required in Schedule A.4.c.v.6 and a summary of the chronic or continuous illicit discharges discovered using one of the following:

   a. Homeowner survey and surface condition analysis.
   b. Detailed septic system inspection involving dye testing, infrared imagery, infrared thermography, and color infrared photography.
   c. The septic system investigation information must include the location of illicit discharges detected on a map legend, in a digital inventory, or in a supplemental document.

4. On-site Investigation Information

   If applicable, the location of the portion of the MS4 inspected using on-site investigations as required in Schedule A.4.c.v.6 and a summary of the illicit discharges discovered when searching for chronic or continuous illicit discharges using closed

circuit TV equipment, dye, and/or smoke testing to identify the following:

a. Intentional or inadvertent sanitary connections to the MS4.
b. Sanitary inflows from joints or other openings in the MS4 pipe.
c. Other sources of stormwater pollutants entering the MS4 such as unpermitted industrial wastewater flows.

The on-site investigation information must include the location of illicit discharges detected on a map legend, in a digital inventory, or in a supplemental document.

5. Optional Techniques to Prioritize Investigations

If the Permit Registrant uses additional techniques described in the CWP Manual to determine illicit discharge potential and prioritize the required inventory in Schedule A.4.c.ii.3 - 4, the map or digital inventory must also include information from the application of the following techniques if performed:

a. Outfall Reconnaissance Inventory Information
The findings from the visual screening of each outfall including the testing results for any discharge if sampled and employing the technique in Schedule A.4.c.ii.5.c.

b. Desktop Assessment and/or Drainage Area Investigation Information

i. Land use associated with the MS4.
ii. Age of developments with stormwater draining to the system.
iii. The MS4's and sanitary system's condition based on the Permit Registrant's asset management program, conveyance system evaluations from past stormwater and wastewater master plans, and/or past field inspections.
iv. Windshield and/or aerial photo survey of a drainage area.
v. Mapping analysis of the storm drain network and potential pollutant generating sources.
vi. Applicable screening score based on screening factors developed for this assessment such as those provided in Table 14 of the CWP Manual.
vii. Overlay map or notations in the digital inventory prioritizing storm sewer drainage basins (i.e., priority areas) for future investigation based on this desktop assessment.

c. Indicator Monitoring Information
A summary of the laboratory results from any monitoring for each outfall and/or manhole tested as required in Schedule B.1.a.

d. Storm Drain Network Investigation Information
A summary of the storm sewer pipe network investigated including, if performed, manholes tested to detect the presence of illicit discharges and the results of this testing as well as other techniques employed to isolate and evaluate intermittent or transient discharges.

e. Information from Equivalent and/or Emerging Techniques
A summary of information gathered from equivalent illicit discharge detection and tracking techniques and/or emerging techniques discussed in Schedule A.4.c.

iii. Legal Authority

Permit Registrant must prohibit, through ordinance or other regulatory mechanism, illicit discharges into the Permit Registrant's MS4 system. The ordinance or other regulatory mechanism must provide authority to investigate the source and require the elimination of

illicit discharges. This regulatory authority must also define the range of illicit discharges it covers including but not limited to sewage, septic tank waste, industrial waste, trash, paints, stains, resins, household hazardous waste, pesticide waste, automotive products, construction waste, and unhardened concrete. If determined by the Permit Registrant to be a significant source of pollutants to its MS4 or waters of the State, the Permit Registrant must prohibit the non-stormwater discharges listed in Schedule A.1.b.i or require nonstructural or structural stormwater controls to address these pollutants before discharge to the Permit Registrant's MS4.

iv. Enforcement Procedures

The Permit Registrant must develop and implement a written escalating enforcement procedure to ensure compliance with the illicit discharge ordinance or other regulatory mechanism to address repeat violations through progressively stricter response, as needed, to achieve compliance. The escalating enforcement procedure must be submitted with the fourth Annual Report. 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. The response procedures must include the following continuum of enforcement tools as described in Table 12 of the CWP Manual:

1. Written warning with an opportunity to comply voluntarily.
2. Written notice of violation ordering compliance.
3. Administrative or civil penalties.
4. Compensatory action.
5. Criminal prosecution.
6. Cost of abatement of the violation and property liens.
7. Emergency cease and desist order.
8. Stop work order.

v. Program to Detect and Eliminate Illicit Discharges

Permit Registrant must implement a program designed to detect, locate, and eliminate illicit discharges into the Permit Registrant's MS4 system; update the program as needed; and, perform the following actions:

1. Illicit Discharge Communication Channel(s)

   Publicize a phone number, webpage, and/or other communication channel that the public can use to contact the Permit Registrant to submit/report a complaint regarding spills or other illicit discharges.

2. Notification of Other Authorities

   Notify the jurisdictional authority within five (5) working days of becoming aware of an illicit discharge originating outside the Permit Registrant's jurisdictional area but discharging to its MS4 regulated under this permit.

3. Procedures for Illicit Discharge Investigations

   Develop and document in the SWMP Plan procedures for identifying the presence of illicit discharges, for prioritizing areas for investigation, and for conducting field investigations of the MS4. The Permit Registrant must use the CWP Manual for its procedures or equivalent illicit discharge detection and tracking techniques.

4. Planning and Funding System Repairs

   Identify and utilize procedures such as capital improvement planning to eliminate

chronic illicit discharges under the direct control of the Permit Registrant such as sanitary inflows due to failing public sanitary and stormwater conveyance systems. These procedures must include a timeline for securing funding that complies with Schedule A.4.c.v.5.b.iii to remove these chronic illicit discharges. For chronic illicit discharges to the MS4 originating from a private system, the Permit Registrant must follow the procedures established in Schedule A.4.c.v.5.b.ii and timelines established in Schedule A.4.c.iv.

5. Complaint and Illicit Discharge Response System

   Develop and implement procedures for responding to complaints and tracking the Permit Registrants actions that documents the following:

   a. The administrative unit responsible for the response to complaints and the identification of illicit discharge sources including a description of when other entities such as the Oregon Emergency Response System and fire department's involvement is appropriate and/or required.
   b. Upon determining that these discharges constitute a threat to human health and/or the environment consistent with Schedule F.B7, the timelines for complaint and illicit discharge response appropriate for the source of the illicit discharge and nature of the complaint with immediate response for all known illicit discharges, including spills.. Complaint responses must, at minimum, use the following timelines:

      i. Within five (5) working days, the Permit Registrant must conduct an initial evaluation. Upon identifying the source of the illicit discharge, the Permit Registrant must initiate the procedures in Schedule A.4.c.iv to eliminate the illicit discharge.
      ii. If the elimination of the illicit discharge will take more than fifteen (15) working days due to technical, logistical, or other reasonable issues, the Permit Registrant must within twenty (20) working days upon identifying the source of an illicit discharge initiate procedures in Schedule A.4.c.iv to eliminate the illicit discharge.
      iii. If the elimination of the illicit discharge involves the repair or replacement of the Permit Registrant's wastewater and/or storm sewer conveyance systems, the Permit Registrant must remove the source of the illicit discharge within three (3) years of the date of its identification.

   c. A complaint and illicit discharge response tracking system documenting the following:

      i. The date the complaint was received and, if available, the complainant's name and contact information.
      ii. The staff responding to the complaint.
      iii. The date(s) the investigation was initiated.
      iv. The date the illicit discharge was identified.
      v. The outcome of the staff investigation and a summary of the procedures used from Schedule A.4.c.v.3.
      vi. The location and stormwater asset or component affected by the illicit discharge.
      vii. If applicable, the corrective action required to eliminate the illicit discharge.
      viii. If applicable, the party responsible for the corrective action.
      ix. If applicable, the status of the enforcement procedures required Schedule A.4.c.iv.

x. If applicable, the date the corrective action was completed and staff involved in the final inspection to evaluate compliance with the Permit Registrant's code or other regulatory mechanism

6. Septic System and On-site Investigations for Chronic Illicit Discharges

   Complete the following for 20% of the liner feet of the MS4 during the permit term:

   a. A septic system investigation, if applicable, for open channels or roadside ditches in unsewered areas draining to the MS4 using the procedures noted in Schedule A.4.c.v.3.
   b. An on-site investigation, if applicable, of the storm sewer system's pipe network using the procedures noted in Schedule A.4.c.v.3.

   If an identified source of chronic illicit discharge(s) is from the Permit Registrant's wastewater and storm sewer system, the Permit Registrant must eliminate the illicit discharge(s) as required in Schedule A.4.c.v.5.b.iii. If an identified source of chronic illicit discharge(s) is from a private wastewater conveyance system, the Permit Registrant must eliminate the illicit discharge(s) following the procedures established in Schedule A.4.c.iv and following the timelines in Schedule A.4.c.v.5.b.ii.

7. IDDE Training

   Provide training, at least once during the permit term, to all persons involved in the following: field inspections or investigations of the MS4 for illicit discharges, tracking of illicit discharges to a source, responding to complaints involving illicit discharges, and enforcement procedures. For staff involved in complaint response, the training must also include spill response standard operating procedures as outlined in the CWP Manual. The Permit Registrant must provide training to all persons involved in implementing the Permit Registrant's IDDE program within 6 months of their assignment to this program. Permit Registrant must provide follow-up training as procedures and/or technology utilized in this program change.

d. Construction Site Runoff

At a minimum, the Permit Registrant must develop, implement and enforce a program to reduce discharges of pollutants and control stormwater runoff from construction activities that results in land disturbance of 5,000 square feet or more. The Permit Registrant must continue to impose any existing program to ensure the proper installation and maintenance of erosion controls, sediment controls, and waste material containment, and pollution prevention controls during all phases of construction activity occurring within their jurisdiction.

i. Implementation Date

No later than January 1, 2021, the Permit Registrant must revise and update its existing construction site runoff control program, as necessary, to include the required components described in Schedule A.4.d.ii - vi.

ii. Legal Authority

Through ordinance or other regulatory mechanism to the extent allowable under State law, the Permit Registrant must require erosion controls, sediment controls, and materials management techniques to be employed and maintained at construction projects from initial clearing through final stabilization that result in a land disturbance of 5,000 square feet or greater.

Permit Registrant's ordinance or other regulatory mechanism must require construction site operators to maintain effective controls as required in Schedule A.4.d.iii to reduce pollutants in stormwater discharges from construction sites. Permit Registrant must also require site operators to submit an erosion and sediment contol plan for review and approval as required in Schedule A.4.d.iv . The ordinance or other regulatory mechanism must provide authority to inspect construction sites for compliance with the Permit Registrant's construction site runoff program.

1. Compliance with Other NPDES Permit Requirements

   At a minimum, construction site erosion and sediment control plans for sites that disturb one or more acres (or that disturb less than one acre but part of a common plan of development) must be consistent with the requirements in the DEQ's NPDES Construction Stormwater General Permit.

iii. Construction Site Runoff Control Specifications

The Permit Registrant must require the use of construction site runoff controls and must maintain written specifications that address the proper design, installation and maintenance of erosion controls andsediment controls. The Permit Registrant must also design, implement, and maintain pollution prevention measures to minimize the exposure to precipitation and stormwater for the following: building materials, building products, construction wastes, trash, landscape materials such as fertilizers, pesticides, herbicides, and sanitary waste.The Permit Registrant, at its discretion, may adopt specifications created by another entity which complies with this requirement.

Construction site runoff control specifications must include:

1. Sizing criteria, performance criteria, design specifications, and guidance on selection and placement of control.
2. Specifications for operation and maintenance including appropriate inspection interval and self-inspection checklists for use by site operator.

iv. Erosion and Sediment Control Plan Review and Approval

Prior to land disturbance, the Permit Registrant must review and approve an erosion and sediment control plan from construction site. The ESCP must be reviewed by a qualified individual knowledgeable in the technical review of ESCPs. The Permit Registrant must not approve any ECSPs unless it contains appropriate site-specific construction site control as required in Schedule A.4.d.iii. The Permit Registrant must ensure that the site operator is prohibited from commencing construction activity prior to receipt of written approval.

The Permit Registrant must develop ESCP Review criteria. At a minimum, the ESCP must include the following:

1. Location of site.
2. Site map.
   a. Location of land disturbance and future impervious surface including building footprint, driveways, walk ways, or other impervious surfaces.
   b. Estimates of the total land disturbance area.
   c. Location of the controls or BMPs with reference to the construction site runoff control specifications in Schedule a.4.d.iii.

d. Location of pollutant sources such as concrete clean-out, portable bathrooms, waste storage, soil and fill storage, and equipment refueling.
e. Location of permeable soils, springs, wetlands, riparian areas, and vegetation that will be protected during construction activity.
f. Drainages patterns and discharge points to the MS4.

3. Site operator contact information.

v. Construction Site Inspections

The Permit Registrant must inspect construction sites to ensure compliance with Schedule A.4.d.iii – iv. If the Permit Registrant elects to establish an inspection prioritization system to identify the frequency and type of inspection, it must consider factors such as project type, total area of disturbance, location, and potential threat to water quality. If a prioritization system is used, the Permit Registrant must describe the prioritization system in the SWMP Plan and must summarize the nature and number of inspections, follow-up actions, and any subsequent enforcement actions conducted.

At a minimum, construction site inspections conducted by the Permit Registrant must include:

1. A determination of whether a construction site is required to and/or has coverage under DEQ's NPDES Construction Stormwater General Permit.
2. A review of the ESCP to determine if controls are installed and maintained as required in Schedule A.4.d.iii.
3. Visual observation and documentation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site.
4. A determination of compliance with the ESCP.
5. A written or electronic inspection report that includes, if necessary, corrective actions and follow-up.

vi. Enforcement Procedures

The Permit Registrant must develop and implement a written escalating enforcement procedure to ensure compliance with the construction site runoff ordinance or other regulatory mechanism to address repeat violations through progressively stricter response, as needed, to achieve compliance. The escalating enforcement procedure must be submitted with the fourth Annual Report. 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. The response procedures must include the following continuum of enforcement tools as described in Table 12 of the CWP Manual:

a. Written warning with an opportunity to comply voluntarily.
b. Written notice of violation ordering compliance.
c. Administrative or civil penalties.
d. Compensatory action.
e. Criminal prosecution.
f. Cost of abatement of the violation and property liens.
g. Emergency cease and desist order.
h. Stop work order.

vii. Notification of NPDES Construction Stormwater Permit Violation

Upon identification, the Permit Registrant must notify DEQ within 14 working days of

construction sites disturbing one or more acres (or disturbing less than one acre but is part of a larger common plan of development) that they have deemed to be in non-compliance with the ESCP, the NPDES Construction Stormwater Permit, and/or operating without a NPDES Construction Stormwater Permit.

viii. Construction Runoff Control Training and Education

The Permit Registrant must provide educational opportunities or inform site operators of available educational opportunities on local construction stormwater requirements. The Permit Registrant must provide training, at least once during the permit term, to all persons involved in ESCP review and approval, construction site inspections, and enforcement. The Permit Registrant must provide training to all persons involved in implementing the Permit Registrant's construction site runoff program within 6 months of their assignment to this program. Permit Registrant must provide follow-up training as procedures and/or control change.

The Permit Registrant must educate site operators of the construction site runoff requirements in Schedule A.4.d.iii - iv. At a minimum, the Permit Registrant's actions to educate site operators must provide clear criteria for obtaining approval of their ESCP.

e. Post-Construction Site Runoff

The Permit Registrant must develop, implement and enforce a program to reduce discharges of pollutants and control stormwater runoff from new development and redevelopment project sites. Permit Registrant must continue to implement and enforce its existing post-construction stormwater management program to ensure that appropriate permanent stormwater controls are utilized at private and public sector development sites including roads and streets.

i. Implementation Deadline

No later than January 1, 2020, Permit Registrant must update its existing program to implement the post-construction site runoff requirements in Schedule A.4.e.ii - viii at new development and redevelopment project sites.

ii. Legal Authority

Through ordinance or other regulatory mechanism to the extent allowable under state law, the Permit Registrant must require the installation and long-term maintenance of permanent nonstructural and structural stormwater controls at new development and redevelopment project sites discharging stormwater to the MS4 creating 5,000 square feet or more of new impervious surface area. The Permit Registrant must use appropriate enforcement procedures and actions to ensure compliance with Schedule A.4.e.iv. The local ordinance or other regulatory mechanism adopted must meet the requirements of Schedule A.4.e.ii - vi.

In local ordinance or in a stormwater design manual referenced in local ordinance, the Permit Registrant must require a site-specific stormwater management approach that targets natural surface or predevelopment hydrological function as much as practicable. This site-specific stormwater management approach must prioritize Low Impact Development (LID), when practicable, utilizing nonstructural stormwater controls first to retain stormwater on site by infiltrating runoff into soil, evaporating rainfall from plant interception, transpiring soil moisture, and protecting natural stormwater management features such as wetlands before employing structural stormwater controls to retain stormwater on-site and to treat stormwater discharged off-site. When allowing structural stormwater controls to be used, the

Permit Registrant must give priority, when practicable, to Green Infrastructure (GI) to infiltrate, filter, evaporate, and/or transpire stormwater.

iii. LID Code-Related Requirements

The Permit Registrant must review and revise its local development-related codes, rules, standards, or other enforceable documents to incorporate the site-specific stormwater management approach prioritizing the application of nonstructural stormwater controls noted in Schedule A.e.ii. The revisions must be designed to minimize impervious surfaces, vegetation loss, and stormwater runoff in all types of development situations.

In conducting this review and revision process, the Permit Registrant must consider the range of issues and recommendations outlined in the following documents:

1. Oregon Department of Land Conservation and Development's and Oregon DEQ's Water Quality Model Code and Guidebook.
2. Puget Sound Partnership's Integrating LID into Local Codes: A Guidebook for Local Governments.
3. Center for Watershed Protection Code and Ordinance Worksheet in Better Site Design Handbook.

The Permit Registrant must submit the results of this review and revision process with the third Annual Report. The review and revision process, at minimum, must document the development-related codes, rules, and/or standards reviewed and revised to allow the prioritization and application of nonstructural stormwater controls.

iv. Post-Construction Stormwater Management Requirements

To reduce pollutants and mitigate the volume, duration, time of concentration and rate of stormwater runoff, the Permit Registrant must develop enforceable post-construction stormwater management requirements in code or in a manual referenced in code that, at a minimum, include the following technical standards:

1. Site Performance Standard

   The Permit Registrant must establish a site performance standard with a numeric stormwater retention requirement to target natural surface or predevelopment hydrologic function as much as practicable to retain rainfall on-site and minimize the off-site discharge of precipitation utilizing the following: infiltration of runoff, evaporation from plant interception, transpiration of soil moisture, and the protection of natural stormwater management features such as wetlands. This retention requirement must be derived from one of the following: a volume-based method (e.g., first 1-inch of a 24-hour event), storm event percentile-based method (e.g., 95th percentile storm event), annual average runoff-based method (e.g., 80% of annual average runoff), or flow duration matching method.

   As provided in Schedule A.4.e.iv.4, 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 by the Permit Registrant. For projects that are unable to fully meet the retention requirement and will use the alternative compliance in Schedule A.4.e.iv.3, the remainder of the stipulated amount of rainfall associated with this retention requirement that cannot be

retained on-site must be treated prior to discharge with a structural stormwater control.

This stormwater structural control must be designed to remove, at minimum, 80% of the total suspended solids (TSS). In treating the stormwater discharged off-site, the Permit Registrant must give priority to using GI before considering other structural stormwater controls. The Permit Registrant must identify conditions where the implementation of GI or equivalent approaches may be impracticable for a site as required in Schedule A.4.e.iv.2. The runoff discharged off-site must target the natural surface or predevelopment flow duration curve for the receiving water to protect water quality by preventing bed and bank erosion.

2. Structural Stormwater Control Design and Specifications

   The Permit Registrant must provide a description of all allowable structural stormwater controls that includes site-specific design requirements, design requirements which do not inhibit maintenance, conditions where each control applies, and operation and maintenance standards for each control. The Permit Registrant must identify conditions where the implementation of GI or equivalent approaches may be impracticable for a site.

3. Allowance for Alternative Compliance

   The Permit Registrant must allow for alternative compliance for exceptions to the stormwater retention requirement noted in Schedule A.4.e.iv.1. The determination by the Permit Registrant that full compliance of this retention requirement cannot be achieved at a site must be based on review criteria considering multiple factors and may not be based solely on the difficulty or cost. The Permit Registrant must also make such determinations based on factors of technical infeasibility and site constraints including but not limited to the following: shallow bedrock, high groundwater, groundwater contamination, low permeability soil, soil instability as documented by a geotechnical analysis, and/or a land use that is inconsistent with capture and infiltration of stormwater.

   For site operators requesting alternative compliance, the Permit Registrant must require and, subsequently, review a written technical justification as to the technical infeasibility or site constraints which prevent the on-site management of the rainfall amount stipulated in the stormwater retention requirement or a portion thereof. 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.4.e.iv.1. The written technical justification must be in the form of a site-specific hydrologic and/or design analysis conducted and endorsed by an Oregon registered Professional Engineer, Oregon Certified Engineering Geologist, architect, and/or landscape architect.

   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.4.e.iv.4.

4. Stormwater Mitigation Options

   The Permit Registrant must establish stormwater mitigation options for alternative compliance noted in Schedule A.4.e.iv.1. 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:

a. Off-Site Mitigation – includes meeting the retention requirement at another location, the use of a stormwater mitigation bank program, or the use of stormwater payment-in-lieu program.
b. Groundwater Replenishment Projects – implements a project that the Permit Registrant has determined to provide an opportunity to replenish regional groundwater supplies.
c. Treatment Equivalent to the Retention Requirement – establishes treatment requirements that attain the equivalent water quality benefits as onsite retention of stormwater from new development or redevelopment sites using a continuous simulation hydrologic model or other evaluation tool.

v. Post-Construction Site Runoff Plan Review

The Permit Registrant must review, approve, and verify proper implementation of post-construction site runoff plans (runoff plans) for new development and redevelopment projects as required in Schedule A.4.e.iv. The runoff plans submitted by the site operator must describe how the new development or redevelopment project meets the post-construction stormwater management requirements in Schedule A.4.e.iv.. For structural stormwater control demonstration projects that do not conform to design and specifications required in Schedule A.4.e.iv.3, the Permit Registrant must ensure that the demonstration project complies with Schedule A.4.e.iv.1 and Schedule A.4.e.vi.

vi. Long-term Operation and Maintenance

The Permit Registrant must implement a strategy to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.4.iv.1. This strategy must, at minimum, include the following:

1. Legal authority allowing the Permit Registrant to inspect and require effective operation and maintenance (O&M) of stormwater controls owned and operated by another entity.
2. Inspection procedures and an inspection schedule ensuring compliance with the O&M requirements of each stormwater control operated by the Permit Registrant and by other entities.
3. A tracking mechanism for documenting inspections and the O&M requirements for each nonstructural and structural stormwater control. This tracking mechanism must document enforcement actions and compliance response. 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.
4. Reporting requirements for privately owned and operated stormwater controls that document compliance with the O&M requirement in Schedule A.4.e.vi.2.
5. A map or digital inventory documenting the location of all public and private

stormwater controls as installed in compliance with this permit.

vii. Training and Education

The Permit Registrant must, at least once during the permit term, provide training or professional development to the following:

1. Individuals performing post-construction runoff site plan reviews as required in Schedule A.4.e.v.
2. Individuals admininstrating the alternative compliance program as required in Schedule A.4.e.iv.3 – 4.
3. Individuals performing O&M practices or evaluating compliance with long-term O&M requirements in Schedule A.4.e.vi.

Training must be provided to staff involved in implementing the Permit Registrant's post-construction site runoff program within 6 months of their assignment to this program. Permit Registrant must provide follow-up training as procedures and/or technology utilized in this program change.

The Permit Registrant must educate site operators on the post-construction site runoff requirements in Schedule A.4.e.iv.1 - 4. At minimum, the Permit Registrant's actions to educate this audience must provide clear criteria for obtaining approval for the site operator's post-construction runoff site plan.

f. Pollution Prevention and Good Housekeeping for Municipal Operations

The Permit Registrant must carry out its municipal operations with the ultimate goal of preventing or reducing pollutant loads in stormwater. Permit Registrant must continue to implement their existing pollution prevention in municipal operations program to ensure that nonstructural and structural stormwater controls are implemented to protect water quality. The Permit Registrant must implement an operation and maintenance program utilizing, as appropriate, the Permit Registrant's actions to comply with Schedule A.4.e.vi to ensure that its nonstructural and structural stormwater controls prevent or reduce the discharge of pollutants from its MS4.

i. Implementation Date

No later than January 1, 2021, the Permit Registrant's pollution prevention and good housekeeping program must include the requirements in Schedule A.4.f.ii - xi.

ii. Operation and Maintenance Strategy for Existing Controls

For existing structural and nonstructural stormwater controls, 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 the Permit Registrant's MS4. The O&M strategy for structural and nonstructural stormwater controls must include, at minimum, the long-term O&M requirements in Schedule A.4.e.vi.

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. The Permit Registrant must inspect at minimum 20% of the Permit Registrant owned or operated catch basins and clean as needed. Material removed from catch basins and inlets must be managed in accordance with Schedule A.4.f.iivx.

iii. Pollution Prevention in Facilities and Operations

The Permit Registrant must conduct all of its municipal O&M activities in a manner that protects water quality and reduces the discharge of pollutants to the MS4. The Permit Registrant must review and update, as necessary, existing practices to ensure appropriate pollution prevention and good housekeeping procedures are conducted, as appropriate, for the following activities:

1. Pipe cleaning for stormwater and wastewater conveyance systems.
2. Cleaning of culverts conveying stormwater in roadside ditches.
3. Ditch maintenance.
4. Road and bridge maintenance.
5. Road repair and resurfacing including pavement grinding.
6. Dust control for roads and municipal construction sites.
7. Winter road maintenance.
8. Fleet maintenance and vehicle washing.
9. Building and sidewalk maintenance including washing.
10. Solid waste transfer and disposal areas.
11. Municipal landscape maintenance.
12. Park and open space maintenance including pet waste management.
13. Municipal golf course maintenance.
14. Material storage and transfer areas.
15. Fertilizer and pesticide storage and transfer areas.
16. Hazardous material storage and transfer areas.
17. Used oil storage and transfer areas.
18. Fuel storage areas and refueling areas.
19. Fire fighting training activities.

iv. Requirements for Pesticide and Fertilizer Applications

The Permit Registrant must establish practices to prevent the discharge of pollutants to the MS4 associated with the application of pesticides and fertilizers, including public right-of-ways, parks, recreational facilities, golf courses, and landscaped areas. 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 and rinsate.

v. Permittee-owned NPDES Industrial Stormwater Permit Facilities

Permit Registrant-owned or operated facilities with industrial activity as defined in 40 CFR §122.26(b)(14) discharging stormwater to the waters of the State must have coverage under DEQ's NPDES Industrial Stormwater Permit. The Permit Registrant may use the actions required in the NPDES Industrial Stormwater Permit to address the applicable facility requirements in Schedule A.f.iii.

vi. Litter Control

The Permit Registrant must implement effective controls to reduce litter to the MS4. In complying with this requirement, the Permit Registrant may work cooperatively with other entities to implement the public participation requirements in Schedule A.4.b to control litter on a regular basis. The Permit Registrant must require litter control during and after public events to reduce the discharge of pollutants to receiving waters.

vii. Materials Disposal

The Permit Registrant must implement documented procedures in accordance with state and

federal rules for proper reuse or disposal of materials or waste removed from properties, infrastructure or assets owned or operated by the Permit Registrant that could impact stormwater quality.

viii. Stormwater Infrastructure Staff Training

The Permit Registrant must, at least once during the permit term, provide training or professional development the following:

1. Individuals responsible for performing O&M practices or evaluating compliance with long-term O&M requirements in Schedule A.4.e.vi and Schedule A.4.f.ii.
2. Individuals responsible for ensuring pollution prevention at facilities and during operations as requirements in Schedule A.4.f.iii.

Training must be provided to staff involved in implementing the Permit Registrant's pollution prevention and good housekeeping for municipal operations program within 6 months of their assignment to this program. Permit Registrant must provide follow-up training as procedures and/or technology utilized in this program change.

SCHEDULE B - MONITORING AND REPORTING REQUIREMNTS

1. Monitoring Requirements

The Permit Registrant must evaluate SWMP compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. 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 the additional monitoring requirements under Schedule D(2).

a. When the Permit Registrant conducts stormwater monitoring, the following monitoring requirements must be followed:

   i. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

   ii. Sample collection, preservation, and analysis must be conducted according to sufficiently sensitive methods/test procedures approved under 40 CFR § 136, unless otherwise approved by DEQ. Where an approved 40 CFR § 136 method does not exist, and other test procedures have not been specified, any available method may be used after approval from DEQ.

b. Records of monitoring information must include:

   i. The date, exact place, and time of sampling or measurements.
   ii. The names(s) of the individual(s) who performed the sampling or measurements.
   iii. The date(s) analyses were performed.
   iv. The names of the individuals who performed the analyses.
   v. The analytical techniques or methods used.
   vi. The results of such analyses.

c. Monitoring Report

   i. Monitoring results must be reported in the Annual Report.

2. Recordkeeping

a. Records Retention

The Permit Registrant must retain records and copies of all information (e.g., all monitoring, calibration, and maintenance records; all original strip chart recordings for any continuous monitoring instrumentation; copies of all reports required by this permit; annual reports; a copy of the NPDES permit; and, records of all data or information used in the development and implementation of the SWMP) for a period of at least five years from the date permit compliance action or for the term of this permit, whichever is longer. This period may be extended at the request of DEQ at any time.

b. Availability of Records

The Permit Registrant must submit the records referred to in Schedule B.2.a to DEQ only when such information is requested. The Permit Registrant must also make all records described above available to the public, if requested to do so in writing. The public must be able to view the records during normal business hours.

c. Annual Report

No later than March 15 of each year beginning in 2018, the Permit Registrant must submit an Annual Report to DEQ. The Permit Registrant must use the Annual Report form provided by DEQ. The reporting period for the 1st Year Annual Report will be from January 1 through

December 31, 2017. Reporting periods for subsequent Annual Reports are specified in Table 1 below. The Permit Registrant must make available to the public all Annual Reports, including any required documents attached to the Annual Report through the Permittee-maintained website specified in Schedule A.4.b.ii.

Table 2. Annual Report Deadlines		
Annual Report	Reporting Period	Due Date
1st Year Annual Report	January 1 – December 31, 2017	March 15, 2018
2nd Year Annual Report	January 1 – December 31, 2018	March 15, 2019
3rd Year Annual Report	January 1 – December 31, 2019	March 15, 2020
4th Year Annual Report	January 1 – December 31, 2020	March 15, 2021
5th Year Annual Report	January 1 – December 31, 2021	March 15, 2022

d. Submissions

The Permit Registrant must provide DEQ with one hard copy and one electronic copy (on CD-ROM or other portable electronic storage device) of Annual Reports and/or other required documents. For electronic submittal of documents (i.e., e-Reporting), DEQ may provide the Permit Registrant with instructions for submitting Annual Reports and/or other documents required by this permit electronically. Once a Permit Registrant receives permission to submit electronically, it will no longer be required to submit such materials to DEQ in hardcopy.

e. Addresses

All hardcopy Annual Reports, attachments, and other required submittals must be sent to DEQ at the following address:

Oregon Department of Environmental Quality
Attention: MS4 Coordinator
700 NE Multnomah St., Suite 600
Portland, OR 97232

SCHEDULE C - COMPLIANCE CONDITIONS AND DATES

Compliance conditions and dates are not included at this time.

SCHEDULE D - SPECIAL CONDITIONS

1. Legal Authority

Each Permit Registrant or co-Permit Registrant must maintain adequate legal authority through ordinance(s), code(s), interagency agreement(s), contract(s), and/or other mechanisms to implement and enforce the provisions of this Permit.

If such legal authority does not already exist, the Permit Registrant must adopt new ordinances or regulatory mechanisms that provide it with adequate legal authority, as allowed and authorized pursuant to applicable state law, in accordance with the implementation schedule outlined in Schedule A.4 which includes requirements for ordinance or other regulatory mechanisms to comply with this Permit.

2. Requirements for Water Bodies with CWA Section 303(d) Listed Pollutants and TMDLs

a. Implementation Deadline
No later than December 31, 2021, Permit Registrant must perform the required actions in Schedule D.2.d.

b. Applicability
The requirements of this section apply to MS4 discharges to receiving waters with established Total Maximum Daily Loads and with new or modified TMDLs approved by EPA during this permit term where urban stormwater is identified as a source of TMDL pollutant loading. This section also applies to MS4 discharges to receiving waters identified as impaired on DEQ's current Integrated Report and 303(d) list for particular pollutants when the scientific literature indicates that urban stormwater may be a reasonable source for these 303(d) listed pollutants. Established TMDLs in the Permit Registrant's permit coverage area are noted on page 1 of this permit.

MS4 discharges of pollutants that are listed in a TMDL with applicable load or wasteload allocations for urban stormwater and that are on the 303(d) list must be reduced through the implementation of Water Quality Standard Attainment Performance Measures described in Schedule D.2.c. Progress towards reducing TMDL pollutant and 303(d) pollutant loads will be evaluated, in subsequent permit terms, by the Permit Registrant using, in part, the documentation required in Schedule D.2.d and a DEQ-approved model.

c. Water Quality Standard Attainment Performance Measures
The Water Quality Standard Attainment Performance Measures are specific actions that DEQ has identified as important management strategies or actions during the development of TMDLs and/or during the development of this Permit. These Performance Measures will reduce the loading of chronic sources of TMDL and 303(d) listed pollutants in the Permit Registrant's stormwater discharge. The Water Quality Standard Attainment Performance Measures are:

i. The elimination of chronic illicit discharges containing TMDL and 303(d) listed pollutants as required in Schedule A.4.c.v.6.

ii. The nonstructural and structural stormwater controls that the Permit Registrant implements or requires implementation to reduce chronic loads of TMDL and 303(d) listed pollutants in its stormwater discharge as required in Schedule A.4.e.iv.

iii. The stormwater controls that the Permit Registrant implements after periodically evaluating

opportunities to utilize nonstructural stormwater controls and to retrofit structural stormwater controls to reduce chronic loads of TMDL and 303(d) listed pollutants in its discharge. In its evaluation of opportunities, the Permit Registrant must consider the following:

1. Stormwater master planning and the capital improvement plan arising from this master planning.
2. Projects to mitigate local flooding concerns.
3. Projects to repair stormwater systems damaged by flooding.
4. Transportation system improvement projects.
5. All other infrastructure projects where municipal stormwater is a component and is discharged to the MS4.

d. Water Quality Standard Attainment Performance Measure Tracking
The Permit Registrant must track and document the implementation of Water Quality Standard Attainment Performance Measures in Schedule D.2.c during the permit term in accordance with following compliance in Schedule A.4.c.i. The Permit Registrant must submit this tracking document by the implementation deadline in Schedule D.2.a. The tracking document must include the following:

i. A map or digital inventory providing the location and a description of each structural stormwater control required in Schedule A.4.e.iv that is installed in new development and redevelopment. This documentation must include:

1. For all Permit Registrants, a summary of the unit process or processes (e.g., filtration, volume reduction, sorption) and a summary of the rationale for its selection in designing the structural stormwater control.

2. For all Permit Registrants, the impervious surface area managed by each structural stormwater control.

3. For Wood Village's MS4, a summary of the following to evaluate the control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs:

   a. For phosphate, monitor influent and effluent dissolved ortho phosphate concentrations and total phosphate concentrations at a representative site in Fairveiw Lake (Reach 4) and Fairview Creek (Reach 5).
   b. For lead, estimates of the effectiveness of controls to remove TSS.
   c. For bacteria, measuring E. coli concentrations and its distribution over flows (e.g., flow duration intervals) to demonstrate compliance with E. coli criteria.

ii. A map or digital inventory providing the location of nonstructural stormwater controls employed in compliance with Schedule A.4.e.ii such as protected riparian buffers, protected wetlands, street trees, and green space used to reduce and treat stormwater as well as street sweeping practices to remove stormwater pollutants. The information on these nonstructural controls must include the impervious surface area managed by each nonstructural stormwater control. For nonstructural stormwater controls utilized to reduce stormwater, this information must include an estimate of the volume of stormwater retained annually by these controls and the analysis supporting this estimate. For street sweeping practices utilized, the surface area of streets swept and an estimate of the solids captured per year and the analysis supporting this estimate.

iii. The location and description of any potential near future (i.e., within 5 years) opportunities to integrate nonstructural and structural stormwater controls into stormwater capital

improvements projects, projects to mitigate local flooding, projects to repair stormwater systems damaged by flooding, transportation system improvements, and any other infrastructure projects where stormwater is a component. The description of potential near future opportunities must note the opportunities that were implemented which included nonstructural and/or structural stormwater controls to reduce TMDL and/or 303(d) pollutant loads. The Permit Registrant must document these on the map or digital inventory used in Schedule D.2.d.i and ii.

iv. A map or digital inventory utilizing the documentation required in Schedule A.4.c.ii.3 and/or Schedule A.4.c.ii.4 providing the location of chronic illicit discharges that were identified and eliminated and that contained TMDL and/or 303(d) listed pollutant. The Permit Registrant must provide an estimate of the pollutant load removed annually with these illicit discharge removal actions and include the supporting analysis for this estimate.

3. Definitions**:**

a. Best Management Practices (BMPs) - BMPs as used in this Permit are synonymous with structural and nonstructural stormwater controls and include the schedule of activities, controls, prohibition of practices, maintenance procedures and other management practices designed to prevent or reduce pollution. BMPs also include treatment requirements for structural stormwater BMPs or controls as well as operating procedures and practices to prevent pollutants from contaminating stormwater runoff and to reduce runoff to reduce pollutant loading (see definitions for structural stormwater BMPs or controls and nonstructural stormwater BMPs or controls).

b. Chronic Illicit Discharges - are continuous illicit discharges resulting from sanitary/wastewater connections to an MS4, sanitary/wastewater inflows into a MS4 resulting from failing wastewater and stormwater conveyance systems, and unpermitted industrial wastewater discharges to the MS4. This definition is synonymous with the definition for continuous illicit discharges in the Center for Watershed Protection's 2011 *Illicit Discharge Detection and Tracking Guide*.

c. Clean Water Act or CWA - refers to what was formally called the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117, 33 U.S.C. § 1251 et seq. [40 CFR §122.2].

d. Erosion - is the process of carrying away soil particles by the action of water.

e. Erosion and Sediment Control Plan - is a site specific plan designed to describe the control of soil, raw materials, or other substances to prevent pollutants in storm water runoff; a ESCP is generally developed for a construction site. For the purposes of this permit, an ESCP means a written 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.

f. Equivalent Illicit Discharge Detection And Tracking Techniques - these are techniques that are equal in function and documented efficacy to the techniques described in the Center for Watershed Protection's 2004 *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*.

g. Evaporate - is rainfall that is changed or converted into a vapor.

h. Evapotranspiration - is the sum of evaporation and transpiration of water from the earth's surface to the atmosphere. It includes evaporation of liquid or solid water plus the transpiration from plants.

i. Final Stabilization - is determined by satisfying the following criteria: (1) there is no reasonable potential for discharge of a significant amount of construction related sediment or turbidity to surface waters; (2) construction materials and waste have been removed and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls; (3) all temporary erosion and sediment controls have been removed and disposed of properly, unless doing so conflicts with local requirements; (4) all soil disturbance

activities have stopped and all stormwater discharges from construction activities that are authorized by this permit have ceased; (5) all disturbed or exposed areas of the site are covered by either final vegetative stabilization or permanent stabilization measures. However, temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or unstabilized following construction (such as dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials), provided that measures are in place to eliminate or minimize erosion.

j. Green Infrastructure - is a specific type of stormwater control using vegetation, soils, and natural processes to manage stormwater. At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems designed to mimic nature by reducing and/or storing stormwater through infiltration, evaporation, and transpiration. At the scale of city or county, green infrastructure refers to the patchwork of natural areas that provides flood protection and natural processes that remove pollutants from stormwater.

k. Infiltration - is the process by which storm water penetrates into soil.

l. Illicit Connections - include, but are not limited to, pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge.

m. Illicit Discharge - is any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater except discharges authorized under Section A.4.a.xii., discharges permitted by a NPDES permit or other state or federal permit, or otherwise authorized by the Department.

n. Impervious Surface - any surface resulting from development activities that prevents the infiltration of water or results in more runoff than in the undeveloped condition. Common impervious surfaces include: building roofs, traditional concrete or asphalt paving on walkways, driveways, parking lots, gravel roads, and packed earthen materials.

o. Low Impact Development - a stormwater management approach that seeks to mitigate the impacts of increased runoff and stormwater pollution using a set of planning, design and construction approaches and stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater, and can occur at a wide range of landscape scales (i.e., regional, community and site). Low impact development is a comprehensive land planning and engineering design approach to stormwater management with a goal of mimicking the pre-development hydrologic regime of urban and developing watersheds.

p. MEP or Maximum Extent Practicable - is the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by Section 402(p) of the Clean Water Act, 33 U.S.C §1342(p).

q. Measurable Goals - are BMP objectives or targets used to identify progress of SWMP and BMP implementation. Measurable goals are prospective and, wherever possible, quantitative. Measurable goals describe what the Permit Registrant intends to do and when they intend to do it.

r. Municipal Separate Storm Sewer System - 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): (i) Owned or operated

by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the Clean Water Act (CWA) that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

s. National Pollutant Discharge Elimination System - is the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA [40 CFR §122.2].

t. Natural Stormwater Management Features - are non-manmade landscape features such as floodplains, wetlands, riparian areas, depressions, and ponds that retain, infiltrate, evaporate, and transpire rainfall. These features may also include herbaceous plant cover and shrub and tree canopies that are present prior to site development.

u. Nonstructural Stormwater Controls or BMPs - are stormwater controls in the form of development standards or other regulatory mechanisms intended to minimize and treat stormwater by minimizing impervious surfaces and by using soil infiltration, evaporation, and transpiration. These controls may also take the form of procedural practices to prevent pollutants from contaminating stormwater. The use of this term in this Permit is consistent with the discussion of nonstructural stormwater BMPs in 64 Federal Register 68760 (December 9, 1999) which encompasses preventative actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; (3) education programs for developers and the public about project designs that minimize water quality impacts; and (4) other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, preventive maintenance and spill prevention.

v. Outfall - is defined as a point source at the point where a municipal separate storm sewer discharges to waters of the State, and does not include open conveyances connecting two municipal separate storm sewers or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

w. Owner or Operator - is the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

x. Pesticide - as used this Permit carries the same definition as used in the Federal Insecticide, Fungicide, and Rodenticide Act and is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Under FIFRA, pest is any insect, rodent, nematode, fungus, weed, or (2) any other form of terrestrial or aquatic plant or animal life or

virus, bacteria, or other micro-organism

y. Plant Interception - is the capture of precipitation by the plant canopy and its subsequent return to the atmosphere through evaporation or sublimation.

z. Pollutant - is dredged spoil; solid waste; incinerator residue; sewage; garbage; sewerage sludge; munitions; chemical wastes; biological materials; radioactive materials; heat; wrecked or discarded equipment; rock; sand; cellar dirt; and industrial, municipal, and agricultural waste discharged into water.

aa. Predevelopment Hydrologic Function - is the hydrology of a site reflecting the local rainfall patterns, soil characteristics, land cover, evapotranspiration, and topography. The term predevelopment as used in predevelopment hydrologic function is consistent with the term predevelopment as discussed in Federal Register Volume 64, Number 235 and refers to the runoff conditions that exist onsite immediately before the planned development activities occur. Predevelopment is not intended to be interpreted as the period before any human-induced land disturbance activity has occurred.

bb. Post-Construction Site Runoff Plan - is a plan developed by a site owner or operator and/or their designer to demonstrate compliance with the post-construction stormwater management and long-term operation and maintenance requirements of this permit.

cc. Redevelopment - a project on a previously developed site that results in the addition or replacement of impervious surface.

dd. Site Performance Standard - refers to the standards for the retention of stormwater onsite and for treatment of stormwater discharged from stormwater controls utilized and/or installed in newly developed and redeveloped sites.

ee. Small MS4 - is a municipal separate storm sewer that is not medium or large MS4. Large MS4 is defined in 40 CFR §122.26(b)(4). Medium MS4 is defined in 40 CFR 122.26(b)(7).

ff. Stormwater - is runoff and includes snow melt runoff, and surface runoff and drainage, and is defined in 40 CFR §122.26(b)(13). “Stormwater” means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or a constructed infiltration facility.

gg. Stormwater Control - refers to both nonstructural and structural stormwater controls or BMPs.

hh. Stormwater Management Program - is a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system. For the purposes of this Permit, the SWMP consists of the actions and activities conducted by the Permit Registrant as required by this Permit and described in the Permit Registrant’s SWMP Plan. A “SWMP Plan” or “SWMP Plan Document” is the written summary describing the unique and/or cooperative means by which an individual Permit Registrant or entity implements the specific stormwater management controls within their jurisdiction.

ii. Stormwater Master Plan - is a public facilities plan that is by definition a support document or

documents to a local comprehensive plan required in Oregon, and certain elements of this plan must be adopted as part of the comprehensive plan. See OAR 660-011-0045.

jj. Stormwater Mitigation Bank Program - is a program for off-site compliance that establishes a market with an entity that tracks the life cycle of an off-site mitigation credit by certifying the credit, issuing a tradable credit to the seller, transferring the ownership of the credit from the seller to the buyer, and use or retirement of the credit to receive a benefit when buyer of the credit is unable to meet a retention requirement on their site.

kk. Stormwater Payment-in-Lieu Program - is a program for off-site compliance where the Permit Registrant or site owner/operator pays a fee in lieu of full compliance on the development site with this fee based on volume ratios (i.e., volume stormwater to be retained onsite to the volume to be retained at the mitigation site) and a rate specified by the Permittee. The Permit Registrant can aggregate fees and apply them to a public stormwater structural or nonstructural control at a later point in time.

ll. Structural Stormwater Controls or BMPs - are stormwater controls that physically designed, installed, and maintained to prevent or reduce the discharge of pollutants in stormwater to minimize the impacts of stormwater on water bodies. As noted in the 64 Federal Register 68760 (December 9, 1999), examples of structural stormwater controls or BMPs include: (1) storage practices such as wet ponds and extended-detention outlet structures; (2) filtration practices such as grassed swales, sand filters and filter strips; and, (3) infiltration practices such as infiltration basins and infiltration trenches.

mm. Structural Stormwater Control Demonstration Project - is a project to evaluate new technologies for stormwater treatment that are currently not among the allowable or approved structural stormwater controls for treating stormwater discharged from a developed site.

nn. Subwatershed - the topographic perimeter of the catchment area of a stream tributary.

oo. Time of Concentration - travel time for a drop of water to travel from most hydrologically remote location in a defined catchment to the outlet for that catchment where remoteness relates to time of travel rather than distance.

pp. Transpiration - to release water vapor into the atmosphere through plant stomata or pores.

qq. Wastewater Master Plan - is a public facilities plan that is by definition a support document or documents to a local comprehensive plan required in Oregon, and certain elements of this plan must be adopted as part of the comprehensive plan. See OAR 660-011-0045.

rr. Waters of the State - Lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon, and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters) that are located wholly or partially within or boarding the state or within its jurisdiction.

SCHEDULE F - NPDES PERMIT GENERAL CONDITIONS - MUNICIPAL SEPARATE STORM SEWER SYSTEMS

October 1, 2015

The general conditions in this schedule apply only to the extent they do not conflict with the requirements contained in Schedules A through E. If the permit requirements in Schedule A through D conflict with these general conditions, the permit requirements in Schedule A through D will control.

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to $25,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed $25,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than $50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine up to $250,000, imprisonment for not more than 10 years or both. The federal Clean Water Act provides for criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person is subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
e. New information or regulations.
f. Modification of compliance schedules.
g. Requirements of permit reopener conditions.
h. Correction of technical mistakes made in determining permit conditions.
i. Determination that the permitted activity endangers human health or the environment.
j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

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.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment

and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions
   (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
   (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.
   (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
      i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
      iii. The permittee submitted notices and requests as required under General Condition B3.c.
   (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when DEQ determines that it will meet the three conditions listed above in General Condition B3.b(1).

c. Notice and request for bypass.
   (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.
   (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
   (2) The permitted facility was at the time being properly operated;
   (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
   (4) The permittee complied with any remedial measures required under General Condition A3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Public Notification of Effluent Violation

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B7. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B7. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;

b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;

c. Ensure immediate notification to the public, health agencies, and other affected entities (including public water systems). The response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

B8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

C4. Penalties for Tampering

The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

The following must be included as information that must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass that exceeds any effluent limitation in this permit;
b. Any upset that exceeds any effluent limitation in this permit;

c. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
d. Any noncompliance that may endanger human health or the environment.

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:
e. A description of noncompliance and its cause;
f. The period of noncompliance, including exact dates and times;
g. The estimated time noncompliance is expected to continue if it has not been corrected;
h. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and
i. Public notification steps taken, pursuant to General Condition B7.

DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance
The permittee must report all instances of noncompliance not reported under General Condition D4 or D5, at the time monitoring reports are submitted. The reports must contain:
a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information
The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements
All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information
Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Discharges of Toxic Pollutant

The permittee must notify DEQ as soon as it knows or has reason to believe the following:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
   (1) One hundred micrograms per liter (100 µg/l);
   (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
   (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
   (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

b. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
   (1) Five hundred micrograms per liter (500 µg/l);
   (2) One milligram per liter (1 mg/l) for antimony;
   (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
   (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

SECTION E. DEFINITIONS

E1. *BOD or BOD_5* means five-day biochemical oxygen demand.
E2. *CBOD or $CBOD_5$* means five-day carbonaceous biochemical oxygen demand.
E3. *TSS* means total suspended solids.
E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
E5. *FC* means fecal coliform bacteria.
E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
E8. *mg/l* means milligrams per liter.
E9. *µg/l* means microgram per liter.
E10. *kg* means kilograms.
E11. *m^3/d* means cubic meters per day.
E12. *MGD* means million gallons per day.
E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations

expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.

E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.

E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.

E18. *Quarter* means January through March, April through June, July through September, or October through December.

E19. *Month* means calendar month.

Week means a calendar week of Sunday through Saturday.

oregon association of CLEAN WATER agencies

Working with more than 95 community wastewater treatment and stormwater management agencies to protect Oregon's water

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September 1, 2016

Mark Riedel-Bash
DEQ Water Quality Permitting
811 SW Sixth Ave.
Portland, OR 97204-1390

Sent electronically to riedel.mark@deq.state.or.us

Re: Draft NPDES General Permit – MS4 Phase II

Dear Mark:

The Oregon Association of Clean Water Agencies is a private, not-for-profit professional organization of Oregon's wastewater treatment and stormwater management agencies. Our members are dedicated to protecting and enhancing Oregon's water quality. Our 125+ statewide members provide sewer and stormwater management services to 2.4 million Oregonians, serving 63% of Oregon's homes and businesses.

ACWA members that are existing and proposed MS4 Phase II communities include: Ashland, Bend, Corvallis, Keizer, Lane County, Marion County, Medford, Rogue Valley Sewer Services, Central Point, Springfield, Troutdale, Turner, Albany, Grants Pass, and Rogue River.

We appreciate the efforts of DEQ to involve municipalities and districts in the development of the proposed permit. The major restart of the permit draft released in July, 2016 is a welcome improvement to the previous versions.

Unfortunately, the complexity and 'paperwork' focus of the draft permit will likely preclude its effectiveness in assisting local communities to focus on the stormwater pollution prevention programs appropriate for their community. The draft permit does not appear to be implementable for either local governments or DEQ, as presently drafted.

DEQ currently has one position dedicated to both Phase I and Phase II municipal stormwater control programs. In its 2017/2019 budget proposal, DEQ has offered up this position as a reduction, in addition to proposing additional general funds and fees to add additional positions. DEQ does not have the resources to effectively monitor the proposed permit, and the permit conditions should be modified to create a permit that DEQ can afford to effectively oversee.

The draft permit needs substantial revision to reduce stormwater pollution to meet water quality goals in an efficient, implementable, and effective manner. DEQ should design and implement a focused stakeholder engagement process, including experienced facilitation and senior DEQ management involvement, to improve the draft permit and re-propose it for public comment.

We appreciate the additional flexibility added to the permit in the Education and Outreach section, and believe this is a workable system for continuing to communicate with our communities on the importance of reducing stormwater pollution.

Our major concerns with the draft permit include:

Reducing Land Disturbance Threshold

- Reducing the construction site runoff threshold to land disturbance of 5,000 square feet or more will be challenging. Implementing the requirements of this portion of the permit is beyond the capacity of most medium and smaller MS4 Phase II communities. This requirement will require single family homes to submit plans, undergo a site plan review process, and conduct inspections.
- For example, the City of Bend expects 1,000 single-family housing starts this year. The City currently reviews all commercial and subdivisions, and curtails sediment runoff from single-family residential developments as a performance-based measure only (e.g., no sediments allowed off site). These are treated similar to an illicit discharge. With the site-specific plan review and approval requirements, the City of Bend staff estimates that each housing start would require an average of 2 hours per plan - resulting in a 2,000 hours per year increase in the level of effort—roughly 1 FTE just for the review and record-keeping alone. This would require a shift in the entire City of Bend review process for single-family residential developments. Additional staffing would also be needed for inspections. This would be in addition to the current levels of review for all non-single family residential development projects.
- The Department offers no technical basis for this threshold in the Permit Evaluation Report and why it should be different for small municipalities as opposed to DEQ itself in its 1200C permit.

Post Construction Requirements

- The *Permit Evaluation Report* discusses the Oregon Phase I permit post-construction site runoff conditions inaccurately. The PER indicates that the Phase I permit establishes a retention requirement using the average annual runoff-based method and, more specifically, requires the capture and treatment of 80% of the average annual rainfall frequency. The Phase I permit requires the "*capture and treatment of 80% of the average annual runoff volume*" not the average annual rainfall frequency. In addition, requiring the capture and treatment of runoff is not the same as requiring the retention of runoff for a specified design storm. The existing Phase I language was carefully worded in discussions between DEQ staff and Phase I permittees to use the word "*capture*", not the word "*retain*". It is incorrect to say that the Phase I permit specifically requires stormwater retention[1] . Currently only three of the Phase I communities specifically

[1] See DEQ Permit Evaluation Report & Fact Sheet, 5/2/16, page 22

require, as a first tier, that their developers retain a specified design storm (0.5 inches for Clackamas, 3.2 inches for Lake Oswego, and the 10-year storm for Portland).

- The *Permit Evaluation Report* indicates that the success of the Phase I Clackamas co—permittees in meeting the proposed post-construction site runoff requirements is a reason to support the reduced threshold. This is misleading. The smaller cities in the Portland metro area often rely on larger municipalities to administer/implement the requirements. Developers and home builders work across the Portland/Metropolitan region. Stormwater control programs have been in place in the larger metropolitan areas of Portland, Washington and Clackamas Counties, Gresham, Salem, and Eugene for 20+ years. Many of these smaller communities rely on the larger agencies for review or have a limited number of applications to allow the use of a private engineering firm for review. Smaller and medium sized jurisdictions in locations without two decades of stormwater utility planning work are not the same.
- The post construction requirements are beyond the requirements for MS4 Phase I communities, which will result in having to separate existing strong regional stormwater partnerships between Phase I and Phase II MS4 communities.
- The proposed post construction site runoff conditions are not implementable by developers or local governments. These requirements will affect housing costs and affordability and are inconsistent with the urban growth strategies incorporated in Oregon's land use planning laws.
- The requirements for alternative compliance strategies are not implementable by local governments.

Inadequate Compliance Strategy for New Permittees

- Requiring new permittees to construct an entire stormwater control program as required by the proposed NPDES general permit in a 5 year permit cycle is unreasonable. Many new MS4 permittees do not have a stormwater utility in place. For new permittees, stormwater program development should be separated from program implementation. The current MS4 Phase II communities have had 10+ years to construct and improve their programs. The Phase I communities have had 20+ years to construct and improve their programs. Developing and implementing an entire stormwater control program to meet the draft permit conditions in 5 years is beyond the capacity of new permittees and smaller Oregon communities.
- For first-term permittees, the level of effort asked should be approximate to that asked of the current permittees in their first permit term, recognizing it takes time, education, and community support to set up a stormwater utility, determine an appropriate service charge, develop and pass implementing ordinances, and develop system knowledge to the level needed to be effective.
- The 'tiered' approach that the Department routinely discussed with the MS4 Phase II Steering Committee has been eliminated. DEQ should evaluate if two general stormwater permits would be more appropriate – one for existing permittees and one for new and smaller jurisdiction permittees.

Extends Beyond Federal Minimum and Oregon MS4 Phase I Permits

- The draft permit extends the permit requirements substantially beyond the federal Phase II requirements, and in some cases, beyond what is required for Oregon's largest communities that operate under Phase I MS4 programs without a compelling scientific or technical basis.
- Incorporation of language regarding *Reasonable Potential* is not appropriate in a stormwater permit and should be removed. We attach the legal analysis of that provision of the permit conducted for ACWA by Cable Huston.
- As written, permittees discharging to 303(d) listed stream segments cannot obtain coverage under this permit.

Illicit Discharge Detection and Elimination Requirements Overly Complex

- The IDDE section is overly complex and will be difficult to administer. For instance, a review of Schedule A.4.c.ii.4 takes the reader to eight other different references both within and outside the general NPDES permit to determine the desired compliance outcome.
- Surveys of possibly failing septic tanks are a County Health Department and DEQ responsibility - - not a municipal responsibility.
- The permit requirements should detail the minimum IDDE requirements. No specific manual should be referenced in the permit. A variety of approaches and manuals should be suggested in the *Permit Evaluation Report*.
- Local government decision making bodies must have the ability to set appropriate enforcement mechanisms.
- The requirement for inspecting 20% of the linear feet of the MS4 within the permit period extends beyond the requirements of MS4 Phase I communities – currently required to conduct dry-weather inspection activities at priority downstream/outfall locations. Inspecting the linear system is far more rigorous than conducting spot inspections at downstream points. Depending on the type of inspection (smoke testing or closed circuit television), a reasonable cost estimate is $3,000 to $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.

TMDL Requirements

- The Water Quality Standard Attainment Performance Measure Tracking is confusing and references only a single TMDL where a number apply statewide. The information requested will be extremely expensive to gather, and ACWA questions if it will be of any value to either permit holders or DEQ. Other Designated Management Agencies are not held to this type of standard for information gathering and data collection. Local governments are glad to work with DEQ on a watershed basis to gather necessary information across the entire watershed and all sources of water pollution - - not just stormwater.
- Using a listing on the 303(d) list linked somehow to urban stormwater is an inappropriate regulatory threshold. Relying on 'scientific literature' will be confusing and problematic. As ACWA has commented to DEQ routinely, the Department's 303(d) list is wrong in

numerous areas. The regulatory threshold should be the development and adoption of the TMDL where the true contribution of urban stormwater to the pollution problem is set and appropriate reduction actions outlined in the TMDL.

- The section on discharges to TMDL or 303(d) listed streams is completely confusing. Section D.2 should be eliminated and all applicable portions of that Section should be added to the body of the Permit in the referenced Sections. Further, the duplication of effort required by this Permit and by the Water Quality Management Plans required of the Designated Management Agencies listed in TMDL documents must be eliminated.

Overall Confusion of Terms and Lack of Clarity

- There is an overall confusion of terms and lack of clarity in the permit. For instance, *'Permit Registrant'* is not defined and the apparent interchangeability of '*owner*', '*operator'* and *'permittee'* is confusing.

- Definitions are included in two different sections.

- The required '*new-permit application'* was not included with the release of the draft permit. The application form should be made available for public review and comment.

- Terms like '*uncontaminated*', '*up-to-date'*, '*environmental stewardship'*are all unclear and open to interpretation.

- A Schedule F specific to MS4 permits is necessary.

- In Schedule A.4.e.vi. relating to the long term operation and maintenance of stormwater controls *"...owned and operated by another entity"*, it is unclear who or what qualifies as "*another entity.*"

Administrative Burden

- The reporting requirements in the draft permit are based on a calendar year. Oregon municipalities and Districts - - like DEQ - - operate on a fiscal year. The TMDL reports, along with Water Pollution Control Facility permits related to Underground Injection Control, are both due on a fiscal year. Requiring reporting on a calendar year basis is a waste of resources. Delaying the effective date of the permit would allow permittees to update their Stormwater Management Plans and align the reporting requirements with existing fiscal practices and TMDL requirements.

- Not all communities track all their SWMP Plan activities separately from other activities, particularly communities that share resources between other departments (street and wastewater, for example). The requirement to provide a yearly cost is an unnecessary administrative burden that should be removed.

We have attached a summary of our specific comments on the draft permit and *Permit Evaluation Report*. We have noted a number of areas when the technical basis for the permit conditions should have additional specifics added in the *Permit Evaluation Report.*

We would be glad to meet with the Department to explain our concerns in greater detail and to work collaboratively to improve the permit to focus on effective, implementable measures to reduce urban stormwater pollution.

Very Truly Yours,

Janet A. Gillaspie
Executive Director

Attachments
A – Cable Huston review of Reasonable Potential Analysis section
B – Detailed ACWA Comments

CABLE HUSTON LLP

LAURA MAFFEI, RG
ADMITTED IN ALASKA, OREGON AND WASHINGTON

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June 27, 2016

VIA EMAIL - (gillaspie@oracwa.org)

Janet Gillaspie
Executive Director
Oregon Association of Clean Water Agencies
107 SE Washington Suite 242
Portland OR 97214

RE: Reasonable Potential in MS4 Permit

Dear Janet:

ACWA asked Cable Huston LLP to review and analyze the use of "reasonable potential" as a limitation in Schedule A of the draft MS4 Phase II General Permit for small municipal separate storm sewer system (MS4s), dated May 2, 2016. As discussed below, it is not appropriate to use "reasonable potential" to describe prohibited discharges from small MS4s.

Schedule A, Section 1.a.ii, of the May 2, 2016, draft Phase II General Permit states that it "does not authorize discharges of storm water that will cause, or have the reasonable potential to cause or contribute to, an excursion above the State water quality standards." Determining whether a discharge has the "reasonable potential" to exceed a water quality standard requires a detailed analysis (e.g., a "reasonable potential analysis" or "RPA") of the pollutants contained in the discharge as well as the chemical constituents of the receiving stream at the point of discharge. RPA is typically used during development of an individual permit to calculate water quality based effluent limits ("WQBELS"). DEQ's "Internal Management Directive, Reasonable Potential Analysis Process for Toxic Pollutants, Version 3.1" dated February 13, 2012, states that "RPA must be conducted for all proposed and existing *industrial and domestic* NPDES individual point sources dischargers." Stormwater is not considered an "industrial" or "domestic" discharge under the Clean Water Act, so the RPA IMD does not cover stormwater NPDES permits.

Small MS4s are not required to collect any numeric data – from their discharges or the receiving stream – to apply for coverage under the general permit. This is consistent with the Clean Water Act's requirement that MS4s control discharges to the "maximum extent practicable." 33 U.S.C. §1342(p)(3)(B)(iii). The "maximum extent practicable" requirement is a technology-based standard used in MS4 permits instead of numeric effluent limits. It requires MS4s to use best management practices to control pollutants in stormwater. In April 2010, the

Oregon Court of Appeals agreed that numeric effluent limits are not required in MS4 permits. *Tualatin Riverkeepers et al., v. Oregon Dep't Of Environ. Quality et al.*, 235 Or. App. 132 (2010). Because RPA is a quantitative, numeric analysis, it would be completely inconsistent to use RPA on a type of discharge (MS4) that is not required to have numeric effluent limits in its permit. Thus, "reasonable potential" does not belong in the small MS4 general permit.

The federal rules that apply to small MS4 permits contain a number of permit requirements for stormwater control plans and other BMPs, but the rules do not include reasonable potential as part of the permitting process. *See* 40 CFR §§ 122.33 & 122.34. EPA's September 2010 *NPDES Permit Writers' Manual* also discusses "reasonable potential" only in the context of determining whether WQBELs are required in permits, but small MS4 permits are not included in this evaluation. Finally, EPA recently issued a final permit for small MS4s in Puerto Rico that does not contain a reference to the "reasonable potential" to cause or contribute to an exceedance of a water quality standard. "General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems In The Commonwealth Of Puerto Rico, Permit Number PRR040000, Permit Number PRR04000F," May 16, 2016 (effective July 1, 2016), at §2.1.1a.. More importantly, individual MS4 permits issued by DEQ do not contain clauses discussing the "reasonable potential" to exceed. *See, e.g.,* "Clackamas County Group" Phase I MS4 Permit, reissued March 16, 2012.

Referencing "reasonable potential" in the May 2, 2016, draft Phase II MS4 NPDES general permit is inappropriate because it implies a need to calculate numeric effluent limits in a stormwater permit. The correct standard for MS4 permits is reduction of pollutants to the maximum extent practicable, which does not include application of numeric limits. DEQ should remove reference to reasonable potential from the draft Phase II MS4 permit.

Very truly yours,

Laura Maffei, RG

LCM:tsk/tb

Oregon Association of Clean Water Agencies

Attachment B – Detailed ACWA Comments – September, 2016

Overall, Stormwater Management Plan and Stormwater Management Program appear to be used interchangeably and use of the terms is very confusing.

Specific Comments

The compiled comments of ACWA members, specific to each section, are included below:

Schedule A – Effluent Limitations…#1 – 3(d)

- Authorized Non-Stormwater Discharges – the inventory of authorized non-stormwater discharges should be the same in the Phase I and Phase II permits. The Phase I permits include *start up flushing of groundwater wells, street wash waters* and *discharges or flows from emergency fire fighting activities*. These are not in this list. This list includes *fire hydrant flushing* which is not in the Phase I permits.
    - *'Landscape irrigation (provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions).'* No permit holder has the resources to ensure that all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions. Under the Federal Insecticide, Rotenticide, 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.
- *Section (3) (a)(d) - 'The permit registrant must provide adequate finances, staff, equipment and other support capabilities to implement the SWMP minimum control measures and other requirements outlined in this permit.*" This is beyond DEQ DEQ's authority to require; DEQ is limited to setting environmental performance standards, not funding or staffing requirements. DEQ might want to consider using language similar to the EPA draft Idaho MS4 Phase II permit such as:

    "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

Construction Site Runoff

- The permit places the onus on the Permit Registrant to make "*a determination of whether a construction site is required to and/or has coverage under DEQ's NPDES Construction Stormwater General Permit.*" (see A.4.d.v.1) This is clearly DEQ's responsibility, not the Permit Registrant's. A change from "*is required to*" to "*may be required to*" would address this concern,

Schedule A - Effluent Limitations #4(e)

Post Construction

- Schedule A.4 (e) (iv) (3). The allowance for alternative compliance continues to confuse retention and infiltration which are not the same thing, a site may be able to retain stormwater but may not be able to infiltrate it. Please clarify whether the intent is infiltration or retention.
- Clarification on wetlands: For new development the permit states that LID must be prioritized, however it also states in section e.ii. that wetlands should be protected as a natural stormwater management feature. Wetlands retain water allowing it to evapotranspire, they do not infiltrate at the rate that LID features do. The permit should clearly state that stormwater wetlands can also be constructed to meet the retention requirement.
- The process for determining how stormwater should be managed on a site is discussed in sections iv.1, iv.3 and iv.4 and is very disjointed and difficult to follow. Please consider rewriting these sections to improve clarity or creating a flow chart to illustrate the process.
- Section iv.1. For projects that can't meet the onsite retention, any runoff not retained must still be treated to for 80% removal of TSS with a structural stormwater control, giving priority to Green Infrastructure. The section continues: "

  The runoff discharged off-site must target the natural surface or predevelopment flow duration curve for the receiving water to protect water quality by preventing bed and bank erosion."

  Then the water not retained on site must be mitigated for off-site. This requirement basically says that runoff from the project site must be treated and detained and then additional runoff must be retained (which inherently means treated) elsewhere as mitigation. This is overly burdensome on development. Suggest either requiring offsite mitigation as outlined in A.4.e.iv.4.a – **or-** treating and matching the predevelopment flow duration curve for runoff not retained on the project site, **not** both.

- Section 2.5.5 of the PER on post-construction states "*Moreover, through an Endangered Species Act Section 7 biological opinion, the National Marine Fisheries Service requires post-construction site runoff controls when the Army Corps of Engineer's permits a transportation project creating new impervious surfaces.*" This requirement applies to much more than just transportation projects, suggest deleting '*transportation*'.
- Section A.4.e.iv.3."*The written technical justification must be in the form of a site-specific hydrologic and/or design analysis conducted and endorsed by an Oregon registered Professional Engineer, Oregon Certified Engineering Geologist, architect, and/or landscape architect.*" This work should be performed by a licensed engineer or geologist. Delete architects and landscape architects or the requirement all together.
- LID Code – Related Requirements. There are some good LID manuals from local jurisdictions. Why would we direct people to use out of State manuals when we could be promoting regional consistency? The Central Oregon Stormwater Manual should be

included as a reference in the permit – see https://coic2.org/community-development/water-resources/

- 80% Total Suspended Solids Removal language. This language is problematic. If you have clean stormwater coming in to a facility, you will not get 80% TSS removal. Where upstream pollution prevention programs are being effective, this performance standard cannot be met.
- Allowance for Alternative Compliance - Another option that is provided in the mitigation options section is related to treatment approaches. This doesn't seem to make sense. The design standards already require treatment. So, why is treatment then a mitigation option?
- The mitigation options section is not implementable in some MS4 jurisdictions and beyond what is expected of a Phase II MS4. The requirement to 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 is describing a "banking" program that would be out of reach for some already-permitted and established MS4s. Furthermore, to achieve this by January of 2020 would be impossible. If the sites were available within the MS4 jurisdiction, establishing an inventory alone would be at least two years, getting staff and resources and establishing 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 would take at least three years. Additionally:
    - Most wetlands and riparian areas are private and not available, leaving some cities no sites to choose from.
    - Requiring that the inventory of alternative projects or sites must be within the same sub-watershed as the site undergoing development would be impossible if the MS4 had no such sites available.

Schedule B – Monitoring and Reporting

1 thru 1.c. Monitoring Requirements

It is unclear as to what type of monitoring is being referenced in this section. 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 will be resource heavy with no water quality benefit, for both the DEQ and the Permittee, to submit water quality data to the DEQ that is collected for random reasons.

There is no need to have sections (a) and (b) if the individual permit language is used; additionally it is already repeated in Schedule F.

Language should be revised to read:

1. The Permit Registrant must evaluate SWMP compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. If stormwater outfall or in-stream monitoring is conducted as part of the permittees program evaluation efforts, the following requirements described in F(C)(1) shall be followed.

a. Monitoring results must be reporting in the Annual Report.

Monitoring is not required; therefore section 1 (a), (b), (c) should be removed.

2. Recordkeeping

a. Record Retention

Having an open ending statement (last sentence of paragraph a.) that the DEQ can request record retention to be longer than 5 years is undefined and opens the permittee up to a possible unintentional permit violation. The DEQ cannot dictate longer than the permit term and should define an end date. Open ended statements with no set goals or dates serve no purpose or provide any direction; they are not clear, achievable, specific, measurable, or enforceable.

Suggested change:
2.a. Remove last sentence.

2.c. Annual Report

Reporting date and schedule: The request to have the annual report submitted to the DEQ by a specific date is clear direction, as is providing a table, but the reporting dates do not coincide with current MS4 budget and record keeping practices. Historically, Annual Reports have been reported by November 1 of each year for the previous reporting period that is a fiscal year (July 1 through June 30). MS4s typically and historically have managed resources, budgets and records on a fiscal year not a calendar year. TMDL and WPCF UIC reporting are done on a fiscal year, due November 1 as well; this will require MS4s with TMDL reporting or UIC permits to have to do Annual Reports at two different times resulting in twice a year with two different break downs in reporting. Most MS4s that have TMDL reporting also have programs that are applicable to both the TMDL implementation strategies as well and MS4 measurable goals. This would be a reporting nightmare and would result in reporting two different findings to the same DEQ office.

Table 2 is really Table 1; typo.

DEQ reporting form: Additionally, having the ability for the MS4 and the DEQ to use a predefined form is a good way to streamline the reporting process and provide consistency for the MS4s and the DEQ. The problem is that this sentence does not allow for "*what if's*", which continue to be and will always be present in any process; the DEQ is requiring the MS4 to use the form that will be available by a set date. As drafted and legally, if the DEQ does not meet their deadline it would be a Permit violation and possibly a lawsuit by a 3rd party. This can be reconciled by providing additional language such as "*if available, must use*".

Website posting: In the last sentence, the DEQ is requiring that MS4s post the Annual Reports to their webpage. The language needs to include: "*if available*".

Language should be revised to read:

> 2.c. Annual Report
> No later than November 1 of each year beginning in 2017, the Permit Registrant must submit an Annual Report to DEQ. If developed and available, the Permit Registrant must use the Annual Report form provided by DEQ. The reporting period for the 1st Year Annual Report will be from January 1 through June 30, 2017. Reporting periods for subsequent Annual Reports are specified in Table 1 below. The Permit Registrant must make Annual Reports available as specified in Schedule A.4.b.ii.
>
> Change Table 2 to be Table 1 with reporting periods changed to be a fiscal year with a reporting date of November 1 each year.

2.d. Submissions
Language should be revised to read:

> 2.d. The Permit Registrant must provide DEQ with one hard copy and one electronic copy (on a portable electronic storage device) of Annual Reports and/or other required documents. DEQ may provide the Permit Registrant with instructions for submitting electronically. Once a Permit Registrant receives permission from DEQ to submit electronically, it will no longer be required to submit such materials in hardcopy.

Schedule D – Special Conditions

2.b --- Applicability

The language in the second paragraph should be revised to remove the reference to requirements that will be contained in subsequent permit terms. Using a DEQ approved model in future years to evaluate BMP performance goes beyond MEP and requires an approach that resembles numeric limits.

Language should be revised to:

Remove the last sentence in the second paragraph of 2.b

2.d.i --- Water Quality Standard Attainment Performance Measure Tracking – Structural Controls

This language is resource heavy and goes beyond MEP. Requiring a summary of the unit processes installed is enough. A summary of the rationale for selection, and impervious surface area managed by each stormwater control device provides no additional water quality benefit. Criterion for selection is determined through local development codes and/or the land use process. Impervious surface area managed is determined through BMP selection, and either presumptive (through adopted design/stormwater manuals) or

engineered. Numeric limits and modeling are not an EPA requirement of a Phase II community; collection of this type of data is for running water quality models; this goes beyond MEP as defined by DEQ and EPA.

Language should be revised to read:

2.d.i--- A map or digital inventory providing the location and a description of each structural stormwater control required in Schedule A.4.e.iv that is installed in new development and redevelopment, along with a description of the unit process or processes.

2.d.ii --- Water Quality Standard Attainment Performance Measure Tracking – Non Structural Controls

Current language goes beyond MEP. Estimating the volume of water retained annually, along with an analysis supporting the estimate is impractical, resource intensive, highly variable depending upon numerous conditions (antecedent rainfall conditions for example) and of no benefit to water quality. The nonstructural BMPs utilized in A.4.e.ii are considered to reduce pollutants to satisfy MEP, as DEQ references in the Permit Evaluation Report. Requiring additional information as outlined in 2.d.ii goes beyond MEP and requires calculations that approach numeric limits. Nonstructural controls are also Codes and Standards as described in the definitions sections. DEQ should reword this section to be clear that the nonstructural controls referenced are physical features and not Codes and Standards. DEQ should also remove the requirement of reporting the surface area of streets swept, which requires additional calculations, and keep with the industry standard of miles swept.

Language should be revised to read:

A map or digital inventory providing the location of nonstructural stormwater controls employed in compliance with Schedule A.4.e.ii such as protected riparian buffers, protected wetlands, street trees, and green space used to reduce and treat stormwater to remove stormwater pollutants. For street sweeping practices utilized, the estimated amount of miles swept and materials captured shall be reported.

2.d.iv --- Water Quality Standard Attainment Performance Measure Tracking – Chronic Illicit Discharges

Requiring an estimate of the pollutant load removed annually from chronic illicit discharges (and an analysis supporting this estimate) is impractical and beyond MEP. Numeric limits, analysis and estimates of the pollutant load reductions are not required by Phase II communities in order to meet MEP; this type of reporting is in line with numeric limit reporting. DEQ can require the inventory but volume and pollutant reduction is beyond MEP, as defined by the DEQ and EPA. Chronic illicit discharges are highly variable by nature, and dependent upon a variety of factors.

Language should be revised to:

Remove the last sentence in Section 2.d.iv.

Definitions

Our comments about the definitions section includes:

- **Illicit Connections** are too widely defined. With the current definition, ANY pipe or conveyance with the '*potential to allow an illicit discharge*' is defined as an Illicit Connection. This would be the entire MS4. Possible rewording would be "*any connection, including but not limited to pipes, drains, open channels or other conveyances* ***by which an illicit discharge is allowed to enter*** *a municipal separate storm sewer system (MS4), or which has been connected to an MS4 without proper authority.*"
- **Impervious Surface** includes, as part of its definition, any surface which "*results in more runoff than in the undeveloped condition.*" This seems overly strict, and could conceivably end up including things like landscaping (if it has more runoff than the forest that preceded it). Consider striking that phrase from the definition.
- **Maximum Extent Practicable** – Consider using the Phase I definition or at least the second sentence: "*The statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve.* ***This standard is considered met if the conditions of the permit are met.***" *(Emphasis added - taken from the City of Salem Phase I permit)*
- **Non-Structural Stormwater Controls or BMPs** – This definition is overly long, to the point of becoming confusing. The first two sentences seem to adequately cover the intent. The remaining explanations might be better placed in the PER.
- **Retention** – add definition.

Schedule F – General Conditions

This schedule is obviously drawn from the standard general conditions for municipal wastewater NPDES permits. Use of this schedule is inappropriate for stormwater discharges. This schedule should be written to remove items specific to wastewater treatment plants including:

- A6. Toxic Pollutants. Stormwater utilities do not generate sewage sludge.
- B1. Proper Operation and Maintenance. Best Management Practices not treatment processes are used to ensure compliance with the permit. No laboratory testing is included. There are no back-up or auxiliary facilities
- B3. Bypass of Treatment Facilities. Does not apply
- B4. Upset. Does not apply.
- B5. Treatment of Single Operational Update. Does not apply
- B6. Public notification of Effluent violation. Does not apply
- B7. Emergency Response and Public Notification Plan. Does not apply. The permit holder would be required to develop an Emergency Response and Public Notification Plan under the provisions of this portion of the permit. That is not appropriate for stormwater utilities.
- C8. This information already covered earlier in the Permit – Schedule B.2.a C5. Reporting of Monitoring Results. Conflicts with the proposed monitoring schedule incorporated in the draft MS4 Phase II permit.
- C9. Already covered in Schedule B.1.b.

- D1. Planned Changes. Only applies to sewage collection systems, not stormwater collection systems.
- E. Definitions. Already included in the permit at Schedule D, condition 3.

Permit Evaluation Report

Regarding the draft Permit Evaluation Report, ACWA has these comments:

1. 1.3 - Additional technical information should be included to provide additional support to the statement "*DEQ has determined that a Permit Registrants' full implementation of the SWMP requirements meets the maximum extend practicable (MEP) standard of CWA section 402(p)(3)(B)(iii).*"Why? Be specific. (page 5)
2. 1.4 - Additional technical information should be included to provide additional support to the statement "*The stormwater controls required in the proposed MS4 Phase II general permit are expected to result in discharges that will comply with Oregon's water quality standards, and protect designed and existing uses.*" Why? Be specific. (page 5)
3. 2.2.1 – Eligibility. Add listing of 12 new areas, the 7 jurisdictions now subject and the DEQ approved 5 waivers. (page 7)
4. 2.4.1 – Reduce the Discharge…Typo at top of page 11 – OAR 340-041-001…(page 11)
5. 2.4.2 – Additional SWMP plan audiences listed in the permit, in addition to the general public, DEQ and Local elected officials include Business/Commercial/Institutions and Construction/Development. (page 11)
6. 2.5.4 – Construction Site Runoff. No technical basis is provided for the 5,000 square foot threshold. If the federal minimum of 1 acre of disturbance is '*... insufficient to ensure the adequate control of pollution sources from the numerous small construction sites from MS4s with UAs'*, then DEQ should have addressed that on a statewide basis in its recent renewal of the 1200C permit.

   What technical and scientific analysis leads the DEQ to conclude that the 1 acre threshold is inadequate?

7. 2.5.4 – Construction Site Runoff. The discussion of the increase in imperviousness associated with urbanization does not factor Oregon's land use planning system into the discussion. Smart planning, including improved transit and transportation systems and walkable communities increase in urbanization, reducing air pollution.

   For instance, this discussion of Oregon 'smart growth' policies is from the American Journal of Public Health, **Urban Sprawl, Smart Growth, and Deliberative Democracy**[1]

   Many public health advocates have recommended smart growth as a potential

[1]Am J Public Health. 2010 October; 100(10): 1852–1856.

doi: 10.2105/AJPH.2009.182501

solution to the problem of urban sprawl., Smart growth can be defined as a policy framework that promotes an urban development pattern characterized by high population density, walkable and bikeable neighborhoods, preserved green spaces, mixed-use development (i.e., development projects that include both residential and commercial uses), available mass transit, and limited road construction. Smart growth was originally conceptualized as an aesthetically pleasing alternative to urban sprawl that would offer residents a high quality of life and the convenience of local amenities, but it also has many potential health benefits, such as diminished air pollution, fewer motor vehicle accidents, lower pedestrian mortality, and increased physical exercise. Smart growth is different from the concept of "garden suburbs" because it addresses issues of population density and transportation, not just availability of green space and preservation of agricultural land.

In the 1970s, Portland, Oregon, was the first major city in the United States to establish smart-growth urban planning by limiting urban growth to an area around the inner city. Since the 1990s, many other urban areas have encouraged the development of planned communities in which people can live, shop, work, go to school, worship, and recreate without having to travel great distances by automobile.

Oregon's land use planning system has required all Oregon cities and counties to develop and implement land use planning programs to control urban sprawl through the use of urban growth boundaries, and to address water quality and transportation needs, in addition to other factors, in developing plans that address Oregon's 14 land use planning goals and guidelines.[2] (page 18)

8. **2.5.5. Post-Construction Site Runoff Control**
   The Permit Evaluation Report discusses the Oregon Phase I Permit's post-construction site runoff condition inaccurately. The PER indicates that the Phase I permit establishes a retention requirement using the average annual runoff-based method and, more specifically, requires the capture and treatment of 80% of the average annual rainfall frequency. The Phase I permit requires the "*capture and treatment of 80% of the average annual runoff volume"* not the average annual rainfall frequency.

   In addition, requiring the capture and treatment of runoff is not the same as requiring the retention of runoff for a specified design storm. The existing Phase I language was carefully worded in discussions between DEQ staff and Phase I permittees to use the word "*capture*" , not the word "*retain*". Phase II permittees interpret the current language '*capture*' to mean that you could capture it, treat it, and then release it. In advance of the specific requirements, more general language in the post construction section states that we need to optimize on-site retention based on the site conditions and prioritize and include implementation of LID and green infrastructure. It is incorrect and misleading to say that the Phase I permit specifically requires retention as it does on page 22. It implies that we have to retain 80% of the average annual runoff. To my knowledge, there are currently only three of the Phase I communities that specifically

[2] See https://www.oregon.gov/LCD/Pages/goals.aspx

require as a first tier that their developers to retain a specified design storm (0.5 inches for Clackamas, 3.2 inches for Lake Oswego, and the 10-year storm for Portland) (page 22).

9. 2.5.2.2 Retention Requirement. Western Oregon Low Impact Development Guidance Manual. Please add author, date, and citation.