

Chapter 22.800 - Title, Scope, and Authority

1. Revised exemptions associated with pavement practices (22.800.040.A.2.b): The proposed modification includes revised terminology associated with exemptions for pavement maintenance practices to match Ecology's revised language in the MS4 Permit. The current Stormwater Code exempts "road maintenance practices" from various Stormwater Code minimum requirements. The proposed 2016 Seattle Stormwater Code update would change "Road maintenance practices" to "Pavement maintenance practices," consistent with the MS4 Permit. This will result in a broader range of projects qualifying for the exemption and will be consistent with the updated MS4 Permit.
2. Added new section for transition to Revised Stormwater Code (22.800.100): In association with its target effective date of January 1, 2016, the 2016 Stormwater Code Update includes new language regarding the applicability of Stormwater Code revisions in relation to specified project permit application and construction dates. The 2016 Stormwater Code Update will apply to permit applications submitted on or after January 1, 2016. In addition, for projects considered under the current Stormwater Code before amendment, if construction has not started by June 30, 2020, the permit will expire and the 2016 Stormwater Code will apply. This revision was to achieve equivalency with MS4 Permit requirements (which apply to areas that discharge to the City's municipal stormwater system) and affects both building and master use permits (including subdivisions). A separate, but parallel, Stormwater Code applicability ordinance with associated legislative documentation is being prepared to incorporate these changes into applicable sections of the Building, Residential, Land Use, and Grading Codes.

Chapter 22.801 - Definitions

3. Added, revised, and deleted terms: In the proposed 2016 Stormwater Code Update, new terms have been added to this Chapter, the definitions for other terms have been materially modified, and the definitions for terms have been deleted. Table 1 lists key terms that are proposed to be added (indicated as underlined text), materially modified (indicated by *italicized* text), or deleted (indicated by ~~striketrough~~ text). These proposed definition changes are necessary to clarify certain Stormwater Code provisions, to implement revised minimum requirements, and to meet the provisions of the MS4 Permit. All proposed definition changes are shown in the draft Stormwater Code (Attachment C).

Table 1: Key New, Materially Modified, or Deleted Definitions

<u>Agency with jurisdiction</u>	<i>Impervious surface</i>	<u>Project Site</u>
<u>Aquatic life use</u>	<u>Industrial activities</u>	<i>Receiving water</i>
<u>Arterial</u>	Joint project	<u>Replaced hard surface</u>
Basin plan	<i>Land disturbing activity</i>	<i>Replace impervious surface</i>
<i>Capacity-constrained system</i>	<i>Large project</i>	<i>Roadway project</i>
Cause or contribute to a violation	<i>Nutrient-critical receiving water</i>	<i>Sidewalk project</i>
<u>Combined sewer basin</u>	<u>On-site BMP</u>	<i>Single-family residential project</i>
<u>Drainage basin plan</u>	<i>Parcel-based project</i>	<i>Site</i>
<i>Drainage system</i>	<u>Pollution-generating hard surface</u>	<u>Small lakes</u>
<u>Erodible or leachable materials</u>	<i>Pollution-generating impervious surface</i>	<i>Stormwater</i>
Flow critical receiving water	<i>Pollution-generating pervious surface</i>	<i>Trail project</i>
<i>Geotechnical engineer</i>	<u>Private drainage system</u>	<i>Watercourse</i>
<i>Green stormwater infrastructure</i>		
<u>Groundwater</u>		
<u>Hard surface</u>		
<u>Illicit Connection</u>		

New: underlined

Materially Modified: *Italicized*

Deleted: ~~Strikethrough~~

Chapter 22.802 – Prohibited and Permissible Discharges

4. Added new subsection to Discharges to Public Combined Sewers (22.802.020.D): A proposed new subsection stating that prohibited discharges to the combined sewer are stated in Chapter 21.16 SMC (Side Sewer Code). This is added to provide a useful cross-reference.
5. Revised Permissible Discharges (22.802.030): The proposed list of permissible discharges includes proposed modifications and conditions, nearly all of which are included for equivalency with the MS4 Permit. Table 2 summarizes the sections where text is proposed for modification. (Underlined text indicates proposed additions relative to the current Stormwater Code). Table 2 does not include all proposed changes, but summarizes the main topic areas and key language. All proposed changes are shown in the draft Stormwater Code (Attachment C).

Table 2: Substantive Changes to Permissible Discharges (22.802.030)

<p>A. <u>Conditionally</u> Permissible Discharges to Drainage systems and Receiving Waters. Discharges from the sources listed below are permissible discharges <u>only if the stated conditions are met and</u> unless the Director of SPU determines that the type of discharge, directly or indirectly to a public drainage system, private drainage system, or a receiving water within or contiguous to Seattle city limits, whether singly or in combination with others, is causing or contributing to a violation of the City's NPDES stormwater permit or is causing or contributing to a water quality problem:</p> <ol style="list-style-type: none"> 1. Discharges from potable water sources, including, <u>but not limited to</u>, flushing of potable water lines, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water, <u>and washing of potable water storage reservoirs</u>. Planned discharges shall be de-chlorinated to a <u>total residual chlorine</u> concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the drainage system. <u>No chemicals may be added, and settleable solids must be removed prior to discharge;</u> 2. <u>Discharges from swimming pools, spas, hot tubs, fountains, or similar aquatic recreation facilities and constructed water features, provided the discharges have been dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and reoxygenated if necessary, volumetrically and velocity controlled to prevent resuspension of sediments in the drainage system, and thermally controlled to prevent an increase of temperature in the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged;</u> 3. <u>Discharges of street and sidewalk washwater when the surfaces are swept prior to washing, detergents are not used, and water use is minimized;</u> 4. <u>Discharges of water from routine external building washdown when detergents are not used and water use is minimized;</u> 5. <u>Discharges of water used to control dust when water use is minimized; and</u> 6. <u>Other non-stormwater discharges, provided that these discharges are in compliance with the requirements of a stormwater pollution prevention plan that addresses control of such discharges and is approved by the Director.</u> <p style="text-align: center;">***</p> <p>B. <u>Permissible discharges: Discharges from the sources listed below are permissible discharges unless the Director of SPU determines that the type of discharge, directly or indirectly to a public drainage system, private drainage system, or a receiving water within or contiguous to Seattle city limits, whether singly or in combination with others, is causing or contributing to a violation of the City's NPDES Municipal Stormwater Permit or is causing or contributing to a water quality problem..</u> <i>[partial excerpt below; most changes to this subsection "B" relate to deletions of text that has been folded into subsection "A" above]</i></p> <p style="text-align: center;">***</p> <ol style="list-style-type: none"> 13. <u>Discharges of tracing dye used to establish or verify a drainage or sewer connection.</u>
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New: underlined

6. Added notification requirements related to testing for prohibited discharges (22.802.040.A): The proposed revisions require that any person conducting dye testing to establish or verify a drainage connection shall notify SPU prior to conducting the test. The will improve SPU processes and efficiencies by allowing SPU Water Quality Hotline staff to learn that dye can be expected in the drainage system.

Chapter 22.803 – Minimum Requirements for All Discharges and All Real Property

7. Added requirement to map property drainage and plumbing infrastructure (22.803.020.A): The proposed revisions include language to make it explicit that, when requested, the owner must map “property drainage and plumbing infrastructure on the property.” This would improve the clarity and authority of the Stormwater Code.
8. Added site maintenance to the Minimum Requirements for Source Controls for All Real Property (22.803.030.G): The proposed revisions include a brief subsection requiring that businesses and public entities perform basic site maintenance activities (e.g., site sweeping, and inspecting loading and unloading areas). This would add clarity and authority to further prevent transport of pollutants off site via stormwater runoff.
9. Revised Minimum Requirements for Source Control for specific discharge locations (22.803.040): The proposed revisions clarify that these source control requirements apply to all discharges except those that drain only to the public combined sewer. This is already indicated in the current Source Control Technical Requirements Manual but is proposed to be added to the 2016 Stormwater Code for further clarity.

Chapter 22.805 – Minimum Requirements for Projects

10. Revised applicability of thresholds for Minimum Requirements for Projects to be based on “hard-surfaces” (22.805.030 – .060, 22.801). In accordance with the MS4 Permit, the proposed revisions change the applicability of thresholds from “impervious surface” to “hard surfaces,” a new term required by Ecology. “Hard surfaces” include impervious surfaces, permeable pavements, and vegetated roofs.
11. Added requirements to protect stormwater BMPs during construction (22.805.020.D.19): In accordance with the MS4 Permit, the proposed revisions require protection of stormwater BMPs from sedimentation (through installation and maintenance of erosion and sediment control BMPs) and compaction during the construction phase of a project. The intent is greater protection of permanent stormwater BMPs, particularly for infiltration-based BMPs (which are particularly subject to damage from sedimentation) and vegetation-based BMPs that are prone to damage during construction.

12. Moved requirements for On-site Stormwater Management and soil amendment (22.805.020, etc.): In the proposed revisions, the requirement for projects to perform On-site Stormwater Management (currently “Implement Green Stormwater Infrastructure” in Seattle’s Stormwater Code) has been moved out of the Minimum Requirements for All Projects (22.803.020) and is now included as a requirement in other Stormwater Code sections based on project type (i.e., Single-family Residential (SFR), Trail/Sidewalk, Parcel-based, Roadway). Similarly, the requirement to amend soils is relocated from its own specific provision to now be included based on project type (i.e., SFR, Trail/Sidewalk, Parcel-based, Roadway). This modification is for consistency with the MS4 Permit and to clarify that On-site Stormwater Management only applies to certain project types and does not apply to utility work or routine maintenance work.
13. Revised Threshold and applicability changes for Minimum Requirements for Single-Family Residential Projects (22.805.030): On-site Stormwater Management (currently “Implement Green Stormwater Infrastructure” in Seattle’s Stormwater Code) is proposed to change from applying to all SFR projects, to applying to SFR projects as follows:
- a. On a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016, either the total new plus replaced hard surface is 750 square feet or more or land disturbing activity is 7,000 square feet or more; or
 - b. For any other project, either the total new plus replaced hard surface is 1,500 square feet or the land disturbing activity is 7,000 square feet or more.

Given the above threshold changes and in response to the MS4 Permit, the City also proposes to remove the current 1,500 square foot impervious surface credit for SFRs. Note that the MS4 Permit threshold is set at 2,000 square feet of new plus replaced hard surface, but the City proposes the above thresholds – expected to result in more on-site stormwater management -- to better address the types and sizes of development projects typical for Seattle and to make on-site, low impact development best management practices the preferred and commonly-used approach to site development, consistent with S5.C.5.b of the MS4 Permit.

14. Revised Minimum Requirements for Parcel-based Projects (22.805.050):
- a. Revised thresholds. In accordance with the MS4 Permit, On-site Stormwater Management (currently “Implement Green Stormwater Infrastructure” in the Seattle’s Stormwater Code) is proposed to change from applying to 2,000 square feet new plus replaced impervious surface, to applying to parcel-based projects as follows:
 - i. On a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016, either the total new plus replaced hard surface is 750 square feet or more or land disturbing activity is 7,000 square feet or more; or
 - ii. For any other project, either the total new plus replaced hard surface is 1,500 square feet or the land disturbing activity is 7,000 square feet or more.

Note that the MS4 Permit threshold is set at 2,000 square feet of new plus replaced hard surface, but the City proposes the above thresholds – expected to

Summary of Major Changes to Seattle's Stormwater Code

result in more on-site stormwater management -- to better address the types and sizes of development projects typical for Seattle and to make on-site, low impact development best management practices the preferred and commonly-used approach to site development, consistent with S5.C.5.b of the MS4 Permit.

- b. Added requirements for Discharges from Groundwater. The proposed revision includes new language for applicability of flow control when a project permanently discharges groundwater to some locations. This change incorporates provisions drawn from a current City Directors' Rule directly into the Stormwater Code.
 - c. Added requirements for water quality treatment. In accordance with MS4 Permit, the proposed revision would require treatment of both pollution-generating hard surfaces and pervious surfaces if water quality treatment is triggered for a project.
15. Revised Minimum Requirements for Roadway Projects (22.805.060):
- a. Added infeasibility criteria to the Minimum Requirements for Roadway Projects (22.805.060.E). New language is proposed to account for the unique construction limitations posed by public roadway right-of-way work within an urban environment having existing infrastructure. The new language allows the reduction of on-site stormwater management, flow control, and water quality treatment requirements for roadway projects under certain conditions. Specifically, roadway projects would have reduced requirements for on-site stormwater management, flow control, and water quality treatment when it can be demonstrated that full compliance with those requirements is not feasible due to situations where “(a) complete installation would require that an existing major publicly or privately-owned infrastructure or utility element be relocated, or (b) the drainage control facility cannot be built and operated to discharge stormwater from the site under gravity flow conditions while meeting the applicable engineering standards.” The proposed language includes additional details describing what constitutes “existing major infrastructure or utility elements” and requires that the project meet the applicable standards to the degree that the project can avoid the infeasibility described in “(a)” or “(b)” above. These Ecology-approved revisions address the same physical site limitation concerns addressed by the 2014 Washington Department of Transportation Highway Runoff Manual (WSDOT 2014).
 - b. Added requirements for Discharges from Groundwater. The proposed revision includes new language for applicability of flow control when a project permanently discharges groundwater to some locations. This change incorporates the provisions drawn from a current City Stormwater rule directly into the Stormwater Code.
 - c. Added requirements for water quality treatment. In accordance with the MS4 Permit, the proposed revision includes new language requiring treatment of both pollution-generating hard surfaces and pervious surfaces if water quality treatment is triggered for a project.

2016 Stormwater Code Update
Summary of Major Changes to Seattle's Stormwater Code

16. Added a new section specific to On-site Stormwater Management (22.805.070): In relation to item #12 above, the current Stormwater Code requirements to “Implement Green Stormwater Infrastructure” are proposed to be revised to be consistent with the MS4 Permit and are moved to a new section titled On-site Stormwater Management. On-site Stormwater Management includes requirements to comply with either:

- a. On-site Performance Standard, or
- b. On-site List by project type

This change is proposed for consistency with the MS4 Permit but also complements Seattle's unique urban environment.

In addition, the current minimum size requirements for projects that trigger On-Site Stormwater Management in the right-of-way (i.e., Roadway Projects, Trail/Sidewalk Projects) are proposed to be removed for creek, wetland, and small lake basins. In these basins, Ecology does not allow a prohibition to installation based on minimum facility size for permeable pavement (2,000 square feet) and bioretention (500 square feet) as is allowed in the current Seattle Stormwater Manual. This will result in additional facilities within the right-of-way in these basins.

17. Added a new On-site Performance Standard (22.805.070.C): In accordance with the MS4 Permit (and per items #12 and #16 above), the proposed revisions include a new quantitative performance standard to meet the On-site Stormwater Management Requirements of 22.805.070. The proposed standard is similar to that specified in the MS4 Permit but is consistent with Seattle's existing flow control standards by targeting the pre-developed condition of “forested” or “pasture,” depending upon existing hard surface coverage.

18. Added a new On-site List (22.805.070.D) stating specific BMP options and requirements for meeting the new On-site Stormwater Management Requirements of 22.805.070: The MS4 Permit allows two options for projects to achieve the On-site Stormwater Management Requirements (22.805.070): using a specified list of approved BMPs, or meeting a “Low Impact Development Performance Standard.” Ecology’s BMP list is presented in a mandatory evaluation order, and the project applicant is required to achieve 100 percent management of applicable hard surfaces, unless the applicant can demonstrate BMP infeasibility (with no cost feasibility consideration). The proposed revisions to the Stormwater Code include a Seattle-specific On-site List of BMPs (Seattle List) that is modified relative to Ecology’s and meets MS4 Permit equivalency obligations. The Seattle List also better matches Seattle’s local conditions, results in a similar volume of stormwater managed as the current Seattle GSI Directors’ Rule, and provides additional flexibility compared to the Ecology list. Except where a difference is required for compliance with the MS4 Permit, the proposed Seattle List includes a range of BMPs similar to that found in Seattle’s current GSI Directors’ Rule. The proposed language and approach has been developed specific to conditions in the City of Seattle. For further information, a more detailed assessment of the City’s options and preferences has been documented in a 2014 policy paper (Seattle 2014). Consistent with the MS4 Permit, Seattle’s List can be superseded or reduced if the installation is in conflict with specific federal or state laws, rules, and standards; special zoning district design criteria; public health and safety standards; transportation regulations; or tree and vegetation regulations.
19. Updated Wetland Protection Standard (22.805.080.B.1): In accordance with the MS4 Permit, the proposed revisions include updates to the Wetland Protection Standard. Since Ecology substantially changed its requirements for this standard, Seattle proposes to incorporate the new Ecology requirements and to add references to Ecology’s “guidance sheets.”
20. Slightly revised the Pre-developed Forested Standard (22.805.080.B.2) and Pre-developed Pasture Standard (22.805.080.B.3): The standards are proposed to be slightly revised to better complement the new On-site Performance Standard language proposed in 22.805.070.C. The technical requirements of the new On-site Performance Standard language require specific hydrologic modeling approaches that were not consistent with the 2009 “Forest” and “Pasture” standards. Therefore, minor revisions are proposed for improved efficiency for developers and city staff plan reviewers.
21. Updated the Enhanced Treatment requirements (22.805.090.B.5): In accordance with the MS4 Permit, the proposed revisions include updates to the Enhanced Treatment requirements. Specifically, the proposed revisions remove the previous broader references to “fish-bearing” waters and instead reference designations for “aquatic life use.”

Chapter 22.808 – Stormwater Code Enforcement

22. Slightly revised Stormwater Code Enforcement language in Chapter 22.808: Based on feedback from SPU and DPD inspectors, there are slight, mainly administrative, changes proposed for this Chapter. The proposed revisions will make enforcement less problematic and more consistent to implement for the City.