Council Bill No. <u>113187</u>

AN ORDINANCE relating to the Stormwater, Grading, and Drainage Control Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396; amending Chapter 22.800, entitled "Title, Purpose, Scope, and Authority"; amending Chapter 22.801, entitled "Definitions"; amending Chapter 22.802, entitled "Stormwater, Drainage, and Erosion Control"; amending Chapter 22.804, entitled "Grading"; and amending Chapter 22.808, entitled "Administration and Enforcement."

The City of Seattl Council Bill/Ordina

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Date 1st Referred:	To: (committee) (2007E): (Cossessed
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Date Re - Referred:	To: (committee) (E 121 E MCL)
Date of Final Passage:	Full Council Vote:
Date Presented to Mayor:	Date Approved:
Date Returned to City Clerk:	Date Published: 1.0
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Date Passed Over Veto:	Veto Sustained:

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This file is complete and ready

Law Department

Law Dept. Review

The City of Seatt Council Bill/Ordin			tment Prograting Constituents	
	Con	nmittee Acti	on:	
This file is complete and rea	dy for presenta	tion to Full Council.	Committee:	(initialPlate)
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- AN ORDINANCE relating to the Stormwater, Grading, and Drainage Control Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396; amending Chapter 22.800, entitled "Title, Purpose, Scope, and Authority"; amending Chapter 22.801, entitled "Definitions"; amending Chapter 22.802, entitled "Stormwater, Drainage, and Erosion Control"; amending Chapter 22.804, entitled "Grading"; and amending Chapter 22.808, entitled "Administration and Enforcement."
- WHEREAS the City of Seattle is subject to the terms of the National Pollutant Discharge Elimination System General Permit ("NPDES Permit") issued July 5, 1995, by the State of Washington Department of Ecology ("Ecology") for discharges from municipal separate storm sewer systems for the Cedar/Green Water Quality Management Area (Permit No. WASM 23003) that are subject to the federal Clean Water Act and other law; and
- WHEREAS the City is subject to the terms of an Ecology-approved City of Seattle Stormwater Management Program, dated April 11, 1997; and
- WHEREAS the NPDES Permit and Stormwater Management Program require that the City adopt Ordinances and minimum requirements that are equivalent to Ecology guidance for controlling runoff from development and construction activities; and
- WHEREAS the City has negotiated with Ecology an environmentally-protective approach to equivalency that involves new regulation of both construction and other discharges; and
- WHEREAS the City has proposed additional changes to its regulation and enforcement program to improve water quality and further the purposes of the Stormwater, Grading and Drainage Control Code; and
- WHEREAS changes in state and federal regulations expected in the near future will require the City to again revise the Stormwater, Grading, and Drainage Control Code; and
- WHEREAS to prepare for these regulatory changes, and to adapt Department of Ecology requirements to a fully-developed city, Seattle Public Utilities has initiated a water quality planning effort, the purpose of which is to outline an integrated water quality improvement program based on an assessment of regulatory, programmatic and capital improvement approaches, and prioritized by the specific water quality issues and beneficial uses of Seattle's lakes, creeks and bays; and



WHEREAS in this upcoming water quality planning effort, Seattle Public Utilities will, with stakeholder involvement:

- 1. consider regulations that extend controls beyond the portion of the site being developed;
- 2. consider regulatory alternatives for public benefit projects such as affordable housing and public transportation;
- 3. develop an adaptive management and monitoring component to evaluate the effectiveness of proposed measures;
- 4. consider specifying vegetative techniques as the most preferred alternative for addressing stormwater run-off; and
- 5. consider rate-based incentives to achieve water quality goals; and

WHEREAS Seattle Public Utilities will report to the WWSHPH Committee on progress on the water quality planning effort on a quarterly basis, beginning in September 2000, and will advise the committee promptly of any new timelines required as a result of changes in state or federal regulations; Now, Therefore:

## BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Section 22.800.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.800.010 Title.

This Subtitle, comprised of SMC Chapters 22.800 through 22.808, shall be known as the "Stormwater, Grading and Drainage Control Code," and may be cited as such.

Section 2. Section 22.800.020 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended by adding a new Subsection C as follows:

## 22.800.020 Purpose.

C. It is expressly acknowledged that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, the water



quality protection measures in this Subtitle are necessary to protect the health, safety and welfare of the residents of Seattle and the integrity of natural resources for the benefit of all and for the purposes of this Subtitle. Such water quality protection measures are required under the federal Clean Water Act, 33 U.S.C. Section 1251, et seq., and in response to the obligations of the City's municipal stormwater discharge permit, issued by the State of Washington under the federal National Pollutant Discharge Elimination System program.

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Section 3. Section 22.800.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.800.030 Scope.

This Subtitle applies to:

- All grading and drainage and erosion control, whether or not a permit is required; and A.
- B. All new ((development and redevelopment)) or replaced impervious surface and all land disturbing activities, whether or not a permit is required; and

- C. All ((new and existing)) discharges directly or indirectly to a public drainage control system; and
- D. All new and existing land uses.
- Section 4. Section 22.800.060 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended by adding a new Subsection C as follows:

22.800.060 Compliance with other laws.

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Compliance with the provisions of this Subtitle and of regulations and manuals adopted C.

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by the City in relation to this Subtitle does not necessarily mitigate all impacts to the environment. Thus, compliance with this Subtitle and related regulations and manuals should not be construed as mitigating all stormwater impacts, and additional mitigation may be required to protect the environment. The primary obligation for compliance with this chapter, and for preventing environmental harm on or from property, is placed upon responsible parties as defined by this Subtitle.

Section 5. Section 22.800.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.800.070 City Projects.

## A. Compliance.

- 1. City agencies shall comply with all the requirements of this Subtitle except they shall not be required to obtain permits and approvals under this Subtitle for work performed within a public right-of-way and for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation. Where the work occurs in a public right-of-way, it shall comply with Seattle Municipal Code Title 15, Street and Sidewalk Use, including the applicable requirements to obtain permits or approvals. Where appropriate as set forth in ((Subsection)) Section 22.804.040 C of this Code, a soils report and analysis by an experienced geotechnical((/eivil)) engineer shall be prepared for City projects.
- 2. A City agency project, as defined in Section 22.801.170, that is not required to obtain permit(s) and approval(s) per subsection A1 above, is not required to comply with Sections 22.802.015 C4, 22.802.016 B1, and 22.802.016 B2, if the project begins land disturbing activities on or before July 1, 2002, and if the project meets one or more of the following criteria:
- a. Project funding was appropriated as identified in Ordinance 119750, titled, "An ordinance adopting a budget, including a capital improvement program and a position list, for the City of Seattle for fiscal year 2000," or
- b. Project received or will receive voter approval of financing before January 1, 2001, or



<u>c.</u>	Project received	or will receive	funds based	on grant	application(s)
submitted before Janu					

d. Project conducted or will conduct land disturbing activity before January 1, 2001.

## B. Inspection.

- 1. When the City conducts projects for which review and approval is required under Section ((22.802.015)) 22.802.020 or 22.804.030, the work shall be inspected by the City agency conducting the project or supervising the contract for the project. The inspector for the City agency shall be responsible for insuring that the grading and drainage control is done in a manner consistent with the requirements of this Subtitle.
- 2. Where a soils analysis and report has been prepared as required under subsection A of this section, the grading shall also be inspected by the geotechnical((/eivil)) engineer who prepared the report.
- 3. A City agency need not provide an inspector from its own agency provided either:
- a. the work is inspected by an appropriate inspector from another City agency; or
- b. the work is inspected by the licensed civil or geotechnical((/eivil)) engineer who prepared the plans and specifications for the work; or
- c. a permit or approval is obtained from the Director of ((Construction and Land Use)) DCLU, and the work is inspected by the Director.
- C. Certification of Compliance. City agencies shall meet the same standards as non-City projects, and shall certify that each individual project meets those standards.
- **Section 6.** Section 22.800.080 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

## 22.800.080 Authority.

A. 1. The Director of ((Construction and Land Use shall have)) DCLU has authority



regarding the provisions of this Subtitle pertaining to grading, review of drainage control plans, and review of erosion control plans, and ((shall-have)) has inspection and enforcement authority pertaining to temporary erosion/sediment control measures.

- 2. The Director of ((Seattle Public Utilities shall have)) SPU has authority regarding all other provisions of this Subtitle pertaining to stormwater, drainage, and erosion control, including inspection and enforcement authority.
- B. The Directors of ((Construction and Land Use)) DCLU and ((Seattle Public Utilities))

  SPU are authorized to take actions necessary to implement the provisions and purposes of this Subtitle in their respective spheres of authority, including, but not limited to, the following: promulgating and amending rules and regulations, pursuant to the Administrative Code, Chapter 3.02 of the Seattle Municipal Code((, which may include prescribing best management practices ("BMPs"))); establishing and conducting inspection programs; establishing and conducting or, as set forth in Section 22.802.012, requiring responsible parties to conduct, monitoring programs, which may include sampling of discharges to or from drainage control facilities, the public drainage control system, or surface water; taking enforcement action; abating nuisances; promulgating guidance and policy documents; and reviewing and approving or disapproving required submittals and applications for approvals and permits.
- C. The Director of ((Seattle Public Utilities)) SPU is authorized to develop drainage basin plans for managing surface water, drainage water, and erosion within individual subbasins. ((Compliance with an adopted)) A drainage basin plan may, when approved by the Director of ((Seattle Public Utilities)) SPU, be used to modify requirements of this Subtitle, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.
- **Section 7.** Section 22.801.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.010 General.



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For the purpose of this Subtitle, the words listed in this Chapter ((shall)) have the following meanings, unless the context clearly indicates otherwise. Terms relating to pollutants and to hazardous wastes, materials, and substances, where not defined in this Subtitle, shall be as defined in Washington Administrative Code Chapters 173-303, 173-304 and 173-340, the Seattle Building Code or the Seattle Fire Code, including future amendments to those codes. Words used in the singular include the plural, and words used in the plural include the singular.

Effective July 5, 2000, all references in the Seattle Municipal Code Chapters 22.800 through 22.808 to "Department of Construction and Land Use," "Department of Design, Construction and Land Use," "Director of Design, Construction and Land Use," "Director of Design, Construction and Land Use," or "Seattle Public Utilities" shall be deemed references to "DCLU," "DCLU," "Director of DCLU," "Director of DCLU," "Espectively. The City's Code Reviser is authorized to amend the Seattle Municipal Code Chapters 22.802 through 22.808 over time as he or she deems appropriate in order to carry out these changes.

**Section 8.** Section 22.801.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 118396, is amended as follows:

## 22.800.020 "A."

"Abandoned solid waste disposal site" means a site ((which)) that is no longer in use and where solid waste was disposed with or without a permit.

"Agency" means any governmental entity or its subdivision.

"Agency with jurisdiction" means those agencies with statutory authority to approve, condition or deny permits, such as the United States Environmental Protection Agency, the Washington State Department of Ecology or the Seattle-King County Department of Public Health.

"American Petroleum Institute (API) oil/water separator": See "Oil/water separator, American Petroleum Institute (API)".



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"Approved" means approved by either the Director of Design. Construction and Land Use or the Director of Seattle Public Utilities.

"As-graded" means the surface condition existing after completion of grading.

Section 9. Section 22.801.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.030 "B."

"Backfilling" means returning a site to its original or approved contours after earth materials were removed for construction purposes.

"Basin plan" means a plan to manage the quality and quantity of stormwater in a watershed, including watershed action plans.

"Bench" means a relatively level step excavated into earth material on which fill is to be placed.

"Best management practice" (BMP) means a physical, chemical, structural or managerial practice or device that prevents, reduces, or treats contamination of water or which prevents or reduces soil erosion. When the Directors develop rules and/or manuals prescribing best management practices for particular purposes, whether or not those rules and/or manuals are adopted by Ordinance, BMPs prescribed in the rules and/or manuals shall be the BMPs required for compliance with this Subtitle.

- 1. "Non-structural" or "operational" best management practices are those ((which)) pollution control strategies that require modified or additional ((operational or)) behavioral practices, such as sweeping a parking lot, or ((having)) maintaining special equipment on site, such as spill response equipment. ((on-site.))
- 2. "Structural" best management practices are those ((which)) pollution control strategies that require the construction of a structure or other physical modification on the site.



 "Biofiltration swale" means a long, gently sloped, vegetated channel designed and maintained to treat stormwater runoff through sedimentation, adsorption, and biological uptake. Grass is the most common vegetation, but wetland vegetation can be used if the soil is saturated.

"Building permit" means a document issued by the City of Seattle Department of <u>Design</u>, Construction and Land Use giving permission for construction or other specified activity in accordance with the Seattle Building Code (Chapter 22.100 SMC).

**Section 10.** Section 22.801.040 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.040 "C."

"Cause or contribute to a violation" means and includes acts or omissions that create a violation, that increase the duration, extent or severity of a violation, and that aid or abet a violation.

"Civil engineer, licensed" means a person who is a licensed by the State of Washington to practice civil engineering.

"Coalescing plate oil/water separator" means a multi-chambered vault, containing a set of parallel, corrugated plates that are stacked and bundled together in the center of the vault.

Coalescing plate separators are designed to remove dispersed oil and floating debris as well as in containing spills.

"Combined sewer" - see "Public combined sewer."

"Compaction" means the densification of a fill by mechanical means.

"Containment area" means the area designated for conducting high-risk pollution generating activities for the purposes of implementing operational source controls or designing and



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installing structural source controls or treatment facilities.

"Contaminate" means the addition of sediment, any other pollutant or waste, or any illicit discharge.

"Cut" means the changing of a grade by excavation.

**Section 11.** Section 22.801.050 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

22.801.050 "D."

"DCLU" means the Department of Design, Construction and Land Use.

"Damages" means monetary compensation for harm, loss, costs, or expenses incurred by the City, including but not limited to the following: costs of abating violations of this Subtitle or public nuisances; fines or penalties the City incurs as a result of a violation of this Subtitle; and costs to repair or clean the public drainage control system as a result of a violation. For the purposes of this Subtitle, it does not include compensation to any person other than the City.

"Design storm" means a rainfall event used in the analysis and design of drainage facilities.

"Designated receiving waters" means the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, and other receiving waters designated by the Director of ((Seattle Public Utilities)) SPU as having the capacity to receive drainage discharges.

"Detention" means ((and refers to)) temporary storage of drainage water for the purpose of controlling the drainage discharge rate.



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"Detention system"	means a faci	ity design	ned to con	rol the	discharge	rate of	stormwater	runoff
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from a site by detain	ning flows in	a tank or	vault.					

"Development" ((—see "New Development and Redevelopment)) means land disturbing activity or the addition or replacement of impervious surface.

"Developmental coverage" means all areas within a site planned ((to be developed or redeveloped including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, areas in which soils, slopes and vegetation have been altered, and roadways and other pervious and impervious surfaces)) for land disturbing activity or new or replaced impervious surface.

"Director" means the Director of the Department authorized to take a particular action, and the Director's designees, who may be employees of that department or another City department.

"Director of <u>Design</u>, Construction and Land Use" means the Director of the Department of <u>Design</u>, Construction and Land Use of the City of Seattle and/or the designee of the Director of <u>Design</u>, Construction and Land Use, who may be employees of that department or another City department.

"Director of Seattle Public Utilities" means the Director of Seattle Public Utilities of the City of Seattle and/or the designee of the Director of Seattle Public Utilities, who may be employees of that department or another City department.

"Discharge point" means the location to which drainage water from a specific site is released.

"Discharge rate" means the rate at which drainage water is released from a specific site. The discharge rate is expressed as volume per unit of time, such as cubic feet per second.

"Drainage basin" means the tributary area through which drainage water is collected, regulated, transported, and discharged to receiving waters.



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"Drainage control" means the management of drainage water. Drainage control is accomplished	d
through the collection, conveyance, and discharge of drainage water, controlling the rate of	
discharge from a site, or separating, treating or preventing the introduction of pollutants.	

"Drainage control facility" means any facility, including best management practices, installed or constructed for the purpose of controlling the flow, quantity, and/or quality of drainage water.

"Drainage control plan" means a plan for collecting, controlling, transporting and disposing of drainage water falling upon, entering, flowing within, and exiting the site, including designs for drainage control facilities.

"Drainage control system" means a system intended to collect, convey and control release of only drainage water. The system may serve public or private property. It includes constructed and/or natural components such as ditches, culverts, streams and drainage control facilities.

"Drainage water" means stormwater, snow melt, surface water, surface and irrigation runoff, water from footing drains and other drains approved by the Director of Seattle Public Utilities or installed in compliance with this Subtitle and rules which may be adopted hereunder. Other water which is not an illicit discharge as defined in ((subsection)) Section 22.802.012 C shall be considered drainage water if it drains from the exterior of a building or structure, a pervious or impervious surface, or undeveloped land, or by surface or shallow subsurface flow.

"Dredging" means the excavation of earth materials from land covered by water. The term ((shall include)) includes dredging ((which)) that maintains an established water depth.

Section 12. Section 22.801.060 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.060 "E."



"Earth material" means any rock, gravel, natural soil or resedimented soil, or any combination thereof, and does not include any solid waste as defined by RCW Chapter 70.95.

"Environmentally Critical Area" means an area designated in Chapter 25.09 of the Seattle Municipal Code.

"Erosion" means the wearing away of the ground surface as a result of mass wasting or of the movement of wind, water and/or ice.

"Excavation" means the mechanical removal of earth material.

"Existing grade" means the natural surface contour of a site, including minor adjustments to the surface of the site in preparation for construction.

"Exploratory excavation" means borings, or small pits, hand-dug or excavated by mechanical equipment. Exploratory excavation does not include preloading of the site.

**Section 13.** Section 22.801.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.070 "F."

"Fill" means ((earth)) material deposited, placed, pushed, pulled, or transported to a place other than the place from which it ((is excavated)) originated.

"Filter strip" means a gently sloping vegetated area that is designed and maintained to treat, through sedimentation, adsorption and biological uptake, stormwater runoff from overland sheet flow from adjacent paved areas before it concentrates into a discrete channel.

"Finished grade" means the grade upon completion of the fill or excavation.



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1	(("Fish and wildlife habitat conservation areas" is as defined in the Seattle Environmentally
2	Critical Areas Ordinance, Scattle Municipal Code, Chapter 25.09.))
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4	(("Flood prone area" is as defined in SMC Chapter 25.09, Environmentally Critical Areas.))
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6	"Flow control" means controlling the discharge rate of stormwater runoff from the site through
7	means such as infiltration or detention.
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9	"Flow control facility" means a method, such as pursuant to this Subtitle or associated rules, for
10	controlling the discharge rate of stormwater runoff from a site.
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12	Section 14. Section 22.801.080 of the Seattle Municipal Code, adopted by Ordinance
13	116425, is amended as follows:
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15	22.801.080 "G."
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17	"Garbage" means putrescible waste.
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19	"Geotechnical((/Civil)) engineer, experienced" or "Geotechnical/Civil engineer, experienced"
20	means a professional civil engineer licensed by the State of Washington who has at least four
21	years of professional experience as a geotechnical engineer, including experience with landslide
22	evaluation.
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24	"Grade" means the ground surface contour (see also "Existing grade" and "Finished grade").
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26	"Grading" means excavation, fill, in-place ground modification, or any combination thereof,
27	including the establishment of a grade following demolition of a structure.
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29	"Grading approval" means an approved component of a building permit relating to grading, as
30	required by this Subtitle.



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Section 15. A new Section 22.801.090 is added to the Seattle Municipal Code to read as follows:

#### 22.801.090 "H."

"High-risk pollution generating activities" are the following:

- 1. Fueling operations that involve transferring fuel into mobile vehicles or equipment at permanent stations, temporary stations, and mobile fueling stations. Permanent stations include facilities, such as, but not limited to, commercial gas stations, maintenance yards, and private fleet fueling stations, where fuel is transferred from a dedicated fueling station. Temporary fueling stations include, but are not limited to, construction sites and any other site where fuel is temporarily stored and dispensed into vehicles or equipment. Mobile fueling stations are fueling operations where fuel is delivered to vehicles and equipment via mobile tank trucks.
- 2. Vehicle, equipment or building washing or cleaning, including any of the following: mobile vehicle steam cleaning operations or vehicle washing at commercial car wash facilities, charity car washes, or permanent parking lots such as new, used, and rental car lots and fleet lots; outside washing of tools or other manufacturing equipment; outside cleaning of commercial cooking equipment such as filters and grills; or washing of buildings, including exteriors or mobile interior building cleaning services.
- 3. Truck or rail loading or unloading of liquid or solid materials that involves transferring non-containerized bulk liquids from truck or rail, or loading/unloading materials at a commercial or industrial loading dock.
- 4. Liquid storage in stationary above ground tanks, including storing liquid chemicals, fertilizers, pesticides, solvents, grease, or petroleum products in stationary above ground tanks.
- 5. Outside portable container storage of liquids, food wastes, or dangerous wastes including storing any of the following: vegetable grease, animal grease, or other accumulated food wastes; used oil; liquid feedstock; cleaning compounds; chemicals; solid waste as defined by SMC 21.36; or dangerous waste.



- 6. Outside storage of non-containerized materials, by-products, or finished products, including outside storage of any of the following: non-liquid pesticides or fertilizers; contaminated soil; food products or food wastes; metals; building materials, including but not limited to lumber, roofing material, insulation, piping, and concrete products; or erodible materials, including but not limited to sand, gravel, road salt, topsoil, compost, excavated soil, and wood chips.
- 7. Outside manufacturing activity including any of the following: processing; fabrication; repair or maintenance of vehicles, products or equipment; mixing; milling; refining; or sand blasting, coating, painting, or finishing of vehicles, products, or equipment.
- 8. Landscape construction or maintenance, including any of the following: land disturbing activities as described in SMC 22.801.130; fertilizer or pesticide application near public drainage control system; and disposal of yard waste near a public drainage control system or riparian corridor.

"High-use" means any project planned to generate or accommodate any of the following:

- 1. Expected average daily traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area. In addition, the following is high-use unless the responsible party demonstrates to the satisfaction of the Director of DCLU or of the Director of SPU that the project will generate less than 100 vehicles per 1,000 square feet of gross building area: uncovered parking lot accessory to any fast-food restaurant, convenience market, supermarket, shopping center, discount store, movie theater, athletic club, or bank.
- 2. Petroleum storage or transfer in excess of 1,500 gallons per year, not including delivered heating oil.
- 3. Storage, or maintenance of a fleet of 25 or more diesel vehicles that are over 10 tons net weight (including, but not limited to, trucks, buses, trains, heavy equipment).
- 4. Road intersections with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 or more on any intersecting roadway, excluding projects proposing primarily pedestrian or bicycle use improvements.

**Section 16.** Section 22.801.100 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:



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22.8	01.1	00	"I."

"Illicit discharge" means the discharges defined by Section 22.802.012.

"Impervious surface" means any surface exposed to rainwater from which most water runs off including, but not limited to, ((paved streets)) paving, ((graveled or paved areas such as driveways, parking areas,)) packed earth material, oiled macadam, or other treated surfaces, ((walkways,)) and roof surfaces, patios, and formal planters.

"Impervious surface, replaced." - See "Replaced or replacement of impervious surface.

"Infiltration facility" means a drainage facility that temporarily stores, and then percolates stormwater runoff into the underlying soil. Examples include but are not limited to infiltration trenches, ponds, vaults, and tanks.

"In-place ground modification" means activity occurring at or below the surface which is designed to alter the engineering parameters and physical characteristics of soil or rock, including but not limited to, in-situ consolidation, solidification, void space reduction and infilling.

"Inspector" means the City inspector, inspection agency, or licensed civil engineer performing the inspection work required by this Subtitle.

Section 17. Section 22.801.130 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.130 "L."

"Land disturbing activity" means any activity that results in a movement of earth, or a change in the existing soil cover (both vegetative and nonvegetative) or the existing topography. Land



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disturbing activities include, but are not limited to,	clearing,	grading,	filling ((and)),	excavation
or addition or replacement of impervious surface.				

"Large project" means a project including 5,000 square feet or more of new or replaced impervious surface or 1 acre or more of land disturbing activity. ((exceeding nine thousand (9,000) square feet of developmental coverage.))

Section 22.801.140 of the Seattle Municipal Code, adopted by Ordinance Section 18. 116425, is amended as follows:

#### 22.801.140 "M."

"Master use permit" means a document issued by ((the Department of Design, Construction and Land Use)) DCLU giving permission for development or use of land or street right-of-way in accordance with the Land Use Code (Title 23, Seattle Municipal Code).

"Media filter" means a stormwater treatment system that utilizes a filtration medium such as sand or leaf compost to remove pollutants via physical filtration and chemical adsorption or precipitation. Filters may be constructed underground in a vault or above ground in a pond. In both systems, stormwater that has passed through the filter media is collected in an underground pipe and discharged to the nearby drainage system.

"Municipal stormwater NPDES permit" means the permit issued to the City under the federal Clean Water Act for public drainage control systems within the City limits.

Section 19. Section 22.801.150 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.150



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"NPDES" means National Pollutant Discharge Elimination System, the national property of the pr	program for
controlling discharges under the federal Clean Water Act.	

"NPDES permit" means an authorization, license or equivalent control document issued by the United States Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

## (("New development" means any of the following activities:

- 1. Structural development, including construction of a new building or other structure;
- 2. Expansion or alteration of an existing structure that results in an increase in the footprint of the building or structure;
  - 3. Land disturbing activities;
  - 4. Creation or expansion of impervious surface;
  - 5. Demolition;
  - 6. Subdivision and short subdivision of land as defined in RCW 58.17.020;
- 7. Class IV general forest practices, as defined in WAC 22-16-050 that are conversions from timber land to other uses.
- No other forest practices or commercial agriculture are considered new development.))
- "Nondesignated receiving waters" means all creeks, streams and lakes in <u>The City</u> of Seattle not designated as receiving waters, including Green Lake, Haller Lake, and Bitter Lake, and all the creeks and streams.
- **Section 20.** Section 22.801.160 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:
- 22.801.160 "O."



"Oil/water separator" means a structure, usually underground, that is designed to provide quiescent flow conditions so that globules of free oil or other floatable materials that may be present in stormwater can float to the water surface and become trapped in the structure.

"Oil/water separator, American Petroleum Institute (API)" means a vault that has multiple chambers separated by baffles and weirs to trap oil in the vault. API oil/water separators are designed to remove dispersed oil and floating debris and in containing spills.

"Oil/water separator, coalescing plate". See Coalescing Plate Oil/Water Separator.

"Owner" means any person having title to and/or responsibility for, a building or property, including a lessee, guardian, receiver or trustee, and the owner's duly authorized agent.

**Section 21.** Section 22.801.170 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432 and 117697, is amended as follows:

## 22.801.170 "P."

"Person" means an individual, firm, partnership, corporation, municipal corporation, and government, and the individual's or entity's heirs, successors and assigns.

"Plan" means, for the purposes of this Subtitle, and unless a different meaning is set forth or clearly required, a graphic or schematic representation, with accompanying notes, schedules, specifications and other related documents.

"Plot plan" means a scaled map of a site and adjacent public rights-of-way showing locations and dimensions of various existing and proposed features, such as buildings, curbs, driveways, sidewalks, trees, grades and drainage patterns.

"Preloading" means the temporary stockpiling of earth material over a site for the purpose of consolidating the existing soils.



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"Project" means the addition	or replacement	of impervious	surface or th	ne undertaking of	land
disturbing activity on a site.					

"Public combined sewer" means a publicly owned and maintained sewage system which carries drainage water and sewage and flows to a publicly owned treatment works.

"Public drainage control system" means a drainage control system owned or used by The City of Seattle serving City streets and adjacent property.

"Public place" means and includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, and planting (parking) strips, squares, triangles and right-of-way for public use and the space above or beneath its surface, whether or not opened or improved.

"Public storm drain" means the part of a public drainage control system which is wholly or partially piped, is owned or operated by a public entity, and is designed to carry only drainage water.

Section 22. Section 22.801.190 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.190 "R."

"Receiving waters" means the waters ultimately receiving drainage water, including the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, including associated bays, but not including tributary streams, creeks and lakes. See also "Designated receiving waters" and "Nondesignated receiving waters".

## (("Redevelopment" means any of the following activities:

Replacement or alteration of a building or structure that does not result in an increase in the footprint of the building or structure;



2.	Replacement, alteration, or upgrade of an impervious surface that is not part of a
routine mainte	nance activity, and does not result in expansion of the impervious surface.))

"Replaced impervious surface" or "replacement of impervious surface" means impervious surface that is removed down to earth material and a new impervious surface is installed.

"Responsible party" means all of the following persons:

- 1. Owners and occupants of property within The City of Seattle; and,
- 2. Any person causing or contributing to a violation of the provisions of this Subtitle.

(("Riparian corridor" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

**Section 23.** Section 22.801.200 of the Seattle Municipal Code, adopted by Ordinance 116425, and amended by Ordinance 118396, is amended as follows:

22.801.200 "S."

"SPU" means Seattle Public Utilities.

"Sand filter" means a depression or basin with the bottom made of a layer of sand designed and maintained to filter pollutants. Stormwater is treated as it percolates through the sand layer.

"Sanitary sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

"Serve" or "service", when used regarding a document, means the procedures set forth in Section 22.808.030.



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"Service drain" means a privately owned and maintained drainage control facility or system which carries only drainage water. Service drains include, but are not limited to, conveyance pipes, catch basin connections, downspout connections, pipes, and subsurface drain connections.

"Shoreline district" means all land regulated by the Shorelines Management Act of 1971 (RCW Chapter 90.58) or City Ordinances implementing it, as defined in the Land Use Code, Title 23 of the Seattle Municipal Code.

"Side sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

"Site" means the lot, parcel of land, street or highway right-of-way lot or parcel, or portion of street, highway or other public right-of-way, or contiguous combination thereof, where ((a permit for new development, redevelopment, land-disturbing activity, or grading has been issued or where any such work)) a permit for the addition or replacement of impervious surface or the undertaking of land disturbing activity has been issued or where any such work is proposed or performed, and the contiguous combination thereof. For development limited to a public street, each segment from mid-intersection to mid-intersection shall be considered a separate site.

"Slope" means an inclined ground surface. In this Subtitle, the inclination of a slope is expressed as a ratio of horizontal distance to vertical distance.

"Small project" means a project with: ((nine thousand (9,000) square feet or less of developmental coverage))

- less than 5,000 square feet of new and replaced impervious surface; and
- 2. less than 1 acre of land disturbing activities.

"Soil" means naturally deposited non-rock earth materials.

"Solid waste" means solid waste as defined by SMC Section 21.36.016.



"Source controls" mean structures or operations that prevent contaminants from coming in	
contact with stormwater through physical separation or careful management of activities that	are
known sources of pollution.	

- 1. "Operational source controls" are those which require modified or additional behavioral practices, such as sweeping a parking lot, or maintaining special equipment on site, such as spill response equipment.
- 2. "Structural source controls" are those which require the construction of a structure or other physical modification on the site.

"Standard design" is a design <u>pre-approved</u> by ((the)) Seattle Public Utilities for drainage and erosion control <u>available</u> for <u>use by</u> a ((typical)) site <u>with pre-defined characteristics</u>.

"Storm drain" - see "Public storm drain" and "Service drain."

"Stormwater" means water originating from rainfall and other precipitation, and from footing drains and other subsurface drains approved by the Director of Seattle Public Utilities or installed in compliance with rules which may be adopted hereunder.

**Section 24.** Section 22.801.210 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.210 "T."

"Terrace" means a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

"Topsoil" means the weathered surface soil, usually including the organic layer, in which plants have most of their roots.



"Treatment facility" means a method, such as pursuant to this Subtitle and associated rules, designed to remove pollutants from stormwater runoff.

**Section 25.** Section 22.801.240 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.240 "W."

"Watercourse" means the route, constructed or formed by humans or by natural processes, generally consisting of a channel with bed, banks or sides, in which surface waters flow((; including)). Watercourse includes small lakes, bogs, streams, creeks, and intermittent artificial components (including ditches and culverts) but does not ((including)) include receiving waters.

(("Wetland" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

"Wetpool" means a permanent pool of water that is contained in the bottom of a wet pond or wet vault stormwater treatment facility. Water in the wetpool is normally lost only through evaporation, evapotranspiration, or slow infiltration into the ground. The wetpool, also referred to as dead storage, is designed to reduce the velocity of incoming stormwater flows, encouraging particulates and particulate-bound pollutants to settle in wet ponds and wet vaults.

"Wetpond" and "wetvault" mean stormwater treatment facilities that contain a permanent pool of water (wetpool). They are designed to settle out particles of fine sediment, and allow biologic activity to occur to metabolize nutrients and organic pollutants, by providing a long retention time. Wetvaults are covered by a lid.

**Section 26.** Section 22.802.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.802.010 Scope and exemptions from Subtitle.



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- A. General. All ((new and existing)) discharges subject to this Subtitle as set forth in Section 22.800.030, all land uses ((and all new development, redevelopment)), additions and replacement of impervious surface, land disturbing activity, and grading shall comply with all requirements of this Subtitle unless explicitly exempted by this Subtitle or by the Director exercising authority granted under this Subtitle.
- В. Exemptions. The following land uses are exempt from the provisions of this Subtitle:
- 1. Commercial agriculture, including only those activities conducted on lands defined in RCW 84.34.020(2), and production of crops or livestock for wholesale trade;
- 2. Forest practices regulated under Title 222 Washington Administrative Code, except for Class IV general forest practices, as defined in WAC 222-16-050, that are conversions from timber land to other uses; and
- 3. Development undertaken by the Washington State Department of Transportation in state highway right-of-way that complies with standards found in Chapter 173-270 Washington Administrative Code, the Puget Sound Highway Runoff Program.
- Section 27. Section 22.802.013 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

((22.802.013 REQUIREMENTS FOR EXISTING DISCHARGES AND LAND USES

A. General.

For all existing discharges directly or indirectly to a public drainage control system, responsible parties shall implement and maintain nonstructural best management practices as specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use. Nonstructural best management practices shall include, but not be limited to, maintenance and housekeeping practices such as cleaning of catch basins and detention facilities, sweeping of parking lots, storing oil barrels and other contaminant sources out of the rain, covering material stockpiles, and proper use and storage of hazardous materials.



drainage control facility are causing or contributing to a water quality problem, such as discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by nonstructural best management practices, including, but not limited to, areas with recurrent spills such as discharges from vehicle maintenance shops or gas stations, then the Director of Scattle Public Utilities may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include structural best management practices, or other action necessary to cease causing or contributing to the water quality problem or the violation of the City's permit. Structural best management practices include but shall not be limited to constructed facilities such as detention tanks, wet pends, oil/water separators, grassed swales, roofing and berming of container storage areas, and revised piping systems.

## B. Spill Prevention Required.

- 1. All commercial and industrial responsible parties shall take measures to prevent spills or other accidental introduction of illicit discharges into a public drainage control system. Such measures shall include:
- a. Establishment and implementation of plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater;
- b. Implementation of procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
- e. Provision of necessary containment and response equipment on site, and training of personnel regarding the procedures and equipment to be used.
- 2. The provisions of this Subsection may be satisfied by a Stormwater Pollution

  Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site.
- 3. The responsible parties shall make the plans and procedures required by this Subsection available to the Director of Seattle Public Utilities when requested.
- C. Release Reporting Requirements. A responsible party must, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of Scattle Public Utilities, a



spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.

- D. Natural Drainage Patterns. Natural drainage patterns shall be maintained.
- E. Obstruction of Watercourses. Watercourses shall not be obstructed.))

## 22.802.013 Requirements for all discharges and land uses.

- A. For all discharges except those that drain only to the public combined sewer, responsible parties shall implement and maintain operational source controls, including but not limited to the following, as further described in rules promulgated by the Director:
- 1. Maintaining drainage control systems such as conveyance systems, detention systems and treatment systems:
  - 2. Maintaining streets, driveways, parking lots and sidewalks; and
  - 3. Identifying and eliminating illicit connections to the drainage control system.
- B. For high-risk pollution generating activities except those that discharge only to the public combined sewer:
- 1. Operational source controls shall be implemented for the high-risk pollution generating activities as specified in rules promulgated jointly by the Directors of SPU and DCLU. Operational source controls for high-risk pollution generating activities shall include, but are not limited to, enclosing, covering, or containing the activity, developing and implementing inspection and maintenance programs, sweeping, and training employees on pollution prevention.
- 2. Spill prevention shall be required. Parties responsible for undertaking, operating, or maintaining the high-risk pollution generating activities are required to do the following, as further defined in rules promulgated by the Director:
- a. Develop and implement plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater. This requirement may be



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- satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site;
- b. Implement procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
- c. Provide necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.
- 3. The responsible parties are required to make plans, procedures, and schedules required by this subsection available to the Director of SPU when requested.
- If the Director of SPU determines that discharges from a drainage control facility are causing or contributing to a water quality problem, such as but not limited to discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by the required operational or structural best management practices, then the Director of SPU may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include operational or structural best management practices or other action necessary to cease causing or contributing to the water quality problem or violation of the City's permit. Structural best management practices may include but shall not be limited to drainage control facilities, structural source controls, treatment facilities, constructed facilities such as enclosures, covering and/or berming of container storage areas, and revised drainage systems. For existing discharges as opposed to new projects, the Directors of SPU and DCLU shall allow twelve (12) months to install a new flow control facility, structural source control or treatment facility after a Director determines pursuant to this subsection that discharges from a site are causing or contributing to a water quality problem and notifies the responsible party in writing of that determination and of the flow control facility, structural source control or treatment facility that must be installed.
- D. Release reporting requirements. A responsible party is required to, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of SPU, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.



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## E. Natural drainage patterns. Natural drainage patterns shall be maintained.

## F. Obstruction of watercourses. Watercourses shall not be obstructed.

**Section 28.** Section 22.802.015 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, and 118396, is amended as follows:

((22.802.015 STORMWATER, DRAINAGE, AND EROSION CONTROL REQUIREMENTS

## A. When Compliance is Required.

- 1. New Development. All new development, regardless of type, and regardless of whether or not a permit is required, must comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage shall also comply with the requirements for large projects set forth in Subsection D below. Only those projects meeting the review thresholds set forth in Subsection B must prepare and submit the required plans.
- 2. Redevelopment. The portion of the site being redeveloped shall at least comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage must also comply with the additional requirements set forth in Subsection D below. Compliance is required regardless of the type of redevelopment, and regardless of whether or not a permit is required. However, only those projects meeting the review thresholds set forth in Subsection B below must prepare and submit the required plans.
- 3. Approval of Exceptions Required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that are below the threshold sizes specified in Subsection B, unless allowed by rule promulgated jointly by the Director of Scattle Public Utilities and the Director of Construction and Land Use or approved by the Director of Construction and Land Use. Approval shall be obtained prior to initiating land disturbing activities or new development or redevelopment. Approvals must be obtained for exceptions to any and all requirements of this Subtitle, including but not limited to the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.



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- Thresholds for Drainage Control Review. The City may, by interagency agreement signed by both the Director of Seattle Public Utilities and the Director of Construction and Land Use, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Subtitle, unless exceptions are granted as set forth in Section 22.808.010. Except as provided in this Subsection, drainage control review and approval shall be required as provided below:
- Where an application for either a master use permit or building permit includes the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance codified in this Subtitle:
  - Where an application for a grading permit or approval is required;
- Where a street use permit is required and the permit is for the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance codified in this Subtitle;
- Where a City public works project or construction contract, including contracts for day labor and other public works purchasing agreements, is for the cumulative addition of 750 square feet or more of developmental coverage to the site after the effective date of the ordinance codified in this Subtitle, except for projects in a City-owned right-of-way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation;
- Where any permit approval or contract includes any new or additional developmental coverage on a site deemed a potentially hazardous location, as specified in Section 22.800.050;
- Whenever an exception to a requirement set forth in this Subtitle or in a rule promulgated under this Subtitle is desired, whether or not review and approval would otherwise be required, including but not limited to alteration of natural drainage patterns or the obstruction of watercourses.



C: Minimum Requirements for All Projects. All projects must comply with the requirements of this subsection. Projects with more than 9,000 square feet of developmental coverage shall also comply with the requirements of Subsection D below. The Director of Construction and Land Use may also require projects with 9,000 square feet or less of developmental coverage to comply with the requirements set forth in Subsection D when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of Construction and Land Use may consider; but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an area with known erosion or flooding problems.

1: Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land specifying criteria, guidelines and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the review threshold, the proposed discharge point shall be identified in the drainage control plan required by paragraph C4 below, for review and approval or disapproval by the Director of Construction and Land Use.

2. Discharge Rate. To the extent practical, the peak drainage water discharge rate from pervious and impervious surfaces on the site shall not exceed 0.2 cubic feet per second per acre under design storm conditions. The Director of Construction and Land Use and the Director of Seattle Public Utilities may jointly promulgate rules modifying the discharge rate requirement for projects which will result in less than 2,000 square feet of new impervious surface. The Director of Construction and Land Use and the Director of Seattle Public Utilities may jointly promulgate rules allowing exceptions to the permissible peak discharge rate for property which discharges water directly to a designated receiving water or directly to a public storm drain which the Director of Seattle Public Utilities determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a receiving water. The design storm used to determine detention volume necessary to obtain the required discharge rate shall be a storm with a statistical probability of occurrence of one in 25 in any given year. If the project is within an environmentally critical area, the design storm requirements of SMC Chapter 25.09, Regulations



for Environmentally Cri	itical Areas, shall be applied. The Direc	tor of Scattle Public Utilities and
the Director of Construc	ction and Land Use shall jointly adopt ru	les specifying the methods of
calculation to determine	the discharge rate. Where laws or regul	ations of the federal governmen
or the State of Washingt	ton impose a more stringent requiremen	t, the more stringent requiremen
shall apply.		

- 3. Control Measures. During new development, redevelopment and land-disturbing activities, best management practices, as further specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use, shall be used to accomplish the following:
- a. Control crosion and the transport of sediment from the site through measures such as mulching, matting, covering, silt fences, sediment traps and catch basins, settling ponds and protective berms;
- b. Permanently stabilize exposed soils that are not being actively worked, through such methods as the installation of permanent vegetative cover and installation of slope protective materials; and
- e. Control the introduction of contaminants and pollutants into, and reduce and treat contaminants in drainage water, drainage control facilities, surface water and groundwater, and the public drainage control system by methods such as covering of material stockpiles; proper disposal of hazardous materials; regular cleaning of catch basins, gravel truck loading and heavy equipment areas; spill control for fueling operations; sweeping; and maintaining erosion control protective features described above.
- 4. Drainage Control Plan. For those projects meeting the review thresholds set forth in Subsection B above and which are less than 9,000 square feet, the applicant shall submit a drainage control plan as set forth in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use. Standard designs for drainage control facilities as set forth in the rules may be used. Projects exceeding 9,000 square feet must submit a comprehensive drainage control plan as set forth in Subsection D below. The Director of Construction and Land Use may impose additional requirements, including a comprehensive drainage control plan prepared by a licensed civil engineer, when the project has complex or unusual drainage, or when additional requirements are otherwise necessary to accomplish the purposes of this Subtitle.



5. Memorandum of Drainage Control. The owner(s) of the site shall sign a
"memorandum of drainage control" that has been prepared by the Director of Seattle Public
Utilities. Completion of the memorandum shall be a condition precedent to issuance of any
permit or approval for which a drainage control plan is required. The memorandum shall not be
required when the drainage control facility will be owned and operated by the City. A
memorandum of drainage control shall include:

a. The legal description of the site;

b. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;

e. An agreement that the owner(s) shall inform future purchasers and other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;

d. The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;

e. Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes;

f. An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and

g. The owner(s)' signatures acknowledged by a notary public.

The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real property records. The applicant shall give the Director of Seattle Public Utilities proof of filing of the memorandum.

6. Flood Prone Areas. Sites within flood prone areas must employ measures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including but not limited to,



SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Director of Scattle Public Utilities and the Director of Construction and Land Use to meet the purposes of this subsection.

- 7. Natural Drainage Patterns. Natural drainage patterns shall be maintained.
- 8. Obstruction of Watercourses. Watercourses shall not be obstructed.

D. Additional Requirements for Large Projects. All projects exceeding 9,000 square feet of developmental coverage and those small projects identified by the Director according to Subsection C above must comply with the requirements set forth in this subsection. These requirements are in addition to the requirements set forth in Subsection C above. When the Directors develop rules prescribing best management practices for particular purposes, whether or not those rules are adopted by ordinance, BMPs prescribed in the rules shall be the BMPs required for compliance with this Subsection. Best management practices shall include, but not be limited to: maintenance and housekeeping practices such as proper storage of oil barrels and other contaminant sources, covering material stockpiles, proper use and storage of hazardous materials, as well as constructed facilities such as detention tanks, wet ponds, extended detention dry ponds, infiltration, vegetated streambank stabilization, structural stabilization, catch basins, oil/water separators, grassed swales, and constructed wetlands.

- 1. In addition to detaining a 25-year storm to a release rate of 0.2 cubic feet per second per acre, the peak drainage water discharge rate from projects of more than 9,000 square feet of developmental coverage shall not exceed 0.15 cubic feet per second per acre in a two-year storm;
- 2. Control the sources of sediment and other contaminants and pollutants that could enter drainage water, including the selection, design and maintenance of temporary and permanent best management practices;
- 3. Minimize streambank erosion and effects on water quality in streams, including the selection, design and maintenance of temporary and permanent best management practices, where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream;
- 4. Minimize the introduction of sediment, heat and other pollutants and contaminants into wetlands, including the selection, design and maintenance of temporary and permanent best



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management practices,	where stormwate	<del>r discharges</del>	directly to a	wetland or to	<del>a conveyance</del>
system that discharges i	nto a wetland;				

- 5. Analyze impacts to off-site water quality resulting from the project. The analysis shall comply with this Subsection and rules promulgated pursuant to this Subsection. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion;
  - c. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 6. A schedule shall be provided for inspection and maintenance of proposed temporary and permanent drainage control facilities and other best management practices. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- 7. In addition to the requirements described above, for land-disturbing activities and demolition of structures, an erosion/sediment control plan designed to comply with the requirements and purposes of this Subtitle and rules promulgated herounder shall be submitted and implemented. The erosion/sediment control plan shall be designed to accomplish the following:
  - a. Stabilization of exposed soils and sediment trapping;
  - b. Delineation of limits on clearing and easements;
  - c. Protection of adjacent property;
  - d. Appropriate timing and stabilization of sediment trapping measures;
  - e. Minimization of erosion on cut-and-fill slopes;
  - f. Control of off-site erosion;
  - g. Stabilization of temporary conveyance channels and outlets;
  - h. Protection of storm drain inlets;
  - Minimization of transport of sediment by construction vehicles;
  - j. Appropriate timing for removal of temporary best management practices;



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k. Control of discharges from construction site dewatering devices to minimize contamination of drainage water; and

- 1. Inspection and maintenance of best management practices for erosion/sediment control to insure functioning at design capacity.
- 8. Comprehensive Drainage Control Plan. A comprehensive drainage control plan to comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by a licensed civil engineer in accordance with standards adopted by the Director of Construction and Land Use.

E. Basin Plans. The Director of Construction and Land Use may determine that, for a particular project, compliance with a drainage basin plan satisfies Subsections D1 through D4 above. The basin plan must have been adopted by rule or ordinance and must provide a level of protection for surface water and groundwater that equals or exceeds that which would otherwise be achieved.))

# 22.802.015 Drainage, erosion control, and source control requirements for all land disturbing activities or addition or replacement of impervious surface.

- A. Compliance required. All land disturbing activities or addition or replacement of impervious surface are required to comply with this section, even where drainage control review is not required. Exception: Maintenance, repair, or installation of underground or overhead utility facilities, such as, but not limited to, pipes, conduits and vaults, is not required to comply with the provisions of this section except subsection C3 below.
- B. Approval of exceptions required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that do not require drainage control review, unless allowed by this Subtitle, by rule promulgated jointly by the Director of SPU and the Director of DCLU, or approved by the Director of DCLU. Approval shall be obtained prior to initiating land disturbing activities or adding or replacing impervious surface. Approvals are required for exceptions to any and all requirements of this Subtitle, including but not limited to the



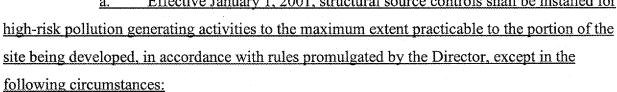
requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.

## C. Requirements for all projects.

- 1. Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Directors of SPU and DCLU specifying criteria, guidelines, and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the drainage review threshold, the proposed discharge point shall be identified in the drainage control plan required by Section 22.802.020, for review and approval or disapproval by the Director of DCLU.
- 2. Flow control. The peak drainage water discharge rate from the portion of the site being developed shall not exceed 0.2 cubic feet per second per acre under 25-year, 24-hour design storm conditions or 0.15 cubic feet per second per acre under 2-year, 24-hour design storm conditions unless the site discharges water directly to a designated receiving water or to a public storm drain which the Director of SPU determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2,000 square feet of new and replaced impervious surface shall be required to install and maintain a flow control facility, in accordance with rules promulgated by the Director, that is sized for the volume of runoff routed through the facility. Approved exceptions and flow control methods may be prescribed in rules promulgated by the Director.
- 3. Construction stormwater control. During land disturbing activities or addition or replacement of impervious surface, temporary and permanent construction controls shall be used to accomplish the following (a-g). Rules promulgated jointly by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director of DCLU when minimum controls are not sufficient to prevent erosion or transport of sediment or other pollutants from the site.
- a. Prevent on-site erosion by stabilizing all soils, including stock piles, that are temporarily exposed. Methods such as, but not limited to, the installation of seeding, mulching, matting, and covering may be specified by rules promulgated by the Director. From



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October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1
to September 30, no soils shall remain unstabilized for more than seven days.
b. Before the completion of the project, permanently stabilize all exposed
soils that have been disturbed during construction. Methods such as permanent seeding,
planting, and sodding may be specified by rules promulgated by the Director.
c. Prevent the transport of sediment from the site. Appropriate use of
methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt
fences, sediment traps, settling ponds, and protective berms may be specified in rules
promulgated by the Director.
d. During construction, prevent the introduction of pollutants in addition to
sediment into stormwater. Appropriate methods, as prescribed in rules promulgated by the
Director, include operational source controls such as but not limited to spill control for fueling
operations, equipment washing, cleaning of catch basins, treatment of contaminated soils, and
proper storage and disposal of hazardous materials.
e. Limit construction vehicle access, whenever possible, to one route.
Stabilize access points as specified in rules promulgated by the Director to minimize the
tracking of sediment onto public roads.
f. Inspect and maintain required erosion and sediment controls as prescribed
in rules promulgated by the Director to ensure continued performance of their intended function
g. Prevent sediment from entering all storm drains, including ditches, which
receive runoff from the disturbed area.
4. Source control.
a. Effective January 1, 2001, structural source controls shall be installed for



i. When that portion of the site being developed discharges only to the public combined sewer; or

<u>ii.</u> For normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or



adversely affect the safety and	l operation	of city r	ight-of-way,	utilities,	or other	property	owned
or maintained by the City.		•					

- b. The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:
- i. Enclose, cover, or contain within a berm or dike the high-risk pollution generating activities;
- ii. Direct drainage from containment area of high-risk pollution
  generating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to
  discharging to a public drainage control system;
- iii. Pave, treat, or cover the containment area of high-risk pollution generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution generating activity; and
- iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution generating activities.
- 5. Flood-prone areas. On sites within flood prone areas, responsible parties are required to employ procedures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including, but not limited to, SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Directors of SPU and DCLU to meet the purposes of this Subtitle.
  - 6. Natural drainage patterns. Natural drainage patterns must be maintained.
  - 7. Obstruction of watercourses. Watercourses shall not be obstructed.
- 8. Water Quality Sensitive Areas. The Director of SPU may impose additional requirements for areas determined to be water quality sensitive areas.
- D. The Director of DCLU may require sites with addition or replacement of 5,000 square feet or less of impervious surface and with less than one acre of land disturbing activity to comply with the requirements set forth in 22.802.016, in addition to the requirements set forth in this Section, when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of DCLU may consider, but not be limited to, the following



attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and tributary to an area with known erosion or flooding problems.

**Section 29.** A new Section 22.802.016 is added to the Seattle Municipal Code to read as follows:

### 22.802.016 Additional requirements for large projects.

A. Applicability. One acre or more of land disturbing activity or addition or replacement of 5,000 square feet or more of impervious surface shall comply with the requirements set forth in this section, in addition to the other applicable requirements of this Subtitle. Exception:

Maintenance, repair, or installation of underground or overhead utility facilities, such as, but not limited to, pipes, conduits and vaults, is not required to comply with the provisions of this section except subsection B7.

#### B. Requirements

- 1. Flow Control. Effective January 1, 2001, in addition to the discharge rate specified in Section 22.802.015, the peak drainage water discharge rate shall not exceed 0.5 cubic feet per second per acre in a 100-year, 24-hour design storm for portions of the site being developed that drain to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake, as defined by Section 25.09.020 or to a drainage control system that drains to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake.
  - 2. Stormwater Treatment.
- a. Effective January 1, 2001, stormwater treatment facilities shall be installed and maintained to treat that portion of the site being developed, as specified in this section and in rules promulgated jointly by the Directors of DCLU and SPU, unless the following conditions exist:
- i. The site produces no stormwater runoff discharge as determined by a licensed civil engineer; or
  - ii. The entire project drains to a public combined sewer.



- b. Stormwater treatment facilities shall be designed to treat the runoff volume from the 6-month, 24-hour storm, collected from the drainage area being routed through the facility.
- c. One of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated jointly by the Directors: infiltration, wetpond, stormwater wetland, biofiltration swale, filter strip, wet vault, media filter, or an alternative technology if the conditions in subsection e below are met.
- d. For high-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director, in addition to other required treatment facilities:
  - i. Coalescing plate/oil water separator;
  - ii. Media filter;
  - iii. API oil/water separator; or
- iv. An alternative technology if the conditions in subsection e below are met.
- e. Alternative technology to meet runoff treatment requirements may be permitted if the following criteria are met, as further specified in rules promulgated jointly by the Directors of SPU and DCLU:
- i. Treatment effectiveness monitoring is conducted, which requirement may be waived if sufficient research has been conducted to demonstrate to the Director of SPU's satisfaction that an alternative technology offers equivalent protection;
- ii. Monitoring and maintenance records are reported to the Director of SPU at the end of each of the first three years following installation; and
- iii. The applicant demonstrates to the Director of SPU's satisfaction that the alternative will provide protection equivalent to the methods prescribed in the applicable subsection c or d above.
- f. The Director of SPU may ask the Washington State Department of Ecology to approve a commitment by the City to develop a water quality improvement plan to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the



 Directors may grant exemptions to or make inapplicable the treatment requirements of this Section 22.802.016 B2, pursuant to rules promulgated by the Directors.

- 3. Protection of Streams. Where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream, streambank erosion and effects on water quality in streams shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls.
- 4. Protection of Wetlands. Where stormwater discharges directly to a wetland, as defined by SMC Chapter 25.09, or to a conveyance system that discharges to a wetland, the introduction of sediment, heat, and other pollutants and contaminants into wetlands shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls. Discharges to wetlands of exceptional value, as defined by SMC Chapter 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of the wetland. Detention and treatment systems shall not be located within any wetland or its buffer. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and infiltration options outside the wetland shall be maximized.
- 5. Off-site Analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage system that drains to that stream, impacts to off-site water quality resulting from the project are to be analyzed and mitigated. The analysis shall comply with this Section and rules the Directors may jointly promulgate pursuant to this Section. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The analysis shall evaluate impacts likely to occur ¼ mile downstream from the project. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion;
  - c. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 6. Inspection and Maintenance Schedule. Temporary and permanent drainage control and stormwater treatment facilities and other controls shall be inspected and maintained



according to a schedule submitted to the Director. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.

- 7. Construction Stormwater Control. In addition to the requirements described above in Section 22.802.015, construction stormwater controls shall be used to accomplish the following (a-j). Rules promulgated by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director when minimum controls are not sufficient to prevent the erosion or transport of sediment or other pollutants from the site. These controls (a-j below) and those required by 22.802.015 C3 shall be shown on a construction stormwater control plan complying with the requirements and purposes of this Subtitle and rules promulgated hereunder and submitted to the Director. The construction stormwater control plan shall address at least the following (a-j) and Section 22.802.015 C3:
- a. Before leaving the site, stormwater runoff shall pass through a sediment trap, sediment pond, or similar device;
- b. In the field, clearing limits and any easements, setbacks, critical areas and their buffers, trees, and drainage courses shall be marked;
- c. Sediment ponds and traps, perimeter dikes, sediment barriers, and other erosion and sedimentation controls intended to trap sediment on site shall be constructed as a first step in grading. These controls shall be functional before the land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized in accordance with Section 22.802.015 C3;
- d. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes will be stabilized in accordance with Section 22.802.015 C3 above;
- e. Properties and waterways downstream from the project site shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site;
- f. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour design storm for the developed condition. Stabilization adequate to prevent erosion of outlets,



 adjacent streambanks, slopes, and downstream reaches shall be provided at the outlets of all conveyance systems;

- g. Whenever construction vehicle access routes intersect paved roads, the transport of sediment onto the paved road shall be minimized. If sediment is transported onto a paved road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from paved roads by shoveling or sweeping and shall be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner;
- h. All temporary erosion and sediment controls shall be removed within 30 days after final site stabilization is achieved or after the temporary controls are no longer needed, whichever is later. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized;
- i. When dewatering devices discharge on site or to a public drainage control system, dewatering devices shall discharge into a sediment trap or sediment pond or gently sloping vegetated area; and
- j. In the construction of underground utility lines, where feasible, no more than 500 feet of trench shall be opened at one time, unless soil is replaced within the same working day, and where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches. Trench dewatering devices shall discharge into a sediment trap or sediment pond.
- **Section 30.** Section 22.802.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432, is amended as follows:

((22.802.020 - SCOPE OF DRAINAGE CONTROL REVIEW AND APPLICATION REQUIREMENTS

- A. Scope of Review. Where drainage review and approval are required by Section 22.802.015, the scope of this review shall at least include the following:
- 1. Master Use Permit Applications. Master use permit applications shall contain sufficient information to allow the Director of Construction and Land Use to determine the



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effects of stormwater on- and off site, including the propriety of a proposed discharge point, compliance with requirements for permanent drainage control facilities, compliance with the requirements to maintain natural drainage patterns and not obstruct watercourses, compliance with applicable flood control requirements, and whether improvements to the public drainage control system shall be required. These determinations shall be part of approved master use permit conditions, and shall be used as a basis for further drainage planning for building permits and other permits listed below.

- 2. Applications for Building and Other Permits. The Director of Construction and Land Use shall review any application for a building permit or other permit listed in Section 22.802.015, other than master use permit applications, for compliance with Section 22.802.015 and to determine whether improvements to the public drainage control system shall be required.
- 3. Projects Exceeding 9,000 Square Feet. For projects exceeding 9,000 square feet of developmental coverage, in addition to the review criteria set forth above, the Director of Construction and Land Use shall review the comprehensive drainage control plan for compliance with applicable requirements.
- 4. Exceptions. Requests for exceptions to requirements shall be reviewed as set forth in Section 22.808.010.

# B. Application and Approval Requirements.

- 1. Drainage control plans for projects subject to review under Subsection 22.802.015 shall be reviewed by the Director of Construction and Land Use. The Director of Construction and Land Use may approve those plans which comply with the provisions of this Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order to assure compliance with the provisions of this Subtitle. Submission of the required drainage control application information shall be a condition precedent to the processing of any of the above-listed permits. Approval of drainage control shall be a condition precedent to issuance of any of the above-listed permits.
- 2. The Director of Construction and Land Use may disapprove plans which do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.



#### C. Submittal Requirements

- 1. Applications shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16 (Side Sewers) and with associated rules and regulations adopted jointly by the Director of Construction and Land Use and the Director of Seattle Public Utilities.
- 2. The Director of Construction and Land Use may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of Construction and Land Use may also require appropriate information about adjoining properties which may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.
- 3. Where an applicant simultaneously applies for more than one of the permits listed in Subsection A above for the same property, the application shall comply with the requirements for the permit which are the most detailed and complete.))

# 22.802.020 Drainage control review and application requirements.

- A. Thresholds for drainage control review. Drainage control review and approval shall be required for any of the following:
- 1. Standard drainage control review and approval shall be required for the following:
- a. Any land disturbing activity encompassing an area of 750 square feet or more;
- b. Applications for either a master use permit or building permit that includes the cumulative addition of 750 square feet or more of land disturbing activity and new and replaced impervious surface;
  - c. Applications for which a grading permit or approval is required:



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d. Applications for street use permits for the cumulative addition of 750
square feet or more of new and replaced impervious surface and land disturbing activity after
he effective date of the Ordinance codified in this Subtitle;

- e. City public works project or construction contracts, including contracts for day labor and other public works purchasing agreements, for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity to the site after the effective date of the Ordinance codified in this Subtitle, except for projects in a City-owned right-of-way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation;
- f. Permit approvals and contracts that include any new or replaced impervious surface on a site deemed a potentially hazardous location, as specified in Section 22.800.050; or
- g. Whenever an exception to a requirement set forth in this Subtitle or in a rule promulgated under this Subtitle is desired, whether or not review and approval would otherwise be required, including but not limited to, alteration of natural drainage patterns or the obstruction of watercourses.
- 2. Large project drainage control review and approval shall be required for projects that include:
  - a. 5,000 square feet or more of new or replaced impervious surface; or
    b. 1 acre or more of land disturbing activity.
- 3. The City may, by interagency agreement signed by the Directors of SPU and DCLU, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges for the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Subtitle, unless exceptions are granted as set forth in Section 22.808.010.
- B. Submittal requirements for drainage control review and approval
- 1. Information Required for Standard Drainage Control Review. The following information shall be submitted to the Director for all projects for which drainage control review is required.



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a. Standard Drainage Control Plan. A drainage control plan shall be
submitted to DCLU. Standard designs for drainage control facilities as set forth in rules
promulgated by the Director may be used.
b. Construction Stormwater Control Plan (Standard Erosion and Sedin
Control Plan). A construction stormwater control plan demonstrating controls sufficient t

- b. Construction Stormwater Control Plan (Standard Erosion and Sediment Control Plan). A construction stormwater control plan demonstrating controls sufficient to determine compliance with Section 22.802.015 C3 shall be submitted. The Director may approve a checklist in place of a plan, pursuant to rules promulgated by the Director.
- c. Memorandum of Drainage Control. The owner(s) of the site shall sign a "memorandum of drainage control" that has been prepared by the Director of SPU. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real property records. The applicant shall give the Director of SPU proof of filing of the memorandum. The memorandum shall not be required when the drainage control facility will be owned and operated by the City. A memorandum of drainage control shall include:
  - i. The legal description of the site;
- ii. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;
- iii. An agreement that the owner(s) shall inform future purchasers and other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;
- iv. The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;
- v. Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes:
- vi. An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and



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- 2. Information required for large project drainage control review. In addition to the submittal requirements for Standard Drainage Control Review, the following information is required for projects that include 1 acre or more of land disturbing activities or 5,000 square feet or more of new and replaced impervious surface.
- a. Comprehensive Drainage Control Plan. A comprehensive drainage control plan, in lieu of a Standard Drainage Control Plan, to comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by a licensed civil engineer in accordance with standards adopted by the Director of DCLU.
- b. Inspection and Maintenance Schedule. A schedule shall be submitted that provides for inspection of temporary and permanent drainage control facilities, treatment facilities, and source controls to comply with Sections 22.802.015 and 22.802.016.
- c. Off-site analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage control system that discharges to that stream, an analysis of impacts to off-site water quality resulting from the project prepared in accordance with Section 22.802.016 shall be submitted.
- d. Construction Stormwater Control Plan. A construction stormwater control plan prepared in accordance with Section 22.802.015 and 22.802.016 shall be submitted.
- 3. Applications for drainage control review and approval shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16, Side Sewers, and with associated rules and regulations adopted jointly by the Directors of DCLU and SPU.
- 4. The Director of DCLU may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including but not limited to SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of DCLU may also require appropriate information about adjoining properties that may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.



- 5. Where an applicant simultaneously applies for more than one of the permits listed in subsection A above for the same property, the application shall comply with the requirements for the permit that is the most detailed and complete.
- C. Authority to Review. The Director of DCLU may approve those plans that comply with the provisions of this Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order to assure compliance with the provisions of this Subtitle. Submission of the required drainage control application information shall be a condition precedent to the processing of any of the above-listed permits. Approval of drainage control shall be a condition precedent to issuance of any of the above-listed permits. The Director of DCLU may review and inspect activities subject to this Subtitle and may require compliance regardless of whether review or approval is specifically required by this Section. The Director of DCLU may disapprove plans that do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.
- **Section 31.** Section 22.802.090 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended at Subsection 22.802.090A as follows:

# 22.802.090 Maintenance and inspection.

A. Responsibility for maintenance and inspection. Drainage control facilities, source controls, and stormwater treatment facilities required by this Subtitle and by rules adopted hereunder, shall be maintained as specified in rules promulgated by the Director, by the owner ((ef)) and other responsible party. The owner ((ef)) and other responsible party shall inspect permanent drainage control facilities at least annually, and shall inspect temporary drainage control facilities and other temporary best management practices or facilities on a schedule consistent with Section 22.802.016 B6 of this Subtitle and sufficient for the facilities to function at design capacity. The Director of ((Seattle Public Utilities)) SPU may require the responsible party to conduct more frequent inspections and/or maintenance when necessary to insure



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functioning at design capacity. The owner(s) shall inform future purchasers and other successors and assignees to the property of the existence of the drainage control facilities and the elements of the drainage control plan, the limitations of the drainage control facilities, and the requirements for continued inspection and maintenance of the drainage control facilities.

Section 32. Section 22.804.030 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 117697, is amended as follows:

#### 22.804.030 Grading permit or approval required.

- A. Grading Permit Required. A grading permit ((shall be)) is required for all grading activities as specified below. Actions exempt from a grading permit are specified in Subsection C.
- 1. Special Sites. A permit shall be required for any site located in ((one (1))) any of the following areas if the combined volume of excavation, fill, dredging, or other movement of earth materials is more than twenty-five (25) cubic yards:
- Shoreline districts((, except)) as defined in SMC 23,60,010. In addition to the permit requirement established in A.1, a permit ((shall be)) is also required for any grading within ten (10) feet of the line of mean higher high tide adjoining saltwater or the line of mean high water adjoining fresh water and for any grading of lands covered by water; ((of))
- b. Environmentally critical areas as defined in SMC 25.09 ((f)) except liquefaction-prone and abandoned landfills.(())) In addition to the permit requirement established in A.1:
- A permit is required for any grading within wetlands and their buffers, or Riparian corridor buffers:
- Grading activities that increase the potential for earth movements or the risk of damage due to earth movement within steep slopes or other landslide hazard areas is prohibited;



c. The drainage basins of Thornton Creek, Pipers Creek, Longfellow Creek, and Taylor Creek, as mapped by SPU, unless stormwater runoff from the site is discharged to a combined sewer system or otherwise piped (tightlined) to a drainage basin other than the named drainage basin.

((Grading may be prohibited in certain environmentally critical areas. For additional requirements see Regulations for Environmentally Critical Areas, SMC 25.09.))

- 2. Potentially Hazardous Locations. A permit ((shall-be)) is required for any site identified under the provisions of Section 22.800.050 for any volume of excavation, fill, dredging or other movement of earth materials.
- 3. Grading Near Public Places. A permit ((shall-be)) is required for all grading activities in excess of four feet (4'), measured vertically, on private property within any area between the vertical prolongation of the margin of a public place, and a one-hundred percent (100%) slope line (forty-five degrees (45°) from a horizontal line) from the existing elevation of the margin of a public place to the proposed elevation of the private property.
- 4. General Sites. For sites not included in Subsections A1 and A2 above, a permit ((shall be)) is required where the grade at any location is changed more than three feet (3') and either:
- a. The cumulative volume of excavation, fill, dredging or other movement of earth materials is more than one hundred (100) cubic yards over the lifetime of the site; or
- b. The grading will result in a slope steeper than three (3) horizontal to one (1) vertical.
- 5. In-place Ground Modification. A permit ((shall-be)) is required for any site where in-place ground modification will take place. The Director of ((Construction and Land Use)) DCLU may waive the requirement for a permit when the Director determines the in-place ground modification will be insignificant in amount or type.
- 6. Temporary Stockpiles. A grading permit or approval ((shall be)) is required for temporary stockpiles which meet the thresholds of Subsections A1, A2 and A4 above and are not located on sites for which a valid grading permit or grading approval has been issued.
- B. Grading Approvals Required.



- 1. A grading approval ((shall-be)) is required for grading activities located on any site where a concurrent building permit is requested except that no approval is required for grading activities where the combined volume is less than the amounts specified for each site in Subsection A above.
- 2. Where a grading approval is required and issued as a component of a building permit, no separate grading permit shall be required. This provision shall apply to grading which is incidental to construction, the temporary stockpiling of earth materials during construction and grading needed for other site improvements. Where there will be construction or placement of a building within the lifetime of the permit, the grading approval shall be a component of the building permit.
- C. Exemptions. The following grading activities shall be exempt from a grading permit, but ((must)) shall still comply with the provisions of this Subtitle:
- 1. Activity conducted under a street use permit ((which)) that specifically authorizes the grading work to be performed;
  - 2. Excavations and filling of cemetery graves;
- 3. Exploratory excavations ((which)) that comply with the requirements of Section 22.804.050;
  - 4. Operation of sewage treatment plant sludge settling ponds;
- 5. Operation of surface mines for the extraction of mineral and earth materials subject to the regulations and under a permit of the State of Washington;
- 6. Stockpiling and handling of earth material when the earth material is consumed or produced in a process which is the principal use of the site and which complies with the requirements of Section 22.804.050;
- 7. Maintenance or reconstruction of active tracks and yards of a railroad in interstate commerce within its existing right-of-way;
- 8. Maintenance or reconstruction of the facilities of parks and playgrounds including work required for the protection, repair, replacement or reconstruction of any existing paths, trails, sidewalks, public improvement or public or private utility, and the stockpiling of material for maintenance activities;
  - 9. Excavation and filling of post holes;



- 10. On-site work required for construction, repair, repaying, replacement or reconstruction of an existing road, street or utility installation in a public right-of-way;
- 11. Trenching and backfilling for the installation, reconstruction or repair of utilities on property other than a public right-of-way;
- 12. Grading done in performance of work authorized by the City for public works projects (((S))see also Section 22.800.070);
- 13. Public works and other publicly funded activities on property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system, and the project will not undercut or otherwise endanger adjacent property, and the Director has waived the permit requirements by interagency agreement;
- 14. Underground storage tank removal and replacement that is subject to regulation by a state or federal agency, except where excavation meets the criteria of Section 22.804.030 A $\underline{3}$  (( $\underline{(3)}$ )), Grading Near Public Places.
- D. Compliance Required for All Grading. Any grading activity, whether or not it requires a grading permit or approval, shall comply with the provisions of this Subtitle.
- **Section 33.** Section 22.804.040 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.804.040 Grading permit or approval: application requirements

- A. General. Application for a grading permit or approval shall be made to the Director of ((Construction and Land Use)) <u>DCLU</u> by the owner of the property to be graded. All applications shall contain the submittal information detailed in this section.
- B. Plans required.
- 1. Projects requiring plans. The information listed in subsection B2 below shall be provided on plans submitted with each application for a grading permit or approval. However, when the only grading included in an application is for an approved drainage control plan or is



for excavation and replacement of earth material within an area four feet (4') or less from the footing lines of a building or structure, the only information required is the location of temporary stockpiles.

- 2. Information to be submitted on plans. The following information shall be submitted with applications for projects requiring plans.
  - a. A general vicinity map and legal description of the site;
- b. A plot plan showing: location of existing buildings and structures, easements, utilities and other surface and above-ground improvements on the property where the work is to be performed; the approximate location of all buildings, structures and other improvements on adjacent land; the location of existing and planned temporary and permanent drainage control facilities, existing and proposed drainage discharge points, watercourses, drainage patterns, environmentally critical areas, and areas of standing water; the approximate location, type and size of trees and other vegetation on the site; designation of trees and vegetation to be removed, and the minimum distance between tree trunks and the nearest excavation and/or fill; and areas where equipment traffic will be permitted and excluded;
- c. The latest available topographic map, including cross-sections of the site and adjacent property, showing the present and proposed contours of the land at not more than two-foot (2') contour intervals, and the location and amount of all temporary stockpiles and excavations. On steeper sites, the Director of ((Construction and Land Use)) DCLU may authorize plans to show a contour interval greater than two feet (2') but in no case more than a five-foot (5') interval. The information relating to adjacent properties may be approximated;
- d. A drainage control plan as set forth in Section ((22.802.015)) 22.802.020, except when the grading is limited to the area providing for vehicular and pedestrian access to the building or to the temporary stockpiling of excavated material.
- 3. Number required. A minimum of three (3) sets of plans shall be submitted with each application for a grading permit. The number of plan sets required for grading approval applications shall be the same as required for the specific permit application. Additional sets may be required by the Director.
- 4. Clarity of plans. Plans shall be drawn to a clearly indicated and commonly accepted scale upon substantial paper such as blueprint quality or standard drafting paper.

  Tissue paper, posterboard or cardboard will not be accepted. The plans shall be of microfilm



quality and limited to a minimum size of 18 inches (18") by 18 inches (18") and a maximum size of 41 inches (41") by 54 inches (54").

- 5. Preparation by Civil Engineer. The grading plans shall be prepared by, or under the direction of, a licensed civil engineer for all applications where the total amount of materials graded is more than two thousand five hundred (2,500) cubic yards. The Director of ((Construction and Land Use)) DCLU may require that grading plans for lesser quantities be prepared by or under the direction of a licensed civil engineer for sites such as, but not limited to, those in geologic hazard zones and areas with known erosion problems.
- 6. Stamping by Geotechnical((/Civil)) Engineer. When required by the Director of ((Construction and Land-Use)) DCLU in accordance with the provisions of this Subtitle, the grading plans shall be reviewed and stamped by the geotechnical((/eivil)) engineer who performed the site analysis and report to indicate that the plans conform to the conclusions and recommendations of the report.

## C. Information required.

- 1. Required with Application. The following information shall be submitted with grading plans at the time of application:
- a. The disposal site for any excavated materials to be removed from the site. If the disposal site is located within the City limits and is not an approved disposal site, an application for a grading permit for the disposal site shall be submitted at the same time as the application for grading permit or approval at the excavation site. In the event that the applicant is unable to specify the disposal site at the time of application, the applicant shall request, in writing, a postponement of the identification of the disposal site. The request shall include a commitment that the applicant will specify a disposal site acceptable to the Director of ((Construction and Land Use)) DCLU prior to any excavation;
- b. Where placement of a fill is proposed, a description of the composition of fill material and its structural qualities;
- c. Where any portion of the grading will encroach on an adjacent property, proof of ownership and an easement or authorization in accordance with Section 22.804.100;
  - d. The immediate and long-term intended use of the property;



	e.	Identification of past industrial or manufacturing uses or hazardous
materials tr	eatment,	disposal or storage that have occurred on the site;

- f. Where a site is located in an area identified pursuant to Section 22.800.050, a copy of all applicable permit or approval applications, and/or permits and approvals from the appropriate regulatory agencies;
- g. When required by Section ((22.802.015)) 22.802.020, an erosion/sediment control plan;
- h. Where the site is located in an area of potential landslide, a draft covenant complying with the requirements of Section 22.808.130.
- i. Each grading proposal shall contain provisions for the preservation of natural drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and for replacement, where necessary, of vegetation or other means to control runoff.
- 2. Required after Initial Screening. The Director of ((Construction and Land Use))

  DCLU may require the following information after the initial screening of a grading application:
- a. A description of methods to be used to minimize sediment or other pollution from leaving the site during and after construction and to protect cleared areas and cut and fill slopes from erosion;
- b. A time schedule of operations, including but not limited to, implementation of the <u>applicable</u> requirements of <u>Sections</u> 22.802.015 <u>and 22.802.016</u>, clearing, minimization of grading of unprotected soil surfaces, restoration of topsoil and vegetative cover, and construction of improvements;
- c. A survey of boundaries and topography of the site and the grades of adjacent public rights-of-way prepared by a surveyor licensed by the State of Washington;
  - d. A soils analysis complying with the following:
- (((1)))i. When Required. A soils analysis and report may be required when an application for a grading permit or approval is made for property located:
  - (A) In areas described in Section 22.800.050,
  - (B) In areas where there is a potential for landslide,
  - (C) In areas where grading may result in instability of the site

or adjoining property,



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- (D) In areas where soils may not be suitable for the use
- (E) In areas where the Director determines pollutants are likely to be present, or
- (F) In any area where the Director determines that the information which would be supplied by a soils analysis and report is necessary for the review of the application((5)).
  - (((2)))ii. Contents. The soils analysis and report shall include:
- (A) Data regarding the nature, distribution and strength of existing soils and subsurface conditions,
- (B) History of the site including history of landslides, known excavations and fills, and location of utilities,
- (C) Where appropriate as indicated by information provided under subsection B above, analytical testing of soils to determine the concentration of pollutants,
- (D) Conclusions and recommendations for clearing the site, of the adequacy of the site for proposed immediate and long-term intended use, foundation, retaining and structural designs, grading methods, and construction and post-construction monitoring, and
- (E) Other information as determined necessary by the Director to adequately evaluate compliance with the requirements of this Subtitle and accomplishment of its purposes, such as an assessment of contamination when past industrial or chemical use have been present on the site((5)).
- (((3)))<u>iii.</u> Preparation. The soils analysis and report shall be prepared by an experienced geotechnical((/eivil)) engineer or other equally qualified person approved by the Director. The Director may require that the plans and specifications be stamped and signed by the geotechnical((/eivil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of the reports(( $\frac{1}{2}$ )).
- (((4)))iv. Minimal Risk. In geologic hazard areas as identified in SMC Chapter 25.09, Regulations for Environmentally Critical Areas, the geotechnical((/eivil)) engineer who prepared the soils analysis and report may be required to submit a letter stating



that the plans and specifications conform to the recommendations of the soils analysis and report. The letter shall also state that, so long as conditions stated in the soils report are satisfied, areas disturbed by construction will be stabilized, the risk of damage to the proposed development or to adjacent properties from soil instability will be minimal, and the proposed grading and development will not increase the potential for soil movement.

- e. Site Analysis. For properties located in any of the areas identified in Subsection d, an analysis and report of the following site factors. The analysis and report shall be prepared by a licensed civil engineer or other person approved by the Director.
- $(((\frac{1}{2})))i$ . A description of the hydrology of the site and the drainage basin in which the development is located $((\frac{1}{2}))$ .
- $((\frac{(2)}{2}))ii$ . The effect of grading upon surrounding properties, watercourses and the drainage basin, including impacts on water quality and fish habitat when a stream, lake or other body of water is affected. Where applicable, the analysis specified in Section  $((\frac{22.802.015D(5)}{22.802.016B5}))$  may also be required  $(\frac{1}{5})$ .
- f. A letter in a form acceptable to the Director from the owner of the site stating that the owner understands and accepts the risk of developing in an area with potentially unstable soils and that the owner will advise, in writing, any prospective purchasers of the site, structures or portions of a structure about the landslide potential of the site.
- g. The Director may require additional information pertaining to the specific site and any other relevant information needed in order to assess potential hazards associated with the site and to determine whether a grading permit or approval should be issued.
- **Section 34.** Section 22.804.050 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.804.050 Grading requirements.

A. Earth movement. Grading shall not create or increase the likelihood of earth movement, including but not limited to, landslides, accelerated soil creep, settlement and subsidence, and hazards associated with strong ground motion and soil liquefaction of the site to be graded and adjoining properties.



- B. Natural features. Each grading proposal shall contain provisions for the preservation of <u>natural</u> drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and replacement, where necessary, of vegetation or other means to control runoff.
- C. Watercourses. Grading shall not create or contribute to flooding, erosion, or increased turbidity, siltation or other forms of pollution in a watercourse, and shall comply with the <u>applicable</u> requirements of ((Section 22.802.015)) Chapter 22.802.
- D. Pollution control. Grading shall be performed, and the completed work shall be in accordance with, all applicable environmental laws, rules and regulations, and with the <u>applicable</u> requirements of ((Section 22.802.015)) Chapter 22.802.
- E. Conformance with plans. Grading shall be performed in accordance with the plans approved by the Director of ((Construction and Land Use)) DCLU.
- F. Slopes. Final graded slopes shall be no steeper than is safe for the intended use, and shall in no case be steeper than two (2) horizontal to one (1) vertical. For requirements for temporary slopes see Sections 22.804.050 M and 22.804.100.
- G. Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, non-approved materials, topsoil and other unsuitable materials, including but not limited to mud, peat, and other materials with insufficient strength to satisfy the design as determined by the Director.
- H. Fills. Fills shall be located so that the base edge of the fill is located more than twelve (12) feet horizontally from the top edge of an existing slope or a planned cut slope. A sloping fill shall not be placed on top of slopes which are steeper than one and one-half (1 ½) horizontal to one (1) vertical.



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- I. Requirements for fill material. Materials used in fills shall comply with the following requirements:
- 1. Material used in filling shall be appropriate to the site and the intended use of that portion of the site.
- 2. Fill shall be composed of earth materials. Any rock or other similar irreducible material used in a fill shall be of a maximum diameter of twelve inches (12") and shall compose not more than twenty percent (20%) of the total fill material.
- 3. Topsoil shall not be used as a fill material except that the upper twelve inches (12") of a fill site may be covered with topsoil.
  - 4. No frozen or thawing material shall be used in a fill.
  - 5. No solid waste, hazardous waste or hazardous material may be used in a fill.
  - 6. No organic material shall be used in a fill unless approved by the Director.
- 7. As necessary, the Director shall specify other characteristics of the fill material used, the degree of compaction, moisture content, and the method of placement appropriate to the site and the intended use of that portion of the site and the requirements for water retention, drainage control and erosion control.
- J. Terraces. The Director may require steps and terraces sufficient to control surface drainage and deposit of debris. Suitable access to the terraces shall be provided to permit proper cleaning and maintenance.
- K. Subsurface Drainage. Cut-and-fill slopes shall be provided with subsurface drainage when needed to maintain slope stability.
- L. Access. When an adjoining site relies on the site to be graded for pedestrian or vehicular access, the Director may require reasonable access to be maintained to the adjoining site.
- M. Stockpiling of Earth Materials.
- 1. General. Stockpiling of any kind shall not adversely affect the lateral support or significantly increase the stresses in or pressure upon any adjacent or contiguous property.



Stockpiling shall comply with the <u>applicable</u> erosion control requirements for temporarily exposed soils set forth in Sections 22.802.015 and 22.802.016, and rules promulgated under ((that)) those Sections.

- 2. Temporary Stockpiling During Construction or Grading. Temporary stockpiles of earth materials during construction or grading shall not exceed ten feet (10') in height. Stockpiles shall have slopes no greater than one (1) horizontal to one (1) vertical.
- 3. Temporary Stockpiling During Dredging. Temporary stockpiles of earth materials excavated during dredging or maintenance dredging shall be subject to the approval of the Director of ((Construction and Land Use)) DCLU.
- 4. Stockpiling and Handling of Earth Materials in Processing. Earth materials consumed or produced in a process may be stockpiled and handled on a site provided the process is the principal use of the site.
- 5. Removal. Temporary stockpiles shall be removed prior to final inspection for a grading permit where no building permit is issued on the same site. Where grading is approved as a component of a building permit, temporary stockpiles shall be removed prior to issuance of a Final Certificate of Occupancy or approval for occupancy after a final inspection.
- N. Exploratory Excavations. Exploratory excavations shall be under the direction of a licensed civil engineer or experienced geotechnical((/eivil)) engineer. No stockpiles of materials shall remain after completion of the exploratory activities. The grading shall comply with other requirements that may be established by the Director.
- **Section 35.** Section 22.804.110 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.804.110 Erosion control.

A. Methods. Grading operations shall comply with the <u>applicable</u> requirements set forth in Sections 22.802.015 <u>and 22.802.016</u>((, Subsections C (3) and D2, D3, D4 and D6)) and rules promulgated thereunder. Devices or procedures for erosion control shall be initiated or installed



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prior to commencing grading operations when technically feasible, and in any case as soon thereafter as is technically feasible, and shall be maintained to function at design capacity.

B. Exposure. Grading operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Grading operations shall comply with <u>the applicable</u> requirements for exposed soils, including best management practices, promulgated pursuant to Sections 22.802.015 and 22.802.016.

**Section 36.** Section 22.804.160 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:

### 22.804.160 Granting or denial of grading approvals and permits.

### A. Approval.

- 1. The Director of ((Construction and Land Use)) DCLU may grant a grading permit or approval that complies with the requirements of this Subtitle and rules promulgated thereunder. An approval may be granted with or without conditions, to assure compliance with the requirements of this Subtitle. Conditions may include, but are not limited to, the following: restricting permit work to specific seasons or weather conditions; limiting vegetation removal; sequencing of work; requiring recommendations contained in the soils analysis and report to be followed; requiring observation by a licensed civil or geotechnical((/eivil)) engineer; requiring special inspection pursuant to Section 1701 of the Seattle Building Code; limiting quantities of soils; requiring structural safeguards; specifying methods of erosion, sedimentation, and drainage control; ((prescribing best management practices)) requiring compliance with other applicable provisions of this Subtitle; specifying methods for maintenance of slope stability; retaining existing trees; requiring revegetation and grass seeding and/or long term maintenance activities; requiring compliance with SMC Chapter 25.09, Regulations for Environmentally Critical Areas, and other regulations of the City or other agencies with jurisdiction.
- 2. The Director may require that plans and specifications be stamped and signed by a licensed civil engineer or experienced geotechnical((/eivil)) engineer to indicate that the



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grading and proposed structure comply with the conclusions and recommendations of any required reports.

- B. Denial. The application for grading permit or approval may be denied if the Director determines that the plans do not comply with the requirements of this Subtitle and rules promulgated hereunder, or do not accomplish the purposes of this Subtitle, or the grading is inconsistent with the proposed development of the site, or the plans do not comply with other applicable federal, state and local laws and regulations.
- C. Limitations. The issuance or granting of a grading permit of approval shall not be construed to be permission for, or an approval of, any violation of any of the provisions of this Subtitle or rules promulgated hereunder, or of any other law or regulation.
- Section 37. Section 22.804.180 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:

#### 22.804.180 Grading inspection.

- A. General. The Director of ((Construction and Land Use)) DCLU may conduct or require inspection of grading sites to determine that work is done according to the grading approval. The permittee and owner shall be notified if the work is in violation. The Director may initiate enforcement action for work that is in violation.
- В. Preloading. Preloading shall be conducted as directed and supervised by a licensed civil or experienced geotechnical((/eivil)) engineer.
- C. Special Inspections. The Director of ((Construction and Land Use)) DCLU may require periodic or continuous inspection from site inspection through foundation inspection by a licensed civil engineer, experienced geotechnical((/eivil)) engineer or special inspector at the permittee's expense. Licensed civil and experienced geotechnical((/eivil)) engineers or special inspectors shall be designated in accordance with Section 1701 of the Seattle Building Code,



- Chapter 22.100 of the Seattle Municipal Code. The approved inspector shall inspect in accordance with the duties specified in <u>Section 1701 of</u> the Seattle Building Code and rules adopted thereunder and shall:
- 1. Be present during the execution of all work the inspector has been approved to inspect;
- 2. Report to the job site in advance of grading operations to become familiar with approved plans and to inspect all materials to be used;
- 3. Not undertake or engage in other occupations which interfere or create a conflict of interest with the inspection duties during the work on the project;
- 4. Inspect the clearing, excavating, filling, compaction, grading, erosion and drainage control measures, and all other soils-control aspects of the construction, and observe whether there is compliance with the approved plans;
  - 5. Inspect soils for evidence of hazardous substances or wastes;
- 6. Observe whether the approved plans are sufficient to control the soil on the site and prevent off-site transport of sediment;
- 7. Immediately report all evidence of hazardous substances or wastes, irregularities, insufficiencies, substitutions of material or other changes from approved plans, and violations of this Subtitle to the owner's architect, engineer or contractor. If the project is not brought immediately into compliance, the Director of ((Construction and Land Use)) DCLU shall be immediately notified. In any event, the Director of ((Construction and Land Use)) DCLU shall be immediately notified when any condition threatens public health, safety or welfare, private or public property, or the environment, whether or not the threat is immediate or likely;
- 8. Notify ((the Department of Construction and Land Use)) <u>DCLU</u> of the time schedule for off-site disposal of excavated material and, when within the City limits, of the location of and permit number of the approved disposal site; and
- 9. The special inspector may require soil grading reports prepared by a licensed civil engineer or experienced geotechnical((/eivil)) engineer. These tests may include field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading but not shown on the approved plans and their effect on the recommendations.



D. Other Inspections. Subject to the approval of the Director of ((Construction and Land Use)) DCLU, a person other than a licensed civil or experienced geotechnical((/eivil)) engineer or special inspector may conduct the required inspection provided the person is under the supervision of a licensed civil engineer or experienced geotechnical((/eivil)) engineer and is qualified to conduct the inspection.

**Section 38.** Section 22.808.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

#### 22.808.020 Liability and defenses of responsible parties.

- A. Who must comply. It is the specific intent of this Subtitle to place the obligation of complying with its requirements upon the responsible parties, as defined in Section 22.801.190. The City of Seattle and its agencies are intended to have the same obligation for compliance when the City is a responsible party. No provision of this Subtitle is intended to impose any other duty upon the City or any of its officers or employees.
- B. Joint and Several Liability. Each responsible party is jointly and severally liable for a violation of this Subtitle. The Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU or both of them may take enforcement action, in whole or in part, against any responsible party. All applicable civil penalties may be imposed against each responsible party. In the event enforcement action is taken against more than one (1) responsible party, recoverable damages, costs, and expenses may be allocated among the responsible parties by the court or the Hearing Examiner based upon the extent to which each responsible party's acts or omissions caused the violation, unless this factor cannot be determined, or the party receiving the allocation under this factor is unable to correct the violation, or is unable to pay the damages, costs, expenses, and any penalty imposed, in which case the trier of fact shall consider:
  - 1. Awareness of the violation;
  - 2. Ability to correct the violation;
  - 3. Ability to pay the damages, costs, and expenses;



- 4. Cooperation with government agencies;
- 5. Degree to which any impact or threatened impact on water or sediment quality, human health, or the environment is related to acts or omissions by each responsible party;
- 6. Degree to which the responsible parties made good-faith efforts to avoid a violation or to mitigate its consequences; and
  - 7. Other equitable factors.
- C. Defenses. A responsible party shall not be liable under this Subtitle when the responsible party carries the burden of proving, by a preponderance of the evidence, one (1) of the following defenses:
  - 1. The violation was caused solely by an act of God;
- 2. The violation was caused solely by another responsible party over whom the defending responsible party had no authority or control and the defending responsible party could not have reasonably prevented the violation;
- 3. The violation was caused solely by a prior owner or occupant when the defending responsible party took possession of the property without knowledge of the violation, after using reasonable efforts to identify violations. However, the defending responsible party shall be liable for all continuing, recurrent, or new violations after becoming the owner or occupant;
- 4. The responsible party implemented and maintained all appropriate <u>drainage</u> control facilities, treatment facilities, flow control facilities, erosion and sediment controls, source controls and best management practices identified in rules promulgated by the Director of ((Construction and Land Use)) <u>DCLU</u> and the Director of ((Seattle Public Utilities)) <u>SPU</u>, or in manuals published by the State Department of Ecology until superseded by rules of the Directors, or as otherwise identified and required of the responsible party by the Director in writing pursuant to this Subtitle.
- **Section 39.** Section 22.808.120 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432, is amended as follows:

22.808.120 Fees.



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Fees for grading permits, drainage control plan review and approvals shall be as set forth in the ((Permit)) Fee ((Ordinance)) Subtitle, Subtitle IX of Title 22, Seattle Municipal Code. Fees for recordkeeping or other activities pursuant to this Subtitle shall, unless otherwise provided for in this Subtitle, be prescribed by Ordinance.

**Section 40.** Section 22.808.150 of the Seattle Municipal Code, adopted by Ordinance 116425, is repealed.

**Section 41.** Severability. The several provisions of this Ordinance are hereby declared to be separate and severable and the invalidity of any clause, sentence, paragraph, sub-division, section or portion of this ordinance or the invalidity of the application thereof to any person or circumstance shall not affect the validity of the remainder of this Ordinance or the validity of its application to other persons or circumstances.

**Section 42.** Any act consistent with the authority and before the effective date of this ordinance is hereby ratified and confirmed.



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(SEAL)

This Ordinance shall take effect and be in force thirty (30) days from and Section 43. after its approval by the Mayor, but if not approved and returned by the Mayor within ten (10) days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020. Passed by the City Council the the day of ______, 2000, and signed by me in open session in authentication of its passage this 5th day of June, 2000. Approved by me this 5th day of June Paul Schell, Mayor Filed by me this 



	ORDINANCE
	NANCE relating to the Stormwater, Grading, and Drainage Control Code, as adopted
	Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and
	8396; amending Chapter 22.800, entitled "Title, Purpose, Scope, and Authority";
	nending Chapter 22.801, entitled "Definitions"; amending Chapter 22.802, entitled
	tormwater, Drainage, and Erosion Control"; amending Chapter 22.804, entitled
"(	brading"; and amending Chapter 22.808, entitled "Administration and Enforcement."
WHERE.	AS the City of Seattle is subject to the terms of the National Pollutant Discharge
Eli	mination System General Permit ("NPDES Permit") issued July 5, 1995, by the State
of	Washington Department of Ecology ("Ecology") for discharges from municipal
sej	arate storm sewer systems for the Cedar/Green Water Quality Management Area
(P	rmit No. WASM 23003) that are subject to the federal Clean Water Act and other law:
an	

- WHEREAS the City is subject to the terms of an Ecology-approved City of Seattle Stormwater Management Program, dated April 11, 1997; and
- WHEREAS the NPDES Permit and Stormwater Management Program require that the City adopt Ordinances and minimum requirements that are equivalent to Ecology guidance for controlling runoff from development and construction activities; and
- WHEREAS the City has negotiated with Ecology an environmentally-protective approach to equivalency that involves new regulation of both construction and other discharges; and
- WHEREAS the City has proposed additional changes to its regulation and enforcement program to improve water quality and further the purposes of the Stormwater, Grading and Drainage Control Code; Now, Therefore:

#### BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

- Section 1. Section 22.800.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:
- 22.800.010 Title.
- This Subtitle, comprised of SMC Chapters 22.800 through 22.808, shall be known as the "Stormwater, Grading and Drainage Control Code," and may be cited as such.



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Section 2. Section 22.800.020 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended by adding a new Subsection C as follows:

22.800.020 Purpose.

It is expressly acknowledged that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, the water quality protection measures in this Subtitle are necessary to protect the health, safety and welfare of the residents of Seattle and the integrity of natural resources for the benefit of all and for the purposes of this Subtitle. Such water quality protection measures are required under the federal Clean Water Act, 33 U.S.C. Section 1251, et seq., and in response to the obligations of the City's municipal stormwater discharge permit, issued by the State of Washington under the federal National Pollutant Discharge Elimination System program.

Section 3. Section 22.800.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.800.030 Scope.

This Subtitle applies to:

- All grading and drainage and erosion control, whether or not a permit is required; and A.
- B. All new ((development and redevelopment)) or replaced impervious surface and all land disturbing activities, whether or not a permit is required; and
- C. All ((new and existing)) discharges directly or indirectly to a public drainage control system; and



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D. All new and existing land uses.

Section 4. Section 22.800.060 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended by adding a new Subsection C as follows:

22,800,060 Compliance with other laws.

C. Compliance with the provisions of this Subtitle and of regulations and manuals adopted by the City in relation to this Subtitle does not necessarily mitigate all impacts to the environment. Thus, compliance with this Subtitle and related regulations and manuals should not be construed as mitigating all stormwater impacts, and additional mitigation may be required to protect the environment. The primary obligation for compliance with this chapter, and for preventing environmental harm on or from property, is placed upon responsible parties as defined by this Subtitle.

Section 5. Section 22.800.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.800.070 City Projects.

#### A. Compliance.

1. City agencies shall comply with all the requirements of this Subtitle except they shall not be required to obtain permits and approvals under this Subtitle for work performed within a public right-of-way and for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation. Where the work occurs in a public right-of-way, it shall comply with Seattle Municipal Code Title 15, Street and Sidewalk Use, including the applicable requirements to obtain permits or approvals. Where appropriate as set forth in ((Subsection)) Section 22.804.040 C of this Code, a soils report and analysis by an experienced geotechnical((/eivil)) engineer shall be prepared for City projects.



	· · · · · · · · · · · · · · · · · · ·
1	2. A City agency project, as
2 2	permit(s) and approval(s) per subse-
∞ <b>ં 3</b>	22.802.015 C4 [City Council Option
4	[City Council Option 2 for Source (
5	disturbing activities on or before Ju-
6	following criteria:
7	a. Project fundi
8	titled, "An ordinance adopti
9	position list, for the City of
10	b. Project receiv
11	January 1, 2001, or
12	c. Project receiv
13	submitted before January 1,
14	d. Project condu
15	<u>1, 2001.</u>
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17	B. Inspection.
18	1. When the City condu
19	Section (( <del>22.802.015</del> )) <u>22.802.020</u> or
20	conducting the project or supervising
21	shall be responsible for insuring that
22	with the requirements of this Subtitle
23	2. Where a soils analys
24	A of this section, the grading shall a
25	prepared the report.
26	3. A City agency need n
27	a. the work is in
28	or /
29	b. the work is in
30	who prepared the plans and specifica
31	c. a permit or ap

2. A City agency project, as defined in Section 22.801.170, that is not required to obtain
permit(s) and approval(s) per subsection A1 above, is not required to comply with Sections
22.802.015 C4 [City Council Option 1 for Source Control], 22.802.016 B1, 22.802.016 B2
City Council Option 2 for Source Control], and 22.802.016 B3, if the project begins land
listurbing activities on or before July 1, 2002, and if the project meets one or more of the
Collowing criteria:

- a. Project funding was appropriated as identified in Ordinance 119750, titled, "An ordinance adopting a budget, including a capital improvement program and a position list, for the City of Seattle for fiscal year 2000," or
- b. Project received or will receive voter approval of financing before January 1, 2001, or
- c. Project received or will receive funds based on grant application(s) submitted before January 1, 2001, or
- d. Project conducted or will conduct land disturbing activity before January 1, 2001.
- 1. When the City conducts projects for which review and approval is required under Section ((22.802.015)) 22.802.020 or 22.804.030, the work shall be inspected by the City agency conducting the project or supervising the contract for the project. The inspector for the City agency shall be responsible for insuring that the grading and drainage control is done in a manner consistent with the requirements of this Subtitle.
- 2. Where a soils analysis and report has been prepared as required under subsection A of this section, the grading shall also be inspected by the geotechnical((/eivil)) engineer who prepared the report.
  - 3. A City agency need not provide an inspector from its own agency provided either:
    - a. the work is inspected by an appropriate inspector from another City agency;
- b. the work is inspected by the licensed civil or geotechnical((/civil)) engineer who prepared the plans and specifications for the work; or
  - c. a permit or approval is obtained from the Director of ((Construction and



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Land Use)) DCLU, and the work is inspected by the Director.

Certification of Compliance. City agencies shall meet the same standards as non-City C. projects, and shall certify that each individual project meets those standards.

Section 6. Section 22.800.080 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

#### 22.800.080 Authority.

- A. 1. The Director of ((Construction and Land Use shall have)) DCLU has authority regarding the provisions of this Subtitle pertaining to grading, review of drainage control plans, and review of erosion control plans, and ((shall have)) has inspection and enforcement authority pertaining to temporary erosion/sediment control measures.
- 2. The Director of ((Seattle Public Utilities shall have)) SPU has authority regarding all other provisions of this Subtitle pertaining to stormwater, drainage, and erosion control, including inspection and enforcement authority.
- B. The Directors of ((Construction and Land Use)) DCLU and ((Seattle Public Utilities)) SPU are authorized to take actions necessary to implement the provisions and purposes of this Subtitle in their respective spheres of authority, including, but not limited to, the following: promulgating and amending rules and regulations, pursuant to the Administrative Code, Chapter 3.02 of the Seattle Municipal Code((, which may include prescribing best management practices ("BMPs"))); establishing and conducting inspection programs; establishing and conducting or, as set forth in Section 22.802.012, requiring responsible parties to conduct, monitoring programs, which may include sampling of discharges to or from drainage control facilities, the public drainage control system, or surface water; taking enforcement action; abating nuisances; promulgating guidance and policy documents; and reviewing and approving or disapproving required submittals and applications for approvals and permits.
- C. The Director of ((Seattle Public Utilities)) SPU is authorized to develop drainage basin plans for managing surface water, drainage water, and erosion within individual subbasins. ((Compliance with an adopted)) A drainage basin plan may, when approved by the Director of ((Seattle Public



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Utilities)) SPU, be used to modify requirements of this Subtitle, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.

Section 7. Section 22.801.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.010 General.

For the purpose of this Subtitle, the words listed in this Chapter ((shall)) have the following meanings, unless the context clearly indicates otherwise. Terms relating to pollutants and to hazardous wastes, materials, and substances, where not defined in this Subtitle, shall be as defined in Washington Administrative Code Chapters 173-303, 173-304 and 173-340, the Seattle Building Code or the Seattle Fire Code, including future amendments to those codes. Words used in the singular include the plural, and words used in the plural include the singular.

Effective July 5, 2000, all references in the Seattle Municipal Code Chapters 22.800 through 22.808 to "Department of Construction and Land Use," "Department of Design, Construction and Land Use," "Director of Design, Construction and Land Use," or "Seattle Public Utilities" shall be deemed references to "DCLU," "DCLU," "Director of DCLU," "Dir

Section 8. Section 22.801.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 118396, is amended as follows:

#### 22.800.020 "A."

"Abandoned solid waste disposal site" means a site ((which)) that is no longer in use and where solid waste was disposed with or without a permit.



"Agency" means any governmental entity or its subdivision.

"Agency with jurisdiction" means those agencies with statutory authority to approve, condition or deny permits, such as the United States Environmental Protection Agency, the Washington State Department of Ecology or the Seattle-King County Department of Public Health.

"American Petroleum Institute (API) oil/water separator": See "Oil/water separator, American Petroleum Institute (API)".

"Approved" means approved by either the Director of <u>Design</u>, Construction and Land Use or the Director of Seattle Public Utilities.

"As-graded" means the surface condition existing after completion of grading.

**Section 9.** Section 22.801.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.030 "B."

"Backfilling" means returning a site to its original or approved contours after earth materials were removed for construction purposes.

"Basin plan" means a plan to manage the quality and quantity of stormwater in a watershed, including watershed action plans.

"Bench" means a relatively level step excavated into earth material on which fill is to be placed.

"Best management practice" (BMP) means a physical, chemical, structural or managerial practice or device that prevents, reduces, or treats contamination of water or which prevents or reduces soil erosion. When the Directors develop rules and/or manuals prescribing best management practices for particular purposes, whether or not those rules and/or manuals are



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adopted by Ordinance, BMPs prescribed in the re	ales and/or manuals shall be the	he BMPs required
for compliance with this Subtitle.		

- 1. "Non-structural" or "operational" best management practices are those ((which)) pollution control strategies that require modified or additional ((operational or)) behavioral practices, such as sweeping a parking lot, or ((having)) maintaining special equipment on site, such as spill response equipment. ((on-site.))
- 2. "Structural" best management practices are those ((which)) pollution control strategies that require the construction of a structure or other physical modification on the site.

"Biofiltration swale" means a long, gently sloped, vegetated channel designed and maintained to treat stormwater runoff through sedimentation, adsorption, and biological uptake. Grass is the most common vegetation, but wetland vegetation can be used if the soil is saturated.

"Building permit" means a document issued by the City of Seattle Department of Design. Construction and Land Use giving permission for construction or other specified activity in accordance with the Seattle Building Code (Chapter 22.100 SMC).

Section 10. Section 22.801.040 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.040

"Cause or contribute to a violation," means and includes acts or omissions that create a violation, that increase the duration, extent or severity of a violation, and that aid or abet a violation.

"Civil engineer, licensed" means a person who is a licensed by the State of Washington to practice civil engineering.

"Coalescing plate oil/water separator" means a multi-chambered vault, containing a set of parallel, corrugated plates that are stacked and bundled together in the center of the vault. Coalescing plate separators are designed to remove dispersed oil and floating debris as well as



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in containing spills.

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"Combined sewer" - see "Public combined sewer."

"Compaction" means the densification of a fill by mechanical means.

"Containment area" means the area designated for conducting high-risk pollution generating activities for the purposes of implementing operational source controls or designing and installing structural source controls or treatment facilities.

"Contaminate" means the addition of sediment, any other pollutant or waste, or any illicit discharge.

"Cut" means the changing of a grade by excavation.

Section 11. Section 22.801.050 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

22.801.050 "D."

"DCLU" means the Department of Design, Construction and Land Use.

"Damages" means monetary compensation for harm, loss, costs, or expenses incurred by the City, including but not limited to the following: costs of abating violations of this Subtitle or public nuisances; fines or penalties the City incurs as a result of a violation of this Subtitle; and costs to repair or clean the public drainage control system as a result of a violation. For the purposes of this Subtitle, it does not include compensation to any person other than the City.

"Design storm" means a rainfall event used in the analysis and design of drainage facilities.

"Designated receiving waters" means the Duwamish River, Puget Sound, Lake Washington,



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Lake Union, and the Lake Washington Ship Canal, and other receiving waters designated by the
Director of ((Seattle Public Utilities)) SPU as having the capacity to receive drainage discharges.

"Detention" means ((and refers to)) temporary storage of drainage water for the purpose of

"Detention" means ((and refers to)) temporary storage of drainage water for the purpose of controlling the drainage discharge rate.

"Detention system" means a facility designed to control the discharge rate of stormwater runoff from a site by detaining flows in a tank or vault.

"Development" ((—see "New Development and Redevelopment)) means land disturbing activity or the addition or replacement of impervious surface.

"Developmental coverage" means all areas within a site planned ((to be developed or redeveloped including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, areas in which soils, slopes and vegetation have been altered, and roadways and other pervious and impervious surfaces)) for land disturbing activity or new or replaced impervious surface.

"Director" means the Director of the Department authorized to take a particular action, and the Director's designees, who may be employees of that department or another City department.

"Director of <u>Design</u>, Construction and Land Use" means the Director of the Department of <u>Design</u>, Construction and Land Use of the City of Seattle and/or the designee of the Director of <u>Design</u>, Construction and Land Use, who may be employees of that department or another City department.

"Director of Seattle Public Utilities" means the Director of Seattle Public Utilities of the City of Seattle and/or the designee of the Director of Seattle Public Utilities, who may be employees of that department or another City department.



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"Discharge point" means the location to which drainage water from a specific site is released.

"Discharge rate" means the rate at which drainage water is released from a specific site. The discharge rate is expressed as volume per unit of time, such as cubic feet per second.

"Drainage basin" means the tributary area through which drainage water is collected, regulated, transported, and discharged to receiving waters.

"Drainage control" means the management of drainage water. Drainage control is accomplished through the collection, conveyance, and discharge of drainage water, controlling the rate of discharge from a site, or separating, treating or preventing the introduction of pollutants.

"Drainage control facility" means any facility, including best management practices, installed or constructed for the purpose of controlling the flow, quantity, and/or quality of drainage water.

"Drainage control plan" means a plan for collecting, controlling, transporting and disposing of drainage water falling upon, entering, flowing within, and exiting the site, including designs for drainage control facilities.

"Drainage control system" means a system intended to collect, convey and control release of only drainage water. The system may serve public or private property. It includes constructed and/or natural components such as ditches, culverts, streams and drainage control facilities.

"Drainage water" means stormwater, snow melt, surface water, surface and irrigation runoff, water from footing drains and other drains approved by the Director of Seattle Public Utilities or installed in compliance with this Subtitle and rules which may be adopted hereunder. Other water which is not an illicit discharge as defined in ((subsection)) Section 22.802.012 C shall be considered drainage water if it drains from the exterior of a building or structure, a pervious or impervious surface, or undeveloped land, or by surface or shallow subsurface flow.

"Dredging" means the excavation of earth materials from land covered by water. The term



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Section 12. Section 22.801.060 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.060 "E."

"Earth material" means any rock, gravel, natural soil or resedimented soil, or any combination thereof, and does not include any solid waste as defined by RCW Chapter 70.95.

"Environmentally Critical Area" means an area designated in Chapter 25.09 of the Seattle Municipal Code.

"Erosion" means the wearing away of the ground surface as a result of mass wasting or of the movement of wind, water and/or ice.

"Excavation" means the mechanical removal of earth material.

"Existing grade" means the natural surface contour of a site, including minor adjustments to the surface of the site in preparation for construction.

"Exploratory excavation" means borings, or small pits, hand-dug or excavated by mechanical equipment. Exploratory excavation does not include preloading of the site.

**Section 13.** Section 22.801.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.070 "F."

"Fill" means ((earth)) material deposited, placed, pushed, pulled, or transported to a place other than the place from which it ((is excavated)) originated.



 through sedimentation, adsorption and biological uptake, stormwater runoff from overland sheet flow from adjacent paved areas before it concentrates into a discrete channel.

"Finished grade" means the grade upon completion of the fill or excavation.

"Filter strip" means a gently sloping vegetated area that is designed and maintained to treat,

(("Fish and wildlife habitat conservation areas" is as defined in the Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code, Chapter 25.09.))

(("Flood prone area" is as defined in SMC Chapter 25.09, Environmentally Critical Areas.))

"Flow control" means controlling the discharge rate of stormwater runoff from the site through means such as infiltration or detention.

"Flow control facility" means a method, such as pursuant to this Subtitle or associated rules, for controlling the discharge rate of stormwater runoff from a site.

**Section 14.** Section 22.801.080 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.080 "G."

"Garbage" means putrescible waste.

"Geotechnical((/Civil)) engineer, experienced" or "Geotechnical/Civil engineer, experienced" means a professional civil engineer licensed by the State of Washington who has at least four years of professional experience as a geotechnical engineer, including experience with landslide evaluation.

"Grade" means the ground surface contour (see also "Existing grade" and "Finished grade").



"Grading" means excavation, fill, in-place ground modification, or any combination thereof, including the establishment of a grade following demolition of a structure.

"Grading approval" means an approved component of a building permit relating to grading, as required by this Subtitle.

**Section 15.** A new Section 22.801.090 is added to the Seattle Municipal Code to read as follows:

#### 22.801.090 "H."

"High-risk pollution generating activities" are the following:

- 1. Fueling operations that involve transferring fuel into mobile vehicles or equipment at permanent stations, temporary stations, and mobile fueling stations. Permanent stations include facilities, such as, but not limited to, commercial gas stations, maintenance yards, and private fleet fueling stations, where fuel is transferred from a dedicated fueling station. Temporary fueling stations include, but are not limited to, construction sites and any other site where fuel is temporarily stored and dispensed into vehicles or equipment. Mobile fueling stations are fueling operations where fuel is delivered to vehicles and equipment via mobile tank trucks.
- 2. Vehicle, equipment or building washing or cleaning, including any of the following: mobile vehicle steam cleaning operations or vehicle washing at commercial car wash facilities, charity car washes, or permanent parking lots such as new, used, and rental car lots and fleet lots; outside washing of tools or other manufacturing equipment; outside cleaning of commercial cooking equipment such as filters and grills; or washing of buildings, including exteriors or mobile interior building cleaning services.
- 3. Truck or rail loading or unloading of liquid or solid materials that involves transferring non-containerized bulk liquids from truck or rail, or loading/unloading materials at a commercial or industrial loading dock.



- 4. Liquid storage in stationary above ground tanks, including storing liquid chemicals, fertilizers, pesticides, solvents, grease, or petroleum products in stationary above ground tanks.
- 5. Outside portable container storage of liquids, food wastes, or dangerous wastes including storing any of the following: vegetable grease, animal grease, or other accumulated food wastes; used oil; liquid feedstock; cleaning compounds; chemicals; solid waste as defined by SMC 21.36; or dangerous waste.
- 6. Outside storage of non-containerized materials, by-products, or finished products, including outside storage of any of the following: non-liquid pesticides or fertilizers; contaminated soil; food products or food wastes; metals; building materials, including but not limited to lumber, roofing material, insulation, piping, and concrete products; or erodible materials, including but not limited to sand, gravel, road salt, topsoil, compost, excavated soil, and wood chips.
- 7. Outside manufacturing activity including any of the following: processing; fabrication; repair or maintenance of vehicles, products or equipment; mixing; milling; refining; or sand blasting, coating, painting, or finishing of vehicles, products, or equipment.
- 8. Landscape construction or maintenance, including any of the following: land disturbing activities as described in SMC 22.801.130; fertilizer or pesticide application near public drainage control system; and disposal of yard waste near a public drainage control system or riparian corridor.

"High-use" means any project planned to generate or accommodate any of the following:

- 1. Expected average daily traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area. In addition, the following is high-use unless the responsible party demonstrates to the satisfaction of the Director of DCLU or of the Director of SPU that the project will generate less than 100 vehicles per 1,000 square feet of gross building area: uncovered parking lot accessory to any fast-food restaurants, convenience markets, supermarkets, shopping centers, discount stores, movie theaters, athletic clubs, or banks.
- 2. Petroleum storage or transfer in excess of 1,500 gallons per year, not including delivered heating oil.



- 3. Storage, or maintenance of a fleet of 25 or more diesel vehicles that are over 10 tons net weight (including, but not limited to, trucks, buses, trains, heavy equipment).
- 4. Road intersections with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 or more on any intersecting roadway, excluding projects proposing primarily pedestrian or bicycle use improvements.

**Section 16.** Section 22.801.100 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.100 "I."

"Illicit discharge" means the discharges defined by Section 22.802.012.

"Impervious surface" means any surface <u>exposed to rainwater</u> from which most water runs off including, but not limited to, ((<del>paved streets</del>)) <u>paving</u>, ((<del>graveled or paved areas such as driveways, parking areas,</del>)) packed earth material, oiled macadam, or other treated surfaces, ((<del>walkways,</del>)) <u>and</u> roof surfaces, patios, and formal planters.

"Impervious surface, replaced." - See "Replaced or replacement of impervious surface.

"Infiltration facility" means a drainage facility that temporarily stores, and then percolates stormwater runoff into the underlying soil. Examples include but are not limited to infiltration trenches, ponds, vaults, and tanks.

"In-place ground modification" means activity occurring at or below the surface which is designed to alter the engineering parameters and physical characteristics of soil or rock, including but not limited to, in-situ consolidation, solidification, void space reduction and infilling.

"Inspector" means the City inspector, inspection agency, or licensed civil engineer performing the inspection work required by this Subtitle.



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Section 17. Section 22.801.130 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.130 "L."

"Land disturbing activity" means any activity that results in a movement of earth, or a change in the existing soil cover (both vegetative and nonvegetative) or the existing topography. Land disturbing activities include, but are not limited to, clearing, grading, filling ((and)), excavation, or addition or replacement of impervious surface.

"Large project" means a project including 5,000 square feet or more of new or replaced impervious surface on 1 acre or more of land disturbing activity. ((exceeding nine thousand (9,000) square feet of developmental coverage.))

Section 18. Section 22.801.140 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.140 "M."

"Master use permit" means a document issued by ((the Department of Design, Construction and Land Use)) DCLU giving permission for development or use of land or street right-of-way in accordance with the Land Use Code (Title 23, Seattle Municipal Code).

"Media filter" means a stormwater treatment system that utilizes a filtration medium such as sand or leaf compost to remove pollutants via physical filtration and chemical adsorption or precipitation. Filters may be constructed underground in a vault or above ground in a pond. In both systems, stormwater that has passed through the filter media is collected in an underground pipe and discharged to the nearby drainage system.



"Municipal stormwater NPDES permit" means the permit issued to the City under the federal Clean Water Act for public drainage control systems within the City limits.

Section 19. Section 22.801.150 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.150 "N."

"NPDES" means National Pollutant Discharge Elimination System, the national program for controlling discharges under the federal Clean Water Act.

"NPDES permit" means an authorization, license or equivalent control document issued by the United States Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

## (("New development" means any of the following activities:

- 1. Structural development, including construction of a new building or other structure:
- 2. Expansion or alteration of an existing structure that results in an increase in the footprint of the building or structure;
  - Land disturbing activities;
  - 4. Creation or expansion of impervious surface;
  - 5. Demolition:
  - 6. Subdivision and short subdivision of land as defined in RCW 58.17.020;
- 7. Class IV general forest practices, as defined in WAC 22-16-050 that are conversions from timber land to other uses.

No other forest practices or commercial agriculture are considered new development.))

"Nondesignated receiving waters" means all creeks, streams and lakes in <u>The City of Seattle not</u> designated as receiving waters, including Green Lake, Haller Lake, and Bitter Lake, and all the creeks and streams.



Section 20. Section 22.801.160 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.801.160 "O."

"Oil/water separator" means a structure, usually underground, that is designed to provide quiescent flow conditions so that globules of free oil or other floatable materials that may be present in stormwater can float to the water surface and become trapped in the structure.

"Oil/water separator, American Petroleum Institute (API)" means a vault that has multiple chambers separated by baffles and weirs to trap oil in the vault. API oil/water separators are designed to remove dispersed oil and floating debris and in containing spills.

"Oil/water separator, coalescing plate". See Coalescing Plate Oil/Water Separator.

"Owner" means any person having title to and/or responsibility for, a building or property, including a lessee, guardian, receiver or trustee, and the owner's duly authorized agent.

Section 21. Section 22,801.170 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432 and 117697, is amended as follows:

## 22.801.170 "P."

"Person" means an individual, firm, partnership, corporation, municipal corporation, and government, and the individual's or entity's heirs, successors and assigns.

"Plan" means, for the purposes of this Subtitle, and unless a different meaning is set forth or clearly required, a graphic or schematic representation, with accompanying notes, schedules, specifications and other related documents.



"Plot plan" means a scaled map of a site and adjacent public rights-of-way showing locations and dimensions of various existing and proposed features, such as buildings, curbs, driveways, sidewalks, trees, grades and drainage patterns.

"Preloading" means the temporary stockpiling of earth material over a site for the purpose of consolidating the existing soils.

"Project" means the addition or replacement of impervious surface or the undertaking of land disturbing activity on a site.

"Public combined sewer" means a publicly owned and maintained sewage system which carries drainage water and sewage and flows to a publicly owned treatment works.

"Public drainage control system" means a drainage control system owned or used by  $\underline{\mathbf{T}}$ he City of Seattle serving City streets and adjacent property.

"Public place" means and includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, and planting (parking) strips, squares, triangles and right-of-way for public use and the space above or beneath its surface, whether or not opened or improved.

"Public storm drain" means the part of a public drainage control system which is wholly or partially piped, is owned or operated by a public entity, and is designed to carry only drainage water.

Section 22. Section 22.801.190 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.190 "R."

"Receiving waters" means the waters ultimately receiving drainage water, including the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship



Canal, including associated bays, but not including tributary streams, creeks and lakes. See also "Designated receiving waters" and "Nondesignated receiving waters".

# (("Redevelopment" means any of the following activities:

- 1. Replacement or alteration of a building or structure that does not result in an increase in the footprint of the building or structure;
- 2. Replacement, alteration, or upgrade of an impervious surface that is not part of a routine maintenance activity, and does not result in expansion of the impervious surface.))
- "Replaced impervious surface" or "replacement of impervious surface" means impervious surface that is removed down to earth material and a new impervious surface is installed.

"Responsible party" means all of the following persons:

- 1. Owners and occupants of property within The City of Seattle; and,
- 2. Any person causing or contributing to a violation of the provisions of this Subtitle.

(("Riparian corridor" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

Section 23. Section 22.801.200 of the Seattle Municipal Code, adopted by Ordinance 116425, and amended by Ordinance 118396, is amended as follows:

22.801.200 "S."

"SPU" means Seattle Public Utilities.

"Sand filter" means a depression or basin with the bottom made of a layer of sand designed and maintained to filter pollutants. Stormwater is treated as it percolates through the sand layer.



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"Sanitary sewer"	is as defined	d in t	the S	Side S	Sewer	Ordinance,	Seattle	Mun	icipal	Code Section
21.16.030.		*							:	.si

"Serve" or "service", when used regarding a document, means the procedures set forth in Section 22.808.030.

"Service drain" means a privately owned and maintained drainage control facility or system which carries only drainage water. Service drains include, but are not limited to, conveyance pipes, catch_basin connections, downspout connections, pipes, and subsurface drain connections.

"Shoreline district" means all land regulated by the Shorelines Management Act of 1971 (RCW Chapter 90.58) or City Ordinances implementing it, as defined in the Land Use Code, Title 23 of the Seattle Municipal Code.

"Side sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

"Site" means the lot or parcel, or portion of street, highway or other public right-of-way((, or eontiguous portion thereof,)) where ((a permit for new development, redevelopment, land-disturbing activity, or grading has been issued or where any such work)) the addition or replacement of impervious surface or the undertaking of land disturbing activity is proposed or performed, and the configuous combination thereof.

"Slope" means an inclined ground surface. In this Subtitle, the inclination of a slope is expressed as a ratio of horizontal distance to vertical distance.

"Small project" means a project with: ((nine thousand (9,000) square feet or less of developmental coverage))

- 1. less than 5,000 square feet of new and replaced impervious surface; and
- 2. less than 1 acre of land disturbing activities.



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"Soil" means naturally deposited non-rock earth materials.

"Solid waste" means solid waste as defined by SMC Section 21.36.016.

"Source controls" mean structures or operations that prevent contaminants from coming in contact with stormwater through physical separation or careful management of activities that are known sources of pollution.

- 1. "Operational source controls" are those which require modified or additional behavioral practices, such as sweeping a parking lot, or maintaining special equipment on site, such as spill response equipment.
- 2. "Structural source controls" are those which require the construction of a structure or other physical modification on the site.

"Standard design" is a design <u>pre-approved</u> by ((the)) Seattle Public Utilities for drainage and erosion control <u>available</u> for <u>use by</u> a ((typical)) site <u>with pre-defined characteristics</u>.

"Storm drain" - see "Public storm drain" and "Service drain."

"Stormwater" means water originating from rainfall and other precipitation, and from footing drains and other subsurface drains approved by the Director of Seattle Public Utilities or installed in compliance with rules which may be adopted hereunder.

**Section 24.** Section 22.801.210 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.210 "T."

"Terrace" means a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.



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29 30 "Topsoil" means the weathered surface soil, usually including the organic layer, in which plants have most of their roots.

"Treatment facility" means a method, such as pursuant to this Subtitle and associated rules, for treating stormwater runoff.

Section 25. Section 22.801.240 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.240 66W.33

"Watercourse" means the route, constructed or formed by humans or by natural processes, generally consisting of a channel with bed, banks or sides, in which surface waters flow((; including)). Watercourse includes small lakes, bogs, streams, creeks, and intermittent artificial components (including ditches and culverts) but does not ((including)) include receiving waters.

(("Wetland" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

"Wetpool" means a permanent pool of water that is contained in the bottom of a wet pond or wet vault stormwater treatment facility. Water in the wetpool is normally lost only through evaporation, evapotranspiration, or slow infiltration into the ground. The wetpool, also referred to as dead storage, is designed to reduce the velocity of incoming stormwater flows, encouraging particulates and particulate-bound pollutants to settle in wet ponds and wet vaults.

"Wetpond" and "wetvault" mean stormwater treatment facilities that contain a permanent pool of water (wetpool). They are designed to settle out particles of fine sediment, and allow biologic activity to occur to metabolize nutrients and organic pollutants, by providing a long retention time. Wetvaults are covered by a lid.



Section 26. Section 22.802.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

# 22.802.010 Scope and exemptions from Subtitle.

- A. General. All ((new and existing)) discharges subject to this Subtitle as set forth in Section 22.800.030, all land uses ((and all new development, redevelopment)), additions and replacement of impervious surface, land disturbing activity, and grading shall comply with all requirements of this Subtitle unless explicitly exempted by this Subtitle or by the Director exercising authority granted under this Subtitle.
- B. Exemptions. The following land uses are exempt from the provisions of this Subtitle:
- 1. Commercial agriculture, including only those activities conducted on lands defined in RCW 84.34.020(2), and production of crops or livestock for wholesale trade;
- 2. Forest practices regulated under Title 222 Washington Administrative Code, except for Class IV general forest practices, as defined in WAC 222-16-050, that are conversions from timber land to other uses; and
- 3. Development undertaken by the Washington State Department of Transportation in state highway right-of-way that complies with standards found in Chapter 173-270 Washington Administrative Code, the Puget Sound Highway Runoff Program.
- Section 27. Section 22.802.013 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

((22.802.013 REQUIREMENTS FOR EXISTING DISCHARGES AND LAND USES

A. General.

For all existing discharges directly or indirectly to a public drainage control system, responsible parties shall implement and maintain nonstructural best management practices as specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use. Nonstructural best management practices shall include, but not be



limited to, maintenance and housekeeping practices such as cleaning of catch basins and detention facilities, sweeping of parking lots, storing oil barrels and other contaminant sources out of the rain, covering material stockpiles, and proper use and storage of hazardous materials.

drainage control facility are causing or contributing to a water quality problem, such as discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by nonstructural best management practices, including, but not limited to, areas with recurrent spills such as discharges from vehicle maintenance shops or gas stations, then the Director of Scattle Public Utilities may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include structural best management practices, or other action necessary to cease causing or contributing to the water quality problem or the violation of the City's permit. Structural best management practices include but shall not be limited to constructed facilities such as detention tanks, wet pends, oil/water separators, grassed swales, roofing and berming of container storage areas, and revised piping systems.

## B. Spill Prevention Required.

- 1. All commercial and industrial responsible parties shall take measures to prevent spills or other accidental introduction of illicit discharges into a public drainage control system. Such measures shall include:
- a. Establishment and implementation of plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater;
- b. Implementation of procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
- e. Provision of necessary containment and response equipment on site, and training of personnel regarding the procedures and equipment to be used.
- 2. The provisions of this Subsection may be satisfied by a Stormwater Pollution Provention Plan prepared in compliance with an NPDES industrial stormwater permit for the site.
- 3. The responsible parties shall make the plans and procedures required by this Subsection available to the Director of Seattle Public Utilities when requested.



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Release Reporting Requirements. A responsible party must, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of Seattle Public Utilities, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.

- Natural Drainage Patterns. Natural drainage patterns shall be maintained.
- Obstruction of Watercourses. Watercourses shall not be obstructed.))

#### Requirements for all discharges and land uses. 22.802.013

- For all discharges except those that drain only to the public combined sewer, responsible parties shall implement and maintain operational source controls, including but not limited to the following, as further described in rules promulgated by the Director:
- Maintaining drainage control systems such as conveyance systems, detention systems and treatment systems;
  - Maintaining streets, driveways, parking lots and sidewalks; and 2.
  - Identifying and eliminating illicit connections to the drainage control system. 3.
- For high-risk pollution generating activities except those that discharge only to the public combined sewer:
- Operational source controls shall be implemented for the high-risk pollution generating activities as specified in rules promulgated jointly by the Directors of SPU and DCLU. Operational source controls for high-risk pollution generating activities shall include. but are not limited to, enclosing, covering, or containing the activity, developing and implementing inspection and maintenance programs, sweeping, and training employees on pollution prevention.



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- Spill prevention shall be required. Parties responsible for undertaking, operating, or maintaining the high-risk pollution generating activities are required to do the following, as further defined in rules promulgated by the Director:
- Develop and implement plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater. This requirement may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site;
- Implement procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
- Provide necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.
- The responsible parties are required to make plans, procedures, and schedules required by this subsection available to the Director of SPU when requested.
- If the Director of SPU determines that discharges from a drainage control facility are causing or contributing to a water quality problem, such as but not limited to discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by the required operational or structural best management practices, then the Director of SPU may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include operational or structural best management practices or other action necessary to cease causing or contributing to the water quality problem or violation of the City's permit. Structural best management practices may include but shall not be limited to drainage control facilities, structural source controls, treatment facilities, constructed facilities such as enclosures, covering and/or berming of container storage areas, and revised drainage systems. For existing discharges as opposed to new projects, the Directors of SPU and DCLU shall allow twelve (12) months to install a new flow control facility, structural source control or treatment facility after a Director determines pursuant to this subsection that discharges from a site are causing or contributing to a water quality problem and notifies the responsible party in writing of that determination and of the flow control facility, structural source control or treatment facility that must be installed.



- D. Release reporting requirements. A responsible party is required to, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of SPU, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.
- E. Natural drainage patterns. Natural drainage patterns shall be maintained.
- F. Obstruction of watercourses. Watercourses shall not be obstructed.
- Section 28. Section 22.802.015 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, and 118396, is amended as follows:

((22.802.015 STORMWATER, DRAINAGE, AND EROSION CONTROL REQUIREMENTS

## A. When Compliance is Required.

- 1. New Development. All new development, regardless of type, and regardless of whether or not a permit is required, must comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage shall also comply with the requirements for large projects set forth in Subsection D below. Only those projects meeting the review thresholds set forth in Subsection B must prepare and submit the required plans.
- 2. Redevelopment. The portion of the site being redeveloped shall at least comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage must also comply with the additional requirements set forth in Subsection D below. Compliance is required regardless of the type of redevelopment, and regardless of whether or not a permit is required. However, only those projects meeting the review thresholds set forth in Subsection B below must prepare and submit the required plans.
- 3. Approval of Exceptions Required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that are below the threshold sizes specified in Subsection B, unless allowed by rule promulgated jointly by the Director of Seattle Public



 Utilities and the Director of Construction and Land Use or approved by the Director of Construction and Land Use. Approval shall be obtained prior to initiating land disturbing activities or new development or redevelopment. Approvals must be obtained for exceptions to any and all requirements of this Subtitle, including but not limited to the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.

- B. Thresholds for Drainage Control Review. The City may, by interagency agreement signed by both the Director of Seattle Public Utilities and the Director of Construction and Land Use, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Substitle, unless exceptions are granted as set forth in Section 22.808.010. Except as provided in this Subsection, drainage control review and approval shall be required as provided below:
- 1. Where an application for either a master use permit or building permit includes the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance codified in this Subtitle:
  - Where an application for a grading permit or approval is required;
- 3. Where a street use permit is required and the permit is for the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance eodified in this Subtitle;
- 4. Where a City public works project or construction contract, including contracts for day labor and other public works purchasing agreements, is for the cumulative addition of 750 square feet or more of developmental coverage to the site after the effective date of the ordinance codified in this Subtitle, except for projects in a City owned right of way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation;
- 5. Where any permit approval or contract includes any new or additional developmental coverage on a site deemed a potentially hazardous location, as specified in Section 22.800.050:



6. Whenever an exception to a requirement set forth in this Subtitle or in a rule promulgated under this Subtitle is desired, whether or not review and approval would otherwise be required, including but not limited to alteration of natural drainage patterns or the obstruction of watercourses.

C. Minimum Requirements for All Projects. All projects must comply with the requirements of this subsection. Projects with more than 9,000 square feet of developmental coverage shall also comply with the requirements of Subsection D below. The Director of Construction and Land Use may also require projects with 9,000 square feet or less of developmental coverage to comply with the requirements set forth in Subsection D when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of Construction and Land Use may consider, but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and tributary to an area with known crosion or flooding problems.

1. Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land specifying criteria, guidelines and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the review threshold, the proposed discharge point shall be identified in the drainage control plan required by paragraph C4 below, for review and approval or disapproval by the Director of Construction and Land Use:

from pervious and impervious surfaces on the site shall not exceed 0.2 cubic feet per second per acre under design storm conditions. The Director of Construction and Land Use and the Director of Seattle Public Utilities may jointly promulgate rules modifying the discharge rate requirement for projects which will result in less than 2,000 square feet of new impervious surface. The Director of Construction and Land Use and the Director of Seattle Public Utilities may jointly promulgate rules allowing exceptions to the permissible peak discharge rate for property which discharges water directly to a designated receiving water or directly to a public storm drain which



the Director of Seattle Public Utilities determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a receiving water. The design storm used to determine detention volume necessary to obtain the required discharge rate shall be a storm with a statistical probability of occurrence of one in 25 in any given year. If the project is within an environmentally critical area, the design storm requirements of SMC Chapter 25.09, Regulations for Environmentally Critical Areas, shall be applied. The Director of Seattle Public Utilities and the Director of Construction and Land Use shall jointly adopt rules specifying the methods of calculation to determine the discharge rate. Where laws or regulations of the federal government or the State of Washington impose a more stringent requirement, the more stringent requirement shall apply.

- 3. Control Measures. During new development, redevelopment and land-disturbing activities, best management practices, as further specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use, shall be used to accomplish the following:
- a. Control erosion and the transport of sediment from the site through measures such as mulching, matting, covering, silt fences, sediment traps and eatch basins, settling ponds and protective berms;
- b. Permanently stabilize exposed soils that are not being actively worked; through such methods as the installation of permanent vegetative cover and installation of slope protective materials; and
- e: Control the introduction of contaminants and pollutants into, and reduce and treat contaminants in drainage water, drainage control facilities, surface water and groundwater, and the public drainage control system by methods such as covering of material stockpiles; proper disposal of hazardous materials; regular cleaning of catch basins, gravel truck loading and heavy equipment areas; spill control for fueling operations; sweeping; and maintaining erosion control protective features described above.
- 4. Drainage Control Plan. For those projects meeting the review thresholds set forth in Subsection B above and which are less than 9,000 square feet, the applicant shall submit a drainage control plan as set forth in rules promulgated jointly by the Director of Scattle Public Utilities and the Director of Construction and Land Use. Standard designs for drainage control facilities as set forth in the rules may be used. Projects exceeding 9,000 square feet must submit a



comprehensive drainage control plan as set forth in Subsection D below. The Director of Construction and Land Use may impose additional requirements, including a comprehensive drainage control plan prepared by a licensed civil engineer, when the project has complex or unusual drainage, or when additional requirements are otherwise necessary to accomplish the purposes of this Subtitle. Memorandum of Drainage Control. The owner(s) of the site shall sign a

- "memorandum of drainage control" that has been prepared by the Director of Seattle Public Utilities. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The memorandum shall not be required when the drainage control facility will be owned and operated by the City. A memorandum of drainage control shall include:
  - The legal description of the site:
- A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;
- An agreement that the owner(s) shall inform future purchasers and other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;
- The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;
- Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes;
- An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and
  - The owner(s)' signatures acknowledged by a notary public.
- The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real



property records. The applicant shall give the Director of Seattle Public Utilities proof of filing of the memorandum.

- 6. Flood Prone Areas. Sites within flood prone areas must employ measures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including but not limited to, SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use to meet the purposes of this subsection.
  - 7. Natural Drainage Patterns. Natural drainage patterns shall be maintained.
  - 8. Obstruction of Watercourses. Watercourses shall not be obstructed.
- D. Additional Requirements for Large Projects. All projects exceeding 9,000 square feet of developmental coverage and those small projects identified by the Director according to Subsection C above must comply with the requirements set forth in this subsection. These requirements are in addition to the requirements set forth in Subsection C above. When the Directors develop rules prescribing best management practices for particular purposes, whether or not those rules are adopted by ordinance, BMPs prescribed in the rules shall be the BMPs required for compliance with this Subsection. Best management practices shall include, but not be limited to: maintenance and housekeeping practices such as proper storage of oil barrels and other contaminant sources, covering material stockpiles, proper use and storage of hazardous materials, as well as constructed facilities such as detention tanks, wet ponds, extended detention dry ponds, infiltration, vegetated streambank stabilization, structural stabilization, catch basins, oil/water separators, grassed swales, and constructed wetlands.
- 1. In addition to detaining a 25-year storm to a release rate of 0.2 cubic feet per second per acre, the peak drainage water discharge rate from projects of more than 9,000 square feet of developmental coverage shall not exceed 0.15 cubic feet per second per acre in a two-year storm;
- 2. Control the sources of sediment and other contaminants and pollutants that could enter drainage water, including the selection, design and maintenance of temporary and permanent best management practices;



3. Minimize streambank erosio	n and effects on wate	<del>r quality in st</del>	<del>cams, incl</del>	uding the
selection, design and maintenance of tempor	rary and permanent b	est manageme	ent practice	s, where
stormwater is discharged directly to a stream	n or to a conveyance	<del>system that di</del>	scharges to	<del>)-a</del>
stream;				

- 4. Minimize the introduction of sediment, heat and other pollutants and contaminants into wetlands, including the selection, design and maintenance of temporary and permanent best management practices, where stormwater discharges directly to a wetland or to a conveyance system that discharges into a wetland;
- 5. Analyze impacts to off-site water quality resulting from the project. The analysis shall comply with this Subsection and rules promulgated pursuant to this Subsection. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion;
  - c. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 6. A schedule shall be provided for inspection and maintenance of proposed temporary and permanent drainage control facilities and other best management practices. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- 7. In addition to the requirements described above, for land-disturbing activities and demolition of structures, an erosion/sediment control plan designed to comply with the requirements and purposes of this Subtitle and rules promulgated hereunder shall be submitted and implemented. The erosion/sediment control plan shall be designed to accomplish the following:
  - a. Stabilization of exposed soils and sediment trapping;
  - b. Delineation of limits on clearing and easements;
  - c. Protection of adjacent property;
  - Appropriate timing and stabilization of sediment trapping measures;
  - e. Minimization of erosion on cut-and-fill slopes;



Land Use.

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	f. Control of off-site erosion;
	g. Stabilization of temporary conveyance channels and outlets;
	h. Protection of storm drain inlets;
	i. Minimization of transport of sediment by construction vehicles;
	j. Appropriate timing for removal of temporary best management practices;
	k. Control of discharges from construction site dewatering devices to
minimize	ontamination of drainage water; and
	1. Inspection and maintenance of best management practices for
erosion/s	iment control to insure functioning at design capacity.
8	Comprehensive Drainage Control Plan. A comprehensive drainage control plan

E. Basin Plans. The Director of Construction and Land Use may determine that, for a particular project, compliance with a drainage basin plan satisfies Subsections D1 through D4 above. The basin plan must have been adopted by rule or ordinance and must provide a level of protection for surface water and groundwater that equals or exceeds that which would otherwise be achieved.))

comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish

the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by

a licensed civil engineer in accordance with standards adopted by the Director of Construction and

# 22.802.015 Drainage, erosion control, and source control requirements for all land disturbing activities or addition or replacement of impervious surface.

- A. Compliance required. All land disturbing activities or addition or replacement of impervious surface are required to comply with this Section, even where drainage control review is not required.
- B. Approval of exceptions required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that do not require drainage control review, unless allowed by this Subtitle, by rule promulgated jointly by the Director of SPU and the Director of



DCLU, or approved by the Director of DCLU. Approval shall be obtained prior to initiating land disturbing activities or adding or replacing impervious surface. Approvals are required for exceptions to any and all requirements of this Subtitle, including but not limited to the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.

## C. Requirements for all projects.

- 1. Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Directors of SPU and DCLU specifying criteria, guidelines, and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the drainage review threshold, the proposed discharge point shall be identified in the drainage control plan required by Section 22.802.020, for review and approval or disapproval by the Director of DCLU.
- 2. Flow control. The peak drainage water discharge rate from the portion of the site being developed shall not exceed 0.2 cubic feet per second per acre under 25-year, 24-hour design storm conditions or 0.15 cubic feet per second per acre under 2-year, 24-hour design storm conditions unless the site discharges water directly to a designated receiving water or to a public storm drain which the Director of SPU determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2.000 square feet of new and replaced impervious surface shall be required to install and maintain a flow control facility, in accordance with rules promulgated by the Director, that is sized for the volume of runoff routed through the facility. Approved exceptions and flow control methods may be prescribed in rules promulgated by the Director.
- 3. Construction stormwater control. During land disturbing activities or addition or replacement of impervious surface, temporary and permanent construction controls shall be used to accomplish the following (a-g). Rules promulgated jointly by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director of DCLU when minimum controls are not sufficient to prevent erosion or transport of sediment or other pollutants from the site.



a. Prevent on-site erosion by stabilizing all soils, including stock piles, that
are temporarily exposed. Methods such as, but not limited to, the installation of seeding,
mulching, matting, and covering may be specified by rules promulgated by the Director. From
October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1
to September 30, no soils shall remain unstabilized for more than seven days.

- b. Before the completion of the project, permanently stabilize all exposed soils that have been disturbed during construction. Methods such as permanent seeding, planting, and sodding may be specified by rules promulgated by the Director.
- c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt fences, sediment traps, settling ponds, and protective berms may be specified in rules promulgated by the Director.
- d. During construction, prevent the introduction of pollutants in addition to sediment into stormwater. Appropriate methods, as prescribed in rules promulgated by the Director, include operational source controls such as but not limited to spill control for fueling operations, equipment washing, cleaning of catch basins, treatment of contaminated soils, and proper storage and disposal of hazardous materials.
- e. Limit construction vehicle access, whenever possible, to one route. Stabilize access points as specified in rules promulgated by the Director to minimize the tracking of sediment onto public roads.
- f. Inspect and maintain required erosion and sediment controls as prescribed in rules promulgated by the Director to ensure continued performance of their intended function.
- g. Prevent sediment from entering all storm drains, including ditches, which receive runoff from the disturbed area.
  - 4. Source control (option 1; see 22.802.016 B2 for option 2).
- a. Effective January 1, 2001, structural source controls shall be installed for high-risk pollution generating activities to the maximum extent practicable to the portion of the site being developed, in accordance with rules promulgated by the Director, except in the following circumstances:
- i. When that portion of the site being developed discharges only to the public combined sewer; or



<u>ii,</u>	For normal residential ac	ctivities unless the Director dete	ermines
that these activities pose a haz	ard to public health, safe	ety or welfare; endanger any pro	perty; or
		of-way, utilities, or other proper	
or maintained by the City.			

- b. The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:
- i. Enclose, cover, or contain within a berm or dike the high-risk pollution generating activities;
- ii. Direct drainage from containment area of high-risk pollution generating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to discharging to a public drainage control system;
- iii. Pave, treat, or cover the containment area of high-risk pollution generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution generating activity; and
- iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution generating activities.
- 5. Flood-prone areas. On sites within flood prone areas, responsible parties are required to employ procedures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including, but not limited to, SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Directors of SPU and DCLU to meet the purposes of this Subtitle.
  - 6. Natural drainage patterns. Natural drainage patterns must be maintained.
  - 7. Obstruction of watercourses. Watercourses shall not be obstructed.
- 8. Water Quality Sensitive Areas. The Director of SPU may impose additional requirements for areas determined to be water quality sensitive areas.
- D. The Director of DCLU may require sites with addition or replacement of 5,000 square feet or less of impervious surface and with less than one acre of land disturbing activity to comply with the requirements set forth in 22.802.016, in addition to the requirements set forth in



this Section, when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of DCLU may consider, but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and tributary to an area with known erosion or flooding problems.

**Section 29.** A new Section 22.802.016 is added to the Seattle Municipal Code to read as follows:

# 22.802.016 Additional requirements for large projects.

A. Applicability. One acre or more of land disturbing activity or addition or replacement of 5,000 square feet or more of impervious surface shall comply with the requirements set forth in this section, in addition to the other applicable requirements of this Subtitle.

## B. Requirements

- 1. Flow Control. Effective January 1, 2001, in addition to the discharge rate specified in Section 22.802.015, the peak drainage water discharge rate shall not exceed 0.5 cubic feet per second per acre in a 100-year, 24-hour design storm for portions of the site being developed that drain to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake, as defined by Section 25.09.020 or to a drainage control system that drains to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake.
  - 2. Source Control (option 2, for option 1, see Section 22.802.015 C4).
- a. Effective January 1, 2001, structural source controls shall be installed for high-risk pollution generating activities to the maximum extent practicable to the entire site, in accordance with rules promulgated by the Director, except in the following circumstances:
- i. When the entire site being developed discharges to the public combined system; or
- ii. For normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or adversely affect the safety and operation of city right-of-way, utilities, or other property owned or maintained by the City.



- b. The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:
- i. Enclose, cover, or contain within a berm or dike the high-risk pollution generating activities;
- ii. Direct drainage from containment area of high-risk pollution generating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to discharging to a public drainage control system;
- iii. Pave, treat, or cover the containment area of high-risk pollution generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution generating activity; and
- iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution generating activities.
  - 3. Stormwater Treatment.
- a. Effective January 1, 2001, stormwater treatment facilities shall be installed and maintained to treat that portion of the site being developed, as specified in this section and in rules promulgated jointly by the Directors of DCLU and SPU, unless the following conditions exist:
- i. The site produces no stormwater runoff discharge as determined by a licensed civil engineer; or
  - ii. / The entire project drains to a public combined sewer.
- b. Stormwater treatment facilities shall be designed to treat the runoff volume from the 6-month, 24-hour storm, collected from the drainage area being routed through the facility.
- c. One of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated jointly by the Directors: infiltration, wetpond, stormwater wetland, biofiltration swale, filter strip, wet vault, media filter, or an alternative technology if the conditions in subsection e below are met.
- d. For high-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director, in addition to other required treatment facilities:
  - i. Coalescing plate/oil water separator;



ii.	Media	filter
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- iii. API oil/water separator; or
- iv. An alternative technology if the conditions in subsection e below are met.
- e. Alternative technology to meet runoff treatment requirements may be permitted if the following criteria are met, as further specified in rules promulgated jointly by the Directors of SPU and DCLU:
- i. Treatment effectiveness monitoring is conducted, which requirement may be waived if sufficient research has been conducted to demonstrate to the Director of SPU's satisfaction that an alternative technology offers equivalent protection;
- ii. Monitoring and maintenance records are reported to the Director of SPU at the end of each of the first three years following installation; and
- iii. The applicant demonstrates to the Director of SPU's satisfaction that the alternative will provide protection equivalent to the methods prescribed in the applicable subsection c or d above.
- f. The Director of SPU may ask the Washington State Department of Ecology to approve a commitment by the City to develop a water quality improvement plan to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Directors may grant exemptions to or make inapplicable the treatment requirements of this Section 22.802.016 B3, pursuant to rules promulgated by the Directors.
- 4. Protection of Streams. Where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream, streambank erosion and effects on water quality in streams shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls.
- 5. Protection of Wetlands. Where stormwater discharges directly to a wetland, as defined by SMC Chapter 25.09, or to a conveyance system that discharges to a wetland, the introduction of sediment, heat, and other pollutants and contaminants into wetlands shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls. Discharges to wetlands of exceptional value, as defined by SMC Chapter 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of



the wetland. Detention and treatment systems shall not be located within any wetland or its buffer. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and infiltration options outside the wetland shall be maximized.

- 6. Off-site Analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage system that drains to that stream, impacts to off-site water quality resulting from the project are to be analyzed and mitigated. The analysis shall comply with this Section and rules the Directors may jointly promulgate pursuant to this Section. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The analysis shall evaluate impacts likely to occur ¼ mile downstream from the project. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion;
  - c. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 7. Inspection and Maintenance Schedule. Temporary and permanent drainage control and stormwater treatment facilities and other controls shall be inspected and maintained according to a schedule submitted to the Director. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- 8. Construction Stormwater Control. In addition to the requirements described above in Section 22.802.015, construction stormwater controls shall be used to accomplish the following (a-j). Rules promulgated by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director when minimum controls are not sufficient to prevent the erosion or transport of sediment or other pollutants from the site. These controls (a-j below) and those required by 22.802.015 C3 shall be shown on a construction stormwater control plan complying with the requirements and purposes of this Subtitle and rules promulgated hereunder and submitted to the Director. The construction stormwater control plan shall address at least the following (a-j) and Section 22.802.015 C3:



- a. Before leaving the site, stormwater runoff shall pass through a sediment trap, sediment pond, or similar device;
- b. In the field, clearing limits and any easements, setbacks, critical areas and their buffers, trees, and drainage courses shall be marked;
- c. Sediment ponds and traps, perimeter dikes, sediment barriers, and other erosion and sedimentation controls intended to trap sediment on site shall be constructed as a first step in grading. These controls shall be functional before the land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized in accordance with Section 22.802.015 C3;
- d. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes will be stabilized in accordance with Section 22.802.015 C3 above;
- e. Properties and waterways downstream from the project site shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site;
- f. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour design storm for the developed condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches shall be provided at the outlets of all conveyance systems;
- g. Whenever construction vehicle access routes intersect paved roads, the transport of sediment onto the paved road shall be minimized. If sediment is transported onto a paved road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from paved roads by shoveling or sweeping and shall be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner;
- h. All temporary erosion and sediment controls shall be removed within 30 days after final site stabilization is achieved or after the temporary controls are no longer needed, whichever is later. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized;



- i. When dewatering devices discharge on site or to a public drainage control system, dewatering devices shall discharge into a sediment trap or sediment pond or gently sloping vegetated area; and
- j. In the construction of underground utility lines, where feasible, no more than 500 feet of trench shall be opened at one time, unless soil is replaced within the same working day, and where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches. Trench dewatering devices shall discharge into a sediment trap or sediment pond.
- Section 30. Section 22.802.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432, is amended as follows:

((22.802.020 SCOPE OF DRAINAGE CONTROL REVIEW AND APPLICATION REQUIREMENTS

- A. Scope of Review. Where drainage review and approval are required by Section 22.802.015, the scope of this review shall at least include the following.
- 1. Master Use Permit Applications. Master use permit applications shall contain sufficient information to allow the Director of Construction and Land Use to determine the effects of stormwater on and off-site, including the propriety of a proposed discharge point, compliance with requirements for permanent drainage control facilities, compliance with the requirements to maintain natural drainage patterns and not obstruct watercourses, compliance with applicable flood control requirements, and whether improvements to the public drainage control system shall be required. These determinations shall be part of approved master use permit conditions, and shall be used as a basis for further drainage planning for building permits and other permits listed below.
- 2. Applications for Building and Other Permits. The Director of Construction and Land Use shall review any application for a building permit or other permit listed in Section 22.802.015, other than master use permit applications, for compliance with Section 22.802.015 and to determine whether improvements to the public drainage control system shall be required.



3. Projects Exceeding 9,000 Square Feet. For projects exceeding 9,000 square feet of developmental coverage, in addition to the review criteria set forth above, the Director of Construction and Land Use shall review the comprehensive drainage control plan for compliance with applicable requirements.

4. Exceptions. Requests for exceptions to requirements shall be reviewed as set forth in Section 22.808.010.

### B. Application and Approval Requirements.

- 1. Drainage control plans for projects subject to review under Subsection
  22.802.015 shall be reviewed by the Director of Construction and Land Use. The Director of
  Construction and Land Use may approve those plans which comply with the provisions of this
  Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order
  to assure compliance with the provisions of this Subtitle. Submission of the required drainage
  control application information shall be a condition precedent to the processing of any of the
  above listed permits. Approval of drainage control shall be a condition precedent to issuance of
  any of the above listed permits.
- 2. The Director of Construction and Land Use may disapprove plans which do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.

# C. Submittal Requirements

- 1. Applications shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16 (Side Sewers) and with associated rules and regulations adopted jointly by the Director of Construction and Land Use and the Director of Seattle Public Utilities.
- 2. The Director of Construction and Land Use may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of Construction and Land Use may also require appropriate information about adjoining properties which may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property.



This additional information may be required as a precondition for permit application review and approval.

3. Where an applicant simultaneously applies for more than one of the permits listed in Subsection A above for the same property, the application shall comply with the requirements for the permit which are the most detailed and complete.))

## 22.802.020 Drainage control review and application requirements.

- A. Thresholds for drainage control review. Drainage control review and approval shall be required for any of the following:
- 1. Standard drainage control review and approval shall be required for the following:
- a. Any land disturbing activity encompassing an area of 750 square feet or more;
- b. Applications for either a master use permit or building permit that includes the cumulative addition of 750 square feet or more of land disturbing activity and new and replaced impervious surface and land disturbing activity;
  - Applications for which a grading permit or approval is required;
- d. Applications for street use permits for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity after the effective date of the Ordinance codified in this Subtitle;
- e. City public works project or construction contracts, including contracts for day labor and other public works purchasing agreements, for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity to the site after the effective date of the Ordinance codified in this Subtitle, except for projects in a City-owned right-of-way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation;
- f. Permit approvals and contracts that include any new or replaced impervious surface on a site deemed a potentially hazardous location, as specified in Section 22.800.050; or



g. Whenever an exception to a require	ment set forth in this Subtitle or in a
rule promulgated under this Subtitle is desired, whether or	not review and approval would
otherwise be required, including but not limited to, alterati	on of natural drainage patterns or the
obstruction of watercourses.	

- 2. Large project drainage control review and approval shall be required for projects that include:
  - a. 5,000 square feet or more of new or replaced impervious surface; or
    b. 1 acre or more of land disturbing activity.
- 3. The City may, by interagency agreement signed by the Directors of SPU and DCLU, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges for the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Subtitle, unless exceptions are granted as set forth in Section 22.808.010.

# B. Submittal requirements for drainage control review and approval

- 1. Information Required for Standard Drainage Control Review. The following information shall be submitted to the Director for all projects for which drainage control review is required.
- a. Standard Drainage Control Plan. A drainage control plan shall be submitted to DCLU. Standard designs for drainage control facilities as set forth in rules promulgated by the Director may be used.
- b. Construction Stormwater Control Plan (Standard Erosion and Sediment Control Plan). A construction stormwater control plan demonstrating controls sufficient to determine compliance with Section 22.802.015 C3 shall be submitted. The Director may approve a checklist in place of a plan, pursuant to rules promulgated by the Director.
- c. Memorandum of Drainage Control. The owner(s) of the site shall sign a "memorandum of drainage control" that has been prepared by the Director of SPU. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the



King County real property records. The applicant shall give the Director of SPU proof of filin	g
of the memorandum. The memorandum shall not be required when the drainage control facilit	ty
will be owned and operated by the City. A memorandum of drainage control shall include:	

- i. The legal description of the site;
- ii. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;
- other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;
- iv. The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;
- v. Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes:
- vi. An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and vii. The owner(s)' signatures acknowledged by a notary public.
- 2. Information required for large project drainage control review. In addition to the submittal requirements for Standard Drainage Control Review, the following information is required for projects that include 1 acre or more of land disturbing activities or 5,000 square feet or more of new and replaced impervious surface.
- a. Comprehensive Drainage Control Plan. A comprehensive drainage control plan, in lieu of a Standard Drainage Control Plan, to comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by a licensed civil engineer in accordance with standards adopted by the Director of DCLU.



	1	Inspection and Ma	intananc	e Schediile	A schedi	ıle shall he	submitted th	ai
	<u>b.</u>							===
provides for in	spection	on of temporary and	l permane	ent drainag	e control fa	acilities, tro	eatment	
facilities, and s	source	controls to comply	with Sec	tions 22.80	2.015 and	22.802.016	<u>5.</u>	
	c	Off-site analysis.	When th	e portion o	f a site bei	ng develop	ed is within !	4

- mile of a stream and discharges directly to that stream, or to a drainage control system that discharges to that stream, an analysis of impacts to off-site water quality resulting from the project prepared in accordance with Section 22.802.016 shall be submitted.
- d. Construction Stormwater Control Plan. A construction stormwater control plan prepared in accordance with Section 22.802.015 and 22.802.016 shall be submitted.
- 3. Applications for drainage control review and approval shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16, Side Sewers, and with associated rules and regulations adopted jointly by the Directors of DCLU and SPU.
- 4. The Director of DCLU may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including but not limited to SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of DCLU may also require appropriate information about adjoining properties that may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.
- 5. Where an applicant simultaneously applies for more than one of the permits listed in subsection A above for the same property, the application shall comply with the requirements for the permit that is the most detailed and complete.
- C. Authority to Review. The Director of DCLU may approve those plans that comply with the provisions of this Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order to assure compliance with the provisions of this Subtitle. Submission of the required drainage control application information shall be a condition precedent to the processing of any of the above-listed permits. Approval of drainage control shall be a condition precedent to issuance of any of the above-listed permits. The Director of DCLU may review and inspect activities subject to this Subtitle and may require compliance regardless of whether



review or approval is specifically required by this Section. The Director of DCLU may disapprove plans that do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.

Section 31. Section 22.802.090 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended at Subsection 22.802.090A as follows:

# 22.802.090 Maintenance and inspection.

A. Responsibility for maintenance and inspection. Drainage control facilities, source controls, and stormwater treatment facilities required by this Subtitle and by rules adopted hereunder, shall be maintained as specified in rules promulgated by the Director, by the owner ((of)) and other responsible party. The owner ((of)) and other responsible party shall inspect permanent drainage control facilities at least annually, and shall inspect temporary drainage control facilities and other temporary best management practices or facilities on a schedule consistent with Section 22.802.016 B7 of this Subtitle and sufficient for the facilities to function at design capacity. The Director of ((Seattle Public Utilities)) SPU may require the responsible party to conduct more frequent inspections and/or maintenance when necessary to insure functioning at design capacity. The owner(s) shall inform future purchasers and other successors and assignees to the property of the existence of the drainage control facilities and the elements of the drainage control plan, the limitations of the drainage control facilities, and the requirements for continued inspection and maintenance of the drainage control facilities.

* * *

Section 32. Section 22.804.030 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 117697, is amended as follows:

22.804.030 Grading permit or approval required.



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			A grading perm			A.	
activities as	s specified be	low. Action	ons exempt fron	n a grading p	ermit are sp	ecified in S	Subsection
C.						A The second	

- Special Sites. A permit shall be required for any site located in ((one (1))) any of 1. the following areas if the combined volume of excavation, fill, dredging, or other movement of earth materials is more than twenty-five (25) cubic yards:
- Shoreline districts((, except)) as defined in SMC 23.60.010. In addition to the permit requirement established in A.1, a permit ((shall be)) is also required for any grading within ten (10) feet of the line of mean higher high tide adjoining saltwater or the line of mean high water adjoining fresh water and for any grading of lands covered by water; ((or))
- Environmentally critical areas as defined in SMC 25.09 ((f)) except b. liquefaction-prone and abandoned landfills.(())) In addition to the permit requirement established in A.1:
- A permit is required for any grading within wetlands and their buffers, or Riparian corridor buffers;
- Grading activities that increase the potential for earth movements or the risk of damage due to earth movement within steep slopes or other landslide hazard areas is prohibited;
- The drainage basins of Thornton Creek, Pipers Creek, Longfellow Creek, and Taylor Creek, as mapped by SPU, unless stormwater runoff from the site is discharged to a combined sewer system or otherwise piped (tightlined) to a drainage basin other than the named drainage basin.
- ((Grading may be prohibited in certain environmentally critical areas. For additional requirements see Regulations for Environmentally Critical Areas, SMC 25.09.))
- Potentially Hazardous Locations. A permit ((shall be)) is required for any site 2. identified under the provisions of Section 22.800.050 for any volume of excavation, fill, dredging or other movement of earth materials.
- Grading Near Public Places. A permit ((shall-be)) is required for all grading 3. activities in excess of four feet (4'), measured vertically, on private property within any area between the vertical prolongation of the margin of a public place, and a one-hundred percent



(100%) slope line (forty-five degrees (45°) from a horizontal line) from the existing elevation of the margin of a public place to the proposed elevation of the private property.

- 4. General Sites. For sites not included in Subsections A1 and A2 above, a permit ((shall be)) is required where the grade at any location is changed more than three feet (3') and either:
- a. The cumulative volume of excavation, fill, dredging or other movement of earth materials is more than one hundred (100) cubic yards over the lifetime of the site; or
- b. The grading will result in a slope steeper than three (3) horizontal to one (1) vertical.
- 5. In-place Ground Modification. A permit ((shall be)) is required for any site where in-place ground modification will take place. The Director of ((Construction and Land Use)) DCLU may waive the requirement for a permit when the Director determines the in-place ground modification will be insignificant in amount or type.
- 6. Temporary Stockpiles. A grading permit or approval ((shall be)) is required for temporary stockpiles which meet the thresholds of Subsections A1, A2 and A4 above and are not located on sites for which a valid grading permit or grading approval has been issued.
- B. Grading Approvals Required.
- 1. A grading approval ((shall-be)) is required for grading activities located on any site where a concurrent building permit is requested except that no approval is required for grading activities where the combined volume is less than the amounts specified for each site in Subsection A above.
- 2. Where a grading approval is required and issued as a component of a building permit, no separate grading permit shall be required. This provision shall apply to grading which is incidental to construction, the temporary stockpiling of earth materials during construction and grading needed for other site improvements. Where there will be construction or placement of a building within the lifetime of the permit, the grading approval shall be a component of the building permit.
- C. Exemptions. The following grading activities shall be exempt from a grading permit, but ((must)) shall still comply with the provisions of this Subtitle:



- 1. Activity conducted under a street use permit ((which)) that specifically authorizes the grading work to be performed;
  - 2. Excavations and filling of cemetery graves;
- 3. Exploratory excavations ((which)) that comply with the requirements of Section 22.804.050;
  - 4. Operation of sewage treatment plant sludge settling ponds;
- 5. Operation of surface mines for the extraction of mineral and earth materials subject to the regulations and under a permit of the State of Washington;
- 6. Stockpiling and handling of earth material when the earth material is consumed or produced in a process which is the principal use of the site and which complies with the requirements of Section 22.804.050;
- 7. Maintenance or reconstruction of active tracks and yards of a railroad in interstate commerce within its existing right-of-way;
- 8. Maintenance or reconstruction of the facilities of parks and playgrounds including work required for the protection, repair, replacement or reconstruction of any existing paths, trails, sidewalks, public improvement or public or private utility, and the stockpiling of material for maintenance activities;
  - 9. Excavation and filling of post holes;
- 10. On-site work required for construction, repair, repaying, replacement or reconstruction of an existing road, street or utility installation in a public right-of-way;
- 11. Trenching and backfilling for the installation, reconstruction or repair of utilities on property other than a public right-of-way;
- 12. Grading done in performance of work authorized by the City for public works projects (((S))see also Section 22.800.070);
- 13. Public works and other publicly funded activities on property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system, and the project will not undercut or otherwise endanger adjacent property, and the Director has waived the permit requirements by interagency agreement;



- 14. Underground storage tank removal and replacement that is subject to regulation by a state or federal agency, except where excavation meets the criteria of Section 22.804.030  $A_{\frac{3}{2}}(((3)))$ , Grading Near Public Places.
- D. Compliance Required for All Grading. Any grading activity, whether or not it requires a grading permit or approval, shall comply with the provisions of this Subtitle.
- Section 33. Section 22.804.040 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.804.040 Grading permit or approval: application requirements

- A. General. Application for a grading permit or approval shall be made to the Director of ((Construction and Land Use)) DCLU by the owner of the property to be graded. All applications shall contain the submittal information detailed in this section.
- B. Plans required.
- 1. Projects requiring plans. The information listed in subsection B2 below shall be provided on plans submitted with each application for a grading permit or approval. However, when the only grading included in an application is for an approved drainage control plan or is for excavation and replacement of earth material within an area four feet (4') or less from the footing lines of a building or structure, the only information required is the location of temporary stockpiles.
- 2. Information to be submitted on plans. The following information shall be submitted with applications for projects requiring plans.
  - a. A general vicinity map and legal description of the site;
- b. A plot plan showing: location of existing buildings and structures, easements, utilities and other surface and above-ground improvements on the property where the work is to be performed; the approximate location of all buildings, structures and other improvements on adjacent land; the location of existing and planned temporary and permanent drainage control facilities, existing and proposed drainage discharge points, watercourses,



drainage patterns, environmentally critical areas, and areas of standing water; the approximate location, type and size of trees and other vegetation on the site; designation of trees and vegetation to be removed, and the minimum distance between tree trunks and the nearest excavation and/or fill; and areas where equipment traffic will be permitted and excluded;

- c. The latest available topographic map, including cross-sections of the site and adjacent property, showing the present and proposed contours of the land at not more than two-foot (2') contour intervals, and the location and amount of all temporary stockpiles and excavations. On steeper sites, the Director of ((Construction and Land Use)) DCLU may authorize plans to show a contour interval greater than two feet (2') but in no case more than a five-foot (5') interval. The information relating to adjacent properties may be approximated;
- d. A drainage control plan as set forth in Section ((22.802.015)) 22.802.020, except when the grading is limited to the area providing for vehicular and pedestrian access to the building or to the temporary stockpiling of excavated material.
- 3. Number required. A minimum of three (3) sets of plans shall be submitted with each application for a grading permit. The number of plan sets required for grading approval applications shall be the same as required for the specific permit application. Additional sets may be required by the Director.
- 4. Clarity of plans. Plans shall be drawn to a clearly indicated and commonly accepted scale upon substantial paper such as blueprint quality or standard drafting paper. Tissue paper, posterboard or cardboard will not be accepted. The plans shall be of microfilm quality and limited to a minimum size of 18 inches (18") by 18 inches (18") and a maximum size of 41 inches (41") by 54 inches (54").
- 5. Preparation by Civil Engineer. The grading plans shall be prepared by, or under the direction of, a licensed civil engineer for all applications where the total amount of materials graded is more than two thousand five hundred (2,500) cubic yards. The Director of ((Construction and Land Use)) DCLU may require that grading plans for lesser quantities be prepared by or under the direction of a licensed civil engineer for sites such as, but not limited to, those in geologic hazard zones and areas with known erosion problems.
- 6. Stamping by Geotechnical((/Civil)) Engineer. When required by the Director of ((Construction and Land Use)) <u>DCLU</u> in accordance with the provisions of this Subtitle, the grading plans shall be reviewed and stamped by the geotechnical((/civil)) engineer who



performed the site analysis and report to indicate that the plans conform to the conclusions and recommendations of the report.

### C. Information required.

- 1. Required with Application. The following information shall be submitted with grading plans at the time of application:
- a. The disposal site for any excavated materials to be removed from the site. If the disposal site is located within the City limits and is not an approved disposal site, an application for a grading permit for the disposal site shall be submitted at the same time as the application for grading permit or approval at the excavation site. In the event that the applicant is unable to specify the disposal site at the time of application, the applicant shall request, in writing, a postponement of the identification of the disposal site. The request shall include a commitment that the applicant will specify a disposal site acceptable to the Director of ((Construction and Land Use)) DCLU prior to any excavation;
- b. Where placement of a fill is proposed, a description of the composition of fill material and its structural qualities;
- c. Where any portion of the grading will encroach on an adjacent property, proof of ownership and an easement or authorization in accordance with Section 22.804.100;
  - d. The immediate and long-term intended use of the property;
- e. Identification of past industrial or manufacturing uses or hazardous materials treatment, disposal or storage that have occurred on the site;
- f. Where a site is located in an area identified pursuant to Section 22.800.050, a copy of all applicable permit or approval applications, and/or permits and approvals from the appropriate regulatory agencies;
- g. When required by Section ((22.802.015)) 22.802.020, an erosion/sediment control plan;
- h. Where the site is located in an area of potential landslide, a draft covenant complying with the requirements of Section 22.808.130.
- i. Each grading proposal shall contain provisions for the preservation of natural drainage patterns and watercourses; for reasonable preservation of natural land and



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water features and other indigenous natural features of the site; and for re-	eplacement, where
necessary, of vegetation or other means to control runoff.	Í

- 2. Required after Initial Screening. The Director of ((Construction and Land Use))

  DCLU may require the following information after the initial screening of a grading application:
- a. A description of methods to be used to minimize sediment or other pollution from leaving the site during and after construction and to protect cleared areas and cut and fill slopes from erosion;
- b. A time schedule of operations, including but not limited to, implementation of the <u>applicable</u> requirements of <u>Sections</u> 22.802.015 <u>and 22.802.016</u>, clearing, minimization of grading of unprotected soil surfaces, restoration of topsoil and vegetative cover, and construction of improvements;
- c. A survey of boundaries and topography of the site and the grades of adjacent public rights-of-way prepared by a surveyor licensed by the State of Washington;
  - d. A soils analysis complying with the following:
- (((1)))i. When Required. A soils analysis and report may be required when an application for a grading permit or approval is made for property located:
  - (A) In areas described in Section 22.800.050,
  - (B) In areas where there is a potential for landslide,
  - (C) In areas where grading may result in instability of the site
- or adjoining property,
- (D) In areas where soils may not be suitable for the use

intended,

- (E) In areas where the Director determines pollutants are
- likely to be present, or
- (F) In any area where the Director determines that the information which would be supplied by a soils analysis and report is necessary for the review of the application((5)).
  - (((2)))ii. Contents. The soils analysis and report shall include:
- (A) Data regarding the nature, distribution and strength of existing soils and subsurface conditions,



- (B) History of the site including history of landslides, known excavations and fills, and location of utilities,
- (C) Where appropriate as indicated by information provided under subsection B above, analytical testing of soils to determine the concentration of pollutants,
- (D) Conclusions and recommendations for clearing the site, of the adequacy of the site for proposed immediate and long-term intended use, foundation, retaining and structural designs, grading methods, and construction and post-construction monitoring, and
- (E) Other information as determined necessary by the Director to adequately evaluate compliance with the requirements of this Subtitle and accomplishment of its purposes, such as an assessment of contamination when past industrial or chemical use have been present on the site((5)).
- (((3)))<u>iii.</u> Preparation. The soils analysis and report shall be prepared by an experienced geotechnical((/eivil)) engineer or other equally qualified person approved by the Director. The Director may require that the plans and specifications be stamped and signed by the geotechnical((/eivil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of the reports((5)).
- (((4)))iv. Minimal Risk. In geologic hazard areas as identified in SMC Chapter 25.09, Regulations for Environmentally Critical Areas, the geotechnical((/eivil)) engineer who prepared the soils analysis and report may be required to submit a letter stating that the plans and specifications conform to the recommendations of the soils analysis and report. The letter shall also state that, so long as conditions stated in the soils report are satisfied, areas disturbed by construction will be stabilized, the risk of damage to the proposed development or to adjacent properties from soil instability will be minimal, and the proposed grading and development will not increase the potential for soil movement.
- e. Site Analysis. For properties located in any of the areas identified in Subsection d, an analysis and report of the following site factors. The analysis and report shall be prepared by a licensed civil engineer or other person approved by the Director.
- $(((1)))\underline{i}$ . A description of the hydrology of the site and the drainage basin in which the development is located((5)).



(((2)))ii. The effect of grading upon surrounding properties, watercourses and the drainage basin, including impacts on water quality and fish habitat when a stream, lake or other body of water is affected. Where applicable, the analysis specified in Section ((22.802.015D(5)))22.802.016 B6 may also be required((;)).

- f. A letter in a form acceptable to the Director from the owner of the site stating that the owner understands and accepts the risk of developing in an area with potentially unstable soils and that the owner will advise, in writing, any prospective purchasers of the site, structures or portions of a structure about the landslide potential of the site.
- g. The Director may require additional information pertaining to the specific site and any other relevant information needed in order to assess potential hazards associated with the site and to determine whether a grading permit or approval should be issued.
- **Section 34.** Section 22.804.050 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.804.050 Grading requirements.

- A. Earth movement. Grading shall not create or increase the likelihood of earth movement, including but not limited to, landslides, accelerated soil creep, settlement and subsidence, and hazards associated with strong ground motion and soil liquefaction of the site to be graded and adjoining properties.
- B. Natural features. Each grading proposal shall contain provisions for the preservation of <u>natural</u> drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and replacement, where necessary, of vegetation or other means to control runoff.
- C. Watercourses. Grading shall not create or contribute to flooding, erosion, or increased turbidity, siltation or other forms of pollution in a watercourse, and shall comply with the <u>applicable</u> requirements of ((Section 22.802.015)) Chapter 22.802.



- D. Pollution control. Grading shall be performed, and the completed work shall be in accordance with, all applicable environmental laws, rules and regulations, and with the <u>applicable</u> requirements of ((Section 22.802.015)) Chapter 22.802.
- E. Conformance with plans. Grading shall be performed in accordance with the plans approved by the Director of ((Construction and Land Use)) DCLU.
- F. Slopes. Final graded slopes shall be no steeper than is safe for the intended use, and shall in no case be steeper than two (2) horizontal to one (1) vertical. For requirements for temporary slopes see Sections  $22.804.050 \, \text{M}$  and 22.804.100.
- G. Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, non-approved materials, topsoil and other unsuitable materials, including but not limited to mud, peat, and other materials with insufficient strength to satisfy the design as determined by the Director.
- H. Fills. Fills shall be located so that the base edge of the fill is located more than twelve (12) feet horizontally from the top edge of an existing slope or a planned cut slope. A sloping fill shall not be placed on top of slopes which are steeper than one and one-half (1 ½) horizontal to one (1) vertical.
- I. Requirements for fill material. Materials used in fills shall comply with the following requirements:
- 1. Material used in filling shall be appropriate to the site and the intended use of that portion of the site.
- 2. Fill shall be composed of earth materials. Any rock or other similar irreducible material used in a fill shall be of a maximum diameter of twelve inches (12") and shall compose not more than twenty percent (20%) of the total fill material.
- Topsoil shall not be used as a fill material except that the upper twelve inches (12") of a fill site may be covered with topsoil.



- 4. No frozen or thawing material shall be used in a fill.
- 5. No solid waste, hazardous waste or hazardous material may be used in a fill.
- 6. No organic material shall be used in a fill unless approved by the Director.
- 7. As necessary, the Director shall specify other characteristics of the fill material used, the degree of compaction, moisture content, and the method of placement appropriate to the site and the intended use of that portion of the site and the requirements for water retention, drainage control and erosion control.
- J. Terraces. The Director may require steps and terraces sufficient to control surface drainage and deposit of debris. Suitable access to the terraces shall be provided to permit proper cleaning and maintenance.
- K. Subsurface Drainage. Cut-and-fill slopes shall be provided with subsurface drainage when needed to maintain slope stability.
- L. Access. When an adjoining site relies on the site to be graded for pedestrian or vehicular access, the Director may require reasonable access to be maintained to the adjoining site.
- M. Stockpiling of Earth Materials.
- 1. General. Stockpiling of any kind shall not adversely affect the lateral support or significantly increase the stresses in or pressure upon any adjacent or contiguous property. Stockpiling shall comply with the <u>applicable</u> erosion control requirements for temporarily exposed soils set forth in Sections 22.802.015 and 22.802.016, and rules promulgated under ((that)) those Sections.
- 2. Temporary Stockpiling During Construction or Grading. Temporary stockpiles of earth materials during construction or grading shall not exceed ten feet (10') in height. Stockpiles shall have slopes no greater than one (1) horizontal to one (1) vertical.
- 3. Temporary Stockpiling During Dredging. Temporary stockpiles of earth materials excavated during dredging or maintenance dredging shall be subject to the approval of the Director of ((Construction and Land Use)) DCLU.



- 4. Stockpiling and Handling of Earth Materials in Processing. Earth materials consumed or produced in a process may be stockpiled and handled on a site provided the process is the principal use of the site.
- 5. Removal. Temporary stockpiles shall be removed prior to final inspection for a grading permit where no building permit is issued on the same site. Where grading is approved as a component of a building permit, temporary stockpiles shall be removed prior to issuance of a Final Certificate of Occupancy or approval for occupancy after a final inspection.
- N. Exploratory Excavations. Exploratory excavations shall be under the direction of a licensed civil engineer or experienced geotechnical((/eivil)) engineer. No stockpiles of materials shall remain after completion of the exploratory activities. The grading shall comply with other requirements that may be established by the Director.
- **Section 35.** Section 22.804.110 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.804.110 Erosion control.

- A. Methods. Grading operations shall comply with the <u>applicable</u> requirements set forth in Section 22.802.015((, Subsections C (3) and D2, D3, D4 and D6)) and rules promulgated thereunder. Devices or procedures for erosion control shall be initiated or installed prior to commencing grading operations when technically feasible, and in any case as soon thereafter as is technically feasible, and shall be maintained to function at design capacity.
- B. Exposure. Grading operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Grading operations shall comply with requirements for exposed soils, including best management practices, promulgated pursuant to Section 22.802.015.
- Section 36. Section 22.804.160 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:



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Granting or denial of grading approvals and permits. 22.804.160

#### Approval. A.

- The Director of ((Construction and Land Use)) DCLU may grant a grading permit or approval that complies with the requirements of this Subtitle and rules promulgated thereunder. An approval may be granted with or without conditions, to assure compliance with the requirements of this Subtitle. Conditions may include, but are not limited to, the following: restricting permit work to specific seasons or weather conditions, limiting vegetation removal: sequencing of work; requiring recommendations contained in the soils analysis and report to be followed: requiring observation by a licensed civil or geotechnical((/eivil)) engineer; requiring special inspection pursuant to Section 1701 of the Seattle Building Code; limiting quantities of soils; requiring structural safeguards; specifying methods of erosion, sedimentation, and drainage control; ((prescribing best management practices)) requiring compliance with other applicable provisions of this Subtitle; specifying methods for maintenance of slope stability; retaining existing trees; requiring revegetation and grass seeding and/or long term maintenance activities; requiring compliance with SMC Chapter 25.09, Regulations for Environmentally Critical Areas, and other regulations of the City or other agencies with jurisdiction.
- The Director may require that plans and specifications be stamped and signed by 2. a licensed civil engineer or experienced geotechnical((/eivil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of any required reports.
- Denial. The application for grading permit or approval may be denied if the Director B. determines that the plans do not comply with the requirements of this Subtitle and rules promulgated hereunder, or do not accomplish the purposes of this Subtitle, or the grading is inconsistent with the proposed development of the site, or the plans do not comply with other applicable federal, state and local laws and regulations.



C. Limitations. The issuance or granting of a grading permit of approval shall not be construed to be permission for, or an approval of, any violation of any of the provisions of this Subtitle or rules promulgated hereunder, or of any other law or regulation.

Section 37. Section 22.804.180 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:

## 22.804.180 Grading inspection.

- A. General. The Director of ((Construction and Land Use)) <u>DCLU</u> may conduct or require inspection of grading sites to determine that work is done according to the grading approval. The permittee and owner shall be notified if the work is in violation. The Director may initiate enforcement action for work that is in violation.
- B. Preloading. Preloading shall be conducted as directed and supervised by a licensed civil or experienced geotechnical((/eivil)) engineer.
- C. Special Inspections. The Director of ((Construction and Land Use)) DCLU may require periodic or continuous inspection from site inspection through foundation inspection by a licensed civil engineer, experienced geotechnical((/eivil)) engineer or special inspector at the permittee's expense. Licensed civil and experienced geotechnical((/eivil)) engineers or special inspectors shall be designated in accordance with Section 1701 of the Seattle Building Code, Chapter 22.100 of the Seattle Municipal Code. The approved inspector shall inspect in accordance with the duties specified in Section 1701 of the Seattle Building Code and rules adopted thereunder and shall:
- 1. Be present during the execution of all work the inspector has been approved to inspect;
- 2. Report to the job site in advance of grading operations to become familiar with approved plans and to inspect all materials to be used;
- 3. Not undertake or engage in other occupations which interfere or create a conflict of interest with the inspection duties during the work on the project;



- 4. Inspect the clearing, excavating, filling, compaction, grading, erosion and drainage control measures, and all other soils-control aspects of the construction, and observe whether there is compliance with the approved plans;
  - 5. Inspect soils for evidence of hazardous substances or wastes;
- 6. Observe whether the approved plans are sufficient to control the soil on the site and prevent off-site transport of sediment;
- 7. Immediately report all evidence of hazardous substances or wastes, irregularities, insufficiencies, substitutions of material or other changes from approved plans, and violations of this Subtitle to the owner's architect, engineer or contractor. If the project is not brought immediately into compliance, the Director of ((Construction and Land Use)) DCLU shall be immediately notified. In any event, the Director of ((Construction and Land Use)) DCLU shall be immediately notified when any condition threatens public health, safety or welfare, private or public property, or the environment, whether or not the threat is immediate or likely;
- 8. Notify ((the Department of Construction and Land Use)) <u>DCLU</u> of the time schedule for off-site disposal of excavated material and, when within the City limits, of the location of and permit number of the approved disposal site; and
- 9. The special inspector may require soil grading reports prepared by a licensed civil engineer or experienced geotechnical((/eivil)) engineer. These tests may include field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading but not shown on the approved plans and their effect on the recommendations.
- D. Other Inspections. Subject to the approval of the Director of ((Construction and Land Use)) DCLU, a person other than a licensed civil or experienced geotechnical((/eivil)) engineer or special inspector may conduct the required inspection provided the person is under the supervision of a licensed civil engineer or experienced geotechnical((/eivil)) engineer and is qualified to conduct the inspection.
- Section 38. Section 22.808.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:



### 22.808.020 Liability and defenses of responsible parties.

- A. Who must comply. It is the specific intent of this Subtitle to place the obligation of complying with its requirements upon the responsible parties, as defined in Section 22.801.190. The City of Seattle and its agencies are intended to have the same obligation for compliance when the City is a responsible party. No provision of this Subtitle is intended to impose any other duty upon the City or any of its officers or employees.
- B. Joint and Several Liability. Each responsible party is jointly and severally liable for a violation of this Subtitle. The Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU or both of them may take enforcement action, in whole or in part, against any responsible party. All applicable civil penalties may be imposed against each responsible party. In the event enforcement action is taken against more than one (1) responsible party, recoverable damages, costs, and expenses may be allocated among the responsible parties by the court or the Hearing Examiner based upon the extent to which each responsible party's acts or omissions caused the violation, unless this factor cannot be determined, or the party receiving the allocation under this factor is unable to correct the violation, or is unable to pay the damages, costs, expenses, and any penalty imposed, in which case the trier of fact shall consider:
  - 1. Awareness of the violation;
  - 2. Ability to correct the violation;
  - 3. Ability to pay the damages, costs, and expenses;
  - 4. Cooperation with government agencies;
- 5. Degree to which any impact or threatened impact on water or sediment quality, human health, or the environment is related to acts or omissions by each responsible party;
- 6. Degree to which the responsible parties made good-faith efforts to avoid a violation or to mitigate its consequences; and
  - 7. Other equitable factors.



- C. Defenses. A responsible party shall not be liable under this Subtitle when the responsible party carries the burden of proving, by a preponderance of the evidence, one (1) of the following defenses:
  - 1. The violation was caused solely by an act of God;
- 2. The violation was caused solely by another responsible party over whom the defending responsible party had no authority or control and the defending responsible party could not have reasonably prevented the violation;
- 3. The violation was caused solely by a prior owner or occupant when the defending responsible party took possession of the property without knowledge of the violation, after using reasonable efforts to identify violations. However, the defending responsible party shall be liable for all continuing, recurrent, or new violations after becoming the owner or occupant;
- 4. The responsible party implemented and maintained all appropriate <u>drainage</u> control facilities, treatment facilities, flow control facilities, erosion and sediment controls, source controls and best management practices identified in rules promulgated by the Director of ((Construction and Land Use)) <u>DCLU</u> and the Director of ((Seattle Public Utilities)) <u>SPU</u>, or in manuals published by the State Department of Ecology until superseded by rules of the Directors, or as otherwise identified and required of the responsible party by the Director in writing pursuant to this Subtitle.
- Section 39. Section 22.808.120 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432, is amended as follows:

#### 22.808.120 Fees.

Fees for grading permits, drainage control plan review and approvals shall be as set forth in the ((Permit)) Fee ((Ordinance)) Subtitle, Subtitle IX of Title 22, Seattle Municipal Code. Fees for recordkeeping or other activities pursuant to this Subtitle shall, unless otherwise provided for in this Subtitle, be prescribed by Ordinance.



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Section 22.808.150 of the Seattle Municipal Code, adopted by Ordinance Section 40. 116425, is repealed. 2 3 Severability. The several provisions of this Ordinance are hereby declared Section 41. to be separate and severable and the invalidity of any clause, sentence, paragraph, sub-division, 5 section or portion of this ordinance or the invalidity of the application thereof to any person or 6 circumstance shall not affect the validity of the remainder of this Ordinance or the validity of its application to other persons or circumstances. 8 9 Any act consistent with the authority and before the effective date of this Section 42. 10 ordinance is hereby ratified and confirmed. 11 12 This Ordinance shall take effect and be in force thirty (30) days from and Section 43. 13 after its approval by the Mayor, but if not approved and returned by the Mayor within ten (10) 14 days after presentation, it shall take effect as provided by Seattle Municipal Code Section 15 1.04.020. 16 17 18 H// 19  $/\!/$ 20 // 21 22 // //23 // 24 H25 II26 11 27 İľ 28 # 29 H30



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1	Passed by the City Council the day of, 2000, and signed by me	
2	in open session in authentication of its passage this day of, 2000.	
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6	President Pageler of the City Council	
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8	Approved by me this day of, 2000.	
9		
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12	Paul Schell, Mayor	
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14	Filed by me this day of, 2000.	
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18	City Clerk	
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20	(SEAL)	



ORDINANCE	•	

- AN ORDINANCE relating to the Stormwater, Grading, and Drainage Control Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396; amending Chapter 22.800, entitled "Title, Purpose, Scope, and Authority"; amending Chapter 22.801, entitled "Definitions"; amending Chapter 22.802, entitled "Stormwater, Drainage, and Erosion Control"; amending Chapter 22.804, entitled "Grading"; and amending Chapter 22.808, entitled "Administration and Enforcement."
- WHEREAS the City of Seattle is subject to the terms of the National Pollutant Discharge Elimination System General Permit ("NPDES Permit") issued July 5, 1995, by the State of Washington Department of Ecology ("Ecology") for discharges from municipal separate storm sewer systems for the Cedar/Green Water Quality Management Area (Permit No. WASM 23003) that are subject to the federal Clean Water Act and other law; and
- WHEREAS the City is subject to the terms of an Ecology-approved City of Seattle Stormwater Management Program, dated April 11, 1997; and
- WHEREAS the NPDES Permit and Stormwater Management Program require that the City adopt Ordinances and minimum requirements that are equivalent to Ecology guidance for controlling runoff from development and construction activities; and
- WHEREAS the City has negotiated with Ecology an environmentally-protective approach to equivalency that involves new regulation of both construction and other discharges; and
- WHEREAS the City has proposed additional changes to its regulation and enforcement program to improve water quality and further the purposes of the Stormwater, Grading and Drainage Control Code; Now, Therefore:

#### BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

- **Section 1.** Section 22.800.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:
- 22.800.010 Title.
- This Subtitle, comprised of SMC Chapters 22.800 through 22.808, shall be known as the "Stormwater, Grading and Drainage Control Code," and may be cited as such.



Section 2. Section 22.800.020 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended by adding a new Subsection C as follows:

22.800.020 Purpose.

* * *

- C. It is expressly acknowledged that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, the water quality protection measures in this Subtitle are necessary to protect the health, safety and welfare of the residents of Seattle and the integrity of natural resources for the benefit of all and for the purposes of this Subtitle. Such water quality protection measures are required under the federal Clean Water Act, 33 U.S.C. Section 1251, et seq., and in response to the obligations of the City's municipal stormwater discharge permit, issued by the State of Washington under the federal National Pollutant Discharge Elimination System program.
- **Section 3.** Section 22.800.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.800.030 Scope.

This Subtitle applies to:

- A. All grading and drainage and erosion control, whether or not a permit is required; and
- B. All new ((development and redevelopment)) or replaced impervious surface and all land disturbing activities, whether or not a permit is required; and
- C. All ((new and existing)) discharges directly or indirectly to a public drainage control system; and



D. All new and existing land uses.

Compliance with other laws.

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Section 4. 116425, is amended by adding a new Subsection C as follows:

22.800.060

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Section 22.800.060 of the Seattle Municipal Code, adopted by Ordinance

Compliance with the provisions of this Subtitle and of regulations and manuals adopted C. by the City in relation to this Subtitle does not necessarily mitigate all impacts to the environment. Thus, compliance with this Subtitle and related regulations and manuals should not be construed as mitigating all stormwater impacts, and additional mitigation may be required to protect the environment. The primary obligation for compliance with this chapter, and for preventing environmental harm on or from property, is placed upon responsible parties as defined by this Subtitle.

Section 5. Section 22.800.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.800.070 City Projects.

#### A. Compliance.

1. City agencies shall comply with all the requirements of this Subtitle except they shall not be required to obtain permits and approvals under this Subtitle for work performed within a public right-of-way and for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation. Where the work occurs in a public right-of-way, it shall comply with Seattle Municipal Code Title 15, Street and Sidewalk Use, including the applicable requirements to obtain permits or approvals. Where appropriate as set forth in ((Subsection)) Section 22.804.040 C of this Code, a soils report and analysis by an experienced geotechnical((/eivil)) engineer shall be prepared for City projects.



- 2. A City agency project, as defined in Section 22.801.170, that is not required to obtain permit(s) and approval(s) per subsection A1 above, is not required to comply with Sections 22.802.015 C4, 22.802.016 B1, and 22.802.016 B2, if the project begins land disturbing activities on or before July 1, 2002, and if the project meets one or more of the following criteria:
- a. Project funding was appropriated as identified in Ordinance 119750, titled, "An ordinance adopting a budget, including a capital improvement program and a position list, for the City of Seattle for fiscal year 2000," or
- b. Project received or will receive voter approval of financing before January 1, 2001, or
- c. Project received or will receive funds based on grant application(s) submitted before January 1, 2001, or
- d. Project conducted or will conduct land disturbing activity before January 1, 2001.

## B. Inspection.

- 1. When the City conducts projects for which review and approval is required under Section ((22.802.015)) 22.802.020 or 22.804.030, the work shall be inspected by the City agency conducting the project or supervising the contract for the project. The inspector for the City agency shall be responsible for insuring that the grading and drainage control is done in a manner consistent with the requirements of this Subtitle.
- 2. Where a soils analysis and report has been prepared as required under subsection A of this section, the grading shall also be inspected by the geotechnical((/eivil)) engineer who prepared the report.
- 3. A City agency need not provide an inspector from its own agency provided either:
- a. the work is inspected by an appropriate inspector from another City agency; or
- b. the work is inspected by the licensed civil or geotechnical((/eivil)) engineer who prepared the plans and specifications for the work; or
  - c. a permit or approval is obtained from the Director of ((Construction and



Land Use)) DCLU, and the work is inspected by the Director.

C. Certification of Compliance. City agencies shall meet the same standards as non-City projects, and shall certify that each individual project meets those standards.

Section 6. Section 22.800.080 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

## 22.800.080 Authority.

- A. 1. The Director of ((Construction and Land-Use shall have)) DCLU has authority regarding the provisions of this Subtitle pertaining to grading, review of drainage control plans, and review of erosion control plans, and ((shall-have)) has inspection and enforcement authority pertaining to temporary erosion/sediment control measures.
- 2. The Director of ((Seattle Public Utilities shall have)) SPU has authority regarding all other provisions of this Subtitle pertaining to stormwater, drainage, and erosion control, including inspection and enforcement authority.
- B. The Directors of ((Construction and Land Use)) DCLU and ((Seattle Public Utilities))

  SPU are authorized to take actions necessary to implement the provisions and purposes of this Subtitle in their respective spheres of authority, including, but not limited to, the following: promulgating and amending rules and regulations, pursuant to the Administrative Code, Chapter 3.02 of the Seattle Municipal Code((, which may include prescribing best management practices ("BMPs"))); establishing and conducting inspection programs; establishing and conducting or, as set forth in Section 22.802.012, requiring responsible parties to conduct, monitoring programs, which may include sampling of discharges to or from drainage control facilities, the public drainage control system, or surface water; taking enforcement action; abating nuisances; promulgating guidance and policy documents; and reviewing and approving or disapproving required submittals and applications for approvals and permits.
- C. The Director of ((Seattle Public Utilities)) <u>SPU</u> is authorized to develop drainage basin plans for managing surface water, drainage water, and erosion within individual subbasins.



((Compliance with an adopted)) A drainage basin plan may, when approved by the Director of ((Seattle Public Utilities)) SPU, be used to modify requirements of this Subtitle, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.

Section 7. Section 22.801.010 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.801.010 General.

For the purpose of this Subtitle, the words listed in this Chapter ((shall)) have the following meanings, unless the context clearly indicates otherwise. Terms relating to pollutants and to hazardous wastes, materials, and substances, where not defined in this Subtitle, shall be as defined in Washington Administrative Code Chapters 173-303, 173-304 and 173-340, the Seattle Building Code or the Seattle Fire Code, including future amendments to those codes. Words used in the singular include the plural, and words used in the plural include the singular.

Effective July 5, 2000, all references in the Seattle Municipal Code Chapters 22.800 through 22.808 to "Department of Construction and Land Use," "Department of Design, Construction and Land Use," "Director of Construction and Land Use," "Director of Design, Construction and Land Use," or "Seattle Public Utilities" shall be deemed references to "DCLU," "DCLU," "Director of DCLU," "Director of DCLU," "SPU," respectively. The City's Code Reviser is authorized to amend the Seattle Municipal Code Chapters 22.802 through 22.808 over time as he or she deems appropriate in order to carry out these changes.

Section 8. Section 22.801.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 118396, is amended as follows:

### 22.800.020 "A."

"Abandoned solid waste disposal site" means a site ((which)) that is no longer in use and where



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solid waste was disposed with or without a permit.

"Agency" means any governmental entity or its subdivision.

"Agency with jurisdiction" means those agencies with statutory authority to approve, condition or deny permits, such as the United States Environmental Protection Agency, the Washington State Department of Ecology or the Seattle-King County Department of Public Health.

"American Petroleum Institute (API) oil/water separator": See "Oil/water separator, American Petroleum Institute (API)".

"Approved" means approved by either the Director of <u>Design</u>, Construction and Land Use or the Director of Seattle Public Utilities.

"As-graded" means the surface condition existing after completion of grading.

**Section 9.** Section 22.801.030 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.030 "B."

"Backfilling" means returning a site to its original or approved contours after earth materials were removed for construction purposes.

"Basin plan" means a plan to manage the quality and quantity of stormwater in a watershed, including watershed action plans.

"Bench" means a relatively level step excavated into earth material on which fill is to be placed.

"Best management practice" (BMP) means a physical, chemical, structural or managerial practice or device that prevents, reduces, or treats contamination of water or which prevents or



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reduces soil erosion. When the Directors develop rules and/or manuals prescribing best management practices for particular purposes, whether or not those rules and/or manuals are adopted by Ordinance, BMPs prescribed in the rules and/or manuals shall be the BMPs required for compliance with this Subtitle.

- 1. "Non-structural" or "operational" best management practices are those ((which)) pollution control strategies that require modified or additional ((operational or)) behavioral practices, such as sweeping a parking lot, or ((having)) maintaining special equipment on site, such as spill response equipment. ((on-site.))
- "Structural" best management practices are those ((which)) pollution control 2. strategies that require the construction of a structure or other physical modification on the site.

"Biofiltration swale" means a long, gently sloped, vegetated channel designed and maintained to treat stormwater runoff through sedimentation, adsorption, and biological uptake. Grass is the most common vegetation, but wetland vegetation can be used if the soil is saturated.

"Building permit" means a document issued by the City of Seattle Department of Design. Construction and Land Use giving permission for construction or other specified activity in accordance with the Seattle Building Code (Chapter 22.100 SMC).

Section 22.801.040 of the Seattle Municipal Code, adopted by Ordinance Section 10. 116425, is amended as follows:

#### 22.801.040 "C."

"Cause or contribute to a violation" means and includes acts or omissions that create a violation, that increase the duration, extent or severity of a violation, and that aid or abet a violation.

"Civil engineer, licensed" means a person who is a licensed by the State of Washington to practice civil engineering.

"Coalescing plate oil/water separator" means a multi-chambered vault, containing a set of



parallel, corrugated plates that are stacked and bundled together in the center of the vault.

Coalescing plate separators are designed to remove dispersed oil and floating debris as well as in containing spills.

"Combined sewer" - see "Public combined sewer."

"Compaction" means the densification of a fill by mechanical means.

"Containment area" means the area designated for conducting high-risk pollution generating activities for the purposes of implementing operational source controls or designing and installing structural source controls or treatment facilities.

"Contaminate" means the addition of sediment, any other pollutant or waste, or any illicit discharge.

"Cut" means the changing of a grade by excavation.

**Section 11.** Section 22.801.050 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

22.801.050 "D."

# "DCLU" means the Department of Design, Construction and Land Use.

"Damages" means monetary compensation for harm, loss, costs, or expenses incurred by the City, including but not limited to the following: costs of abating violations of this Subtitle or public nuisances; fines or penalties the City incurs as a result of a violation of this Subtitle; and costs to repair or clean the public drainage control system as a result of a violation. For the purposes of this Subtitle, it does not include compensation to any person other than the City.

"Design storm" means a rainfall event used in the analysis and design of drainage facilities.



"Designated receiving waters" means the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, and other receiving waters designated by the Director of ((Seattle Public Utilities)) SPU as having the capacity to receive drainage discharges.

"Detention" means ((and refers to)) temporary storage of drainage water for the purpose of controlling the drainage discharge rate.

"Detention system" means a facility designed to control the discharge rate of stormwater runoff from a site by detaining flows in a tank or vault.

"Development" ((—see "New Development and Redevelopment)) means land disturbing activity or the addition or replacement of impervious surface.

"Developmental coverage" means all areas within a site planned ((to be developed or redeveloped including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, areas in which soils, slopes and vegetation have been altered, and roadways and other pervious and impervious surfaces)) for land disturbing activity or new or replaced impervious surface.

"Director" means the Director of the Department authorized to take a particular action, and the Director's designees, who may be employees of that department or another City department.

"Director of <u>Design</u>, Construction and Land Use" means the Director of the Department of <u>Design</u>, Construction and Land Use of the City of Seattle and/or the designee of the Director of <u>Design</u>, Construction and Land Use, who may be employees of that department or another City department.

"Director of Seattle Public Utilities" means the Director of Seattle Public Utilities of the City of Seattle and/or the designee of the Director of Seattle Public Utilities, who may be employees of



that department or another City department.

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29 30 "Discharge point" means the location to which drainage water from a specific site is released.

"Discharge rate" means the rate at which drainage water is released from a specific site. The discharge rate is expressed as volume per unit of time, such as cubic feet per second.

"Drainage basin" means the tributary area through which drainage water is collected, regulated, transported, and discharged to receiving waters.

"Drainage control" means the management of drainage water. Drainage control is accomplished through the collection, conveyance, and discharge of drainage water, controlling the rate of discharge from a site, or separating, treating or preventing the introduction of pollutants.

"Drainage control facility" means any facility, including best management practices, installed or constructed for the purpose of controlling the flow, quantity, and/or quality of drainage water.

"Drainage control plan" means a plan for collecting, controlling, transporting and disposing of drainage water falling upon, entering, flowing within, and exiting the site, including designs for drainage control facilities.

"Drainage control system" means a system intended to collect, convey and control release of only drainage water. The system may serve public or private property. It includes constructed and/or natural components such as ditches, culverts, streams and drainage control facilities.

"Drainage water" means stormwater, snow melt, surface water, surface and irrigation runoff, water from footing drains and other drains approved by the Director of Seattle Public Utilities or installed in compliance with this Subtitle and rules which may be adopted hereunder. Other water which is not an illicit discharge as defined in ((subsection)) Section 22.802.012 C shall be considered drainage water if it drains from the exterior of a building or structure, a pervious or impervious surface, or undeveloped land, or by surface or shallow subsurface flow.



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"Dredging" means the excavation of earth materials from land covered by water.	The term
((shall include)) includes dredging ((which)) that maintains an established water d	epth.

Section 12. Section 22.801.060 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.060 "E."

"Earth material" means any rock, gravel, natural soil or resedimented soil, or any combination thereof, and does not include any solid waste as defined by RCW Chapter 70.95.

"Environmentally Critical Area" means an area designated in Chapter 25.09 of the Seattle Municipal Code.

"Erosion" means the wearing away of the ground surface as a result of mass wasting or of the movement of wind, water and/or ice.

"Excavation" means the mechanical removal of earth material.

"Existing grade" means the natural surface contour of a site, including minor adjustments to the surface of the site in preparation for construction.

"Exploratory excavation" means borings, or small pits, hand-dug or excavated by mechanical equipment. Exploratory excavation does not include preloading of the site.

Section 13. Section 22.801.070 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.070 66F. 29



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"Fill" means ((earth)) material deposited, placed, pushed, pulled, or transported to a place other than the place from which it ((is excavated)) originated.

"Filter strip" means a gently sloping vegetated area that is designed and maintained to treat, through sedimentation, adsorption and biological uptake, stormwater runoff from overland sheet flow from adjacent paved areas before it concentrates into a discrete channel.

"Finished grade" means the grade upon completion of the fill or excavation.

(("Fish and wildlife habitat conservation areas" is as defined in the Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code, Chapter 25.09.))

(("Flood prone area" is as defined in SMC Chapter 25.09, Environmentally Critical Areas.))

"Flow control" means controlling the discharge rate of stormwater runoff from the site through means such as infiltration or detention.

"Flow control facility" means a method, such as pursuant to this Subtitle or associated rules, for controlling the discharge rate of stormwater runoff from a site.

**Section 14.** Section 22.801.080 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.801.080 "G."

"Garbage" means putrescible waste.

"Geotechnical((/Civil)) engineer, experienced" or "Geotechnical/Civil engineer, experienced" means a professional civil engineer licensed by the State of Washington who has at least four years of professional experience as a geotechnical engineer, including experience with landslide evaluation.



"Grade" means the ground surface contour (see also "Existing grade" and "Finished grade").

"Grading" means excavation, fill, in-place ground modification, or any combination thereof, including the establishment of a grade following demolition of a structure.

"Grading approval" means an approved component of a building permit relating to grading, as required by this Subtitle.

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**Section 15.** A new Section 22.801.090 is added to the Seattle Municipal Code to read as follows:

#### 22.801.090 "H."

"High-risk pollution generating activities" are the following:

1. Fueling operations that involve transferring fuel into mobile vehicles or equipment at permanent stations, temporary stations, and mobile fueling stations. Permanent stations include facilities, such as, but not limited to, commercial gas stations, maintenance yards, and private fleet fueling stations, where fuel is transferred from a dedicated fueling station. Temporary fueling stations include, but are not limited to, construction sites and any other site where fuel is temporarily stored and dispensed into vehicles or equipment. Mobile fueling stations are fueling operations where fuel is delivered to vehicles and equipment via mobile tank trucks.

2. Vehicle, equipment or building washing or cleaning, including any of the following: mobile vehicle steam cleaning operations or vehicle washing at commercial car wash facilities, charity car washes, or permanent parking lots such as new, used, and rental car lots and fleet lots; outside washing of tools or other manufacturing equipment; outside cleaning of commercial cooking equipment such as filters and grills; or washing of buildings, including exteriors or mobile interior building cleaning services.



- 3. Truck or rail loading or unloading of liquid or solid materials that involves transferring non-containerized bulk liquids from truck or rail, or loading/unloading materials at a commercial or industrial loading dock.
- 4. Liquid storage in stationary above ground tanks, including storing liquid chemicals, fertilizers, pesticides, solvents, grease, or petroleum products in stationary above ground tanks.
- 5. Outside portable container storage of liquids, food wastes, or dangerous wastes including storing any of the following: vegetable grease, animal grease, or other accumulated food wastes; used oil; liquid feedstock; cleaning compounds; chemicals; solid waste as defined by SMC 21.36; or dangerous waste.
- 6. Outside storage of non-containerized materials, by-products, or finished products, including outside storage of any of the following: non-liquid pesticides or fertilizers; contaminated soil; food products or food wastes; metals; building materials, including but not limited to lumber, roofing material, insulation, piping, and concrete products; or erodible materials, including but not limited to sand, gravel, road salt, topsoil, compost, excavated soil, and wood chips.
- 7. Outside manufacturing activity including any of the following: processing; fabrication; repair or maintenance of vehicles, products or equipment; mixing; milling; refining; or sand blasting, coating, painting, or finishing of vehicles, products, or equipment.
- 8. Landscape construction or maintenance, including any of the following: land disturbing activities as described in SMC 22.801.130; fertilizer or pesticide application near public drainage control system; and disposal of yard waste near a public drainage control system or riparian corridor.

"High-use" means any project planned to generate or accommodate any of the following:

1. Expected average daily traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area. In addition, the following is high-use unless the responsible party demonstrates to the satisfaction of the Director of DCLU or of the Director of SPU that the project will generate less than 100 vehicles per 1,000 square feet of gross building area: uncovered parking lot accessory to any fast-food restaurant, convenience market, supermarket, shopping center, discount store, movie theater, athletic club, or bank.



- 2. Petroleum storage or transfer in excess of 1,500 gallons per year, not including delivered heating oil.
- 3. Storage, or maintenance of a fleet of 25 or more diesel vehicles that are over 10 tons net weight (including, but not limited to, trucks, buses, trains, heavy equipment).
- 4. Road intersections with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 or more on any intersecting roadway, excluding projects proposing primarily pedestrian or bicycle use improvements.
- Section 16. Section 22.801.100 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

#### 22.801.100 "I."

"Illicit discharge" means the discharges defined by Section 22.802.012.

"Impervious surface" means any surface <u>exposed to rainwater</u> from which most water runs off including, but not limited to, ((<del>paved streets</del>)) <u>paving</u>, ((<del>graveled or paved areas such as driveways, parking areas,</del>)) packed earth material, oiled macadam, or other treated surfaces, ((<del>walkways,</del>)) <u>and</u> roof surfaces, patios, and formal planters.

"Impervious surface, replaced." - See "Replaced or replacement of impervious surface.

"Infiltration facility" means a drainage facility that temporarily stores, and then percolates stormwater runoff into the underlying soil. Examples include but are not limited to infiltration trenches, ponds, vaults, and tanks.

"In-place ground modification" means activity occurring at or below the surface which is designed to alter the engineering parameters and physical characteristics of soil or rock, including but not limited to, in_situ consolidation, solidification, void space reduction and infilling.



"Inspector" means the City inspector, inspection agency, or licensed civil engineer performing the inspection work required by this Subtitle.

**Section 17.** Section 22.801.130 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.801.130 "L."

"Land disturbing activity" means any activity that results in a movement of earth, or a change in the existing soil cover (both vegetative and nonvegetative) or the existing topography. Land disturbing activities include, but are not limited to, clearing, grading, filling ((and)), excavation, or addition or replacement of impervious surface.

"Large project" means a project <u>including 5,000 square feet or more of new or replaced</u> impervious surface or 1 acre or more of land disturbing activity. ((exceeding nine thousand (9,000) square feet of developmental coverage.))

**Section 18.** Section 22.801.140 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.801.140 "M."

"Master use permit" means a document issued by ((the Department of Design, Construction and Land Use)) DCLU giving permission for development or use of land or street right-of-way in accordance with the Land Use Code (Title 23, Seattle Municipal Code).

"Media filter" means a stormwater treatment system that utilizes a filtration medium such as sand or leaf compost to remove pollutants via physical filtration and chemical adsorption or precipitation. Filters may be constructed underground in a vault or above ground in a pond. In both systems, stormwater that has passed through the filter media is collected in an underground pipe and discharged to the nearby drainage system.



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"Municipal stormwater NPDES permit" means the permit issued to the City under the federal Clean Water Act for public drainage control systems within the City limits.

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**Section 19.** Section 22.801.150 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

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#### 22.801.150 "N."

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"NPDES" means National Pollutant Discharge Elimination System, the national program for controlling discharges under the federal Clean Water Act.

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"NPDES permit" means an authorization, license or equivalent control document issued by the United States Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

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## (("New development" means any of the following activities:

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1. Structural development, including construction of a new building or other structure;

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2. Expansion or alteration of an existing structure that results in an increase in the footprint of the building or structure;

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Land disturbing activities;

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4. Creation or expansion of impervious surface;

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5. Demolition;

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6. Subdivision and short subdivision of land as defined in RCW 58.17.020;

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7. Class IV general forest practices, as defined in WAC 22-16-050 that are conversions from timber land to other uses.

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No other forest practices or commercial agriculture are considered new development.))

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"Nondesignated receiving waters" means all creeks, streams and lakes in <u>The City of Seattle not designated as receiving waters</u>, including Green Lake, Haller Lake, and Bitter Lake, and all the creeks and streams.

**Section 20.** Section 22.801.160 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.801.160 "O."

"Oil/water separator" means a structure, usually underground, that is designed to provide quiescent flow conditions so that globules of free oil or other floatable materials that may be present in stormwater can float to the water surface and become trapped in the structure.

"Oil/water separator, American Petroleum Institute (API)" means a vault that has multiple chambers separated by baffles and weirs to trap oil in the vault. API oil/water separators are designed to remove dispersed oil and floating debris and in containing spills.

"Oil/water separator, coalescing plate". See Coalescing Plate Oil/Water Separator.

"Owner" means any person having title to and/or responsibility for, a building or property, including a lessee, guardian, receiver or trustee, and the owner's duly authorized agent.

**Section 21.** Section 22.801.170 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432 and 117697, is amended as follows:

### 22.801.170 "P."

"Person" means an individual, firm, partnership, corporation, municipal corporation, and government, and the individual's or entity's heirs, successors and assigns.



"Plan" means, for the purposes of this Subtitle, and unless a different meaning is set forth or clearly required, a graphic or schematic representation, with accompanying notes, schedules, specifications and other related documents.

"Plot plan" means a scaled map of a site and adjacent public rights-of-way showing locations and dimensions of various existing and proposed features, such as buildings, curbs, driveways, sidewalks, trees, grades and drainage patterns.

"Preloading" means the temporary stockpiling of earth material over a site for the purpose of consolidating the existing soils.

"Project" means the addition or replacement of impervious surface or the undertaking of land disturbing activity on a site.

"Public combined sewer" means a publicly owned and maintained sewage system which carries drainage water and sewage and flows to a publicly owned treatment works.

"Public drainage control system" means a drainage control system owned or used by The City of Seattle serving City streets and adjacent property.

"Public place" means and includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, and planting (parking) strips, squares, triangles and right-of-way for public use and the space above or beneath its surface, whether or not opened or improved.

"Public storm drain" means the part of a public drainage control system which is wholly or partially piped, is owned or operated by a public entity, and is designed to carry only drainage water.

Section 22. Section 22.801.190 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:



#### 22.801.190 "R."

"Receiving waters" means the waters ultimately receiving drainage water, including the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, including associated bays, but not including tributary streams, creeks and lakes. See also "Designated receiving waters" and "Nondesignated receiving waters".

### (("Redevelopment" means any of the following activities:

- 1. Replacement or alteration of a building or structure that does not result in an increase in the footprint of the building or structure;
- 2. Replacement, alteration, or upgrade of an impervious surface that is not part of a routine maintenance activity, and does not result in expansion of the impervious surface.))
- "Replaced impervious surface" or "replacement of impervious surface" means impervious surface that is removed down to earth material and a new impervious surface is installed.

"Responsible party" means all of the following persons:

- 1. Owners and occupants of property within The City of Seattle; and,
- 2. Any person causing or contributing to a violation of the provisions of this Subtitle.

(("Riparian corridor" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

Section 23. Section 22.801.200 of the Seattle Municipal Code, adopted by Ordinance 116425, and amended by Ordinance 118396, is amended as follows:

22.801.200 "S."

"SPU" means Seattle Public Utilities.



"Sand filter" means a depression or basin with the bottom made of a layer of sand designed and maintained to filter pollutants. Stormwater is treated as it percolates through the sand layer.

"Sanitary sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

"Serve" or "service", when used regarding a document, means the procedures set forth in Section 22.808.030.

"Service drain" means a privately owned and maintained drainage control facility or system which carries only drainage water. Service drains include, but are not limited to, conveyance pipes, catch_basin connections, downspout connections, pipes, and subsurface drain connections.

"Shoreline district" means all land regulated by the Shorelines Management Act of 1971 (RCW Chapter 90.58) or City Ordinances implementing it, as defined in the Land Use Code, Title 23 of the Seattle Municipal Code.

"Side sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.

"Site" means the lot, parcel of land, street or highway right of way lot or parcel, or portion of street, highway or other public right-of-way, or contiguous combination thereof, where ((a permit for new development, redevelopment, land-disturbing activity, or grading has been issued or where any such work)) a permit for the addition or replacement of impervious surface or the undertaking of land disturbing activity has been issued or where any such work is proposed or performed, and the contiguous combination thereof. For development limited to a public street, each segment from mid-intersection to mid-intersection shall be considered a separate site.

"Slope" means an inclined ground surface. In this Subtitle, the inclination of a slope is expressed as a ratio of horizontal distance to vertical distance.



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"Small project" means a project	with: (( <del>nine thous</del> a	<del>ind (9,000</del>	<del>)) square f</del>	eet or les	<del>s of</del>
developmental coverage))					

- less than 5,000 square feet of new and replaced impervious surface; and
- less than 1 acre of land disturbing activities.

"Soil" means naturally deposited non-rock earth materials.

"Solid waste" means solid waste as defined by SMC Section 21.36.016.

"Source controls" mean structures or operations that prevent contaminants from coming in contact with stormwater through physical separation or careful management of activities that are known sources of pollution.

"Operational source controls" are those which require modified or additional behavioral practices, such as sweeping a parking lot, or maintaining special equipment on site, such as spill response equipment.

- "Structural source controls" are those which require the construction of a structure or other physical modification on the site.
- "Standard design" is a design pre-approved by ((the)) Seattle Public Utilities for drainage and erosion control available for use by a ((typical)) site with pre-defined characteristics.
- "Storm drain" see "Public storm drain" and "Service drain."
- "Stormwater" means water originating from rainfall and other precipitation, and from footing drains and other subsurface drains approved by the Director of Seattle Public Utilities or installed in compliance with rules which may be adopted hereunder.

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Section 24. Section 22.801.210 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:



## 22.801.210 "T."

"Terrace" means a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

"Topsoil" means the weathered surface soil, usually including the organic layer, in which plants have most of their roots.

"Treatment facility" means a method, such as pursuant to this Subtitle and associated rules, designed to remove pollutants from stormwater runoff.

**Section 25.** Section 22.801.240 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.801.240 "W."

"Watercourse" means the route, constructed or formed by humans or by natural processes, generally consisting of a channel with bed, banks or sides, in which surface waters flow((; including)). Watercourse includes small lakes, bogs, streams, creeks, and intermittent artificial components (including ditches and culverts) but does not ((including)) include receiving waters.

(("Wetland" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

"Wetpool" means a permanent pool of water that is contained in the bottom of a wet pond or wet vault stormwater treatment facility. Water in the wetpool is normally lost only through evaporation, evapotranspiration, or slow infiltration into the ground. The wetpool, also referred to as dead storage, is designed to reduce the velocity of incoming stormwater flows, encouraging particulates and particulate-bound pollutants to settle in wet ponds and wet vaults.



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"Wetpond" and "wetvault" mean stormwater treatment facilities that contain a permanent pool of water (wetpool). They are designed to settle out particles of fine sediment, and allow biologic activity to occur to metabolize nutrients and organic pollutants, by providing a long retention time. Wetvaults are covered by a lid.

Section 22.802.010 of the Seattle Municipal Code, adopted by Ordinance Section 26. 116425, is amended as follows:

#### 22.802.010 Scope and exemptions from Subtitle.

- General. All ((new and existing)) discharges subject to this Subtitle as set forth in A. Section 22.800.030, all land uses ((and all new development, redevelopment)), additions and replacement of impervious surface, land disturbing activity, and grading shall comply with all requirements of this Subtitle unless explicitly exempted by this Subtitle or by the Director exercising authority granted under this Subtitle.
- В. Exemptions. The following land uses are exempt from the provisions of this Subtitle:
- 1. Commercial agriculture, including only those activities conducted on lands defined in RCW 84.34.020(2), and production of crops or livestock for wholesale trade;
- Forest practices regulated under Title 222 Washington Administrative Code, 2. except for Class IV general forest practices, as defined in WAC 222-16-050, that are conversions from timber land to other uses; and
- Development undertaken by the Washington State Department of Transportation 3. in state highway right-of-way that complies with standards found in Chapter 173-270 Washington Administrative Code, the Puget Sound Highway Runoff Program.
- Section 27. Section 22.802.013 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

((22.802.013 REQUIREMENTS FOR EXISTING DISCHARGES AND LAND USES



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#### A. General.

For all existing discharges directly or indirectly to a public drainage control system, responsible parties shall implement and maintain nonstructural best management practices as specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use. Nonstructural best management practices shall include, but not be limited to, maintenance and housekeeping practices such as cleaning of eatch basins and detention facilities, sweeping of parking lots, storing oil barrels and other contaminant sources out of the rain, covering material stockpiles, and proper use and storage of hazardous materials.

If the Director of Scattle Public Utilities determines that discharges from a drainage control facility are causing or contributing to a water quality problem, such as discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by nonstructural best management practices, including, but not limited to, areas with recurrent spills such as discharges from vehicle maintenance shops or gas stations, then the Director of Seattle Public Utilities may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include structural best management practices, or other action necessary to cease causing or contributing to the water quality problem or the violation of the City's permit. Structural best management practices include but shall not be limited to constructed facilities such as detention tanks, wet ponds, oil/water separators, grassed swales, roofing and berming of container storage areas, and revised piping systems.

### B. Spill Prevention Required.

- All commercial and industrial responsible parties shall take measures to prevent spills or other accidental introduction of illicit discharges into a public drainage control system. Such measures shall include:
- Establishment and implementation of plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater;
- Implementation of procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and



- e. Provision of necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.
- 2. The provisions of this Subsection may be satisfied by a Stormwater Pollution

  Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site.
- 3. The responsible parties shall make the plans and procedures required by this Subsection available to the Director of Scattle Public Utilities when requested.
- C. Release Reporting Requirements. A responsible party must, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of Seattle Public Utilities, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.
- D. Natural Drainage Patterns. Natural drainage patterns shall be maintained.
- E. Obstruction of Watercourses. Watercourses shall not be obstructed.))

# 22.802.013 Requirements for all discharges and land uses.

- A. For all discharges except those that drain only to the public combined sewer, responsible parties shall implement and maintain operational source controls, including but not limited to the following, as further described in rules promulgated by the Director:
- 1. Maintaining drainage control systems such as conveyance systems, detention systems and treatment systems;
  - 2. Maintaining streets, driveways, parking lots and sidewalks; and
  - 3. Identifying and eliminating illicit connections to the drainage control system.
- B. For high-risk pollution generating activities except those that discharge only to the public combined sewer:
- 1. Operational source controls shall be implemented for the high-risk pollution generating activities as specified in rules promulgated jointly by the Directors of SPU and



DCLU. Operational source controls for high-risk pollution generating activities shall include
but are not limited to, enclosing, covering, or containing the activity, developing and
implementing inspection and maintenance programs, sweeping, and training employees on
pollution prevention.

- 2. Spill prevention shall be required. Parties responsible for undertaking, operating, or maintaining the high-risk pollution generating activities are required to do the following, as further defined in rules promulgated by the Director:
- a. Develop and implement plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater. This requirement may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site;
- b. Implement procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
- c. Provide necessary containment and response equipment on-site, and training of personnel regarding the procedures and equipment to be used.
- 3. The responsible parties are required to make plans, procedures, and schedules required by this subsection available to the Director of SPU when requested.
- C. If the Director of SPU determines that discharges from a drainage control facility are causing or contributing to a water quality problem, such as but not limited to discharges that violate the City's municipal stormwater NPDES permit or that cannot be adequately addressed by the required operational or structural best management practices, then the Director of SPU may require the responsible party to undertake more stringent or additional best management practices. These best management practices may include operational or structural best management practices or other action necessary to cease causing or contributing to the water quality problem or violation of the City's permit. Structural best management practices may include but shall not be limited to drainage control facilities, structural source controls, treatment facilities, constructed facilities such as enclosures, covering and/or berming of container storage areas, and revised drainage systems. For existing discharges as opposed to new projects, the Directors of SPU and DCLU shall allow twelve (12) months to install a new flow control facility, structural source control or treatment facility after a Director determines



pursuant to this subsection that discharges from a site are causing or contributing to a water quality problem and notifies the responsible party in writing of that determination and of the flow control facility, structural source control or treatment facility that must be installed.

- D. Release reporting requirements. A responsible party is required to, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of SPU, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.
- E. Natural drainage patterns. Natural drainage patterns shall be maintained.
- F. Obstruction of watercourses. Watercourses shall not be obstructed.
- **Section 28.** Section 22.802.015 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, and 118396, is amended as follows:
- ((22.802.015 STORMWATER, DRAINAGE, AND EROSION CONTROL REQUIREMENTS
- A. When Compliance is Required.
- 1. New Development. All new development, regardless of type, and regardless of whether or not a permit is required, must comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage shall also comply with the requirements for large projects set forth in Subsection D below. Only those projects meeting the review thresholds set forth in Subsection B must prepare and submit the required plans.
- 2. Redevelopment. The portion of the site being redeveloped shall at least comply with the minimum requirements set forth in Subsection C below. Projects exceeding 9,000 square feet of developmental coverage must also comply with the additional requirements set forth in Subsection D below. Compliance is required regardless of the type of redevelopment, and



regardless of whether or not a permit is required. However, only those projects meeting the review thresholds set forth in Subsection B below must prepare and submit the required plans.

- 3. Approval of Exceptions Required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that are below the threshold sizes specified in Subsection B, unless allowed by rule promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use or approved by the Director of Construction and Land Use. Approval shall be obtained prior to initiating land disturbing activities or new development or redevelopment. Approvals must be obtained for exceptions to any and all requirements of this Subtitle, including but not limited to the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.
- B. Thresholds for Drainage Control Review. The City may, by interagency agreement signed by both the Director of Seattle Public Utilities and the Director of Construction and Land Use, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Subtitle, unless exceptions are granted as set forth in Section 22.808.010. Except as provided in this Subsection, drainage control review and approval shall be required as provided below:
- 1. Where an application for either a master use permit or building permit includes the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance codified in this Subtitle;
  - Where an application for a grading permit or approval is required;
- 3. Where a street use permit is required and the permit is for the cumulative addition of 750 square feet or more of developmental coverage after the effective date of the ordinance codified in this Subtitle;
- 4. Where a City public works project or construction contract, including contracts for day labor and other public works purchasing agreements, is for the cumulative addition of 750 square feet or more of developmental coverage to the site after the effective date of the ordinance codified in this Subtitle, except for projects in a City-owned right of way and except for work



22.800.050;

of watercourses.

Department of Parks and Recreation;

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Land Use.

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comply with the requirements of Subsection D below. The Director of Construction and Land Use may also require projects with 9,000 square feet or less of developmental coverage to comply with the requirements set forth in Subsection D when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of Construction and Land Use may consider, but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and

tributary to an area with known erosion or flooding problems.

of this subsection. Projects with more than 9,000 square feet of developmental coverage shall also

performed for the operation and maintenance of park lands under the control or jurisdiction of the

Where any permit approval or contract includes any new or additional

Whenever an exception to a requirement set forth in this Subtitle or in a rule

Minimum Requirements for All Projects. All projects must comply with the requirements

developmental coverage on a site deemed a potentially hazardous location, as specified in Section

promulgated under this Subtitle is desired, whether or not review and approval would otherwise

be required, including but not limited to alteration of natural drainage patterns or the obstruction

selected as set forth in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land specifying criteria, guidelines and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the review threshold, the proposed discharge point shall be identified in the drainage control plan required by paragraph C4 below, for review and approval or disapproval by the Director of Construction and

Discharge Point. The discharge point for drainage water from each site shall be

Discharge Rate. To the extent practical, the peak drainage water discharge rate from pervious and impervious surfaces on the site shall not exceed 0.2 cubic feet per second per acre under design storm conditions. The Director of Construction and Land Use and the Director



of Seattle Public Utilities may jointly promulgate rules modifying the discharge rate requirement for projects which will result in less than 2,000 square feet of new impervious surface. The Director of Construction and Land Use and the Director of Seattle Public Utilities may jointly promulgate rules allowing exceptions to the permissible peak discharge rate for property which discharges water directly to a designated receiving water or directly to a public storm drain which the Director of Seattle Public Utilities determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a receiving water. The design storm used to determine detention volume necessary to obtain the required discharge rate shall be a storm with a statistical probability of occurrence of one in 25 in any given year. If the project is within an environmentally critical area, the design storm requirements of SMC Chapter 25.09, Regulations for Environmentally Critical Areas, shall be applied. The Director of Seattle Public Utilities and the Director of Construction and Land Use shall jointly adopt rules specifying the methods of calculation to determine the discharge rate. Where laws or regulations of the federal government or the State of Washington impose a more stringent requirement, the more stringent requirement shall apply.

3. Control Measures. During new development, redevelopment and land-disturbing activities, best management practices, as further specified in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use, shall be used to accomplish the following:

a. Control erosion and the transport of sediment from the site through measures such as mulching, matting, covering, silt fences, sediment traps and eateh basins, settling ponds and protective berms;

b. Permanently stabilize exposed soils that are not being actively worked; through such methods as the installation of permanent vegetative cover and installation of slope protective materials; and

e. Control the introduction of contaminants and pollutants into, and reduce and treat contaminants in drainage water, drainage control facilities, surface water and groundwater, and the public drainage control system by methods such as covering of material stockpiles; proper disposal of hazardous materials; regular cleaning of eatch basins, gravel truck loading and heavy equipment areas; spill control for fueling operations; sweeping; and maintaining crosion control protective features described above.



- 4. Drainage Control Plan. For those projects meeting the review thresholds set forth in Subsection B above and which are less than 9,000 square feet, the applicant shall submit a drainage control plan as set forth in rules promulgated jointly by the Director of Scattle Public Utilities and the Director of Construction and Land Use. Standard designs for drainage control facilities as set forth in the rules may be used. Projects exceeding 9,000 square feet must submit a comprehensive drainage control plan as set forth in Subsection D below. The Director of Construction and Land Use may impose additional requirements, including a comprehensive drainage control plan prepared by a licensed civil engineer, when the project has complex or unusual drainage, or when additional requirements are otherwise necessary to accomplish the purposes of this Subtitle.
- 5. Memorandum of Drainage Control. The owner(s) of the site shall sign a "memorandum of drainage control" that has been prepared by the Director of Seattle Public Utilities. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The memorandum shall not be required when the drainage control facility will be owned and operated by the City. A memorandum of drainage control shall include:
  - a. The legal description of the site;
- b. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;
- c. An agreement that the owner(s) shall inform future purchasers and other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;
- d. The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;
- e. Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes;
- f. An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against



the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and

- g. The owner(s)' signatures acknowledged by a notary public.
- The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real property records. The applicant shall give the Director of Seattle Public Utilities proof of filing of the memorandum.
- 6. Flood Prone Areas. Sites within flood prone areas must employ measures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including but not limited to, SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Director of Seattle Public Utilities and the Director of Construction and Land Use to meet the purposes of this subsection.
  - 7. Natural Drainage Patterns. Natural drainage patterns shall be maintained.
  - 8. Obstruction of Watercourses. Watercourses shall not be obstructed.
- D. Additional Requirements for Large Projects. All projects exceeding 9,000 square feet of developmental coverage and those small projects identified by the Director according to Subsection C above must comply with the requirements set forth in this subsection. These requirements are in addition to the requirements set forth in Subsection C above. When the Directors develop rules prescribing best management practices for particular purposes, whether or not those rules are adopted by ordinance, BMPs prescribed in the rules shall be the BMPs required for compliance with this Subsection. Best management practices shall include, but not be limited to: maintenance and housekeeping practices such as proper storage of oil barrels and other contaminant sources, covering material stockpiles, proper use and storage of hazardous materials, as well as constructed facilities such as detention tanks, wet ponds, extended detention dry ponds, infiltration, vegetated streambank stabilization, structural stabilization, eatch basins, oil/water separators, grassed swales, and constructed wetlands.
- 1. In addition to detaining a 25-year storm to a release rate of 0.2 cubic feet per second per acre, the peak drainage water discharge rate from projects of more than 9,000 square



feet of developmental coverage shall not exceed 0.15 cubic feet per second per acre in a two year storm;

- 2. Control the sources of sediment and other contaminants and pollutants that could enter drainage water, including the selection, design and maintenance of temporary and permanent best management practices;
- 3. Minimize streambank erosion and effects on water quality in streams, including the selection, design and maintenance of temporary and permanent best management practices, where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream;
- 4. Minimize the introduction of sediment, heat and other pollutants and contaminants into wetlands, including the selection, design and maintenance of temporary and permanent best management practices, where stormwater discharges directly to a wetland or to a conveyance system that discharges into a wetland;
- 5. Analyze impacts to off-site water quality resulting from the project. The analysis shall comply with this Subsection and rules promulgated pursuant to this Subsection. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion:
  - e. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 6. A schedule shall be provided for inspection and maintenance of proposed temporary and permanent drainage control facilities and other best management practices. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- 7: In addition to the requirements described above, for land-disturbing activities and demolition of structures, an erosion/sediment control plan designed to comply with the requirements and purposes of this Subtitle and rules promulgated hereunder shall be submitted and implemented. The erosion/sediment control plan shall be designed to accomplish the following:



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1	a. Stabilization of exposed soils and sediment trapping;
2	b. Delineation of limits on clearing and easements;
3	c. Protection of adjacent property;
4	d. Appropriate timing and stabilization of sediment trapping measures;
5	e. Minimization of crosion on cut-and-fill slopes;
6	f. Control of off-site erosion;
7	g. Stabilization of temporary conveyance channels and outlets;
8	h. Protection of storm drain inlets;
9	i. Minimization of transport of sediment by construction vehicles;
10	j. Appropriate timing for removal of temporary best management practices;
11	k. Control of discharges from construction site dewatering devices to
12	minimize contamination of drainage water; and
13	1. Inspection and maintenance of best management practices for
14	erosion/sediment control to insure functioning at design capacity.
15	8. Comprehensive Drainage Control Plan. A comprehensive drainage control plan to
16	comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish
17	the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by
18	a licensed civil engineer in accordance with standards adopted by the Director of Construction and
19	Land Use.
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21	E. Basin Plans. The Director of Construction and Land Use may determine that, for a
22	particular project, compliance with a drainage basin plan satisfies Subsections D1 through D4
23	above. The basin plan must have been adopted by rule or ordinance and must provide a level of
24	protection for surface water and groundwater that equals or exceeds that which would otherwise
25	<del>be achieved.</del> ))
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27	22.802.015 Drainage, erosion control, and source control requirements for all land
28	disturbing activities or addition or replacement of impervious surface.
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30	A. Compliance required. All land disturbing activities or addition or replacement of
31	impervious surface are required to comply with this section, even where drainage control review

is not required. Exception: Maintenance, repair, or installation of underground or overhead utility facilities, such as, but not limited to, pipes, conduits and vaults, is not required to comply with the provisions of this section except subsection C3 below.

B. Approval of exceptions required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that do not require drainage control review, unless allowed by this Subtitle, by rule promulgated jointly by the Director of SPU and the Director of DCLU, or approved by the Director of DCLU. Approval shall be obtained prior to initiating land disturbing activities or adding or replacing impervious surface. Approvals are required for exceptions to any and all requirements of this Subtitle, including but not limited to the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.

## C. Requirements for all projects.

- 1. Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Directors of SPU and DCLU specifying criteria, guidelines, and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the drainage review threshold, the proposed discharge point shall be identified in the drainage control plan required by Section 22.802.020, for review and approval or disapproval by the Director of DCLU.
- 2. Flow control. The peak drainage water discharge rate from the portion of the site being developed shall not exceed 0.2 cubic feet per second per acre under 25-year, 24-hour design storm conditions or 0.15 cubic feet per second per acre under 2-year, 24-hour design storm conditions unless the site discharges water directly to a designated receiving water or to a public storm drain which the Director of SPU determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2,000 square feet of new and replaced impervious surface shall be required to install and maintain a flow control facility, in accordance with rules promulgated



by the Director, that is sized for the volume of runoff routed through the facility. Approved exceptions and flow control methods may be prescribed in rules promulgated by the Director.

- 3. Construction stormwater control. During land disturbing activities or addition or replacement of impervious surface, temporary and permanent construction controls shall be used to accomplish the following (a-g). Rules promulgated jointly by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director of DCLU when minimum controls are not sufficient to prevent erosion or transport of sediment or other pollutants from the site.
- a. Prevent on-site erosion by stabilizing all soils, including stock piles, that are temporarily exposed. Methods such as, but not limited to, the installation of seeding, mulching, matting, and covering may be specified by rules promulgated by the Director. From October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1 to September 30, no soils shall remain unstabilized for more than seven days.
- b. Before the completion of the project, permanently stabilize all exposed soils that have been disturbed during construction. Methods such as permanent seeding, planting, and sodding may be specified by rules promulgated by the Director.
- c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt fences, sediment traps, settling ponds, and protective berms may be specified in rules promulgated by the Director.
- d. During construction, prevent the introduction of pollutants in addition to sediment into stormwater. Appropriate methods, as prescribed in rules promulgated by the Director, include operational source controls such as but not limited to spill control for fueling operations, equipment washing, cleaning of catch basins, treatment of contaminated soils, and proper storage and disposal of hazardous materials.
- e. Limit construction vehicle access, whenever possible, to one route.

  Stabilize access points as specified in rules promulgated by the Director to minimize the tracking of sediment onto public roads.
- f. Inspect and maintain required erosion and sediment controls as prescribed in rules promulgated by the Director to ensure continued performance of their intended function.



g.	Prevent sediment fro	m entering	all storm	drains.	including	ditches,	which
receive runoff from th	he disturbed area.						

## 4. Source control.

- a. Effective January 1, 2001, structural source controls shall be installed for high-risk pollution generating activities to the maximum extent practicable to the portion of the site being developed, in accordance with rules promulgated by the Director, except in the following circumstances:
- i. When that portion of the site being developed discharges only to the public combined sewer; or
- ii. For normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or adversely affect the safety and operation of city right-of-way, utilities, or other property owned or maintained by the City.
- b. The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:
- i. Enclose, cover, or contain within a berm or dike the high-risk pollution generating activities;
- ii. Direct drainage from containment area of high-risk pollution generating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to discharging to a public drainage control system;
- iii. Pave, treat, or cover the containment area of high-risk pollution generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution generating activity; and
- iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution generating activities.
- 5. Flood-prone areas. On sites within flood prone areas, responsible parties are required to employ procedures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including, but not limited to, SMC Chapter 25.06 (Floodplain Development) and



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Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Directors of SPU and DCLU to meet the purposes of this Subtitle.

- Natural drainage patterns. Natural drainage patterns must be maintained.
- 7. Obstruction of watercourses. Watercourses shall not be obstructed.
- Water Quality Sensitive Areas. The Director of SPU may impose additional requirements for areas determined to be water quality sensitive areas.
- The Director of DCLU may require sites with addition or replacement of 5,000 square feet or less of impervious surface and with less than one acre of land disturbing activity to comply with the requirements set forth in 22.802.016, in addition to the requirements set forth in this Section, when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of DCLU may consider, but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and tributary to an area with known erosion or flooding problems.
- A new Section 22.802.016 is added to the Seattle Municipal Code to read Section 29. as follows:

#### 22.802.016 Additional requirements for large projects.

- Applicability. One acre or more of land disturbing activity or addition or replacement of A. 5,000 square feet or more of impervious surface shall comply with the requirements set forth in this section, in addition to the other applicable requirements of this Subtitle. Exception: Maintenance, repair, or installation of underground or overhead utility facilities, such as, but not limited to, pipes, conduits and vaults, is not required to comply with the provisions of this section except subsection B7.
- B. Requirements
- 1. Flow Control. Effective January 1, 2001, in addition to the discharge rate specified in Section 22.802.015, the peak drainage water discharge rate shall not exceed 0.5 cubic feet per second per acre in a 100-year, 24-hour design storm for portions of the site being



are met.

developed that drain to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake, as defined by Section 25.09.020 or to a drainage control system that drains to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake.

## 2. Stormwater Treatment.

- a. Effective January 1, 2001, stormwater treatment facilities shall be installed and maintained to treat that portion of the site being developed, as specified in this section and in rules promulgated jointly by the Directors of DCLU and SPU, unless the following conditions exist:
- i. The site produces no stormwater runoff discharge as determined by a licensed civil engineer; or
  - ii. The entire project drains to a public combined sewer.
- b. Stormwater treatment facilities shall be designed to treat the runoff volume from the 6-month, 24-hour storm, collected from the drainage area being routed through the facility.
- c. One of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated jointly by the Directors: infiltration, wetpond, stormwater wetland, biofiltration swale, filter strip, wet vault, media filter, or an alternative technology if the conditions in subsection e below are met.
- d. For high-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director, in addition to other required treatment facilities:
  - . Coalescing plate/oil water separator;
  - ii. Media filter;
  - iii. API oil/water separator; or
  - iv. An alternative technology if the conditions in subsection e below
- e. Alternative technology to meet runoff treatment requirements may be permitted if the following criteria are met, as further specified in rules promulgated jointly by the Directors of SPU and DCLU:



- i. Treatment effectiveness monitoring is conducted, which requirement may be waived if sufficient research has been conducted to demonstrate to the Director of SPU's satisfaction that an alternative technology offers equivalent protection;
- ii. Monitoring and maintenance records are reported to the Director of SPU at the end of each of the first three years following installation; and
- iii. The applicant demonstrates to the Director of SPU's satisfaction that the alternative will provide protection equivalent to the methods prescribed in the applicable subsection c or d above.
- f. The Director of SPU may ask the Washington State Department of Ecology to approve a commitment by the City to develop a water quality improvement plan to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Directors may grant exemptions to or make inapplicable the treatment requirements of this Section 22.802.016 B2, pursuant to rules promulgated by the Directors.
- 3. Protection of Streams. Where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream, streambank erosion and effects on water quality in streams shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls.
- 4. Protection of Wetlands. Where stormwater discharges directly to a wetland, as defined by SMC Chapter 25.09, or to a conveyance system that discharges to a wetland, the introduction of sediment, heat, and other pollutants and contaminants into wetlands shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls. Discharges to wetlands of exceptional value, as defined by SMC Chapter 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of the wetland. Detention and treatment systems shall not be located within any wetland or its buffer. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and infiltration options outside the wetland shall be maximized.
- 5. Off-site Analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage system that drains to that stream, impacts to off-site water quality resulting from the project are to be analyzed and mitigated. The analysis shall comply with this Section and rules the Directors may jointly promulgate



pursuant to this Section. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The analysis shall evaluate impacts likely to occur ¼ mile downstream from the project. The impacts to be evaluated and mitigated shall include at least the following:

- a. Amount of sedimentation;
- b. Streambank erosion;
- c. Discharges to groundwater contributing to recharge zones;
- d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 6. Inspection and Maintenance Schedule. Temporary and permanent drainage control and stormwater treatment facilities and other controls shall be inspected and maintained according to a schedule submitted to the Director. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- above in Section 22.802.015, construction stormwater controls shall be used to accomplish the following (a-j). Rules promulgated by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director when minimum controls are not sufficient to prevent the erosion or transport of sediment or other pollutants from the site. These controls (a-j below) and those required by 22.802.015 C3 shall be shown on a construction stormwater control plan complying with the requirements and purposes of this Subtitle and rules promulgated hereunder and submitted to the Director. The construction stormwater control plan shall address at least the following (a-j) and Section 22.802.015 C3:
- a. Before leaving the site, stormwater runoff shall pass through a sediment trap, sediment pond, or similar device;
- b. In the field, clearing limits and any easements, setbacks, critical areas and their buffers, trees, and drainage courses shall be marked;
- c. Sediment ponds and traps, perimeter dikes, sediment barriers, and other erosion and sedimentation controls intended to trap sediment on site shall be constructed as a first step in grading. These controls shall be functional before the land disturbing activities take



place. Earthen structures such as dams, dikes, and diversions shall be stabilized in accordance with Section 22.802.015 C3;

- d. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes will be stabilized in accordance with Section 22.802.015 C3 above;
- e. Properties and waterways downstream from the project site shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site;
- f. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour design storm for the developed condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches shall be provided at the outlets of all conveyance systems;
- g. Whenever construction vehicle access routes intersect paved roads, the transport of sediment onto the paved road shall be minimized. If sediment is transported onto a paved road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from paved roads by shoveling or sweeping and shall be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner;
- h. All temporary erosion and sediment controls shall be removed within 30 days after final site stabilization is achieved or after the temporary controls are no longer needed, whichever is later. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized;
- i. When dewatering devices discharge on site or to a public drainage control system, dewatering devices shall discharge into a sediment trap or sediment pond or gently sloping vegetated area; and
- j. In the construction of underground utility lines, where feasible, no more than 500 feet of trench shall be opened at one time, unless soil is replaced within the same working day, and where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches. Trench dewatering devices shall discharge into a sediment trap or sediment pond.



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Section 22.802.020 of the Seattle Municipal Code, adopted by Ordinance Section 30. 116425 and amended by Ordinance 117432, is amended as follows:

((22.802.020 SCOPE OF DRAINAGE CONTROL REVIEW AND APPLICATION REQUIREMENTS

Scope of Review. Where drainage review and approval are required by Section 22.802.015, the scope of this review shall at least include the following.

- Master Use Permit Applications. Master use permit applications shall contain sufficient information to allow the Director of Construction and Land Use to determine the effects of stormwater on- and off-site, including the propriety of a proposed discharge point, compliance with requirements for permanent drainage control facilities, compliance with the requirements to maintain natural drainage patterns and not obstruct watercourses, compliance with applicable flood control requirements, and whether improvements to the public drainage control system shall be required. These determinations shall be part of approved master use permit conditions, and shall be used as a basis for further drainage planning for building permits and other permits listed below.
- Applications for Building and Other Permits. The Director of Construction and Land Use shall review any application for a building permit or other permit listed in Section 22.802.015, other than master use permit applications, for compliance with Section 22.802.015 and to determine whether improvements to the public drainage control system shall be required.
- Projects Exceeding 9,000 Square Feet. For projects exceeding 9,000 square feet of developmental coverage, in addition to the review criteria set forth above, the Director of Construction and Land Use shall review the comprehensive drainage control plan for compliance with applicable requirements.
- Exceptions: Requests for exceptions to requirements shall be reviewed as set forth in Section 22.808.010.
- Application and Approval Requirements.



- 1. Drainage control plans for projects subject to review under Subsection
  22.802.015 shall be reviewed by the Director of Construction and Land Use. The Director of
  Construction and Land Use may approve those plans which comply with the provisions of this
  Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order
  to assure compliance with the provisions of this Subtitle. Submission of the required drainage
  control application information shall be a condition precedent to the processing of any of the
  above listed permits. Approval of drainage control shall be a condition precedent to issuance of
  any of the above listed permits.
- 2. The Director of Construction and Land Use may disapprove plans which do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.

## C. Submittal Requirements

- 1. Applications shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16 (Side Sewers) and with associated rules and regulations adopted jointly by the Director of Construction and Land Use and the Director of Seattle Public Utilities.
- 2. The Director of Construction and Land Use may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of Construction and Land Use may also require appropriate information about adjoining properties which may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.
- 3. Where an applicant simultaneously applies for more than one of the permits listed in Subsection A above for the same property, the application shall comply with the requirements for the permit which are the most detailed and complete.))

22.802.020 Drainage control review and application requirements.



A. Thresholds for drainage control review	w. Drainage co	ontrol review	and	approval	shall be
required for any of the following:					

- 1. Standard drainage control review and approval shall be required for the following:
- a. Any land disturbing activity encompassing an area of 750 square feet or more:
- b. Applications for either a master use permit or building permit that includes the cumulative addition of 750 square feet or more of land disturbing activity and new and replaced impervious surface;
  - c. Applications for which a grading permit or approval is required;
- d. Applications for street use permits for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity after the effective date of the Ordinance codified in this Subtitle;
- e. City public works project or construction contracts, including contracts for day labor and other public works purchasing agreements, for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity to the site after the effective date of the Ordinance codified in this Subtitle, except for projects in a City-owned right-of-way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation:
- f. Permit approvals and contracts that include any new or replaced impervious surface on a site deemed a potentially hazardous location, as specified in Section 22.800.050; or
- g. Whenever an exception to a requirement set forth in this Subtitle or in a rule promulgated under this Subtitle is desired, whether or not review and approval would otherwise be required, including but not limited to, alteration of natural drainage patterns or the obstruction of watercourses.
- 2. Large project drainage control review and approval shall be required for projects that include:
  - a. 5,000 square feet or more of new or replaced impervious surface; or
  - b. 1 acre or more of land disturbing activity.



3. The City may, by in	nteragency agreement signed by the Directors of SPU and
DCLU, waive the drainage and ero	osion control permit and document requirements for property
owned by public entities, when dis	scharges for the property do not enter the public drainage
control system or the public comb	ined sewer system. Whether or not they are required to obtain
permits or submit documents, pub	lic entities are subject to the substantive requirements of this
Subtitle, unless exceptions are gra	nted as set forth in Section 22.808.010.

## B. Submittal requirements for drainage control review and approval

- 1. Information Required for Standard Drainage Control Review. The following information shall be submitted to the Director for all projects for which drainage control review is required.
- a. Standard Drainage Control Plan. A drainage control plan shall be submitted to DCLU. Standard designs for drainage control facilities as set forth in rules promulgated by the Director may be used.
- b. Construction Stormwater Control Plan (Standard Erosion and Sediment Control Plan). A construction stormwater control plan demonstrating controls sufficient to determine compliance with Section 22.802.015 C3 shall be submitted. The Director may approve a checklist in place of a plan, pursuant to rules promulgated by the Director.
- c. Memorandum of Drainage Control. The owner(s) of the site shall sign a "memorandum of drainage control" that has been prepared by the Director of SPU. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real property records. The applicant shall give the Director of SPU proof of filing of the memorandum. The memorandum shall not be required when the drainage control facility will be owned and operated by the City. A memorandum of drainage control shall include:
  - i. The legal description of the site;
- ii. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;



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iii. An agreement that the owner(s) shall inform future purchasers and				
other successors and assignees of the existence of the drainage control facilities and other				
elements of the drainage control plan, the limitations of the drainage control facilities, and of the				
requirements for continued inspection and maintenance of the drainage control facilities;				
iv. The side sewer permit number and the date and name of the				
permit or approval for which the drainage control plan is required;				
v. Permission for the City to enter the property for inspection,				
monitoring, correction, and abatement purposes;				
vi. An acknowledgment by the owner(s) that the City is not				
responsible for the adequacy or performance of the drainage control plan, and a waiver of any				
and all claims against the City for any harm, loss, or damage related to the plan, or to drainage				
or erosion on the property, except for claims arising from the City's sole negligence; and				
vii. The owner(s)' signatures acknowledged by a notary public.				
2. Information required for large project drainage control review. In addition to the				
submittal requirements for Standard Drainage Control Review, the following information is				
required for projects that include 1 acre or more of land disturbing activities or 5,000 square feet				
or more of new and replaced impervious surface.				
a. Comprehensive Drainage Control Plan. A comprehensive drainage				
control plan, in lieu of a Standard Drainage Control Plan, to comply with the requirements of				
this Subtitle and rules promulgated hereunder and to accomplish the purposes of this Subtitle				
shall be submitted with the permit application. It shall be prepared by a licensed civil engineer				
in accordance with standards adopted by the Director of DCLU.				

b. Inspection and Maintenance Schedule. A schedule shall be submitted that provides for inspection of temporary and permanent drainage control facilities, treatment facilities, and source controls to comply with Sections 22.802.015 and 22.802.016.

c. Off-site analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage control system that discharges to that stream, an analysis of impacts to off-site water quality resulting from the project prepared in accordance with Section 22.802.016 shall be submitted.



- d. Construction Stormwater Control Plan. A construction stormwater control plan prepared in accordance with Section 22.802.015 and 22.802.016 shall be submitted.
- 3. Applications for drainage control review and approval shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16, Side Sewers, and with associated rules and regulations adopted jointly by the Directors of DCLU and SPU.
- 4. The Director of DCLU may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle and other laws and regulations, including but not limited to SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of DCLU may also require appropriate information about adjoining properties that may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.
- 5. Where an applicant simultaneously applies for more than one of the permits listed in subsection A above for the same property, the application shall comply with the requirements for the permit that is the most detailed and complete.
- C. Authority to Review. The Director of DCLU may approve those plans that comply with the provisions of this Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order to assure compliance with the provisions of this Subtitle. Submission of the required drainage control application information shall be a condition precedent to the processing of any of the above-listed permits. Approval of drainage control shall be a condition precedent to issuance of any of the above-listed permits. The Director of DCLU may review and inspect activities subject to this Subtitle and may require compliance regardless of whether review or approval is specifically required by this Section. The Director of DCLU may disapprove plans that do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.



**Section 31.** Section 22.802.090 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended at Subsection 22.802.090A as follows:

## 22.802.090 Maintenance and inspection.

A. Responsibility for maintenance and inspection. Drainage control facilities, source controls, and stormwater treatment facilities required by this Subtitle and by rules adopted hereunder, shall be maintained as specified in rules promulgated by the Director, by the owner ((or)) and other responsible party. The owner ((or)) and other responsible party shall inspect permanent drainage control facilities at least annually, and shall inspect temporary drainage control facilities and other temporary best management practices or facilities on a schedule consistent with Section 22.802.016 B6 of this Subtitle and sufficient for the facilities to function at design capacity. The Director of ((Seattle Public Utilities)) SPU may require the responsible party to conduct more frequent inspections and/or maintenance when necessary to insure functioning at design capacity. The owner(s) shall inform future purchasers and other successors and assignees to the property of the existence of the drainage control facilities and the elements of the drainage control plan, the limitations of the drainage control facilities.

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Section 32. Section 22.804.030 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 117697, is amended as follows:

## 22.804.030 Grading permit or approval required.

A. Grading Permit Required. A grading permit ((shall be)) is required for all grading activities as specified below. Actions exempt from a grading permit are specified in Subsection C.



- 1. Special Sites. A permit shall be required for any site located in ((one (1))) any of the following areas if the combined volume of excavation, fill, dredging, or other movement of earth materials is more than twenty-five (25) cubic yards:
- a. Shoreline districts((<del>, except</del>)) as defined in SMC 23.60.010. In addition to the permit requirement established in A.1, a permit ((shall be)) is also required for any grading within ten (10) feet of the line of mean higher high tide adjoining saltwater or the line of mean high water adjoining fresh water and for any grading of lands covered by water; ((ex))
- b. Environmentally critical areas <u>as defined in SMC 25.09</u> ((<del>()</del>)except liquefaction-prone and abandoned landfills.(<del>()</del>)) <u>In addition to the permit requirement established in A.1:</u>
- i. A permit is required for any grading within wetlands and their buffers, or Riparian corridor buffers;
- ii. Grading activities that increase the potential for earth movements or the risk of damage due to earth movement within steep slopes or other landslide hazard areas is prohibited;
- c. The drainage basins of Thornton Creek, Pipers Creek, Longfellow Creek, and Taylor Creek, as mapped by SPU, unless stormwater runoff from the site is discharged to a combined sewer system or otherwise piped (tightlined) to a drainage basin other than the named drainage basin.
- ((Grading may be prohibited in certain environmentally critical areas. For additional requirements see Regulations for Environmentally Critical Areas, SMC 25.09.))
- 2. Potentially Hazardous Locations. A permit ((shall-be)) is required for any site identified under the provisions of Section 22.800.050 for any volume of excavation, fill, dredging or other movement of earth materials.
- 3. Grading Near Public Places. A permit ((shall-be)) is required for all grading activities in excess of four feet (4'), measured vertically, on private property within any area between the vertical prolongation of the margin of a public place, and a one-hundred percent (100%) slope line (forty-five degrees (45°) from a horizontal line) from the existing elevation of the margin of a public place to the proposed elevation of the private property.



- 4. General Sites. For sites not included in Subsections A1 and A2 above, a permit ((shall-be)) is required where the grade at any location is changed more than three feet (3') and either:
- a. The cumulative volume of excavation, fill, dredging or other movement of earth materials is more than one hundred (100) cubic yards over the lifetime of the site; or
- b. The grading will result in a slope steeper than three (3) horizontal to one (1) vertical.
- 5. In-place Ground Modification. A permit ((shall be)) is required for any site where in-place ground modification will take place. The Director of ((Construction and Land Use)) DCLU may waive the requirement for a permit when the Director determines the in-place ground modification will be insignificant in amount or type.
- 6. Temporary Stockpiles. A grading permit or approval ((shall be)) is required for temporary stockpiles which meet the thresholds of Subsections A1, A2 and A4 above and are not located on sites for which a valid grading permit or grading approval has been issued.

## B. Grading Approvals Required.

- 1. A grading approval ((shall be)) is required for grading activities located on any site where a concurrent building permit is requested except that no approval is required for grading activities where the combined volume is less than the amounts specified for each site in Subsection A above.
- 2. Where a grading approval is required and issued as a component of a building permit, no separate grading permit shall be required. This provision shall apply to grading which is incidental to construction, the temporary stockpiling of earth materials during construction and grading needed for other site improvements. Where there will be construction or placement of a building within the lifetime of the permit, the grading approval shall be a component of the building permit.
- C. Exemptions. The following grading activities shall be exempt from a grading permit, but ((must)) shall still comply with the provisions of this Subtitle:
- 1. Activity conducted under a street use permit ((which)) that specifically authorizes the grading work to be performed;

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- 2. Excavations and filling of cemetery graves;
- 3. Exploratory excavations ((which)) that comply with the requirements of Section 22.804.050:
  - 4. Operation of sewage treatment plant sludge settling ponds;
- 5. Operation of surface mines for the extraction of mineral and earth materials subject to the regulations and under a permit of the State of Washington;
- 6. Stockpiling and handling of earth material when the earth material is consumed or produced in a process which is the principal use of the site and which complies with the requirements of Section 22.804.050;
- 7. Maintenance or reconstruction of active tracks and yards of a railroad in interstate commerce within its existing right-of-way;
- 8. Maintenance or reconstruction of the facilities of parks and playgrounds including work required for the protection, repair, replacement or reconstruction of any existing paths, trails, sidewalks, public improvement or public or private utility, and the stockpiling of material for maintenance activities;
  - 9. Excavation and filling of post holes;
- 10. On-site work required for construction, repair, repaving, replacement or reconstruction of an existing road, street or utility installation in a public right-of-way;
- 11. Trenching and backfilling for the installation, reconstruction or repair of utilities on property other than a public right-of-way;
- 12. Grading done in performance of work authorized by the City for public works projects (((S))see also Section 22.800.070);
- 13. Public works and other publicly funded activities on property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system, and the project will not undercut or otherwise endanger adjacent property, and the Director has waived the permit requirements by interagency agreement;
- 14. Underground storage tank removal and replacement that is subject to regulation by a state or federal agency, except where excavation meets the criteria of Section 22.804.030 A $\underline{3}$  (( $\underline{(3)}$ )), Grading Near Public Places.



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Section 33. Section 22.804.040 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

22.804.040 Grading permit or approval: application requirements

grading permit or approval, shall comply with the provisions of this Subtitle.

General. Application for a grading permit or approval shall be made to the Director of Á. ((Construction and Land Use)) DCLU by the owner of the property to be graded. All applications shall contain the submittal information detailed in this section.

Compliance Required for All Grading. Any grading activity, whether or not it requires a

#### В. Plans required.

- 1. Projects requiring plans. The information listed in subsection B2 below shall be provided on plans submitted with each application for a grading permit or approval. However, when the only grading included in an application is for an approved drainage control plan or is for excavation and replacement of earth material within an area four feet (4') or less from the footing lines of a building or structure, the only information required is the location of temporary stockpiles.
- 2. Information to be submitted on plans. The following information shall be submitted with applications for projects requiring plans.
  - A general vicinity map and legal description of the site; a.
- b. A plot plan showing: location of existing buildings and structures, easements, utilities and other surface and above-ground improvements on the property where the work is to be performed; the approximate location of all buildings, structures and other improvements on adjacent land; the location of existing and planned temporary and permanent drainage control facilities, existing and proposed drainage discharge points, watercourses, drainage patterns, environmentally critical areas, and areas of standing water; the approximate location, type and size of trees and other vegetation on the site; designation of trees and vegetation to be removed, and the minimum distance between tree trunks and the nearest excavation and/or fill; and areas where equipment traffic will be permitted and excluded;

- c. The latest available topographic map, including cross-sections of the site and adjacent property, showing the present and proposed contours of the land at not more than two-foot (2') contour intervals, and the location and amount of all temporary stockpiles and excavations. On steeper sites, the Director of ((Construction and Land Use)) DCLU may authorize plans to show a contour interval greater than two feet (2') but in no case more than a five-foot (5') interval. The information relating to adjacent properties may be approximated;
- d. A drainage control plan as set forth in Section ((22.802.015)) 22.802.020, except when the grading is limited to the area providing for vehicular and pedestrian access to the building or to the temporary stockpiling of excavated material.
- 3. Number required. A minimum of three (3) sets of plans shall be submitted with each application for a grading permit. The number of plan sets required for grading approval applications shall be the same as required for the specific permit application. Additional sets may be required by the Director.
- 4. Clarity of plans. Plans shall be drawn to a clearly indicated and commonly accepted scale upon substantial paper such as blueprint quality or standard drafting paper. Tissue paper, posterboard or cardboard will not be accepted. The plans shall be of microfilm quality and limited to a minimum size of 18 inches (18") by 18 inches (18") and a maximum size of 41 inches (41") by 54 inches (54").
- 5. Preparation by Civil Engineer. The grading plans shall be prepared by, or under the direction of, a licensed civil engineer for all applications where the total amount of materials graded is more than two thousand five hundred (2,500) cubic yards. The Director of ((Construction and Land Use)) DCLU may require that grading plans for lesser quantities be prepared by or under the direction of a licensed civil engineer for sites such as, but not limited to, those in geologic hazard zones and areas with known erosion problems.
- 6. Stamping by Geotechnical((/Civil)) Engineer. When required by the Director of ((Construction and Land Use)) DCLU in accordance with the provisions of this Subtitle, the grading plans shall be reviewed and stamped by the geotechnical((/eivil)) engineer who performed the site analysis and report to indicate that the plans conform to the conclusions and recommendations of the report.
- C. Information required.



- 1. Required with Application. The following information shall be submitted with grading plans at the time of application:
- a. The disposal site for any excavated materials to be removed from the site. If the disposal site is located within the City limits and is not an approved disposal site, an application for a grading permit for the disposal site shall be submitted at the same time as the application for grading permit or approval at the excavation site. In the event that the applicant is unable to specify the disposal site at the time of application, the applicant shall request, in writing, a postponement of the identification of the disposal site. The request shall include a commitment that the applicant will specify a disposal site acceptable to the Director of ((Construction and Land-Use)) DCLU prior to any excavation;
- b. Where placement of a fill is proposed, a description of the composition of fill material and its structural qualities;
- c. Where any portion of the grading will encroach on an adjacent property, proof of ownership and an easement or authorization in accordance with Section 22.804.100;
  - d. The immediate and long-term intended use of the property;
- e. Identification of past industrial or manufacturing uses or hazardous materials treatment, disposal or storage that have occurred on the site;
- f. Where a site is located in an area identified pursuant to Section 22.800.050, a copy of all applicable permit or approval applications, and/or permits and approvals from the appropriate regulatory agencies;
- g. When required by Section ((22.802.015)) 22.802.020, an erosion/sediment control plan;
- h. Where the site is located in an area of potential landslide, a draft covenant complying with the requirements of Section 22.808.130.
- i. Each grading proposal shall contain provisions for the preservation of natural drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and for replacement, where necessary, of vegetation or other means to control runoff.
- 2. Required after Initial Screening. The Director of ((Construction and Land Use))

  DCLU may require the following information after the initial screening of a grading application:



or adjoining property,

intended.

- a. A description of methods to be used to minimize sediment or other pollution from leaving the site during and after construction and to protect cleared areas and cut and fill slopes from erosion;
- b. A time schedule of operations, including but not limited to, implementation of the <u>applicable</u> requirements of <u>Sections</u> 22.802.015 <u>and 22.802.016</u>, clearing, minimization of grading of unprotected soil surfaces, restoration of topsoil and vegetative cover, and construction of improvements;
- c. A survey of boundaries and topography of the site and the grades of adjacent public rights-of-way prepared by a surveyor licensed by the State of Washington;
  - d. A soils analysis complying with the following:
- (((1)))i. When Required. A soils analysis and report may be required when an application for a grading permit or approval is made for property located:
  - (A) In areas described in Section 22.800.050,
  - (B) In areas where there is a potential for landslide,
  - (C) In areas where grading may result in instability of the site
  - (D) In areas where soils may not be suitable for the use
- (E) In areas where the Director determines pollutants are likely to be present, or
- (F) In any area where the Director determines that the information which would be supplied by a soils analysis and report is necessary for the review of the application( $(\frac{1}{2})$ ).
  - $(((\frac{2}{2})))ii$ . Contents. The soils analysis and report shall include:
- (A) Data regarding the nature, distribution and strength of existing soils and subsurface conditions,
- (B) History of the site including history of landslides, known excavations and fills, and location of utilities,
- (C) Where appropriate as indicated by information provided under subsection B above, analytical testing of soils to determine the concentration of pollutants,



monitoring, and

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Conclusions and recommendations for clearing the site, of the adequacy of the site for proposed immediate and long-term intended use, foundation, retaining and structural designs, grading methods, and construction and post-construction

(E) Other information as determined necessary by the Director to adequately evaluate compliance with the requirements of this Subtitle and accomplishment of its purposes, such as an assessment of contamination when past industrial or chemical use have been present on the site( $(\frac{1}{2})$ ).

Preparation. The soils analysis and report shall be ((<del>(3)</del>))iii. prepared by an experienced geotechnical((/eivil)) engineer or other equally qualified person approved by the Director. The Director may require that the plans and specifications be stamped and signed by the geotechnical((/eivil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of the reports( $(\tau)$ ).

Minimal Risk. In geologic hazard areas as identified in (((4)))ivSMC Chapter 25.09, Regulations for Environmentally Critical Areas, the geotechnical((/eivil)) engineer who prepared the soils analysis and report may be required to submit a letter stating that the plans and specifications conform to the recommendations of the soils analysis and report. The letter shall also state that, so long as conditions stated in the soils report are satisfied, areas disturbed by construction will be stabilized, the risk of damage to the proposed development or to adjacent properties from soil instability will be minimal, and the proposed grading and development will not increase the potential for soil movement.

Site Analysis. For properties located in any of the areas identified in Subsection d, an analysis and report of the following site factors. The analysis and report shall be prepared by a licensed civil engineer or other person approved by the Director.

A description of the hydrology of the site and the drainage (((1)))i.basin in which the development is located( $(\frac{1}{2})$ ).

The effect of grading upon surrounding properties. (((2)))iiwatercourses and the drainage basin, including impacts on water quality and fish habitat when a stream, lake or other body of water is affected. Where applicable, the analysis specified in Section ((22.802.015D(5)))22.802.016 B5 may also be required  $((\frac{1}{2}))$ .



- f. A letter in a form acceptable to the Director from the owner of the site stating that the owner understands and accepts the risk of developing in an area with potentially unstable soils and that the owner will advise, in writing, any prospective purchasers of the site, structures or portions of a structure about the landslide potential of the site.
- g. The Director may require additional information pertaining to the specific site and any other relevant information needed in order to assess potential hazards associated with the site and to determine whether a grading permit or approval should be issued.
- **Section 34.** Section 22.804.050 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

## 22.804.050 Grading requirements.

- A. Earth movement. Grading shall not create or increase the likelihood of earth movement, including but not limited to, landslides, accelerated soil creep, settlement and subsidence, and hazards associated with strong ground motion and soil liquefaction of the site to be graded and adjoining properties.
- B. Natural features. Each grading proposal shall contain provisions for the preservation of <u>natural</u> drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and replacement, where necessary, of vegetation or other means to control runoff.
- C. Watercourses. Grading shall not create or contribute to flooding, erosion, or increased turbidity, siltation or other forms of pollution in a watercourse, and shall comply with the <u>applicable</u> requirements of ((Section 22.802.015)) Chapter 22.802.
- D. Pollution control. Grading shall be performed, and the completed work shall be in accordance with, all applicable environmental laws, rules and regulations, and with the applicable requirements of ((Section 22.802.015)) Chapter 22.802.



- E. Conformance with plans. Grading shall be performed in accordance with the plans approved by the Director of ((Construction and Land Use)) DCLU.
- F. Slopes. Final graded slopes shall be no steeper than is safe for the intended use, and shall in no case be steeper than two (2) horizontal to one (1) vertical. For requirements for temporary slopes see Sections 22.804.050 M and 22.804.100.
- G. Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, non-approved materials, topsoil and other unsuitable materials, including but not limited to mud, peat, and other materials with insufficient strength to satisfy the design as determined by the Director.
- H. Fills. Fills shall be located so that the base edge of the fill is located more than twelve (12) feet horizontally from the top edge of an existing slope or a planned cut slope. A sloping fill shall not be placed on top of slopes which are steeper than one and one-half (1 ½) horizontal to one (1) vertical.
- I. Requirements for fill material. Materials used in fills shall comply with the following requirements:
- 1. Material used in filling shall be appropriate to the site and the intended use of that portion of the site.
- 2. Fill shall be composed of earth materials. Any rock or other similar irreducible material used in a fill shall be of a maximum diameter of twelve inches (12") and shall compose not more than twenty percent (20%) of the total fill material.
- 3. Topsoil shall not be used as a fill material except that the upper twelve inches (12") of a fill site may be covered with topsoil.
  - 4. No frozen or thawing material shall be used in a fill.
  - 5. No solid waste, hazardous waste or hazardous material may be used in a fill.
  - 6. No organic material shall be used in a fill unless approved by the Director.



- 7. As necessary, the Director shall specify other characteristics of the fill material used, the degree of compaction, moisture content, and the method of placement appropriate to the site and the intended use of that portion of the site and the requirements for water retention, drainage control and erosion control.
- J. Terraces. The Director may require steps and terraces sufficient to control surface drainage and deposit of debris. Suitable access to the terraces shall be provided to permit proper cleaning and maintenance.
- K. Subsurface Drainage. Cut-and-fill slopes shall be provided with subsurface drainage when needed to maintain slope stability.
- L. Access. When an adjoining site relies on the site to be graded for pedestrian or vehicular access, the Director may require reasonable access to be maintained to the adjoining site.
- M. Stockpiling of Earth Materials.
- 1. General. Stockpiling of any kind shall not adversely affect the lateral support or significantly increase the stresses in or pressure upon any adjacent or contiguous property. Stockpiling shall comply with the <u>applicable</u> erosion control requirements for temporarily exposed soils set forth in Sections 22.802.015 and 22.802.016, and rules promulgated under ((that)) those Sections.
- 2. Temporary Stockpiling During Construction or Grading. Temporary stockpiles of earth materials during construction or grading shall not exceed ten feet (10') in height.

  Stockpiles shall have slopes no greater than one (1) horizontal to one (1) vertical.
- 3. Temporary Stockpiling During Dredging. Temporary stockpiles of earth materials excavated during dredging or maintenance dredging shall be subject to the approval of the Director of ((Construction and Land Use)) DCLU.
- 4. Stockpiling and Handling of Earth Materials in Processing. Earth materials consumed or produced in a process may be stockpiled and handled on a site provided the process is the principal use of the site.



5. Removal. Temporary stockpiles shall be removed prior to final inspection for a grading permit where no building permit is issued on the same site. Where grading is approved as a component of a building permit, temporary stockpiles shall be removed prior to issuance of a Final Certificate of Occupancy or approval for occupancy after a final inspection.

N. Exploratory Excavations. Exploratory excavations shall be under the direction of a licensed civil engineer or experienced geotechnical((/eivil)) engineer. No stockpiles of materials shall remain after completion of the exploratory activities. The grading shall comply with other requirements that may be established by the Director.

**Section 35.** Section 22.804.110 of the Seattle Municipal Code, adopted by Ordinance 116425, is amended as follows:

### 22.804.110 Erosion control.

- A. Methods. Grading operations shall comply with the <u>applicable</u> requirements set forth in Sections 22.802.015 and 22.802.016((, Subsections C (3) and D2, D3, D4 and D6)) and rules promulgated thereunder. Devices or procedures for erosion control shall be initiated or installed prior to commencing grading operations when technically feasible, and in any case as soon thereafter as is technically feasible, and shall be maintained to function at design capacity.
- B. Exposure. Grading operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Grading operations shall comply with <u>the applicable</u> requirements for exposed soils, including best management practices, promulgated pursuant to Sections 22.802.015 <u>and 22.802.016</u>.
- Section 36. Section 22.804.160 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:

22.804.160 Granting or denial of grading approvals and permits.



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#### Approval. A.

- The Director of ((Construction and Land Use)) DCLU may grant a grading permit or approval that complies with the requirements of this Subtitle and rules promulgated thereunder. An approval may be granted with or without conditions, to assure compliance with the requirements of this Subtitle. Conditions may include, but are not limited to, the following: restricting permit work to specific seasons or weather conditions; limiting vegetation removal; sequencing of work; requiring recommendations contained in the soils analysis and report to be followed; requiring observation by a licensed civil or geotechnical((/eivil)) engineer; requiring special inspection pursuant to Section 1701 of the Seattle Building Code; limiting quantities of soils; requiring structural safeguards; specifying methods of erosion, sedimentation, and drainage control; ((prescribing best management practices)) requiring compliance with other applicable provisions of this Subtitle; specifying methods for maintenance of slope stability; retaining existing trees; requiring revegetation and grass seeding and/or long term maintenance activities; requiring compliance with SMC Chapter 25.09, Regulations for Environmentally Critical Areas, and other regulations of the City or other agencies with jurisdiction.
- 2. The Director may require that plans and specifications be stamped and signed by a licensed civil engineer or experienced geotechnical((/civil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of any required reports.
- Denial. The application for grading permit or approval may be denied if the Director B. determines that the plans do not comply with the requirements of this Subtitle and rules promulgated hereunder, or do not accomplish the purposes of this Subtitle, or the grading is inconsistent with the proposed development of the site, or the plans do not comply with other applicable federal, state and local laws and regulations.
- Limitations. The issuance or granting of a grading permit of approval shall not be C. construed to be permission for, or an approval of, any violation of any of the provisions of this Subtitle or rules promulgated hereunder, or of any other law or regulation.



Section 37. Section 22.804.180 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117852, is amended as follows:

## 22.804.180 Grading inspection.

- A. General. The Director of ((Construction and Land Use)) <u>DCLU</u> may conduct or require inspection of grading sites to determine that work is done according to the grading approval. The permittee and owner shall be notified if the work is in violation. The Director may initiate enforcement action for work that is in violation.
- B. Preloading. Preloading shall be conducted as directed and supervised by a licensed civil or experienced geotechnical((/civil)) engineer.
- C. Special Inspections. The Director of ((Construction and Land Use)) DCLU may require periodic or continuous inspection from site inspection through foundation inspection by a licensed civil engineer, experienced geotechnical((/eivil)) engineer or special inspector at the permittee's expense. Licensed civil and experienced geotechnical((/eivil)) engineers or special inspectors shall be designated in accordance with Section 1701 of the Seattle Building Code, Chapter 22.100 of the Seattle Municipal Code. The approved inspector shall inspect in accordance with the duties specified in Section 1701 of the Seattle Building Code and rules adopted thereunder and shall:
- 1. Be present during the execution of all work the inspector has been approved to inspect;
- 2. Report to the job site in advance of grading operations to become familiar with approved plans and to inspect all materials to be used;
- 3. Not undertake or engage in other occupations which interfere or create a conflict of interest with the inspection duties during the work on the project;
- 4. Inspect the clearing, excavating, filling, compaction, grading, erosion and drainage control measures, and all other soils-control aspects of the construction, and observe whether there is compliance with the approved plans;
  - 5. Inspect soils for evidence of hazardous substances or wastes;



- 6. Observe whether the approved plans are sufficient to control the soil on the site and prevent off-site transport of sediment;
- 7. Immediately report all evidence of hazardous substances or wastes, irregularities, insufficiencies, substitutions of material or other changes from approved plans, and violations of this Subtitle to the owner's architect, engineer or contractor. If the project is not brought immediately into compliance, the Director of ((Construction and Land Use)) DCLU shall be immediately notified. In any event, the Director of ((Construction and Land Use)) DCLU shall be immediately notified when any condition threatens public health, safety or welfare, private or public property, or the environment, whether or not the threat is immediate or likely;
- 8. Notify ((the Department of Construction and Land-Use)) <u>DCLU</u> of the time schedule for off-site disposal of excavated material and, when within the City limits, of the location of and permit number of the approved disposal site; and
- 9. The special inspector may require soil grading reports prepared by a licensed civil engineer or experienced geotechnical((/eivil)) engineer. These tests may include field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading but not shown on the approved plans and their effect on the recommendations.
- D. Other Inspections. Subject to the approval of the Director of ((Construction and Land Use)) DCLU, a person other than a licensed civil or experienced geotechnical((/eivil)) engineer or special inspector may conduct the required inspection provided the person is under the supervision of a licensed civil engineer or experienced geotechnical((/eivil)) engineer and is qualified to conduct the inspection.
- Section 38. Section 22.808.020 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended as follows:

## 22.808.020 Liability and defenses of responsible parties.

A. Who must comply. It is the specific intent of this Subtitle to place the obligation of complying with its requirements upon the responsible parties, as defined in Section 22.801.190.

The City of Seattle and its agencies are intended to have the same obligation for compliance when the City is a responsible party. No provision of this Subtitle is intended to impose any other duty upon the City or any of its officers or employees.

- B. Joint and Several Liability. Each responsible party is jointly and severally liable for a violation of this Subtitle. The Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU or both of them may take enforcement action, in whole or in part, against any responsible party. All applicable civil penalties may be imposed against each responsible party. In the event enforcement action is taken against more than one (1) responsible party, recoverable damages, costs, and expenses may be allocated among the responsible parties by the court or the Hearing Examiner based upon the extent to which each responsible party's acts or omissions caused the violation, unless this factor cannot be determined, or the party receiving the allocation under this factor is unable to correct the violation, or is unable to pay the damages, costs, expenses, and any penalty imposed, in which case the trier of fact shall consider:
  - 1. Awareness of the violation;
  - 2. Ability to correct the violation;
  - 3. Ability to pay the damages, costs, and expenses;
  - 4. Cooperation with government agencies;
- 5. Degree to which any impact or threatened impact on water or sediment quality, human health, or the environment is related to acts or omissions by each responsible party;
- 6. Degree to which the responsible parties made good-faith efforts to avoid a violation or to mitigate its consequences; and
  - 7. Other equitable factors.
- C. Defenses. A responsible party shall not be liable under this Subtitle when the responsible party carries the burden of proving, by a preponderance of the evidence, one (1) of the following defenses:
  - 1. The violation was caused solely by an act of God;



- 2. The violation was caused solely by another responsible party over whom the defending responsible party had no authority or control and the defending responsible party could not have reasonably prevented the violation;
- 3. The violation was caused solely by a prior owner or occupant when the defending responsible party took possession of the property without knowledge of the violation, after using reasonable efforts to identify violations. However, the defending responsible party shall be liable for all continuing, recurrent, or new violations after becoming the owner or occupant;
- 4. The responsible party implemented and maintained all appropriate <u>drainage</u> control facilities, treatment facilities, flow control facilities, erosion and sediment controls, source controls and best management practices identified in rules promulgated by the Director of ((Construction and Land Use)) <u>DCLU</u> and the Director of ((Seattle Public Utilities)) <u>SPU</u>, or in manuals published by the State Department of Ecology until superseded by rules of the Directors, or as otherwise identified and required of the responsible party by the Director in writing pursuant to this Subtitle.
- Section 39. Section 22.808.120 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinance 117432, is amended as follows:

## 22.808.120 Fees.

Fees for grading permits, drainage control plan review and approvals shall be as set forth in the ((Permit)) Fee ((Ordinance)) Subtitle, Subtitle IX of Title 22, Seattle Municipal Code. Fees for recordkeeping or other activities pursuant to this Subtitle shall, unless otherwise provided for in this Subtitle, be prescribed by Ordinance.

- Section 40. Section 22.808.150 of the Seattle Municipal Code, adopted by Ordinance 116425, is repealed.
- **Section 41.** Severability. The several provisions of this Ordinance are hereby declared to be separate and severable and the invalidity of any clause, sentence, paragraph, sub-division,

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section or portion of this ordinance or the invalidity of the application thereof to any person or circumstance shall not affect the validity of the remainder of this Ordinance or the validity of its application to other persons or circumstances.

**Section 42.** Any act consistent with the authority and before the effective date of this ordinance is hereby ratified and confirmed.

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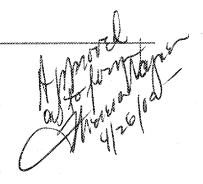
1	Section 43. This Ordinance sh	all take effect and be	n force thirty (30) d	ays from and
2	after its approval by the Mayor, but if no	t approved and return	ed by the Mayor wit	hin ten (10)
3	days after presentation, it shall take effect	et as provided by Seatt	le Municipal Code	Section
4	1.04.020.	·		
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6	Passed by the City Council the da	y of	_, 2000, and signed	by me in
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## Seattle Public Utilities

Diana Gale, Director



#### MEMORANDUM

DATE:

April 10, 2000

TO:

Margaret Pageler, City Council President

VIA:

Joan Walters, Director, City Budget Office

Mark Sidran, City Attorney

FROM:

Diana Gale, Managing Director

SUBJECT:

PROPOSED STORMWATER, GRADING AND DRAINAGE CONTROL CODE

**AMENDMENTS** 

#### Transmittal

I am pleased to transmit for City Council consideration proposed legislation to adopt amendments to the Stormwater, Grading and Drainage Control Code (SMC 22.800 – SMC 22.808).

#### Background

The major amendments to the Stormwater, Grading and Drainage Control Code are driven by the Department of Ecology and are required for the City to comply with the provisions of its 1995 NPDES stormwater permit. Ecology has established regional stormwater requirements for development that must be adopted by the City of Seattle and five other jurisdictions in the Puget Sound region by July 2000. Other amendments are being proposed to restructure the Code, clarify existing provisions and references, and reflect review and inspection process changes within DCLU.

## **Major Changes**

The following major changes proposed for the Code are required for the City to comply with its NPDES Stormwater permit:

• <u>Large Project Threshold</u>. The current threshold between large and small projects is based on a term called "developmental coverage" and a project size of 9,000 square feet. In order for Seattle's Code to be consistent with other jurisdictions and in keeping with Ecology's requirements, the code will be changed to define a large project as one involving "5,000 square feet or more of new or replaced impervious surface" or "greater than one acre of land disturbing activities."





- Source Control. The revised Stormwater Code contains a new requirement targeting High-Risk Pollution Generating (HRPG) activities, such as fueling operations, loading and unloading of liquids and solids, and outside manufacturing operations. Projects proposing to conduct HRPG activities will be required to incorporate structural source controls, such as enclosing the activity, covering the activity or containing the activity in a bermed area. In addition, all HRPG activities (independent of the permit application process) will be required to implement operational source controls, such as sweeping exposed surfaces, training personnel in pollution prevention, and maintaining spill control equipment on site. These source control requirements will not apply to certain residential uses or in areas where the runoff enters the City's combined sewer system.
- Treatment. All large projects will now be required to install a treatment facility, such as a wet pond, wet vault, or underground filtration system. Additional treatment structures, such as oil/water separators, will have to be installed if the project is classified as a "high-use site," which is largely based on the nature and level of vehicular traffic. These treatment requirements will not apply in areas where the runoff enters the City's combined sewer system.
- Flow Control. The Code currently has discharge flow rate limitations based on 2-year and 25-year design storms for projects over 2,000 square feet discharging to either a creek or to the combined sewer system. In the revised code, a large project (i.e., over 5,000 square feet) discharging to a creek will have an additional requirement to limit the flows from the site based on a 100-year design storm.
- <u>Construction</u>. The revised Code strengthens existing requirements to control erosion during construction, such as covering exposed soils that will not be worked for a period of time, and requiring additional details to be included on plans for large projects.

#### **Major Impacts**

These proposed amendments will most significantly affect large projects—both public and private. Large projects draining to a lake, river, bay or other receiving water body in the City will have to design, build and maintain stormwater treatment facilities to remove pollutants in the stormwater runoff before that runoff leaves the site. Large projects discharging into a creek will have to meet the treatment requirement *plus* install larger detention facilities designed for a 100-year storm event.

## **Deadline for Adoption**

Timing for these amendments is driven by terms and conditions of Seattle's 1995 NPDES stormwater permit, which requires that the City adopt requirements equivalent with Ecology's no later than July 5, 2000. If such requirements are not adopted by the end of the permit term, the City may be found out of compliance with its permit and risk fines of up to \$27,500 per day, plus face increased risks of third party lawsuits. Many of Ecology's requirements were adopted in the 1995 Stormwater code revision. After Ecology's review of the City's municipal code in October 1999, Ecology determined that the City needed to incorporate additional requirements to meet Ecology's standards of equivalent protection. Since that time, SPU and DCLU have been in discussions with the Department of Ecology, staff from SPU, DCLU and SEATRAN, and interested stakeholders to negotiate these final terms.



#### **Process to Date**

SPU has been working in partnership with DCLU and SEATRAN to develop these recommendations. A Technical Review Committee has been meeting weekly for six weeks to provide input on the code and on the accompanying Directors Rules, which will provide technical requirements and guidelines for implementing the requirements. In addition to staff from SPU, DCLU and SEATRAN, the Technical Review Committee included representatives from industry, private consultants, professional engineers, University of Washington, Port of Seattle, Central Staff, Seattle Attorney's Office, Seattle Housing Authority, SPU's Citizens Advisory Committee, and Friends of the Earth. In addition, discussions have been held with representatives of Seattle's public schools and proposed civic projects. Public meetings held to date include the Neighborhood Business Coalition, the Chamber of Commerce Land Use Committee, and the Seattle Housing Consortium. Two briefings have been provided to the City Council's Water Resources, Solid Waste and Public Health Committee.

## Requirements Tailored to Seattle

As a result of discussions with Ecology and other stakeholders, SPU has developed several alternatives to the minimum requirements. Ecology has confirmed that the following four approaches will satisfy the requirements of the City's permit. The first three may not be altered at this time within the timeframe the permit allows for the new ordinance. The fourth term is being presented as two options in the proposed ordinance language, either of which is acceptable to Ecology.

- 1. The compliance date for meeting the new treatment, flow control, and *structural* source control requirements will be January 2001. City projects in the 2000 budget are similarly exempted from the new treatment, flow control, and structural source control requirements. All other requirements will become effective on the effective date of the ordinance. These compliance terms are intended to provide time for developing solid implementation plans for administering the new requirements, and to provide adequate notice of the changes that are typically included in the preliminary planning of projects.
- 2. The City and Ecology both share a common concern that, owing to the highly urbanized character of Seattle and the unsystematic pattern of development occurring in the City, the highest benefits to water quality may not be achieved by following the site-by-site treatment facility approach as described in the revised Stormwater Code. Therefore, Ecology has agreed that if Seattle will make a *commitment* to develop a "water quality improvement plan," the City can make exceptions to, or make inapplicable, the treatment requirements contained in the revised code. The intent is to prevent expenditures of capital, both public and private, in a prescriptive, non-strategic manner during the planning process if there is a reasonable probability that the results of the water quality improvement plan might later show an alternative approach to be more effective. Once the water quality improvement plan is approved and implemented, it can be expected that some combination of structural installations, increased maintenance frequencies, programmatic enhancements, and possibly some other innovative approaches may be selected that will result in the most cost-effective investment of resources to improve water quality. The ordinance includes the following language to reflect this opportunity:



The Director of SPU may ask Ecology to approve a commitment by the City to develop a water quality improvement plan, to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Directors may jointly promulgate rules to create exceptions to, or make inapplicable, the treatment requirements. A completed water quality improvement plan may, when approved by the Director of SPU, be used by the City to modify treatment requirements, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.

- 3. Ecology's minimum requirement for redevelopment requires that large projects submit a retrofit schedule to meet all flow and treatment requirements for the entire site, not just the portion of the site being developed. Ecology has accepted the City's alternative proposal to address water quality issues throughout the City, and not just locations under development, through an enhanced water quality program. This approach will require operational source controls to be applied to all discharges, in conjunction with a commitment of an additional SPU FTE to conduct site audits as part of SPU's Source Control Program.
- 4. The draft ordinance contains two options for source control. Ecology's minimum requirement is that source control must be applied to the *entire* site for *large* redevelopment projects. This requirement is included as one option in the proposed amendments to the code. However, SPU has obtained Ecology's concurrence that a proposed second option would also satisfy equivalency with Ecology's requirement. This second option applies source control to *all* projects that are high-risk pollution generating activities, but only to the portion of the site being developed. This second option has a tighter nexus, connecting the regulation to the activity and the requirement to that portion of the site being developed. The first option raises legal concerns for the City regarding private property rights issues. We highly recommend that the Council adopt the second option as described above.

## **Other Proposed Amendments**

During the last several years of maintaining and implementing the Stormwater, Grading and Drainage Control Code, we have identified a number of improvements that would clarify and facilitate administration of existing regulations. A number of changes are proposed that reflect this experience in implementing the Code, changes to our internal process and to better enforce the requirements.

## **SEPA Environmental Review Determination**

DCLU has completed environmental review and issued a Determination of Non-Significance (no environmental impact statement required) on April 6, 2000. The appeal period ends on April 25, 2000.

## **Public Hearing Scheduled**

A public hearing on this legislation has been scheduled before the City Council Water Resources, Solid Waste & Public Health Committee on May 11 at 5:30 PM in the City Council Chamber.



#### **Cost of Implementation**

It is expected that the costs for implementing the additional construction and structural source control requirements will be relatively small in relationship to the overall project costs. The implementation costs for operational source controls are intended to be relatively low in relationship to the operating costs of the business. Overall, we believe that these pollution prevention actions produce high benefits, are representative of the costs of doing business in an area that values its water resources, and are well worth the expenditures involved. SPU will be required to add 1.0 FTE to enhance its water quality program.

We have estimated that the costs to meet the additional 100-year design flow control requirement limiting flows to creeks will add approximately 33% to the cost of the detention facility that is currently required under the existing code. This translates to less than \$4,000 for a 5,000 square foot development and less than \$20,000 for a project involving one acre of impervious surface.

However, the treatment requirement for large projects can be quite costly, running in the tens of thousands of dollars to install a structure designed to treat the runoff from just 5,000 square feet of impervious surface area. For public projects, SPU estimated that meeting the new treatment requirement for projected SEATRAN street improvement projects alone could cost \$20 million per year. Other public projects could add to this total. However, there is a provision we have negotiated with DOE to modify this requirement when a planning commitment is made by the City and approved by DOE to identify alternative strategies for improving water quality goals. The City would be in a position to allocate its CIP funds more strategically and in a cost-effective manner. This scenario would involve allocation of 1.0-2.0 FTE staff and \$1,000,000-\$2,000,000 over a two year period from the existing CIP budget.

#### Recommendation

The revised stormwater code as proposed will meet the requirements of our stormwater permit. Additionally, it is envisioned that these revisions will further protect the City's valuable water resources, and produce a positive benefit for all of Seattle's residents and our visitors. These changes reflect Seattle's commitment to being part of a larger, regional approach for addressing problems related to urban stormwater runoff. I recommend the Council approve these proposed amendments to the Stormwater, Grading and Drainage Control Code.

#### For Further Information

If you have any questions about this proposed legislation, please contact Robert D. Chandler, Ph.D., of SPU at 684-7597, or Mary Beth Binns of DCLU at 233-7198.



# Fiscal Note

Department:	Contact Person/Phone:	CBO Analyst/Phone:
SPU	Robert D. Chandler, 4-7597	
DCLU	Mary Beth Binns, 3-7198	Pascal St Gerard, 4-8085
SeaTran	Richard Burgunder, 4-5279	

# Legislation Title:

Stormwater, Grading and Drainage Control Code (SMC 22.800 - SMC 22.808)

# Summary of the Legislation:

The Stormwater, Grading & Drainage Control Code (SMC 22.800 - 22.808) was written to protect life, property and the environment from harm caused by stormwater runoff.

# Background (Include justification for the legislation and funding history, if applicable):

Amendments are being proposed to the Stormwater Code in order for the City to comply with the provisions of its 1995 National Pollutant Discharge Elimination System (NDPES) Stormwater Discharge Permit, issued by the Department of Ecology under the Clean Water Act. Funding for implementing the Stormwater Code is from a combination of drainage rates and permit fees.

# Public Private Partnership Review Status:

Not applicable

**Is the legislation subject to public hearing requirements?** If yes, what public hearings have been held to date?

Yes, the legislation is subject to public hearing requirements. A public hearing on this legislation has been scheduled before the City Council Water Resources, Solid Waste & Public Health Committee on May 11 at 5:30 PM in the City Council Chamber. To date, two briefings on the proposed legislation have been held before the City Council Water Resources, Solid Waste & Public Health Committee. One more briefing before this Committee is scheduled for April 25.

# Fiscal Sustainability Issues (related to grant awards): Not applicable.

# Estimated Expenditure Impacts:

Estimate is based on anticipated costs for contracting Professional & Technical Services needed to support SPU in developing the Water Quality Improvement



The Water Quality Planning position(s) may finish upon completion of the plan in 2001 or 2002. More likely, however, it will be necessary to transition this position from one of planning to one of implementation of the plan.

Other Issues (including long-term implications of the legislation):

It is expected that the costs for implementing the additional construction and structural source control requirements will be relatively small in relationship to the overall project costs. The implementation costs for operational source controls are intended to be relatively low in relationship to the operating costs of the business. Overall, we believe that these pollution prevention actions produce high benefits, are representative of the costs of doing business in an area that values its water resources, and are well worth the expenditures involved. SPU will be required to add 1.0 FTE to enhance its water quality program.

We have estimated that the costs to meet the additional 100-year design flow control requirement limiting flows to creeks will add approximately 33% to the cost of the detention facility that is currently required under the existing code. This translates to less than \$4,000 for a 5,000 square foot development and less than \$20,000 for a project involving one acre of impervious surface.

However, the treatment requirement for large projects can be quite costly, running in the tens of thousands of dollars to install a structure designed to treat the runoff from just 5,000 square feet if impervious surface area. For public projects, SPU estimated that meeting the new treatment requirement for projected SEATRAN street improvement projects would cost roughly \$20 million per year. Other public projects could add to this total. However, there is a provision we have negotiated with DOE to modify this requirement when a planning commitment is made by the City and approved by DOE to identify alternative strategies for improving water quality goals. The City would be in a position to allocate its CIP funds more strategically and in a cost-effective manner. This scenario would involve allocation of 1.0-2.0 FTE staff and \$1,000,000-\$2,000,000 over a two year period from the existing CIP budget.



# CITY OF SEATTLE ANALYSIS AND DECISION OF THE DIRECTOR OF THE DEPARTMENT OF DESIGN, CONSTRUCTION AND LAND USE

Applicant Name:

Seattle Public Utilities

Address of Proposal:

Amendments to the Stormwater, Grading and Drainage Control Code, including associated Directors' Rules, required for the City to comply with the provisions of its 1995 NPDES stormwater permit, and secondarily, to restructure parts of the Code, clarify existing provisions and references, and reflect review and inspection process

changes.

# SUMMARY OF PROPOSED ACTION

The proposal is a non-project action by Seattle Public Utilities to amend the Stormwater, Grading and Drainage Control Code, Seattle Municipal Code (SMC). Amendments are proposed to: Chapter 22.800 regulating title, purpose, scope, and authority; Chapter 22.801 regarding definitions; Chapter 22.802 regulating stormwater runoff quality and quantity, drainage rate, and erosion control; Chapter 22.804 regulating grading; and Chapter 22.808 regulating administration and enforcement. New Directors' Rules are also proposed. The major amendments to the Stormwater, Grading and Drainage Control Code and Directors' Rules are driven by the Department of Ecology and are required for the City to comply with the provisions of its 1995 NPDES stormwater permit. Other amendments are being proposed to restructure the Code, clarify existing provisions and references, and reflect review and inspection process changes within DCLU.

The following approvals are required:

SEPA – Environmental Determination (Chapter 25.05, SMC)

Legislative Decision - City Council Action, Type V (Chapter 23.76, SMC)

SEPA DETERMINATION:	(	Exempt (X)DNS ()MDNS ()EIS
	(	) DNS with Conditions
	(	) DNS involving non-exempt grading, or demolition, or another agency with jurisdiction



#### **BACKGROUND DATA**

# Site and Vicinity Description

The proposed legislation (a SEPA non-project action) applies to anyone proposing more than 750 square feet of land disturbing activity, which includes proposed new, and replacement of, impervious surface. In addition, changes are proposed to regulations governing all existing discharges to the public drainage control system and any amount of land disturbing activity, including new and replacement of impervious surface anywhere within the City.

The major amendments to the Stormwater, Grading and Drainage Control Code are driven by the Department of Ecology and are required for the City to comply with the provisions of its 1995 NPDES stormwater permit. Ecology has established regional stormwater requirements for development that must be adopted by the City of Seattle and five other jurisdictions in the Puget Sound region by July 2000. Other amendments are being proposed to restructure the Code, clarify existing provisions and references, and reflect review and inspection process changes within DCLU. SPU has been working in partnership with DCLU and SEATRAN to develop these recommendations. Additionally, a Technical Review Committee has been meeting weekly for six weeks to provide input on the code and on the accompanying Directors Rules, which will provide additional technical requirements and guidelines for implementing the revised Stormwater Code. In addition to staff from SPU, DCLU and SEATRAN, the Technical Review Committee included representatives from industry, private consultants, professional engineers, University of Washington, Port of Seattle, Central Staff, Seattle Attorneys Office, Seattle Housing Authority, SPU's Citizens Advisory Committee, and Friends of the Earth.

As a result of discussions with Ecology and other stakeholders, SPU has developed several alternatives to the minimum requirements that would both meet the deadline and received confirmation from Ecology that these alternatives will satisfy the City's permit terms.

- 1. The Director of SPU will ask Ecology to approve a *commitment* by the City to develop a water quality improvement plan, which will to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Director of SPU may then promulgate rules to create exceptions to, or make inapplicable, the treatment requirements. A *completed* water quality improvement plan may, when approved by the Director of SPU, be used by the City to modify treatment requirements, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.
- 2. Ecology's minimum requirement for redevelopment requires that large projects submit a retrofit schedule to meet all flow and treatment requirements. Ecology has



accepted the City's proposal to require operational source controls be applied to all discharges, in conjunction with the commitment of an additional 1.0 FTE to enhance SPU's source control programs.

- 3. Ecology's minimum requirement is that source control must be applied to the *entire* site for *large* redevelopment projects. This requirement is included as one option in the proposed amendments to the code. However, SPU has obtained Ecology's concurrence that a proposed second option would also satisfy equivalency with Ecology's requirement. This second option applies source control to *all* projects that are high-risk pollution generating activities, but only to the portion of the site being developed. This second option has a tighter nexus, connecting the regulation to the activity and the requirement to that portion of the site being developed. The first option raises private property rights issues. We most highly recommend that the Council adopt the second option as described above.
- 4. The compliance date for meeting the new treatment, flow control, and *structural* source control requirements will be January 2001. City projects in the 2000 budget are similarly exempted from the new treatment, flow control, and structural source control requirements. All other requirements will become effective on the effective date of the ordinance.

Considered together, the package of proposed changes and alternatives are as protective or provide greater protection that required for compliance with the provisions of the City's 1995 NPDES stormwater permit.

# Proposal Description

The following major changes proposed for the Code are required for the City to comply with its NPDES Stormwater permit:

- <u>Large Project Threshold</u>. The current threshold between large and small projects is based on a term called "developmental coverage" and a project size of 9,000 square feet. In order for Seattle's Code to be consistent with other jurisdictions and in keeping with Ecology's requirements, the code will be changed to define a large project as one involving "5,000 square feet or more of new or replaced impervious surface" or "greater than one acre of land disturbing activities."
- Source Control. The revised Stormwater Code contains a new requirement targeting High-Risk Pollution Generating (HRPG) activities, such as fueling operations, loading and unloading of liquids and solids, and outside manufacturing operations. Projects proposing to conduct HRPG activities will be required to incorporate structural source controls, such as enclosing the activity, covering the activity or containing the activity in a bermed area. In addition, all HRPG activities (independent of the permit application process) will be required to implement operational source controls, such as sweeping exposed surfaces, training personnel in pollution prevention, and maintaining spill control equipment on site. These source



control requirements will not apply to certain residential uses or in areas where the runoff enters the City's combined sewer system.

- Treatment. All large projects will now be required to install a treatment facility, such as a wet pond, wet vault, or underground filtration system. Additional treatment structures, such as oil/water separators, will have to be installed if the project is classified as a "high-use site," which is largely based on the nature and level of vehicular traffic. These treatment requirements will not apply in areas where the runoff enters the City's combined sewer system.
- <u>Flow Control</u>. The Code currently has discharge flow rate limitations based on 2-year and 25-year design storms for projects over 2,000 square feet discharging to either a creek or to the combined sewer system. In the revised code, a large project (i.e., over 5,000 square feet) discharging to a creek will have an additional requirement to limit the flows from the site based on a 100-year design storm.
- Construction. The revised Code strengthens existing requirements to control erosion during construction, such as covering exposed soils that will not be worked for a period of time, and requiring additional details to be included on plans for large projects.

These proposed amendments will most significantly affect large projects—both public and private. Large projects draining to a lake, river, bay or other receiving water body in the City will have to design, build and maintain stormwater treatment facilities to remove pollutants in the stormwater runoff before that runoff leaves the site. Large projects discharging into a creek will have to meet the treatment requirement *plus* install larger detention facilities designed for a 100-year storm event. Ecology is requiring few amendments to regulations already in place governing all projects, including small projects. The existing regulations largely are considered to provide sufficient protection. However, minor modifications are proposed that are as environmentally protective or more environmentally protective than current requirements.

# Other Amendments Not Affecting Compliance

The City has maintained the Stormwater, Grading and Drainage Control Code for a number of years. Over these years we have learned how to implement and improve upon the regulations. Changes are proposed that reflect our experience in implementing the Code and changes to our internal process to better enforce the requirements. These changes do not affect permit compliance. These changes are intended to clarify the intent of existing authority and improve the City's ability to enforce the regulations.

#### Public Comments

Copies of the proposed legislation are available for public review. This information may be obtained from:

• DCLU's website, "DCLU News", http://www.ci.seattle.wa.us/dclu/.



- DCLU Public Resource Center, Dexter Horton Building, 710 Second Avenue, Suite 200. The Public Resource Center is open 8:00 am to 5:00 pm on Monday, Wednesday, Thursday, and Friday and 10:00 am to 5:00 pm on Tuesday.
- Electronic copies are available by emailing requests to marybeth.binns@ci.seattle.wa.us

A public hearing on the proposed legislation will be held on May 11, 2000 before the Seattle City Council Water Resources, Solid Waste and Public HealthCommittee.

You may appeal this determination to:

City of Seattle Hearing Examiner 618 Second Avenue, Room 3120 Seattle, Washington 98104

no later than April 25, 2000 by letter and \$50.00 filing fee. You should be prepared to make specific factual objections. Contact the Hearing Examiner's Office by phone at (206) 684-0521 to ask about the procedures for SEPA appeals.

#### **ANALYSIS - SEPA**

The initial disclosure of the potential impacts from the project was made in the environmental checklist submitted by the applicant dated April 3, 2000. The information in the checklist, supplemental information acquired by lead agency staff, and the experience of the lead agency with review of similar projects form the basis for the analysis and decision.

The SEPA Overview Policy (SMC 25.05.665D) clarifies the relationship between codes, policies and environmental review. Specific policies for each element of the environment, certain neighborhood plans and other policies explicitly referenced may serve as the basis for exercising substantive SEPA authority.

The Overview Policy states in part: "...where City regulations have been adopted to address an environmental impact, it shall be presumed that such regulations are adequate to achieve sufficient mitigation" (subject to some limitation). Under certain limitation/circumstances (SMC 25.05.665D1 – 7) mitigation can be considered. Thus, a more detailed discussion of some of the impacts is appropriate.

# Short-term Impacts

The proposed amendments will result in improved construction-related, practices intended to mitigate, within the limitations of the regulations, impacts to the environment. Future development affected by this legislation and subject to SEPA will be required further to address short-term impacts on the environment.



# Long-term Impacts

The proposed legislation is a change toward tighter environmental regulations that will result in better overall environmental quality.

#### Conclusion

Due to the lack of significant negative impacts and greater environmental benefits associated with the proposed legislation, no mitigation beyond the proposed legislation is necessary or warranted by the application of the City's adopted SEPA policies.

# **DECISION - SEPA**

This decision was made after review by the responsible official on behalf of the lead agency of a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and form. The intent of this declaration is to satisfy the requirements of the State Environmental Policy Act (RCW 43.21C), including the requirement to inform the public agency decisions pursuant to SEPA.

- (X) Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.0302c.
- ( ) Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. An EIS is required under RCW 43.21C.0302c.

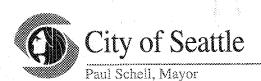
# RECOMMENDED CONDITIONS - SEPA

None.

Signature:

Date:





# Seattle Public Utilities

Diana Gale, Director

# MEMORANDUM

TO:

Margaret Pageler, City Council President

FROM:

Timothy Croll

Director, Resource Planning Division

Seattle Public Utilities

DATE:

April 26 2000

SUBJECT:

ECOLOGY APPROVAL OF DRAFT ORDINANCE

I am pleased to announce that the Department of Ecology has determined that the proposed amendments to the Stormwater, Grading and Drainage Control Code (SMC 22.800 – SMC 22.808) will meet the three of the five criteria necessary for compliance with the City's 1995 NPDES municipal stormwater permit. As agreed between the City and Ecology, the additional two criteria will be addressed in the proposed Directors Rules. I have attached copies of our correspondence with Ecology to document this concurrence.

**ENCLOSURES:** 

Letter to Department of Ecology, April 14, 2000

Assessment for Determining Equivalency with Ecology (1992)

Minimum Requirements, 4/3/00

Discussion Memo Regarding Equivalency, 4/4/00

Supplemental Information for Streambank Erosion Control: Analysis Methods and Justification of Discharge Rate Requirements, 4/3/00

City of Seattle Flow Control Requirements, 4/3/00

Stormwater, Grading and Drainage Control Code, 4/12/00.

Letter from Department of Ecology, April 14, 2000



## Seattle Public Utilities

Diana Gale, Director

April 14, 2000

Megan White, P.E., Manager Water Quality Program Washington State Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600

Re: Equivalent Stormwater Requirements for New Development

Municipal Stormwater Permit No. WASM23003

#### Dear Ms. White:

The attached documentation demonstrates that the City of Seattle provides equivalent protection to the Department of Ecology's 1992 stormwater development regulations described in the "Minimum Requirements" of the *Stormwater Management Manual for the Puget Sound Basin*. This documentation includes:

- * "Assessment for Determining Equivalency with Ecology (1992) Minimum Requirements," dated 4/3/00
- "Discussion Memo Regarding Equivalency," dated 4/4/00
- "Supplemental Information for Streambank Erosion Control: Analysis Methods and Justification of Discharge Rate Requirements," dated 4/3/00
- "City of Seattle Flow Control Requirements," dated 4/3/00
- Proposed Amendments to the "Stormwater, Grading and Drainage Control Code," dated 4/14/00¹.

Through discussions with your staff, we understand that Ecology accepts the City of Seattle's Stormwater, Grading and Drainage Control Code with the proposed amendments as meeting

¹ Substantially the same as 4/12 version, except p. 18, line 36 regarding source control as discussed with Ed O'Brien.

the equivalency requirements of our NPDES municipal stormwater permit. We also understand Ecology will provide a second phase of review to support the City's development of technical guidance for implementing these code requirements.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.

If you have any questions regarding this matter, please contact Miranda Maupin of my staff at (206) 386-9133 or by email at miranda.maupin@ci.seattle.wa.us.

Sincerely,

Timothy Croll

Resource Planning Director

Seattle Public Utilities

Enclosures:

Assessment for Determining Equivalency with Ecology (1992) Minimum

Requirements, 4/3/00

Zucha

Discussion Memo Regarding Equivalency, 4/4/00

Supplemental Information for Streambank Erosion Control: Analysis Methods

and Justification of Discharge Rate Requirements, 4/3/00

City of Seattle Flow Control Requirements, 4/3/00

Stormwater, Grading and Drainage Control Code, 4/12/00

cc:

Ann Wessel, Department of Ecology Ed O' Brien, Department of Ecology Robert Chandler, Seattle Public Utilities Theresa Wagner, Seattle City Attorney's Office

Department of Ecology's Minimum Requirements	Seattle Municipal Code (SMC)	Notes	Comments from the Department of Ecology
Minimum Requirements for Small Projects			
Small Parcel #1 Construction Access Route Construction vehicle access route shall be, whenever possible, limited to one route. Access points shall be stabilized with quarry spall or crushed rock to minimize the tracking of sediment onto public roads	SMC 22.802.015.C.3 e. Limit construction vehicle access, whenever possible, to one route. Stabilize access points as specified in rules promulgated by the Director to minimize the tracking of sediment onto nublic roads.		Equivalent per 3/21 discussion.
Small Parcel #2 Stabilization of Denuded Areas All exposed and unworked soils shall be stabilized by suitable application of BMPs. From October to April 30, no soils shall remain unstabilized for more than 2 days. From May 1 to September 30, no soils shall remain unstabilized for more than 7 days.	SMC 22.802.015.C.3 a. Prevent on-site erosion by stabilizing all soils, including stock piles, that are temporarily exposed. Methods such as, but not limited to, the installation of seeding, mulching, matting and covering may be specified by rules promulgated by the Director. From October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1 to September 30, no soils shall remain unstabilized for more than two days.	SMC distinguishes between temporary stabilization, permanent stabilization, and transport of sediment from site through 3 separate requirements. Transport of sediment is covered in next requirement.	Equivalent per 3/21 discussion.
	SMC 22.802.015.C.3 b. Before the completion of the project, permanently stabilize all exposed soils that have been disturbed during construction. Methods such as permanent seeding, planting and sodding as specified by rules promulgated by the Director.		
Small Parcel #3 Protection of Adjacent Properties Adjacent properties shall be protected from sediment deposition by appropriate use of vegetative buffer strips, sediment barriers or filters, dikes or mulching, or by a combination of these measures and other appropriate parts.	SMC 22.802.015.C.3 c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, storndrain inlet protection, silt fences, sediment traps, settling ponds and protective berms, may be specified in rules promulgated by the Director.	SMC has more authority, preventing erosion from site, including public right of ways, drainage systems, etc., versus just adjacent properties.	Equivalent per 3/21 discussion.
Small Parcel #4 Maintenance All erosion and sediment control BMPs shall be regularly inspected and maintained to insure continued performance of their intended function.	SMC 22.802.015.C.3 f. Inspect and maintain all erosion and sediment control BMPs as directed in rules promulgated by Director to ensure continued performance of their intended function.	Substituted "as directed in rules promulgated by Director" for "regularly," for more specific enforcement.	Equivalent per 3/21 discussion.
Small Parcel #5 Other BMPs As required by the local Plan Approval Authority, other appropriate BMPs to mitigate the effects of increased runoff shall be applied.	SMC 22.802.015.C.2. Flow Control. The peak drainage water discharge rate from the portion of the site being developed shall not exceed 0.2 cubic feet per second per acre under 25-year, 24-hour design storm conditions or 0.15 cubic feet per second per acre under 2-year, 24-hour design storm conditions unless the site discharges		Equivalent per 3/21 discussion.
	water directly to a designated receiving water or to a public storm drain which the Director of SPU determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2,000 square feet of new and replaced impervious surface shall be required to install a flow control facility, which shall be sized for the volume of runoff		
	routed through the facility. Approved exceptions and flow control methods may be prescribed in rules promulgated by the Director.		



Department of Ecology's	
Minimum Requirements	Seattle Municipal Code (SI

Comments from the

Department of Ecology's   Minimum Requirements	Seattle Municipal Code (SMC)	Notes	Comments from the Department of Ecology
Minimum Requirement for Large Projects			
#1.1 ESC: Stabilization and Sediment Trapping All exposed and unworked soils shall be stabilized by suitable application of BMPs. From October to April 30, no soils shall remain unstabilized for more than 2 days. From May1 to September 30, no soils shall remain unstabilized for more than 7 days. Prior to leaving the site, stormwater runoff shall pass through a sediment pond or sediment trap, or other BMPs.	SMC 22.802.015.C.3 a. Prevent on-site erosion by stabilizing all soils, including stock piles, that are temporarily exposed. Methods such as, but not limited to, the installation of seeding, mulching, matting and covering may be specified by rules promulgated by the Director. From October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1 to September 30, no soils shall remain unstabilized for more than seven days.		Equivalent per 3/21 discussion.
	SMC 22.802.015.C.3 b. Before the completion of the project, permanently stabilize all exposed soils that have been disturbed during construction. Methods such as permanent seeding, planting and sodding as specified by rules promulgated by the Director.		
#1.2 ESC: Defineate Clearing and Easement Limits In the field, mark clearing limits and/or any easements, setbacks, sensitive/critical areas and their buffers, trees, and drainage courses.	SMC 22.802.016.B.8 b. In the field, clearing limits and any easements, setbacks, critical areas and their buffers, trees, and drainage courses shall be marked.		Equivalent per 3/21 discussion.
	SMC 22.802.015.C.3 c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt fences, sediment traps, settling ponds and protective berms, may be specified in rules promulgated by the Director.	SMC has more authority, preventing erosion from site, including public right of ways versus just adjacent properties.	Equivalent per 3/21 discussion.
#1.4 ESC: Timing & Stabilization of Sediment Trapping Measures Sediment ponds and traps, perimeter dikes, sediment barriers, and other BMPs intended to trap sediment on-site shall be constructed as a first step in grading. These BMPs shall be functional before land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be seeded and mulched according to the timing indicated in #1.1.	SMC 22.802.016.B.8 d. Sediment ponds and traps, perimeter dikes, sediment barriers, and other erosion and sedimentation controls intended to trap sediment on site shall be constructed as a first step in grading. These controls shall be functional before the land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized according to section 22.802.015.C 3.		Equivalent per 3/21 discussion.
#1.5 ESC: Cut and Fill Slopes  Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes shall be stabilized in accordance with #1.1.	SMC 22.802.016.B.8 d. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes will be stabilized in accordance with Section 22.802.015.C 3 above.		Equivalent per 3/21 discussion.
#1.6 ESC: Controlling Off-site Erosion Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site.	SMC 22.802.016.B.8 e. Properties and waterways downstream from the project site shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site.		Equivalent per 3/21 discussion.

Assessment for Determining Equivalency with Ecology (1992) Minimum Requirements	Minimum Requirements		7
Department of Ecology's Minimum Requirements	Seattle Municipal Code (SMC)	Notes	Comments from the Department of Ecology
#1.7 ESC: Stabilization of Temporary Conveyance Channels and Outlets  All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour frequency storm for the developed condition. Stabilization adequate to prevent erosion of outlets, adjacent	SMC 22.802.016.B.8 f. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour design storm for the developed condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.		Equivalent per 3/21 discussion.
streambanks, slopes and downstream reaches shall be provided at the			
#1.8 ESC: Storm Drain Inlet Protection All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or otherwise treated to remove sediment.	SMC 22.802.015.C.3 c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt fences, sediment traps, settling ponds and protective berms, may be specified in rules promulgated by the Director.	Incorporated this requirement into broader requirement of preventing the transport of sediment from the site. Rules will state that all stormdrains must be protected and provide technical guidance.	Equivalent per 3/31 phone discussion.
#1.9 ESC: Underground Utility Construction  The construction of underground utility lines shall be subject to the following criteria: Where feasible, no more than 500' of trench shall be opened at one time.; Where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches.; Trench dewatering devices shall discharge into a sediment trap or sediment nond.	SMC 22.802.016.B.8 j. In the construction of underground utility lines, where feasible, no more than 500 feet of trench shall be opened at one time, unless soil is replaced within the same working day, and where consistent with safety and space considerations, excavated material shall be placed on the upbill side of trenches. Trench dewatering devices shall discharge into a sediment trap or sediment pond.		Equivalent per 3/31 phone discussion.
#1.10 ESC: Construction Access Routes Wherever construction vehicle access routes intersect paved roads, provisions must be made to minimize the transport of sediment onto the paved road. If sediment is transported onto a road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a controlled sediment disposal area. Street washing shall be allowed only after codiment is removed in this manner.	SMC 22.802.016.B.8 g. Whenever construction vehicle access routes intersect paved roads, the transport of sediment onto the paved road shall be minimized. If sediment is transported onto a paved road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from paved roads by shoveling or sweeping and shall be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner.		Equivalent per 3/21 discussion.
#1.11 ESC: Removal of Temporary BMPs All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized.	SMC 22.802.016.B.8 h. All temporary erosion and sediment controls shall be removed within 30 days after final site stabilization is achieved or after the temporary controls are no longer needed. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized.		Equivalent per 3/21 discussion.
#1.12 ESC: Dewatering Construction Sites Dewatering devices shall discharge into a sediment trap or sediment pond.	SMC 22.802.016.B.8 i. When dewatering devices discharge on site or to a public drainage control system, dewatering devices shall discharge into a sediment trap or sediment pond or gently sloping vegetated area.		Equivalent per 3/31 phone discussion.



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Minimum Requirements  #1.13 ESC: Control of Pollutants other than Sediment on Construction Site All pollutants other than sediment that occur on-site during construction of stormwater.  #1.14 ESC: Maintenance of in a manner that cocur on-site during construction of stormwater.  #1.14 ESC: Maintenance of their intended function. All maintenance and repair shall be maintained function. All maintenance and repair shall be conducted in accordance with an approved manual.  #1.15 ESC: Financial Liability Performance bonding, or other appropriate financial instruments, shall be required for all projects to ensure compliance with the approved ESC.  #1.13 ESC: Control of Pollutants in addition to sediment on some controls of controls as prescribed in rules promulgated by the Director. Operational source controls may include, but shall not be limited to spill control for fueling operations, equipment washing, cleaning of eatch basins, treatment of contaminated soils, and proper storage and disposal of hazardous materials.  #1.14 ESC: Maintenance  All pollutants other than sediment that does not cause controls may include, but shall not be limited to spill control for fueling operations, equipment washing, cleaning of eatch basins, treatment of contaminated soils, and proper storage and disposal of hazardous materials.  #1.14 ESC: Maintenance  All temporary and permanent evosion and sediment control BMPs shall be conducted in accordance with an approved manual.  #1.15 ESC: Financial Liability  Performance bonding, or other appropriate financial instruments, shall be required for all projects to ensure compliance with the approved ESC  #1.15 ESC: Financial Liability  Performance of survey continued performance of any proper storage and disposal of permitted for all projects to ensure continued performance or covenants as a condition precedent to issuance of any performance of any proper storage and disposal or fuel projects to ensure continued performance or any proper storage and disposal or fuel maintained disposal or fu	E _	Notes Modified language slightly since 3/21	Comments from the
#1.13 ESC: Control of Pollutants other than Sediment on Shall pollutants other than sediment that occur on-site during construction shall be handled and disposed of in a manner that does not cause contamination of stormwater.  #1.14 ESC: Maintenance All pollutants other than sediment that does not cause contamination of stormwater.  #1.14 ESC: Maintenance and repaired and repaire	u _	lodified language slightly since 3/21	The contract of the track
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be required for all projects to ensure compliance with the approved ESC permit.	a condition precedent to issuance of any		Equivalent ner 3/21 discussion
			more for the manner of the
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2.802.015, C.6 Existing drainage patterns	shall be maintained.	Rule will describe a preference for	
Natural drainage patterns shall be maintained, and discharges from the		maintaining natural drainage natterns	Equivalent ner 3/21 discussion
site shall occur at the natural location, to the maximum extent		where appropriate and address	more and the fact of the section of
practicable.	# # # # # # # # # # # # # # # # # # #	implementation	

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Source Courted of Pollution  Source Courted (option 1; see 22.802.016 B2 for option 2)  CA.200.718 g	Department of Ecology's Minimum Requirements	Seattle Municipal Code (SMC)	Notes	Comments from the Department of Ecology
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Source control (option 1; see 22.802.016 B2 for option 2).  Selective Jeanary 1, 2001, structural source controls shall be installed for high-risk pollution-generating activities to the maximum extent rules promalgated by the Director, except in the following circumstances:  'I. When that portion of the site being developed, in accordance with rules promalgated by the Director, except in the following circumstances:  'I. When that portion of the site being developed discharges to the public combined system; or  ii. When the project has been identified in Ordinance 119750, adopting a redefined in the "definitions" in When the project has been identified in Ordinance 119750, adopting a redefined a sequent program and a position list, for iii. When persons are conducting normal residential activities under operation of city restructural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the City of containment area of high-risk pollution-generating activities with materials that will not interact with or break down in the presence of other materials activities.  See Discussion Memo of 444/00 for further discussion from flowing or being blown onto containment areas of high-risk pollution-generating activities.	Source control BMPs shall be applied to all projects to the maximum	22.802.015.B 4	requirements for 8 high risk pollution	Enther option equivalent per
Effective January 1, 2001, structural source controls shall be installed for high-risk pollution-generating activities to the maximum extent practicable to the portion of the site being developed, in accordance with rules promulgated by the Director, except in the following circumstances:  i. When that portion of the site being developed discharges to the public combined system; or  ii. When the project has been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Seattle for fiscal year 2000; or  iii. When persons are conducting normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or adversely affect the safety and operation of city right-of-way, utilities, or other property owned or maintained by the City.  The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:  i. Enclose, cover, or contain within a berm or dike the high-risk pollution-generating activities;  ii. Direct drainage from containment area of high-risk pollution-generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution-generating activity; and  iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.	extent marticable Course control RMPs shall be selected designed and	Source control (option 1; see 22,802,016 B2 for option 2).	generating (HRPG) activities, rather	3/21 discussion.
night-risk pollution-generating activities to the maximum extent practicable to the portion of the site being developed, in accordance with rules promulgated by the Director, except in the following circumstances:  i. When that portion of the site being developed discharges to the public combined system; or  ii. When the project has been identified in Ordinance 119730, adopting a budget, including a capital improvement program and a position list, for the City of Scattle for fiscal year 2000; or  The City of Scattle for fiscal year 2000; or  iii. When persons are conducting normal residential activities unless the Director determines that these activities pose a hazard to public health, adoption of the presons are conducting normal residential activities unless the maintained by the view of the presons are conducting normal residential activities unless the maintained by the City.  The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Dibuton-generating activities of a cuber property owned or generating activities.  ii. Enclose, cover, or contain within a berm or dike the high-risk pollution-generating activities with materials used in conjunction with the demandance of other materials used in conjunction with the posting activities with materials that will not interact with or head down in the presence of other materials used in conjunction with the pollution-generating activities.  Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.	CARVILL PLANCACIO. COMO COMO CARVILLO C	Effective January 1 2001 structural source controls shall be installed for	than regulating based on SIC	
			husinesses The HRPG activities	
		Ingir-itsk pomutofi-generating acuyines to the intarinian coose	Continue tital continue;	
		practicable to the portion of the site being developed, in accordance with	exempt low density residential, and	
		rules arountly afed by the Director, except in the following circumstances:	are defined in the "definitions"	
		III. that coming of the cite bring developed discharges to the rublic	section	
		1. When that portion of the site being developed discharges to the profits	SCHOIL:	
		combined system; or		
		ii When the project has been identified in Ordinance 119750, adopting a	Operational source controls,	
		1	including spill prevention drainage	
		budget, including a capital improvement program and a position use, for	moraning spin provention, aranings	-
		The City of Seattle for fiscal year 2000; or	system maintenance, street	
		iii When nersons are conducting normal residential activities unless the	maintenance, and eliminating illicit	
		Director deformation that there against an more a hazard to miblic health	connections are addressed for all	
		Diffector determines that these activities post a nazara to public meature.		
		safety or welfare; endanger any property; or adversely affect the safety	discharges in section 22.802.013.	
		and operation of city right-of-way, utilities, or other property owned or		
			The current ordinance offers two	
		The structural source controls shall include, but not be limited to, the	options, awaiting City Council	-
		further defined in rules promulgated jointly by	decision. The first option,	
			recommended by staff, is to regulate	
<u> </u>			all projects (in section 22.802.015)	
			for the nortion of the site being	
		pollution-generating activities;	James Contract The contract outlier (in	
		ii. Direct drainage from containment area of high-risk pollution-	developed. The second opnor (in	
		oenerating activity to a closed sump or tank for settling and appropriate	section 22.802.016) regulates Large	
······································		3. The stands were to the discharge of a ship in draining a control execution.	Projects for the entire site.	-
		disposal, of treat prior to discharging to a public diamage common system,		
		iii. Pave, treat, or cover the containment area of high-risk pollution-	See Discussion Memo of 4/4/00 for	
		generating activities with materials that will not interact with or break	Carl attended the care of the care	
pollution-generating activity; and iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.		down in the presence of other meterials used in continuction with the	further discussion.	
pollution-generating activity; and iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.				
iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.		pollution-generating activity; and		
areas of high-risk pollution-generating activities.		iv. Prevent precipitation from flowing or being blown onto containment		-
		areas of high-risk pollution-generating activities.		

Requirements	
Minimum	
(1992)	
with Ecology	
Equivalency	
Determining	
ment for	

F			
Comments from the	Department of Ecology	ar 3/2 ar 3/2 ing cc r 4/4 r 4/4 diagrams	
	Notes	Language modified to incorporate Ecology's suggestions regarding facility sizing and alternative technology research. In addition, language modified to allow alternative technologies for high-use sites.  New section (f) added to allow for water quality planning commitment concept discussed with Ecology on 3/21 and 3/31.	
ATABLE MAN AND ATTACKED	eattle Municipal Code (SMC)	a. Effective hamany 1, 2001, stormwater Treatment.  a. Effective hamany 1, 2001, stormwater Treatment facilities shall be installed and maintained to treat that portion of the site being developed, as specified in this section and in rules promulgated jointly by the Directors of DCLU and SPU, unless the following conditions exist:  i. The site produces no stormwater runoff discharge as determined by a ficensed civil engineer; or mit The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or iii. The project drains to a public combined system; or of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated jointly by the Directors inflation, well and in accordance with rules promulgated jointly by the Director of stormwater ventured the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director; in addition to other require treatment facilities:  i. Activity-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director of SPU and DCLU:  ii. Activity-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director of SPU and DCLU:  ii. Activity-use states, monoiroring is conducted, which requirements on the Director of SPU as further separator; or wan alternative technology to meet runoff treatment requirements of SPU and DCLU:  iii. Treatment effectiveness monoiroring is conducted, which requirements of SPU and DCLU:  iii. Treatment effe	property was equal or exceed that which would otherwise be achieved.
Department of Ecology's	Minimum Requirements	All projects shall provide treatment BMPs shall be sized to capture and treat the water quality design storm, defined as the 5-month, 24-hour return period storm. The first priority for treatment shall be to inflitate as much as possible of the water quality design storm, only if site conditions are appropriate and ground water quality will not be impaired. Direct discharge of untreated stormwater to groundwater is prohibited. All treatment BMPs shall be selected designed and maintained according to an approved manual.  C. first properties of the control	

Assessment for Determining Equivalency with Ecology (1992) Minimum Requirements	Minimum Requirements		
Department of Ecology's Minimum Requirements	(SMC)	Notes	Comments from the Department of Ecology
#5 Streambank Erosion Control Stormwater discharges to streams shall control streambank erosion by limiting the peak rate of runoff from individual development sites to 50% of the existing condition 2-year, 24-hour design storm while maintaining the existing condition peak runoff rate for the 10-year, 24-	n & C	See attached justification for the .5 cubic feet per second per acre discharge rate for the 100-year, 24-hour design storm.	Equivalent per 4/4 and 4/13 discussion.
hour and 100-year, 24-hour design storms.	public storm drain which the Director of Seattle Public Utilities determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2,000 square feet of new and replaced impervious surface shall be required to install a flow control facility, which shall be sized for the volume of runoff routed through the facility. Approved exceptions and flow control methods	See attached Chapter 25.09 "Regulations for Environmental Critical Areas," section 25.09.010 B 3. for riparian corridor definitions.	
	22.802.016.B. 1. Flow Control. Effective January 1, 2001, except for projects that have been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Scattle for fiscal year 2000. In addition to the discharge rate specified in Section 22.802.015, the		
	peak drainage water discharge rate shall not exceed 0.5 cubic feet per second per acre in a 100-year, 24-hour design storm for portions of the site being developed that drain to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake, as defined by Section 25.09.020 or to a system that drains to a Class		
#6 Wetlands Stormwater discharges to wetlands must be controlled and treated to the extent necessary to meet the State Water Quality Standards or Groundwater Quality Standards as appropriate. Discharges to wetlands	directly to a wetland, as defined by SMC Chapter 25.09, or to a conveyance system that discharges to a wetland, the introduction of sediment, heat, and other pollutants and contaminants into wetlands shall	See attached Chapter 25.09 "Regulations for Environmental Critical Areas," section 25.09.010 B	Equivalent per 4/4 and 4/13 discussion.
shall maintain the hydroperiod and flows of existing site conditions to the extent necessary to protect the characteristic uses of the wetland. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and natural water storage and infiltration opportunities outside the wetland shall be maximized. (Mitigation wetlands may not be used as treatment wetlands. Treatment constructed wetlands may not be constructed on existing wetlands.)	be minimized through the selection, design, installation, and manitenance of temporary and permanent controls. Discharges to wetlands of exceptional value, as defined by SMC Chapter 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of the wetland. Detention and treatment systems shall not be located within any wetland or its buffer. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and infiltration options	4. 10f Wetland delimitons.	
#7 Water Quality Sensitive Areas Where local governments determine that the Minimum Requirements do not provide adequate protection of water quality sensitive areas, either on-site or within the basin, more stringent controls shall be required to protect water quality.	22.802.015 C.8. Water Quality Sensitive Areas. The Director may impose additional requirements for areas determined to be water quality sensitive areas.		Equivalent per 3/21 discussion.



Department of Ecology's Minimum Requirements	(SMC)	Notes	Comments from the Department of Ecology
#8 Off-site Analysis and Mitigation All development projects shall conduct an analysis of off-site water quality impacts resulting from the project and shall mitigate these impacts. The analysis shall extend a minimum of 14 mile downstream from the project. The existing or potential impacts to be evaluated and mitigated shall include, at a minimum excessive sedimentation, streambank erosion, discharges to ground water contributing to recharge zones, violations of water quality standards, spills and discharges of priority pollutants.	a stream, or a drainage system within 1/4 mile of a stream, impacts to off-site water quality resulting from the project shall be analyzed and mitigated. The analysis shall comply with this Section and rules promulgated pursuant to this Section. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The analysis shall evaluate impacts likely to occur 1/4 mile downstream from the project. The impacts to be evaluated and mitigated shall include at least the following:		Equivalent per 3/21 discussion.
	<ul> <li>a. Amount of sedimentation;</li> <li>b. Streambank erosion;</li> <li>c. Discharges to groundwater contributing to recharge zones;</li> <li>d. Violations of state or federal surface water, groundwater, or sediment quality standards; and</li> <li>e. Spills and other accidental illicit discharges;</li> </ul>		
#9 Basin Planning  Adopted or implemented watershed-basin plans may be used to modify any or all of the Minimum Requirements, provided that the level of protection for surface or ground water achieved by the basin plan will equal or exceed that which would be achieved by the Minimum Requirements in the absence of a basin plan. (more text available.)	SMC 22.800.080 C. The Director of SPU is authorized to develop drainage basin plans for managing surface water, drainage water and erosion within individual subbasins. A drainage basin plan may, when approved by the Director of SPU, be used by the City to modify requirements of this Subtitle, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.		Ecology determined equivalent in 2/17 letter.
#10 Operation and Maintenance An operation and maintenance schedule shall be provided for all proposed stormwater facilities and BMPs, and the party responsible for maintenance and operations shall be identified.	22.802.016.B.7 Inspection and Maintenance Schedule. Temporary and permanent drainage control facilities and other controls shall be inspected and maintained according to a schedule submitted to the Director. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.		Equivalent per 3/21 discussion.
#11 Financial Liability Performance bonding or other appropriate financial instruments shall be required for all projects to ensure compliance with these standards.	SMC 22.808.130 includes requirements related to performance bonding and other appropriate financial instruments required for all projects to ensure compliance with standards. Specifically, the Director may require an applicant for a permit or approval to submit financial assurances, including insurance, bonds, cash deposits or instruments of credit and coverants.	See Discussion Memo dated 4/4/00 for additional discussion.	Equivalent per 3/21 discussion.
Froentions	Procedures for exceptions are outlined in SMC 22.808.010.	22.808.010 C 5 deleted as requested.	Equivalent per 3/21 discussion.



# **Discussion Memo Regarding Equivalency:**

# Seattle's Proposed Stormwater Requirements

#### Introduction

Seattle's proposed draft ordinance and an equivalency matrix have been submitted to Ecology for review and approval. In addition, this memo includes discussion regarding minimum requirements and several alternatives we have discussed with staff from Ecology for meeting the minimum requirements.

#### **Thresholds**

Seattle will adopt a new threshold as indicated in the draft code. Both new development and redevelopment projects adding or replacing 5,000 square feet or more of impervious surface or 1 acre of land disturbing activity must comply with the Large Project requirements described in 22.802.016.

# **Small Parcel Minimum Requirements**

The draft code includes all of Ecology's minimum requirements for small parcels. See equivalency matrix and code section 22.802.015.

# **Large Parcel Minimum Requirements**

Most of the large parcel minimum requirements are addressed in the equivalency matrix which directly compares Ecology's minimum requirements to the proposed requirements in the Seattle Municipal Code. Additional issues are addressed below.

# Minimum Requirement #1: Erosion and Sediment Control

See equivalency matrix and code sections 22.802.015 and 22.802.016.

# Minimum Requirement #2: Natural Drainage Preservation

Seattle will address implementation in the associated Director's rules.

# **Minimum Requirement #3: Source Control**

See equivalency matrix and code section 22.802.015 and 22.802.016. (Source control has been included as an option in both sections, for all projects and large projects—see comment below.)

Seattle proposes an alternative method of applicability for source control. Ecology requires source control for the entire site for large projects that are a certain business type (based on SIC code). Seattle proposes regulating high-risk pollutant generating (HRPG) activities, rather than businesses based on SIC code. This is consistent with King County's model. In addition, Seattle proposes to regulate all projects, not just large projects, but only for the portion of the site being developed. This proposal provides a more targeted regulatory nexus, by linking the regulation to the development project and the activity of concern. We understand Ecology approves of this approach as equivalent based on discussion on March 21. Note however, the ordinance contains both options—the final decision will be made by Seattle's City Council.

# Minimum Requirement #4: Runoff Treatment

Seattle has proposed a treatment requirement for large projects in the draft code. See equivalency matrix and code section 22.802.016.

However, Seattle would like the option to waive treatment requirements for redevelopment when "Water Quality Planning Commitment" is demonstrated to Ecology.

Site-specific facilities installed only when and where new projects occur may not be the most effective strategy for improving water quality in a built-out urban environment. This treatment requirement is expected to result in approximately forty private treatment facilities per year, treating an average of less than 10,000 square feet of impervious surface, and not necessarily addressing pollutants or basins of highest concern. In addition, due to limited space, and high property values in the City, this requirement will be more expensive for in-City development, than for builders in developing jurisdictions, and pose a conflict with the City's Growth Management obligations. Seattle proposes that an alternative strategy may be more effective for improving water quality in an urban environment.

Ecology has mentioned that having a water quality planning scope, schedule and budget approved by Ecology could modify or waive the treatment requirement in some situations. We understand this option has been pursued by King County, and approved by Ecology, for flow control requirements for redevelopment. Seattle Public Utilities is currently involved in a number of planning efforts related to water quality, including developing a long-term water quality strategy and an integrated basin planning methodology. In partnership with Ecology, Seattle would like to focus some of this effort toward a water quality improvement plan commitment that would consist of a planning scope, schedule and budget to determine the most effective solutions for effective water quality improvement in Seattle. In addition, the City would like the option to waive a site-specific treatment requirement when research demonstrates an alternative technology offers equivalent protection. We are developing a draft of an example water quality planning commitment for review. During the interim, Seattle proposes including language in the treatment requirement section of the ordinance that states:

22.802.016 B 2 (f) The Director of SPU may ask the Washington State Department of Ecology to approve a commitment by the City to develop a water quality improvement plan to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Directors may jointly promulgate rules to create exceptions to or make inapplicable the treatment requirements of this subsection 22.802.016(B)(3). A completed water quality improvement plan may, when approved by the Director of SPU, be used by the City to modify requirements of this Subtitle consistent with the plan, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.

The treatment requirement will remain in the ordinance. However, the City would like assurance that when Seattle demonstrates a commitment of water quality planning to Ecology, prescriptive treatment requirements for redevelopment may be waived in some situations.

# **Minimum Requirement #5: Flow Control**

See equivalency matrix and code section 22.802.015 and 22.802.016. In response to Ecology's February 17 letter:

- 1. The City acknowledges Ecology's approval of the 2-year flow control standards.
- 2. The City would like approval for Seattle's 25-year, 24-hour design storm standard of 0.2 cfs/acre. See attached methodology.
- 3. The City would like approval for Seattle's proposed 100-year, 24-hour design storm standard of 0.5 cfs/acre. See attached methodology.
- 4. The threshold for applying flow control for the 2-year and 25-year storm will be 2,000 square feet of <u>new and/or replaced</u> impervious surface. This will be consistent in the code and Director's rules.
- 5. Flow calculations justifying the detention system sizing matrix will be addressed in the second phase of equivalency review—focusing on technical guidance.

# Minimum Requirement #6: Wetlands

See equivalency matrix and code section 22.802.016.

# Minimum Requirement #7: Water Quality Sensitive Areas

Seattle's proposed code includes Ecology's language regarding this requirement. See equivalency matrix and code sections 22.802.016.

# Minimum Requirement #8: Offsite Analysis

See equivalency matrix and code sections 22.802.016.

# Minimum Requirement #9: Basin Planning

Ecology determined that this minimum requirement is adequately addressed.

# Minimum Requirement #10: Operation and Maintenance

See equivalency matrix and code sections 22.802.016.

# Minimum Requirement #11: Financial Liability

We understand Ecology determined that this minimum requirement is adequately addressed based on discussion on March 21.



# Exceptions

As requested by Ecology, we have removed 22.808.010 C 5, "The requested exception is the least possible variation from the requirements of this code," from the Exceptions to Requirements section. We understand Ecology determined that this minimum requirement is adequately addressed based on discussion on March 21. Additional information is provided below.

Ecology's comment: What does SMC Chapter 23.76 require in regard to public notice for Type II land use decisions?

Public notice is made twice: a two-week comment period prior to DCLU's decision, followed by a two-week appeal period once DCLU's decision is made. Agencies with jurisdiction are notified as well. If the two-week comment period reveals significant public concern, a departmental public hearing will be held. If an appeal is made, the Hearing Examiner will conduct the hearing. Since the Type II decision can be appealed, it is the intent of the initial public comment to expose the issues to be resolved in order to avoid the appeal.

Ecology's comment: The exception that the requirement is "not technically feasible" is not a criterion that is "similar." Also, the exception clause should contain a provision that the exception granted is the least possible exception that could be granted to comply with the intent of the Minimum Requirements.

The concept of "not technically feasible" is a necessary variance to administering regulations that include alternative technologies.

The statement, "An exception shall only be granted to the extent necessary to meet the criteria set forth in this Section," is equivalent to the concept of Ecology's "least possible exception." This language is found in 22.808.010 A, Exceptions to Requirements, General.

# Redevelopment

Ecology's requires source control for the entire site for redevelopment. Seattle has proposed requiring source control for all projects, but only to the portion of the site being developed. (See Source Control above.) We understand Ecology approves of this approach based on discussion on March 21.

Ecology requires redevelopment projects to submit a retrofit schedule for applying the minimum requirements (basically installing flow and treatment facilities) to the entire site, beyond the portion being developed. This approach could present legal issues for the City and raises unresolved administrative implementation concerns.

Instead, Seattle proposes to enhance the City's Water Quality Program rather than requiring a retrofit schedule for treatment and flow control for the entire site for all large redevelopment projects. Seattle's enhanced program would include:

- Developing a Source Control Manual, adopted by Directors' Rule, that provides more specific requirements for operational source control requirements for all discharges. The proposed Source Control Manual would apply to both development and existing discharges. New development/redevelopment would have to comply with the structural requirements, and all existing discharges would have to comply with the operational requirements.
- 2. Committing to an additional FTE to conduct water quality site audits beginning January 2001.
- 3. Integrating retrofit concerns into current integrated basin planning. (Based on King County model.)

Based on discussion on March 21, we understand Ecology approves of this approach to redevelopment projects.

# **Application of these Requirements to City Projects**

The requirements of the Stormwater, Grading and Drainage Control Code will apply to City projects as stated in the current Code, section 22.800.070 A:

Compliance. City agencies shall comply with all the requirements of this Subtitle except they shall not be required to obtain permits and approvals under this Subtitle for work performed within a public right-of-way and for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation. Where the work occurs in a public right-of-way, it shall comply with Seattle Municipal Code Title 15, Street and Sidewalk Use, including the applicable requirements to obtain permits or approvals. Where appropriate as set forth in Subsection 22.804.040C of this code, a soils report and analysis by an experienced geotechnical/civil engineer shall be prepared for City projects.

# Additional Issues not Addressed in Ecology's February 17 Letter

# **Compliance Dates**

Seattle proposes a six month compliance date for new treatment, flow control and structural source control requirements for private projects and all public projects that apply for City approval through a MUP, side sewer permit or grading permit. In addition, Seattle proposes exemption for public projects in the City's council-approved 2000 budget. All other requirements will be effective by July 5, 2000. These compliance dates will provide for the time necessary to develop and fund a sound implementation program and for projects designers to incorporate the requirements and technical specifications at the appropriate planning phase.

We understand based on discussion on March 21 that Ecology has agreed to these compliance terms. We would like notification that these compliance terms are approved by Ecology and will not effect permit compliance.



# **Site Design Options**

Proposal: Seattle proposes incorporating "Site Design" options in the technical guidance manuals for flow control and treatment requirements.

The concept of site design options has been adopted by the City of Portland to give credit for stormwater solutions that are well-integrated with other design objectives. Examples include pervious pavement, landscape planters, tree planting, and ecoroofs. When applied, these options could either eliminate the need for traditional facilities, reduce the size of the facility, or offer alternative facility options that meet other site design objectives. For example, if properly designed, a landscape planter may be used for treatment and/or flow control.

We understand Ecology approves of this approach based on discussion on March 21. Final approval for these options will be sought in the second phase of equivalency review, focusing on technical guidance.

range of curve numbers was used to evaluate runoff conditions over a variety of pre-development pervious/impervious conditions.

Table 1—Variables and Values Used in the Santa Barbara Urban Hydrograph Model

Variable	Value
Pervious Area (acres)	1.0
Impervious Area (acres)	
SCS Curve Number for Pervious Area, CN _p	Varied between 80 and 100
SCS Curve Number for Impervious Area, CNi	n/a [1] . Para a jaran kana a j
Time of Concentration, Tc (minutes)	Varied between 0 and 30 minutes
Depth of Rainfall (inches)	1.680 in (2-year, 24-hour)
그는 사이에 가장하는 것이 되는 것이 어떻게 되었다. 사람들은 기계	2.740 in (10-year, 24-hour)
	3.125 in (25-year, 24-hour)

#### Comparing Requirements for 2-year, 24-hour Design Storm

The comparison between the Technical Manual and the SGD Code for a 2-year, 24-hour design storm is shown in Figure 2, where the assumed pre-development condition was 100-percent pervious. The horizontal line represents the maximum discharge rate of 0.15 cfs per acre that is allowed under the rules contained in the SGD Code. The three ascending lines are the discharge rates allowed by the Technical Manual and are based on 50 percent of the peak discharge rate predicted by the SBUH model. For CNs above approximately 94, the requirements of the SGD Code will result in peak discharge rates below those allowed by the Technical Manual; the opposite is true for CN values of less than approximately 85. Between these two values, whether the SGD Code provides greater levels of protection or not depends on the time of concentration (Tc) and the SCS Curve Number (CN). For a 2-year storm, the SGD Code will provide an equal or greater level of protection than the Technical Manual for the following reasons:

- Although CN values for the Seattle area can vary between 85 and 98, values tend to be in the
  upper portion of this range because most development in the City occurs on property with existing
  developed conditions. Therefore, the SGD Code requirement is typically more stringent than the
  requirement of the Technical Manual;
- Times of concentration for runoff are usually between 10 and 20 minutes, making the SGD Code requirement typically more stringent than the Technical Manual;
- In cases where the model shows the Technical Manual requirements are more stringent, the differences between the SGD Code's and Technical Manual's allowable peak discharges are relatively small, usually less than about 25%, which is well within the expected level of error that can exist in SBUH predictions;

#### Comparing Requirements for 10-Year and 25-Year Design Storms

The Technical Manual requires that the peak runoff be unchanged following development for 10-year design storm. The SGD Code requires that the peak discharge rate not exceed 0.2 cfs for a 25-year storm. Owing to the different sized design storms involved, a direct comparison of the requirements cannot be made as was done with the 2-year storm. A rudimentary assessment can be achieved by using the 25-year 24-hour storm as a basis for comparison. Figure 3 shows the peak discharge rates



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allowed under the SGD Code and Technical Manual. In this case, the maximum peak discharge rate allowed by the Technical Manual was assumed to be no greater than the pre-development peak, as modeled by the SBUH. For 25-year, 24-hour storm events, the requirements contained in the SGD Code are clearly more stringent than those contained in the Technical Manual, no matter the curve number or time of concentration. Between the peak discharge rate that is allowed by the SGD Code and the discharge rate that otherwise would be allowed by the Technical Manual there is a difference ranging from a factor of about two to almost ten. Although there are no specific requirements in the SGD Code for maximum discharge rates for ten-year, 24-hour storm, Figure 4 shows that the City's requirement of 0.20 cfs per acre at this lower intensity storm would also provide substantially equivalent protection. Therefore, for larger storm events, the City's requirements provide greater protection against streambank erosion than those requirements contained in the Technical Manual.

# Comparing Requirements for 100-Year Design Storm

The Technical Manual requires that the peak runoff be unchanged for a 100-year design storm following development. For the City, authority to address concerns associated with a 100-year storm is clarified in Director's Rule SED 93-3 and further specified in the Regulations for Environmentally Critical Areas (SMC 25.09). The City's Design Specifications for Private Drainage Systems also states that, "detention volumes for a 100-year, 24-hour design storm may be required for areas of the city where there is limited downstream capacity and where drainage-related flooding problems are known to occur."

## Summary

Based on hydrologic analyses performed using the SBUH model, the peak discharge rates allowed under the SGD Code are typically lower than those that otherwise would be allowed by the Technical Manual. Therefore, the City's requirement for streambank erosion control, as contained in the SGD Code, is substantially equivalent to, and in most cases greater than, protection that would be afforded by the requirements contained in the Technical Manual.

# Supplemental Information for Streambank Erosion Control: Analysis Methods and Justification of Discharge Rate Requirements

#### Overview

Minimum Requirement #5 in the 1992 Stormwater Management Manual for the Puget Sound Basin (Technical Manual) provides limits on post-development peak rates of runoff in order to control streambank erosion. These limits are based on how post-development rates compare to "existing," that is, pre-development peak runoff rates. The City of Seattle, in its Stormwater, Grading and Drainage Control Code (SGD Code), also controls streambank erosion by placing limits on post-development peak runoff rates. However, the City's SGD Code sets numeric post-development peak rates that are independent of pre-developed conditions. The objective of both the Technical Manual and the SGD Code requirements is the same: to reduce erosion of streambanks caused by high peak flows. The rationale behind the City's requirements and why it provides equal or greater levels of protection to that afforded by the Technical Manual is provided below.

# **Technical Manual Requirements**

In the Technical Manual, Minimum Requirement #5 for Streambank Erosion Control states that:

Stormwater discharges to streams shall control streambank erosion by limiting the peak rate of runoff from individual development sites to 50 percent of the existing condition 2-year, 24-hour design storm while maintaining the existing condition peak runoff rate for the 10-year, 24-hour and 100-year, 24-hour design storms.

#### Seattle Municipal Code (SMC) Requirements

The requirements for streambank erosion control provided in the SMC are included in the Stormwater, Grading and Drainage Control Code (SMC 22.802.015), the Regulations for Environmental Critical Areas (SMC 25.09) and a clarifying Director's Rule (SED 93-3).

To the extent practical, the peak drainage water discharge rate from pervious and impervious surfaces on the site shall not exceed 0.2 cubic feet per second per acre under design storm conditions....The design storm used to determine detention volume necessary to obtain the required discharge rate shall be a storm with a statistical probability of occurrence of one in 25 in any given year. (SMC 22.802.15, C.2)

In addition to detaining a 25-year storm to a release rate of 0.2 cubic feet per second per acre, the peak drainage water discharge rate from projects of more than 9,000 square feet of developmental coverage shall not exceed 0.15 cubic feet per second per acre in a two-year storm. (SMC 22.802.125, D.1)

The Director's Rule (SED 93-3) provides additional guidance: "When necessary to accomplish the purposes of the Stormwater, Grading and Drainage Control Code, the Director of Engineering may require detention volume for a one-hundred (100) year design storm and/or a release rate less than .2 cubic feet per second per acre for a 25-year storm and 0.15 cubic feet per second per acre for a 2-year design storm in cases in which there is limited downstream capacity and drainage-related flooding problems are known to occur."



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In addition, Seattle's Regulations for Environmentally Critical Areas (SMC 25.09.060.C.5) requires: "All drainage associated with the development shall be connected to City-approved drainage control systems with approved discharge points... If an adequate drainage conveyance system is not available and safety and erosion concerns dictate, the Director may require design of drainage facilities to handle up to a one hundred (100) year storm, and/or require a release rate slower that the rate normally required."

#### Rationale for the Requirements

The Technical Manual's aim is to control streambank erosion by limiting the peak discharge rates to either being equal to (in the case of the 10- and 100-year, 24-hour storms), or less than (for the 2-year, 24-hour storms), the discharge rates of the existing levels prior to development or redevelopment. This may be an appropriate approach for development or redevelopment activities occurring on previously undeveloped properties having existing discharge levels that are relatively low, as might be found in forested or low-density rural areas. However, within the City limits approximately 81 percent of the land area is already developed for residential, commercial, industrial, or roadway uses. Most of the remaining 19 percent consists of parks and greenbelts that are protected from development. Therefore, any development or redevelopment that occurs in the City almost invariably involves urbanized land areas whose existing discharge rates are already high.

The City, therefore, believes that Ecology's requirements that post-development peak discharges be reduced only by 50 percent for a 2-year storm, and remain unchanged for larger design storms, will still result in unacceptably high levels of erosion. Rather than establishing acceptable post-development release rates on levels that existed prior to development, the approach taken by the City is to have post-development release rates approximate those of undeveloped property. Peak discharge rates from undeveloped land have been estimated by the City to be approximately 0.15 cubic feet per second per acre for a 2-year, 24-hour design storm, and 0.2 cubic feet per second per acre for a 25-year, 24-hour storm.

#### Design Storm Hyetographs

The Technical Manual uses the standard SCS Type 1A rainfall distribution, resolved to a 10-minute time interval for calculating peak discharge rates using the Santa Barbara Urban Hydrograph Method (SBUH). However, the City uses a hyetograph based specifically on rainfall distribution patterns in the Seattle area. The analysis assumes that the precipitation data fit the Gumbel distribution method. Both hyetographs are similar during the time period building up to the peak rainfall volume (expressed as a percent of the total rainfall), but the peak volume in the City's hyetograph is almost 50% higher than that of the SCS Type 1A (See Figure 1). The higher peak flow rates predicted using City's hyetograph are, therefore, more restrictive than those otherwise predicted using the hyetograph provided in the Technical Manual.

#### Evaluation of Equivalency

The requirements contained in the SGD Code are substantially equivalent to those of the Technical Manual based on the results of hydrologic analyses performed using the Santa Barbara Urban Hydrograph Method (SBUH). Using guidance contained in the Technical Manual, a model was developed to compute runoff hydrographs for varying design storm conditions, and comparisons were made between allowable peak discharge rates from development/redevelopment sites based on the requirements contained in the SGD Code and requirements in the Technical Manual. The model was programmed using the 24-hour storm hyetograph values for Seattle (contained in SPU Director's Rule 93-3), and run using the variables and values contained in Table 1 with ten-minute time steps. A

# City of Seattle Flow Control Requirements (Peak flow in cfs per 1 acre [re]development)

## Overview

In order to evaluate the relationship between Ecology's and the City's requirements for allowable discharge rate (in cfs/acre), a modeling analysis was conducted using the Santa Barbara Urban Hydrograph method. Two different hyetographs were used in the model: (1) the SCS Type 1A, from Ecology's Technical Manual; and (2) the City of Seattle hyetograph, which is nearly identical to the SCS Type 1A hyetograph with the exception of the peak (See Figure 1). The based assumptions for comparing the two requirements is that development and redevelopment in Seattle typically involves preexisting conditions that already have high effective impervious surfaces [curve numbers (CN) in the mid-90's and above] and short times of concentrations [TCs of 15 minutes or less].

# Methodology

- 1. Each of the six graphs (Figures 2 7) comparing discharge rates were generated using the Santa Barbara Urban Hydrograph method for calculating peak discharge rates.
- 2. In the SBUH program, the following parameters were held constant:
  - Area = 1 acre
  - dt (Time step) = 10 minutes
- 3. Rainfall was varied using the values contained in Directors' Rule 93-3
  - 2-year/24-hour volume: 1.680 inches
  - 25-year/24-hour volume: 3.125 inches
  - 100-year/24-hour volume: 3.840 inches
- 4. Curve numbers were varied in increments of 5 units, between CN=80 and CN=100 to give a range of pre-development impervious conditions.
- 5. Three different Times of Concentration (TC) were used: 5 minutes, 15 minutes and 30 minutes
- 6. Two different hyetographs were used to estimate the peak flows:
  - Seattle Hyetograph, with values provided in Directors Rule 93-3
  - WDOE Hyetograph, which is the SCS Type 1A
- 7. Allowable peak discharge rates per City of Seattle's Stormwater Code:
  - 2-year/24-hour design storm:

0.15 cfs/acre

25-year/24-hour design storm:

0.20 cfs/acre

100-year/24-hour design storm: 0.50 cfs/acre (proposed)

Dated: April 3, 200

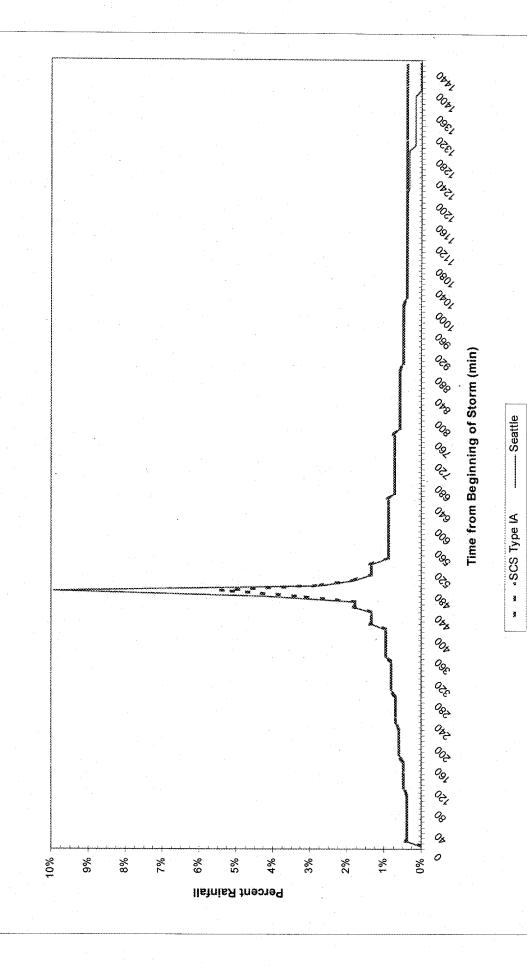
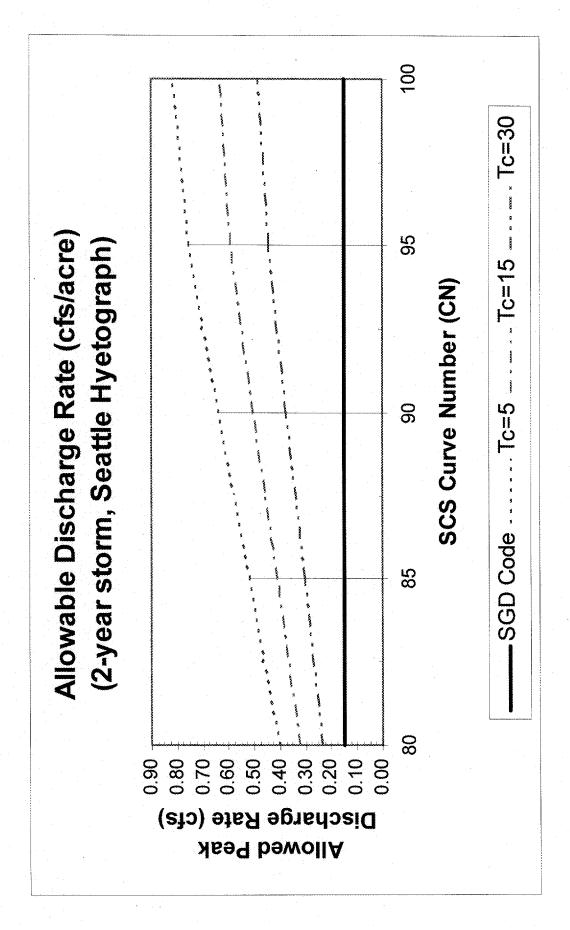


FIGURE 1



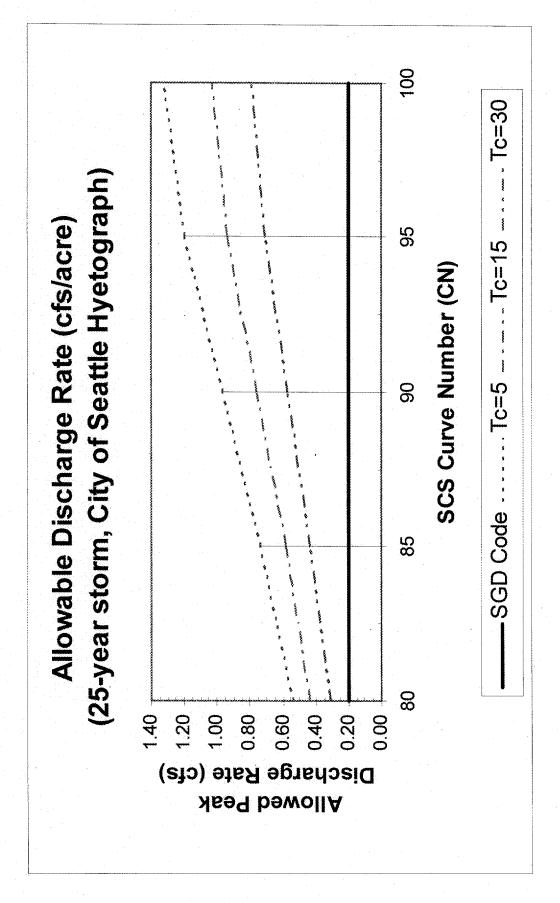


100 (2-year storm, WDOE (SCS Type 1A) Hyetograph) Estimating Allowable Discharge Rate (cfs/acre) 95 SCS Curve Number (CN) 8 85 8 0.25 0.20 0.15 0.10 0.00 0.05 Rate (cfs) Allowed Peak Discharge

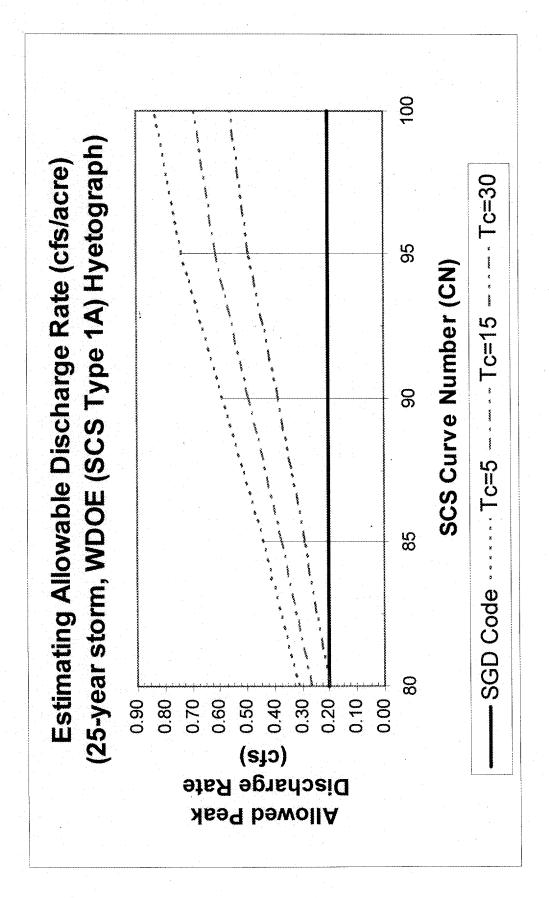


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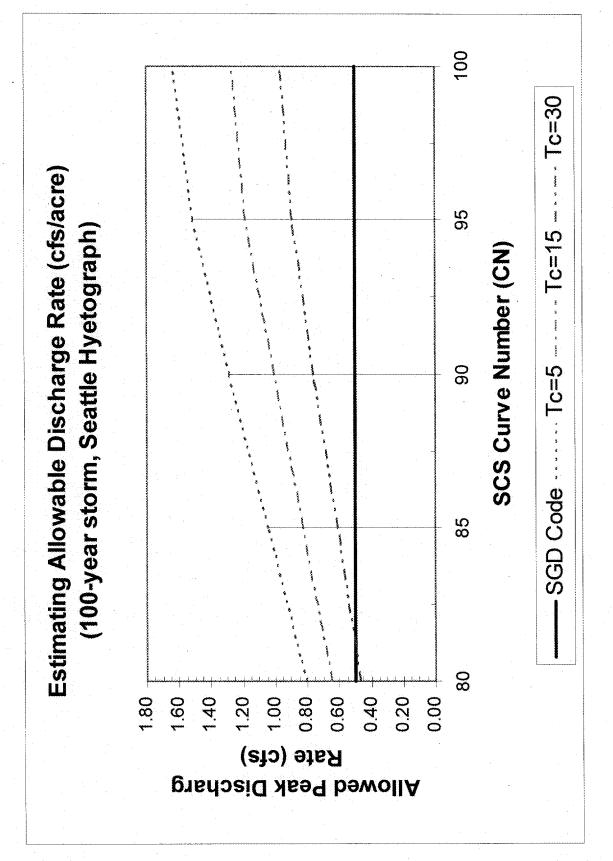




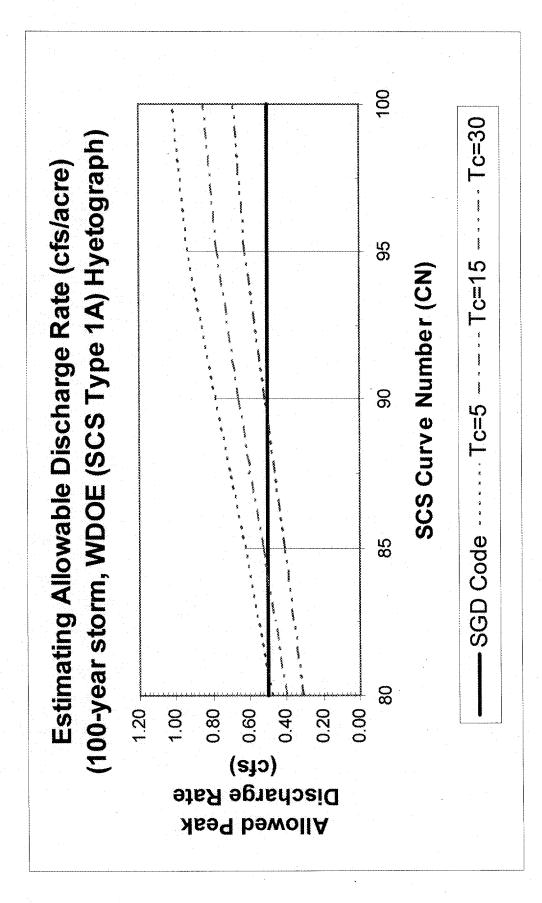














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**ORDINANCE** 

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AN ORDINANCE relating to the Stormwater, Grading, and Drainage Control Code, Seattle Municipal Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396; amending Chapter 22.800 regulating title, purpose, scope, and authority; amending Chapter 22.801 regarding definitions; amending Chapter 22.802 regulating stormwater, drainage, and erosion control; amending Chapter 22.804 regulating grading; and amending Chapter 22.808 regulating administration and enforcement.

Section 22.800.010 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.800.010 Title.

This Subtitle, comprised of SMC Chapters 22.800 through 22.808, shall be known as the "Stormwater, Grading and Drainage Control Code," and may be cited as such.

New Subsection 22.800.020 C. of the Stormwater, Grading, and Drainage Control Section 2. Code, adopted by ordinance 116425, is added as follows:

#### 22.800.020 Purpose. * * *

C. It is expressly acknowledged that water quality degradation can result either directly from one discharge or through the collective impact of many small discharges. Therefore, the water quality protection measures in this Subtitle are necessary to protect the health, safety and welfare of the residents of Seattle and the integrity of natural resources for the benefit of all and for the purposes of this Subtitle. Such water quality protection measures are required under the federal Clean Water Act, 33 U.S.C. Section 1251, et seq., and in response to the obligations of the City's municipal stormwater discharge permit, issued by the State of Washington under the federal National Pollutant Discharge Elimination System program.

Section 3. Section 22.800.030 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.800.030 Scope.

This Subtitle applies to:

- All grading and drainage and erosion control, whether or not a permit is required; and Α.
- All new ((development and redevelopment)) or replaced impervious surface and all land B. disturbing activities, whether or not a permit is required; and
- All ((new and existing)) discharges directly or indirectly to a public drainage control system; and
- D. All new and existing land uses.



 **Section 4.** New Subsection 22.800.060 C. of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is added as follows:

# 22.800.060 Compliance with other laws.

* * *

C. Compliance with the provisions of this Subtitle and of regulations and manuals adopted by the City in relation to this Subtitle does not necessarily mitigate all impacts to the environment. Thus, compliance with this Subtitle and related regulations and manuals should not be construed as mitigating all stormwater impacts, and additional mitigation may be required to protect the environment. The primary obligation for compliance with this chapter, and for preventing environmental harm on or from property, is placed upon responsible parties as defined by this Subtitle.

**Section 5.** Section 22.800.070 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.800.070 City Projects.

- A. Compliance. City agencies shall comply with all the requirements of this Subtitle except they shall not be required to obtain permits and approvals under this Subtitle for work performed within a public right-of-way and for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation. Where the work occurs in a public right-of-way, it shall comply with Seattle Municipal Code Title 15, Street and Sidewalk Use, including the applicable requirements to obtain permits or approvals. Where appropriate as set forth in Subsection 22.804.040C of this code, a soils report and analysis by an experienced geotechnical((/eivil)) engineer shall be prepared for City projects.
- B. Inspection.
  - 1. When the City conducts projects for which review and approval is required under Section ((22.802.015)) 22.802.020 or 22.804.030, the work shall be inspected by the City agency conducting the project or supervising the contract for the project. The inspector for the City agency shall be responsible for insuring that the grading and drainage control is done in a manner consistent with the requirements of this Subtitle.
  - 2. Where a soils analysis and report has been prepared as required under Subsection A of this section, the grading shall also be inspected by the geotechnical((/eivil)) engineer who prepared the report.
  - 3. A City agency need not provide an inspector from its own agency provided either:
    - the work is inspected by an appropriate inspector from another City agency; or
    - b. the work is inspected by the licensed civil or geotechnical((/eivil)) engineer who prepared the plans and specifications for the work; or
    - c. a permit or approval is obtained from the Director of ((Construction and Land Use)) DCLU, and the work is inspected by the Director.
- C. Certification of Compliance. City agencies shall meet the same standards as non-City projects, and shall certify that each individual project meets those standards.

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Section 22.800.080 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:

#### 22.800.080 Authority.

- A. 1. The Director of ((Construction and Land Use shall have)) DCLU has authority regarding the provisions of this Subtitle pertaining to grading, review of drainage control plans, and review of erosion control plans, and ((shall-have)) has inspection and enforcement authority pertaining to temporary erosion/sediment control measures.
  - 2. The Director of ((Seattle Public Utilities)) SPU has authority regarding all other provisions of this Subtitle pertaining to stormwater, drainage, and erosion control, including inspection and enforcement authority.
- В. The Directors of ((Construction and Land Use)) DCLU and ((Seattle Public Utilities)) <u>SPU</u> are authorized to take actions necessary to implement the provisions and purposes of this Subtitle in their respective spheres of authority, including, but not limited to, the following: promulgating and amending rules and regulations, pursuant to the Administrative Code, Chapter 3.02 of the Seattle Municipal Code((, which may include prescribing best management practices ("BMPs"))); establishing and conducting inspection programs; establishing and conducting or, as set forth in Section 22.802.012, requiring responsible parties to conduct monitoring programs, which may include sampling of discharges to or from drainage control facilities, the public drainage control system, or surface water; taking enforcement action; abating nuisances; promulgating guidance and policy documents; and reviewing and approving or disapproving required submittals and applications for approvals and permits.
- C. The Director of ((Seattle Public Utilities)) SPU is authorized to develop drainage basin plans for managing surface water, drainage water, and erosion within individual subbasins. ((Compliance with an adopted)) A drainage basin plan may, when approved by the Director of ((Seattle Public Utilities)) SPU, be used to modify requirements of this Subtitle, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.
- Section 7. Section 22.801.010 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.010 General.

For the purpose of this Subtitle, the words listed in this Chapter ((shall)) have the following meanings unless the context clearly indicates otherwise. Terms relating to pollutants and to hazardous wastes, materials, and substances, where not defined in this Subtitle, shall be as defined in Washington Administrative Code Chapters 173-303, 173-304 and 173-340, the



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Seattle Building Code or the Seattle Fire Code, including future amendments to those codes. Words used in the singular include the plural, and words used in the plural include the singular.

Section 8. Section 22.801.020 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinance 118396, is amended as follows:

#### 22.800.020 66A."

- "Abandoned solid waste disposal site" means a site that((which)) is no longer in use and where solid waste was disposed with or without a permit.
- "Agency" means any governmental entity or its subdivision.
- "Agency with jurisdiction" means those agencies with statutory authority to approve, condition or deny permits, such as the United States Environmental Protection Agency, the Washington State Department of Ecology or the Seattle/King County Department of Public Health.
- "American Petroleum Institute (API) oil/water separator": See "Oil/water separator, American Petroleum Institute (API)".
- means a vault that has multiple chambers separated by baffles and weirs to trap oil in the vault. API oil/water separators are designed to remove dispersed oil and floating debris and in containing spills.
- "Approved" means approved by either the Director of Design, Construction and Land Use or the Director of Seattle Public Utilities.
- "As-graded" means the surface condition existing after completion of grading.
- Section 9. Section 22.801.030 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.030 66B 39

- "Backfilling" means returning a site to its original or approved contours after earth materials were removed for construction purposes.
- "Basin plan" means a plan to manage the quality and quantity of stormwater in a watershed, including watershed action plans.
- "Bench" means a relatively level step excavated into earth material on which fill is to be placed. "Best management practice" (BMP) means a physical, chemical, structural or managerial practice or device that prevents, reduces, or treats contamination of water or which prevents or reduces soil erosion. When the Directors develop rules and/or manuals prescribing best management practices for particular purposes, whether or not those rules and/or manuals are adopted by ordinance, BMPs prescribed in the rules and/or manuals shall be the BMPs required for compliance with this Subtitle.
- 1. Non-structural or operational best management practices are those ((which)) pollution control strategies that require modified or additional ((operational or)) behavioral practices, such as sweeping a parking lot, or ((having)) maintaining special equipment on site, such as spill response equipment. ((on-site.)).
- 2. Structural best management practices are those ((which)) pollution control strategies that require the construction of a structure or other physical modification on the site.
- "Biofiltration swale" means a long, gently sloped, vegetated channel designed and maintained to

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 treat stormwater runoff through sedimentation, adsorbtion, and biological uptake. Grass is the most common vegetation, but wetland vegetation can be used if the soil is saturated.

"Building permit" means a document issued by the City of Seattle Department of <u>Design</u>, Construction and Land Use giving permission for construction or other specified activity in accordance with the Seattle Building Code (Chapter 22.100 SMC).

**Section 10.** Section 22.801.040 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.040 "C."

- "Cause or contribute to a violation" means and includes acts or omissions that create a violation, that increase the duration, extent or severity of a violation, and that aid or abet a violation.
- "Civil engineer, licensed" means a person who is a licensed by the State of Washington to practice civil engineering.
- "Coalescing plate oil/water separator" means a multi-chambered vault, containing a set of parallel, corrugated plates that are stacked and bundled together in the center of the vault. Coalescing plate separators are designed to remove dispersed oil and floating debris as well as in containing spills.
- "Combined sewer" see PUBLIC COMBINED SEWER.
- "Compaction" means the densification of a fill by mechanical means.
- "Containment area" means the area designated for conducting high risk pollution generating activities for the purposes of implementing operational source controls or designing and installing structural source controls or treatment facilities.
- "Contaminate" means the addition of sediment, any other pollutant or waste, or any illicit discharge.
- "Cut" means the changing of a grade by excavation.

**Section 11.** Section 22.801.050 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:

## 22.801.050 "D."

# "DCLU" means the Department of Design, Construction and Land Use.

- "Damages" means monetary compensation for harm, loss, costs, or expenses incurred by the City, including but not limited to, the following: costs of abating violations of this Subtitle or public nuisances; fines or penalties the City incurs as a result of a violation of this Subtitle; and costs to repair or clean the public drainage control system as a result of a violation. For the purposes of this Subtitle, it does not include compensation to any person other than the City.
- "Design storm" means a rainfall event used in the analysis and design of drainage facilities.
- "Designated receiving waters" means the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, and other receiving waters designated by the Director of ((Seattle Public Utilities)) SPU as having the capacity to receive drainage discharges.



"Detention" means ((and refers to)) temporary	storage of drainage	water for the purpose of
controlling the drainage discharge rate.		

"Detention system" means a facility designed to control the discharge rate of stormwater runoff from a site by detaining flows in a tank or vault.

"Development" means land disturbing activity or the addition or replacement of impervious surface.

"Developmental coverage" means all areas within a site planned ((to be developed or redeveloped including, but not limited to, rooftops, driveways, carports, accessory buildings, parking areas, areas in which soils, slopes and vegetation have been altered, and roadways and other pervious and impervious surfaces)) for land disturbing activity or new or replaced impervious surface.

"Director" means the Director of the Department authorized to take a particular action, and the Director's designees, who may be employees of that department or another City department.

"Director of <u>Design</u>, Construction and Land Use" means the Director of the Department of <u>Design</u>, Construction and Land Use of the City of Seattle and/or the designee of the Director of <u>Design</u>, Construction and Land Use, who may be employees of that department or another City department.

"Director of Seattle Public Utilities" means the Director of Seattle Public Utilities of the City of Seattle and/or the designee of the Director of Seattle Public Utilities, who may be employees of that department or another City department.

"Discharge point" means the location to which drainage water from a specific site is released.

"Discharge rate" means the rate at which drainage water is released from a specific site. The discharge rate is expressed as volume per unit of time, such as cubic feet per second.

"Drainage basin" means the tributary area through which drainage water is collected, regulated, transported, and discharged to receiving waters.

"Drainage control" means the management of drainage water. Drainage control is accomplished through the collection, conveyance, and discharge of drainage water, controlling the rate of discharge from a site, or separating, treating or preventing the introduction of pollutants.

"Drainage control facility" means any facility, including best management practices, installed or constructed for the purpose of controlling the flow, quantity, and/or quality of drainage water.

"Drainage control plan" means a plan for collecting, controlling, transporting and disposing of drainage water falling upon, entering, flowing within, and exiting the site, including designs for drainage control facilities.

"Drainage control system" means a system intended to collect, convey and control release of only drainage water. The system may serve public or private property. It includes constructed and/or natural components such as ditches, culverts, streams and drainage control facilities.

"Drainage water" means stormwater, snow melt, surface water, surface and irrigation runoff, water from footing drains and other drains approved by the Director of Seattle Public Utilities or installed in compliance with this Subtitle and rules which may be adopted hereunder. Other water which is not an illicit discharge as defined in Subsection 22.802.012C shall be considered drainage water if it drains from the exterior of a building or structure, a pervious or impervious surface, or undeveloped land, or by surface or shallow subsurface flow.

"Dredging" means the excavation of earth materials from land covered by water. The term ((shall include)) includes dredging ((which)) that maintains an established water depth.

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**Section 12.** Section 22.801.060 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.060 "E."

- "Earth material" means any rock, gravel, natural soil or resedimented soil, or any combination thereof, and does not include any solid waste as defined by RCW 70.95.
- "Environmentally Critical Area" means an area designated in Chapter 25.09 of the Seattle Municipal Code.
- "Erosion" means the wearing away of the ground surface as a result of mass wasting or of the movement of wind, water and/or ice.
- "Excavation" means the mechanical removal of earth material.
- "Existing grade" means the natural surface contour of a site, including minor adjustments to the surface of the site in preparation for construction.
- "Exploratory excavation" means borings, or small pits, hand dug or excavated by mechanical equipment. Exploratory excavation does not include preloading of the site.
- **Section 13.** Section 22.801.070 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.070 "F."

- "Fill" means ((earth)) material deposited, placed, pushed, pulled, or transported to a place other than the place from which it ((is excavated)) originated.
- "Filter strip" means a gently sloping vegetated area that is designed and maintained to treat, through sedimentation, adsorbtion and biological uptake, stormwater runoff from overland sheet flow from adjacent paved areas before it concentrates into a discrete channel.
- "Finished grade" means the grade upon completion of the fill or excavation.
- (("Fish and wildlife conservation habitat areas" is as defined in the Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code, Chapter 25.09.))
- (("Flood prone areas" is as defined in SMC Chapter 25.09, Environmentally Critical Areas.))
- "Flow control" means controlling the discharge rate of stormwater runoff from the site through means such as infiltration or detention.
- "Flow control facility" means a method, defined by or approved pursuant to this Subtitle or associated rules, for controlling the discharge rate of stormwater runoff from a site.
- **Section 14.** Section 22.801.080 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.080 "G."

- "Garbage" means putrescible waste.
- "Geotechnical((/Civil)) engineer, experienced" means a professional civil engineer licensed by the State of Washington who has at least four years of professional experience as a geotechnical engineer, including experience with landslide evaluation.
- "Grade" means the ground surface contour. (See also "Existing grade" and "Finished grade").
- "Grading" means excavation, fill, in-place ground modification, or any combination thereof, including the establishment of a grade following demolition of a structure.



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"Grading approval" means an approved component of a building permit relating to grading, as required by this Subtitle.

New Section 22.801.090 is added to the Stormwater, Grading, and Drainage Section 15. Control Code as follows:

#### 66TF 99 22.801.090

"High risk pollution generating activities" are the following:

- 1. Fueling operations that involve transferring fuel into mobile vehicles or equipment at permanent stations, temporary stations, and mobile fueling stations. Permanent stations include facilities, such as but not limited to, commercial gas stations, maintenance yards, and private fleet fueling stations, where fuel is transferred from a dedicated fueling station. Temporary fueling stations include, but are not limited to, construction sites and any other site where fuel is temporarily stored and dispensed into vehicles or equipment. Mobile fueling stations are fueling operations where fuel is delivered to vehicles and equipment via mobile tank trucks.
- 2. Vehicle, equipment or building washing or cleaning, including any of the following: mobile vehicle steam cleaning operations or vehicle washing at commercial car wash facilities, charity car washes, or permanent parking lots such as new, used, and rental car lots and fleet lots: outdoor washing of tools or other manufacturing equipment; outdoor cleaning of commercial cooking equipment such as filters and grills; or washing of buildings, including exteriors or mobile interior building cleaning services.
- 3. Truck or rail loading or unloading of liquid or solid materials that involves transferring noncontainerized bulk liquids from truck or rail, or loading/unloading materials at a commercial or industrial loading dock.
- 4. Liquid storage in stationary above ground tanks, including storing liquid chemicals, fertilizers, pesticides, solvents, grease, or petroleum products in stationary above ground tanks.
- 5. Outside portable container storage of liquids, food wastes, or dangerous wastes including storing any of the following: vegetable grease, animal grease, or other accumulated food wastes: used oil; liquid feedstock; cleaning compounds; chemicals; solid waste as defined by SMC 21.36; or dangerous waste outside buildings in portable containers.
- 6. Outside storage of non-containerized materials, by-products, or finished products, including outside storage of any of the following: non-liquid pesticides or fertilizers; contaminated soil; food products or food wastes; metals; building materials, including but not limited to lumber, roofing material, insulation, piping, and concrete products; or erodible materials, including but not limited to sand, gravel, road salt, topsoil, compost, excavated soil, and wood chips.
- 7. Outside manufacturing activity including any of the following: processing; fabrication; repair or maintenance of vehicles, products and equipment; mixing; milling; refining; or sand blasting, coating, painting, or finishing of vehicles, products, and equipment.
- 8. Landscape construction or maintenance, including any of the following: land disturbing activities as described in SMC 22.802.015.3; fertilizer and pesticide application near public drainage control systems; and disposal of vegetation and yard waste.
- "High-use" means any project planned to generate or accommodate any of the following:
- 1. Expected average daily traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area. In addition, the following use is high-use unless it can be demonstrated that the project will generate less than 100 vehicles per 1,000 square feet of gross

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building area: uncovered parking lot accessory to fast-food restaurants, convenience markets, supermarkets, shopping centers, discount stores, movie theaters, athletic clubs, or banks.

- 2. Petroleum storage or transfer in excess of 1,500 gallons per year, not including delivered heating oil.
- 3. Storage, or maintenance of a fleet of 25 or more diesel vehicles that are over 10 tons net weight (including, but not limited to, trucks, buses, trains, heavy equipment).
- 4. Road intersections with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 or more on any intersecting roadway, excluding projects proposing primarily pedestrian or bicycle use improvements.

**Section 16.** Section 22.801.100 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

# 22.801.100 "1."

"Illicit discharge" means the discharges defined by Section 22.802.012.

"Impervious surface" means any surface <u>exposed to rainwater</u> from which most water runs off including, but not limited to, ((<del>paved streets</del>)) <u>paving</u>, ((<del>graveled or paved areas such as driveways, parking areas</del>)), packed earth material, oiled macadam, or other treated surfaces, ((<del>walkways,</del>)) <u>and</u> roof surfaces, patios, and formal planters.

"Impervious surface, replaced". See "Replaced or replacement of impervious surface.

"Infiltration facility" means a drainage facility that temporarily stores, and then percolates stormwater runoff into the underlying soil. Examples include but are not limited to infiltration trenches, ponds, vaults, and tanks.

"In-place ground modification" means activity occurring at or below the surface which is designed to alter the engineering parameters and physical characteristics of soil or rock, including but not limited to, in situ consolidation, solidification, void space reduction and infilling.

"Inspector" means the City inspector, inspection agency, or licensed civil engineer performing the inspection work required by this Subtitle.

**Section 17.** Section 22.801.130 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.8010.130 "L."

"Land disturbing activity" means any activity that results in a <u>movement of earth</u>, change in the existing soil cover (both vegetative and nonvegetative), or the existing topography. Land disturbing activities include, but are not limited to, clearing, grading, filling ((and)), excavation, and addition or replacement of impervious surface.

"Large project" means a project <u>including 5,000</u> square feet or more of new or replaced <u>impervious surface on 1 acre or more of land disturbing activity.</u> ((exceeding nine thousand (9,000) square feet of developmental coverage.))

**Section 18.** Section 22.801.140 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:



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45 46 "Master use permit" means a document issued by the Department of Construction and Land Use giving permission for development or use of land or street right-of-way in accordance with the Land Use Code (Title 23 Seattle Municipal Code).

"Media filter" means a stormwater treatment system that utilizes a filtration medium such as sand or leaf compost to remove pollutants via physical filtration and chemical adsorption or precipitation. Filters may be constructed underground in a vault or above ground in a pond. In both systems, stormwater that has passed through the filter media is collected in an underground pipe and discharged to the nearby drainage system.

"Municipal stormwater NPDES permit" means the permit issued to the City under the federal Clean Water Act for public drainage control systems within the City limits.

Section 19. Section 22.801.150 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.150 66 7 99

"NPDES" means National Pollutant Discharge Elimination System, the national program for controlling discharges under the federal Clean Water Act.

"NPDES permit" means an authorization, license or equivalent control document issued by the United States Environmental Protection Agency or the Washington State Department of Ecology to implement the requirements of the NPDES program.

(("New development" means any of the following activities:

- 1. Structural development, including construction of a new building or other structure;
- 2. Expansion or alteration of an existing structure that results in an increase in the footprint of the building or structure:
- 3. Land disturbing activities:
- 4. Creation or expansion of impervious surface;
- 5. Demolition:
- 6. Subdivision and short subdivision of land as defined in RCW 58.17.020;
- 7. Class IV general forest practices, as defined in WAC 22 16 050 that are conversions from timber land to other uses.

No other forest practices or commercial agriculture are considered new development.))

"Nonndesignated receiving waters" means all creeks, streams and lakes in the City of Seattle not designated as receiving waters, including Green Lake, Haller Lake, and Bitter Lake and all the creeks and streams.

Section 22.801.160 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.160 660."

"Oil/water separator" means a structure, usually underground, that is designed to provide quiescent flow conditions so that globules of free oil or other floatable materials that may be DCLU/MBB Dated April 12, 2000 Page 11 of 40

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present in stormwater can float to the water surface and become trapped in the structure.

"Oil/water separator, American Petroleum Institute (API)" means a vault that has multiple chambers separated by baffles and weirs to trap oil in the vault. API oil/water separators are designed to remove dispersed oil and floating debris and in containing spills.

"Oil/water separator, coalescing plate". See Coalescing Plate Oil/Water Separator.

"Owner" means any person having title to and/or responsibility for, a building or property, including a lessee, guardian, receiver or trustee, and the owner's duly authorized agent.

**Section 21.** Section 22.801.170 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.170 "P."

"Person" means an individual, firm, partnership, corporation, municipal corporation, and government, and the individual's or entity's heirs, successors and assigns.

"Plan" means, for the purposes of this Subtitle, and unless a different meaning is set forth or clearly required, a graphic or schematic representation, with accompanying notes, schedules, specifications and other related documents.

"Plot plan" means a scaled map of a site and adjacent public rights-of-way showing locations and dimensions of various existing and proposed features, such as buildings, curbs, driveways, sidewalks, trees, grades and drainage patterns.

"Preloading" means the temporary stockpiling of earth material over a site for the purpose of consolidating the existing soils.

"Project" means the addition or replacement of impervious surface or the undertaking of land disturbing activity.

"Public combined sewer" means a publicly owned and maintained sewage system which carries drainage water and sewage and flows to a publicly owned treatment works.

"Public drainage control system" means a drainage control system owned or used by the City of Seattle serving City streets and adjacent property.

"Public place" means and includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, and planting (parking) strips, squares, triangles and right-of-way for public use and the space above or beneath its surface, whether or not opened or improved.

"Public storm drain" means the part of a public drainage control system which is wholly or partially piped, is owned or operated by a public entity, and is designed to carry only drainage water.

Section 22. Section 22.801.190 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.801.190 "R."

"Receiving waters" means the waters ultimately receiving drainage water, including the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, including associated bays, but not including tributary streams, creeks and lakes. See also "Designated receiving waters" and "Nondesignated receiving waters".

(("Redevelopment" means any of the following activities:



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2. Replacement, alteration, or upgrade of an impervious surface that is not part of a routine maintenance activity, and does not result in expansion of the impervious surface.)) "Replaced or replacement of impervious surface" means impervious surface that is removed down to earth material and a new impervious surface is installed.

1. Replacement or alteration of a building or structure that does not result in an increase in the

"Responsible party" means all of the following persons:

- 1. Owners and occupants of property within the City of Seattle; and,
- 2. Any person causing or contributing to a violation of the provisions of this Subtitle.
- (("Riparian corridor" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))

Section 22.801.200 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, and amended by ordinance 118396, is amended as follows:

#### "S." 22.801.200

"SPU" means Seattle Public Utilities.

footprint of the building or structure:

- "Sand filter" means a depression or basin with the bottom made of a layer of sand designed and maintained to filter pollutants. Stormwater is treated as it percolates through the sand layer.
- "Sanitary sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.
- "Serve" or "service", when used regarding a document, means the procedures set forth in Section 22.808.030.
- "Service drain" means a privately owned and maintained drainage control facility or system which carries only drainage water. Service drains include, but are not limited to conveyance pipes, catch basin connections, downspout connections, pipes, and subsurface drain connections.
- "Shoreline district" means all land regulated by the Shorelines Management Act of 1971 (RCW Chapter 90.58) or City ordinances implementing it, as defined in the Land Use Code, Title 23 of the Seattle Municipal Code.
- "Side sewer" is as defined in the Side Sewer Ordinance, Seattle Municipal Code Section 21.16.030.
- "Site" means the lot or parcel, or portion of street, highway or other public right-of-way where work is proposed or performed, and the contiguous combination thereof.
- "Slope" means an inclined ground surface. In this Subtitle, the inclination of a slope is expressed as a ratio of horizontal distance to vertical distance.
- "Small project" means a project with: ((nine thousand (9,000) square feet or less of developmental coverage.))
- 1) less than 5,000 square feet of new and replaced impervious surface; and
- 2) less than 1 acre of land disturbing activities.
- "Soil" means naturally deposited non-rock earth materials. "Solid waste" means solid waste as defined by SMC Section 21.36.016.
- "Source controls" mean structures or operations that prevent contaminants from coming in contact with stormwater through physical separation or careful management of activities that are known sources of pollution.

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- 1) "Operational source controls" are those which require modified or additional behavioral practices, such as sweeping a parking lot or maintaining special equipment on site, such as spill response equipment.
- 2) "Structural source controls" are those which require the construction of a structure or other physical modification on the site.
- "Standard design" is a design pre-approved by ((the)) Seattle Public Utilities for drainage and erosion control available for use by a ((typical)) site with pre-defined characteristics.
- "Storm drain" see "Public storm drain" and "Service drain".
- "Stormwater" means water originating from rainfall and other precipitation, and from footing drains and other subsurface drains approved by the Director of Seattle Public Utilities or installed in compliance with rules which may be adopted hereunder.
- Section 24. Section 22.801.210 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.210 ٠٠٠٠)

- "Terrace" means a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.
- "Topsoil" means the weathered surface soil, usually including the organic layer, in which plants have most of their roots.
- "Treatment facility" means a method, defined by or approved pursuant to, this Subtitle and associated rules, for treating stormwater runoff.
- Section 25. Section 22.801.240 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.801.240 "W."

- "Watercourse" means the route, constructed or formed by humans or by natural processes, generally consisting of a channel with bed, banks or sides, in which surface waters flow((; including)). Watercourse includes small lakes, bogs, streams, creeks, and intermittent artificial components (including ditches and culverts) but does not ((including)) include receiving waters. (("Wetland" is as defined in Seattle Environmentally Critical Areas Ordinance, Seattle Municipal Code Chapter 25.09.))
- "Wetpool" means a permanent pool of water that is contained in the bottom of a wet pond or wet vault stormwater treatment facility. Water in the wetpool is normally lost only through evaporation, evapotranspiration, or slow infiltration into the ground. The wetpool, also referred to as dead storage, is designed to reduce the velocity of incoming stormwater flows, encouraging particulates and particulate-bound pollutants to settle in wet ponds and wet vaults.
- "Wetpond" and "wetvault" means stormwater treatment facilities that contain a permanent pool of water (wetpool). They are designed to settle out particles of fine sediment, and allow biologic activity to occur to metabolize nutrients and organic pollutants, by providing a long retention time. Wetvaults are covered by a lid.



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44 45 46 Section 26. Section 22.802.010 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.802.010 Scope and exemptions from Subtitle.

- General. All ((new and existing)) discharges subject to this Subtitle as set forth in Section 22.800.030, all land uses ((and all new development, redevelopment)), additions and replacement of impervious surface, land disturbing activity, and grading shall comply with all requirements of this Subtitle unless explicitly exempted by this Subtitle or by the Director exercising authority granted under this Subtitle.
- Exemptions. The following land uses are exempt from the provisions of this Subtitle: В.
  - Commercial agriculture, including only those activities conducted on lands defined in RCW 84.34.020(2), and production of crops or livestock for wholesale trade.
  - 2. Forest practices regulated under Title 222 Washington Administrative Code, except for Class IV general forest practices, as defined in WAC 222-16-050, that are conversions from timber land to other uses; and
  - Development undertaken by the Washington State Department of Transportation in state 3. highway right-of-way that complies with standards found in Chapter 173-270 Washington Administrative Code, the Puget Sound Highway Runoff Program.
- C. Other exemptions. The following activities are exempt from the provisions of this Subtitle:
  - 1. Discharges resulting from public firefighting activities, but not from activities not related to firefighting such as the maintenance or cleaning of firefighting equipment, are exempt from regulation under this ((Section)) Subtitle.

Section 27. Section 22.802.012 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:

#### 22.802.012 Prohibited discharges.

- Stormwater discharges to sanitary and combined sewers. In consultation with the local sewage treatment agency, the Director of ((Seattle Public Utilities)) SPU may approve discharges of stormwater to a public combined sewer or sanitary sewer if other methods of controlling pollutants in the discharge are not adequate or reasonable, the discharging party certifies that the discharge will not harm the environment and will not overburden or otherwise harm the public combined sewer or sanitary sewer systems. The Director of ((Seattle Public Utilities)) SPU shall condition approval of such a discharge on compliance with local pretreatment regulations.
- Discharges prohibited to public drainage control systems. It is unlawful to make illicit B. discharges, as defined in Subsection C below, either directly or indirectly to a public drainage control system.
- C. Illicit discharges defined.
  - Except as provided in Subsection D below, all discharges which are not composed entirely of stormwater are illicit discharges. See Section 22.808.020 for defenses available to responsible parties.

- 2. The following is a partial list, provided for informational purposes only, of common substances which are illicit discharges when allowed to enter a public drainage control system: Solid waste; human and animal waste; antifreeze, oil, gasoline, grease and all other automotive and petroleum products; flammable or explosive materials; metals in excess of naturally occurring amounts, whether in liquid or solid form; chemicals not normally found in uncontaminated water; solvents and degreasers; painting products; drain cleaners; commercial and household cleaning materials; pesticides; herbicides; fertilizers; acids; alkalis; ink; steam-cleaning waste; laundry waste; soap; detergent; ammonia; chlorine; chlorinated swimming pool or hot tub water; domestic or sanitary sewage; animal carcasses; food and food waste; yard waste; dirt; sand; and gravel.
- D. Permissible discharges. Discharges from the sources listed below shall only be illicit discharges if the Director of ((Seattle Public Utilities)) SPU determines that the type of discharge, 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, such as those which contain more contamination than typical discharges in the City, or which contain a type of contamination that is more toxic or is otherwise a more serious problem than typical discharges in the City: Potable water sources; washing of potable water storage reservoirs; flushing of potable water lines; natural uncontaminated surface water; natural uncontaminated groundwater; air conditioning condensation; natural springs; uncontaminated water from crawl space pumps; runoff from lawn watering; irrigation runoff; runoff from residential car washing by individuals; flows from riparian habitats and wetlands; heat; discharges in compliance with an NPDES permit; and discharges from approved footing drains and other subsurface drains or, where approval is not required, installed in compliance with this Subtitle and rules promulgated pursuant to this Subtitle.
- E. Exemption. Discharges resulting from public firefighting activities, but not from activities not related to firefighting such as the maintenance or cleaning of firefighting equipment, are exempt from regulation under this section.
- ((F.)) Testing for illicit discharges. When the Director of ((Seattle Public Utilities)) SPU has reason to believe that any discharge is an illicit discharge, the Director of ((Seattle Public Utilities)) SPU may sample and analyze the discharge and recover the costs from a responsible party in an enforcement proceeding. When the discharge is likely to contain illicit discharges on a recurring basis, the Director of ((Seattle Public Utilities)) SPU may conduct, or may require the responsible party to conduct, ongoing monitoring at the responsible party's expense.
- **Section 28.** Section 22.802.013 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is repealed and replaced as follows:

# 22.802.013 Requirements for all discharges and land uses.

A. For all discharges directly or indirectly to a public drainage control system, responsible parties shall implement and maintain operational source controls,



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- including but not limited to the following, as further described in rules promulgated by the Director:
- Maintaining drainage control systems such as conveyance systems, detention systems and treatment systems:
- Maintaining streets, driveways, parking lots and sidewalks; and
- Identifying and eliminating illicit connections to the drainage control system.
  - Operational Requirements for High-Risk Pollution Generating Activities that discharge directly or indirectly to a public drainage control system.
    - 1. Operational source controls shall be implemented for high-risk pollution generating activities as specified in rules promulgated jointly by the Directors of SPU and DCLU. Operational source controls for high-risk pollution generating activities shall include, but are not limited to, enclosing, covering, or containing the activity, developing and implementing inspection and maintenance programs, sweeping, and training employees on pollution prevention.
    - 2. Spill Prevention Requirements. Parties responsible for undertaking, operating, or maintaining high-risk pollution generating activities are required to do the following, as further defined in rules promulgated by the Director:
      - Develop and implement plans and procedures to prevent spills and other accidental releases of materials that may contaminate stormwater. requirement may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with an NPDES industrial stormwater permit for the site:
      - b. Implement procedures for immediate containment and other appropriate action regarding spills and other accidental releases to prevent contamination of stormwater; and
      - Provide necessary containment and response equipment on-site, and training of C. personnel regarding the procedures and equipment to be used.
    - 3. The responsible parties are required to make plans, procedures, and schedules required by this Subsection available to the Director of SPU when requested.
    - The provisions of this Subsection may be satisfied by a Stormwater Pollution Prevention Plan prepared in compliance with and NPDES industrial stormwater permit for the site.
  - If the Director of SPU determines that discharges from a drainage control facility are Ċ. causing or contributing to a water quality problem then the Director of SPU may require the responsible party to implement flow control, operational or structural source controls, or treatment, as prescribed in rules promulgated jointly by the Directors of SPU and DCLU, necessary to cease causing or contributing to the water quality problem or a violation of the City's permit. Flow control, operational or structural source controls or treatment may include, but shall not be limited to, detention systems, constructed facilities such as enclosures, covering and/or berming of container storage areas, revised drainage systems, sand filters, wet ponds, oil/water separators, and biofiltration swales. The Directors of SPU and DCLU shall allow twelve (12) months to install flow control, operational or structural source controls or treatment after the Directors determine that discharges from a site are causing or contributing to a water quality problem, and notify the discharger in writing of that determination and of the structural source controls and treatment that must be installed.

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- D. Release reporting requirements. A responsible party is required to, at the earliest possible time, but in any case within 24 hours of discovery, report to the Director of SPU, a spill, release, dumping, or other situation that has contributed or is likely to contribute pollutants to a public drainage control system. This reporting requirement is in addition to, and not instead of, any other reporting requirements under federal, state or local laws.
- E. Natural drainage patterns. Natural drainage patterns shall be maintained.
- F. Obstruction of watercourses. Watercourses shall not be obstructed.

Section 29. Section 22.802.015 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432, 117697, and 118396, is repealed and replaced as follows:

# 22.802.015 Drainage, erosion control, and source control requirements for all land disturbing activities or addition or replacement of impervious surface.

- A. Compliance required. All land disturbing activities or addition or replacement of impervious surface are required to comply with this Section, even where drainage control review is not required.
- B. Approval of exceptions required. Exceptions to the requirements of this Subtitle may not be used on any projects, including those that do not require drainage control review, unless allowed by this Subtitle, by rule promulgated jointly by the Director of <u>SPU</u> and the Director of <u>DCLU</u>, or approved by the Director of <u>DCLU</u>. Approval shall be obtained prior to initiating land disturbing activities or adding or replacing impervious surface. Approvals are required for exceptions to any and all requirements of this Subtitle, including but not limited to, the requirement that natural drainage patterns be maintained and the requirement that watercourses not be obstructed.
- C. Requirements for all projects.
  - 1. Discharge Point. The discharge point for drainage water from each site shall be selected as set forth in rules promulgated jointly by the Directors of <u>SPU</u> and <u>DCLU</u> specifying criteria, guidelines, and standards for determining drainage discharge points to meet the purposes of this Subtitle. The criteria shall include, but not be limited to, preservation of natural drainage patterns and whether the capacity of the drainage control system is adequate for the additional volume. For those projects meeting the drainage review threshold, the proposed discharge point shall be identified in the drainage control plan required by <u>Section 22.802.020</u>, for review and approval or disapproval by the Director of <u>DCLU</u>.
  - 2. Flow control. The peak drainage water discharge rate from the portion of the site being developed shall not exceed 0.2 cubic feet per second per acre under 25-year, 24-hour design storm conditions or 0.15 cubic feet per second per acre under 2-year, 24-hour design storm conditions unless the site discharges water directly to a designated receiving water or to a public storm drain which the Director of SPU determines has sufficient capacity to carry existing and anticipated loads from the point of connection to a designated receiving water body. Projects with more than 2,000 square feet of new and replaced impervious surface shall be required to install a flow control facility that is sized for the volume of runoff routed through the facility. Approved exceptions and flow control methods may be prescribed in rules promulgated by the Director.



- 3. Construction stormwater control. During land disturbing activities or addition or replacement of impervious surface, temporary and permanent construction controls shall be used to accomplish the following (a-g). Rules promulgated jointly by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director of DCLU when minimum controls are not sufficient to prevent erosion or transport of sediment or other pollutants from the site.
  - a. Prevent on-site erosion by stabilizing all soils, including stock piles, that are temporarily exposed. Methods such as, but not limited to, the installation of seeding, mulching, matting, and covering may be specified by rules promulgated by the Director. From October 1 to April 30, no soils shall remain unstabilized for more than two days. From May 1 to September 30, no soils shall remain unstabilized for more than seven days.
  - b. Before the completion of the project, permanently stabilize all exposed soils that have been disturbed during construction. Methods such as permanent seeding, planting, and sodding may be specified by rules promulgated by the Director.
  - c. Prevent the transport of sediment from the site. Appropriate use of methods such as, but not limited to, vegetated buffer strips, stormdrain inlet protection, silt fences, sediment traps, settling ponds, and protective berms may be specified in rules promulgated by the Director.
  - d. During construction, prevent the introduction of pollutants in addition to sediment into stormwater. Appropriate methods, as prescribed in rules promulgated by the Director, include operational source controls such as but not limited to spill control for fueling operations, equipment washing, cleaning of catch basins, treatment of contaminated soils, and proper storage and disposal of hazardous materials.
  - e. Limit construction vehicle access, whenever possible, to one route. Stabilize access points as specified in rules promulgated by the Director to minimize the tracking of sediment onto public roads.
  - f. Inspect and maintain required erosion and sediment controls as prescribed in rules promulgated by the Director to ensure continued performance of their intended function.
  - g. Prevent sediment from entering all storm drains, including ditches, which receive runoff from the disturbed area.
- 4. Source control (option 1; see 22.802.016 B2 for option 2).
  - a. Effective January 1, 2001, structural source controls shall be installed for high-risk pollution-generating activities to the maximum extent practicable to the portion of the site being developed, in accordance with rules promulgated by the Director, except in the following circumstances:
    - i. When that portion of the site being developed discharges to the public combined system; or
    - ii. When the project has been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Seattle for fiscal year 2000; or
    - iii. When persons are conducting normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or adversely affect the safety and operation of city right-of-way, utilities, or other property owned or

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maintained by the City.

- The structural source controls shall include, but not be limited to, the following, as b. further defined in rules promulgated jointly by the Directors:
  - Enclose, cover, or contain within a berm or dike the high-risk pollution-generating activities;
  - Direct drainage from containment area of high-risk pollutionii. generating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to discharging to a public drainage control system;
    - Pave, treat, or cover the containment area of high-risk pollutioniii. generating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution-generating activity; and
    - Prevent precipitation from flowing or being blown onto containment iv. areas of high-risk pollution-generating activities.
- 5. Flood-prone areas. On sites within flood prone areas, responsible parties are required to employ procedures to minimize the potential for flooding on the site and for the project to increase the risk of floods on adjacent or nearby properties. Flood control measures shall include those set forth in other titles of the Seattle Municipal Code and rules promulgated thereunder, including, but not limited to, SMC Chapter 25.06 (Floodplain Development) and Chapter 25.09 (Environmentally Critical Areas), and in rules promulgated jointly by the Directors of SPU and DCLU to meet the purposes of this Subtitle.
- 6. Natural drainage patterns. Natural drainage patterns must be maintained.
- 7. Obstruction of watercourses. Watercourses shall not be obstructed.
- Water Quality Sensitive Areas. The Director of SPU may impose additional requirements for areas determined to be water quality sensitive areas.
- The Director of DCLU may require sites with addition or replacement of 5,000 square feet D. or less of impervious surface and with less than one acre of land disturbing activity to comply with the requirements set forth in 22.802.016, in addition to the requirements set forth in this Section, when necessary to accomplish the purposes of this Subtitle. In making this determination, the Director of DCLU may consider, but not be limited to, the following attributes of the site: location within an Environmentally Critical Area; proximity and tributary to an Environmentally Critical Area; proximity and tributary to an area with known erosion or flooding problems.

Section 30. New Section 22.802.016 is added to the Stormwater, Grading, and Drainage Control Code as follows:

#### 22.802.016 Additional requirements for large projects.

- Applicability. One acre or more of land disturbing activity or addition or replacement of 5,000 square feet or more of impervious surface shall comply with the requirements set forth in this section, in addition to the other requirements of this Subtitle.
- B. Requirements



- 1. Flow Control. Effective January 1, 2001, except for projects that have been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Seattle for fiscal year 2000. In addition to the discharge rate specified in Section 22.802.015, the peak drainage water discharge rate shall not exceed 0.5 cubic feet per second per acre in a 100-year, 24-hour design storm for portions of the site being developed that drain to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake, as defined by Section 25.09.020 or to a system that drains to a Class A or Class B Riparian Corridor, excluding Bitter Lake and Haller Lake.
- 2. Source Control (option 2, for option 1, see Section 22.802.015 C4).
  - a. Effective January 1, 2001, structural source controls shall be installed for highrisk pollution-generating activities to the maximum extent practicable to the entire site, in accordance with rules promulgated by the Director, except in the following circumstances:
    - i. When that portion of the site being developed discharges to the public combined system; or
    - ii. When the project has been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Seattle for fiscal year 2000; or
    - iii. When persons are conducting normal residential activities unless the Director determines that these activities pose a hazard to public health, safety or welfare; endanger any property; or adversely affect the safety and operation of city right-of-way, utilities, or other property owned or maintained by the City.
  - b. The structural source controls shall include, but not be limited to, the following, as further defined in rules promulgated jointly by the Directors:
    - i. Enclose, cover, or contain within a berm or dike the high-risk pollution-generating activities;
    - ii. Direct drainage from containment area of high-risk pollutiongenerating activity to a closed sump or tank for settling and appropriate disposal, or treat prior to discharging to a public drainage control system;
    - iii. Pave, treat, or cover the containment area of high-risk pollutiongenerating activities with materials that will not interact with or break down in the presence of other materials used in conjunction with the pollution-generating activity; and
    - iv. Prevent precipitation from flowing or being blown onto containment areas of high-risk pollution-generating activities.
- 3. Stormwater Treatment.
  - a. Effective January 1, 2001, stormwater treatment facilities shall be installed and maintained to treat that portion of the site being developed, as specified in this section and in rules promulgated jointly by the Directors of DCLU and SPU, unless the following conditions exist:
    - i. The site produces no stormwater runoff discharge as determined by a licensed civil engineer; or
      - ii. The project drains to a public combined system; or

- iii. The project has been identified in Ordinance 119750, adopting a budget, including a capital improvement program and a position list, for The City of Seattle for fiscal year 2000.
- b. Stormwater treatment facilities shall be designed to treat the runoff volume from the 6-month, 24-hour storm, collected from the drainage area being routed through the facility.
- c. One of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated jointly by the Directors: infiltration, wetpond, stormwater wetland, biofiltration swale, filter strip, wet vault, media filter, or an alternative technology if the conditions in paragraph e below are met
- d. For high-use sites, one of the following stormwater treatment facilities shall be installed and maintained in accordance with rules promulgated by the Director, in addition to other required treatment facilities:
  - i. Coalescing plate/oil water separator;
  - ii. Media filter:
  - iii. API oil/water separator; or
  - iv. An alternative technology if the conditions in paragraph e below are met.
- e. Alternative technology to meet runoff treatment requirements may be permitted if the following criteria are met, as further specified in rules promulgated jointly by the Directors of SPU and DCLU:
  - i. Treatment effectiveness monitoring is conducted, which requirement may be waived if sufficient research has been conducted to demonstrate to the Director of SPU's satisfaction that an alternative technology offers equivalent protection;
  - ii. Monitoring and maintenance records are reported to the Director of SPU at the end of each of the first three years following installation; and
  - iii. The applicant demonstrates the alternative will provide protection equivalent to the methods prescribed in paragraph c above.
- f. The Director of SPU may ask the Washington State Department of Ecology to approve a commitment by the City to develop a water quality improvement plan to identify pollutants of concern and associated sources, prioritize drainage basins, and evaluate alternative improvement strategies. After such approval and consistent with its terms, the Directors may jointly promulgate rules to create exceptions to or make inapplicable the treatment requirements of this subsection 22.802.016(B)(3). A completed water quality improvement plan may, when approved by the Director of SPU, be used by the City to modify requirements of this Subtitle consistent with the plan, provided the level of protection for human health, safety and welfare, the environment, and public or private property will equal or exceed that which would otherwise be achieved.
- 4. Protection of Streams. Where stormwater is discharged directly to a stream or to a conveyance system that discharges to a stream, streambank erosion and effects on water quality in streams shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls.
- 5. Protection of Wetlands. Where stormwater discharges directly to a wetland, as defined by SMC Chapter 25.09, or to a conveyance system that discharges to a



wetland, the introduction of sediment, heat, and other pollutants and contaminants into wetlands shall be minimized through the selection, design, installation, and maintenance of temporary and permanent controls. Discharges to wetlands of exceptional value, as defined by SMC Chapter 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of the wetland. Detention and treatment systems shall not be located within any wetland or its buffer. Prior to discharging to a wetland, alternative discharge locations shall be evaluated and infiltration options outside the wetland shall be maximized.

- 6. Off-site Analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage system that drains to that stream, impacts to off-site water quality resulting from the project are to be analyzed and mitigated. The analysis shall comply with this Section and rules the Directors may jointly promulgate pursuant to this Section. The analysis shall provide for mitigation of all surface water quality or sediment quality impacts. The analysis shall evaluate impacts likely to occur ¼ mile downstream from the project. The impacts to be evaluated and mitigated shall include at least the following:
  - a. Amount of sedimentation;
  - b. Streambank erosion:
  - c. Discharges to groundwater contributing to recharge zones;
  - d. Violations of state or federal surface water, groundwater, or sediment quality standards; and
  - e. Spills and other accidental illicit discharges;
- 7. Inspection and Maintenance Schedule. Temporary and permanent drainage control and stormwater treatment facilities and other controls shall be inspected and maintained according to a schedule submitted to the Director. The schedule shall meet the requirements of this Subtitle and rules promulgated under this Subtitle.
- 8. Construction Stormwater Control. In addition to the requirements described above in Section 22.802.015, construction stormwater controls shall be used to accomplish the following (a-j). Rules promulgated by the Directors of SPU and DCLU specify the minimum required controls as well as additional controls that may be required by the Director when minimum controls are not sufficient to prevent the erosion or transport of sediment or other pollutants from the site. These controls (a-j below) and those required by 22.802.015 .C.3 shall be shown on a construction stormwater control plan complying with the requirements and purposes of this Subtitle and rules promulgated hereunder and submitted to the Director. The construction stormwater control plan shall address at least the following (a-j) and Section 22.802.015.C.3:
  - a. Before leaving the site, stormwater runoff shall pass through a sediment trap, sediment pond, or similar device;
  - b. In the field, clearing limits and any easements, setbacks, critical areas and their buffers, trees, and drainage courses shall be marked;
  - c. Sediment ponds and traps, perimeter dikes, sediment barriers, and other erosion and sedimentation controls intended to trap sediment on site shall be constructed as a first step in grading. These controls shall be functional before the land disturbing activities take place. Earthen structures such as dams, dikes, and diversions shall be stabilized in accordance with Section 22.802.015.C.3;

- d. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. In addition, slopes will be stabilized in accordance with Section 22.802.015.C.3 above;
- e. Properties and waterways downstream from the project site shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater from the project site;
- f. All temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected velocity of a 2-year, 24-hour design storm for the developed condition. Stabilization adequate to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches shall be provided at the outlets of all conveyance systems;
- g. Whenever construction vehicle access routes intersect paved roads, the transport of sediment onto the paved road shall be minimized. If sediment is transported onto a paved road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from paved roads by shoveling or sweeping and shall be transported to a controlled sediment disposal area. Street washing shall be allowed only after sediment is removed in this manner;
- h. All temporary erosion and sediment controls shall be removed within 30 days after final site stabilization is achieved or after the temporary controls are no longer needed, whichever is later. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal shall be permanently stabilized;
- i. When dewatering devices discharge on site or to a public drainage control system, dewatering devices shall discharge into a sediment trap or sediment pond or gently sloping vegetated area; and
- j. In the construction of underground utility lines, where feasible, no more than 500 feet of trench shall be opened at one time, unless soil is replaced within the same working day, and where consistent with safety and space considerations, excavated material shall be placed on the uphill side of trenches. Trench dewatering devices shall discharge into a sediment trap or sediment pond.

**Section 31.** Section 22.802.020 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinance 117432, is repealed and replaced as follows:

# 22.802.020 Drainage control review and application requirements.

- A. Thresholds for drainage control review. Drainage control review and approval shall be required for any of the following:
  - 1. Standard drainage control review and approval shall be required for the following:
    - a. Any land disturbing activity encompassing an area of 750 square feet or more;
    - b. Applications for either a master use permit or building permit that includes the cumulative addition of 750 square feet or more of land disturbing activity and new and replaced impervious surface and land disturbing activity;
    - c. Applications for which a grading permit or approval is required;
    - d. Applications for street use permits for the cumulative addition of 750 square feet or



- more of new and replaced impervious surface and land disturbing activity after the effective date of the ordinance codified in this Subtitle;
- e. City public works project or construction contracts, including contracts for day labor and other public works purchasing agreements, for the cumulative addition of 750 square feet or more of new and replaced impervious surface and land disturbing activity to the site after the effective date of the ordinance codified in this Subtitle, except for projects in a City-owned right-of-way and except for work performed for the operation and maintenance of park lands under the control or jurisdiction of the Department of Parks and Recreation;
- f. Permit approvals and contracts that include any new or replaced impervious surface on a site deemed a potentially hazardous location, as specified in Section 22.800.050; or
- g. Whenever an exception to a requirement set forth in this Subtitle or in a rule promulgated under this Subtitle is desired, whether or not review and approval would otherwise be required, including but not limited to, alteration of natural drainage patterns or the obstruction of watercourses.
- 2. Large project drainage control review and approval shall be required for projects that include:
  - a. 5,000 square feet or more of new or replaced impervious surface; or
  - b. 1 acre or more of land disturbing activity.
- 3. The City may, by interagency agreement signed by the Directors of SPU and DCLU, waive the drainage and erosion control permit and document requirements for property owned by public entities, when discharges for the property do not enter the public drainage control system or the public combined sewer system. Whether or not they are required to obtain permits or submit documents, public entities are subject to the substantive requirements of this Subtitle, unless exceptions are granted as set forth in Section 22.808.010.
- B. Submittal requirements for drainage control review and approval
  - 1. Information Required for Standard Drainage Control Review. The following information shall be submitted to the Director for all projects for which drainage control review is required.
    - a. Standard Drainage Control Plan. A drainage control plan shall be submitted to DCLU. Standard designs for drainage control facilities as set forth in rules promulgated by the Director may be used.
    - b. Construction Stormwater Control Plan (Standard Erosion and Sediment Control Plan). A construction stormwater control plan demonstrating controls sufficient to determine compliance with Section 22.802.015 C3 shall be submitted. The Director may approve a checklist in place of a plan, pursuant to rules promulgated by the Director.
    - c. Memorandum of Drainage Control. The owner(s) of the site shall sign a "memorandum of drainage control" that has been prepared by the Director of SPU. Completion of the memorandum shall be a condition precedent to issuance of any permit or approval for which a drainage control plan is required. The applicant shall file the memorandum of drainage control with the King County Department of Records and Elections so as to become part of the King County real property records. The applicant shall give the Director of SPU proof of filing of the memorandum.

The memorandum shall not be required when the drainage control facility will be owned and operated by the City. A memorandum of drainage control shall include:

- i. The legal description of the site;
- ii. A summary of the terms of the drainage control plan, including any known limitations of the drainage control facilities, and an agreement by the owners to implement those terms;
- iii. An agreement that the owner(s) shall inform future purchasers and other successors and assignees of the existence of the drainage control facilities and other elements of the drainage control plan, the limitations of the drainage control facilities, and of the requirements for continued inspection and maintenance of the drainage control facilities;
- iv. The side sewer permit number and the date and name of the permit or approval for which the drainage control plan is required;
- v. Permission for the City to enter the property for inspection, monitoring, correction, and abatement purposes;
- vi. An acknowledgment by the owner(s) that the City is not responsible for the adequacy or performance of the drainage control plan, and a waiver of any and all claims against the City for any harm, loss, or damage related to the plan, or to drainage or erosion on the property, except for claims arising from the City's sole negligence; and
- vii. The owner(s)' signatures acknowledged by a notary public.
- 2. Information required for large project drainage control review. In addition to the submittal requirements for Standard Drainage Control Review, the following information is required for projects that include 1 acre of land disturbing activities or the cumulative addition of 5,000 square feet or more of new and replaced impervious surface.
  - a. Comprehensive Drainage Control Plan. A comprehensive drainage control plan, in lieu of a Standard Drainage Control Plan, to comply with the requirements of this Subtitle and rules promulgated hereunder and to accomplish the purposes of this Subtitle shall be submitted with the permit application. It shall be prepared by a licensed civil engineer in accordance with standards adopted by the Director of DCLU.
  - b. Inspection and Maintenance Schedule. A schedule shall be submitted that provides for inspection of temporary and permanent drainage control facilities, treatment facilities, and source controls to comply with Sections 22.802.015 and 22.802.016.
  - c. Off-site analysis. When the portion of a site being developed is within ¼ mile of a stream and discharges directly to that stream, or to a drainage system that discharges to that stream, an analysis of impacts to off-site water quality resulting from the project prepared in accordance with Section 22.802.016 shall be submitted.
  - d. Construction Stormwater Control Plan. A construction stormwater control plan prepared in accordance with Section 22.802.015 and 22.802.016 shall be submitted.
- 3. Applications for drainage control review and approval shall be prepared and submitted in accordance with provisions of this Section, with Chapter 21.16, Side Sewers, and with associated rules and regulations adopted jointly by the Directors of DCLU and SPU.
- 4. The Director of DCLU may require additional information necessary to adequately evaluate applications for compliance with the requirements and purposes of this Subtitle



and other laws and regulations, including SMC Chapter 25.09, Regulations for Environmentally Critical Areas. The Director of DCLU may also require appropriate information about adjoining properties that may be related to, or affected by, the drainage control proposal in order to evaluate effects on the adjacent property. This additional information may be required as a precondition for permit application review and approval.

- 5. Where an applicant simultaneously applies for more than one of the permits listed in Subsection A above for the same property, the application shall comply with the requirements for the permit that is the most detailed and complete.
- C. Authority to Review. The Director of DCLU may approve those plans that comply with the provisions of this Subtitle and rules promulgated hereunder, and may place conditions upon the approval in order to assure compliance with the provisions of this Subtitle. Submission of the required drainage control application information shall be a condition precedent to the processing of any of the above-listed permits. Approval of drainage control shall be a condition precedent to issuance of any of the above-listed permits. The Director of DCLU may review and inspect activities subject to this Subtitle and may require compliance regardless of whether review or approval is specifically required by this Section. The Director of DCLU may disapprove plans that do not comply with the provisions of this Subtitle and rules promulgated hereunder. Disapproved plans shall be returned to the applicant, who may correct and resubmit the plans.

Section 32. Subsection 22.802.090 A. of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:

# 22.802.090 Maintenance and inspection.

A. Responsibility for maintenance and inspection. Drainage control facilities, source controls, and stormwater treatment systems required by this Subtitle and by rules adopted hereunder, shall be maintained as specified in rules promulgated by the Director, by the owner ((OF)) and other responsible party. The owner ((OF)) and responsible party shall inspect permanent drainage control facilities at least annually, and shall inspect temporary drainage control facilities and other temporary best management practices or facilities on a schedule consistent with Section 22.802.016 B7 of this Subtitle and sufficient for the facilities to function at design capacity. The Director of ((Seattle Public Utilities)) SPU may require the responsible party to conduct more frequent inspections and/or maintenance when necessary to insure functioning at design capacity. The owner(s) shall inform future purchasers and other successors and assignees to the property of the existence of the drainage control facilities and the elements of the drainage control plan, the limitations of the drainage control facilities, and the requirements for continued inspection and maintenance of the drainage control facilities.

Section 33. Section 22.804.030 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 117697, is amended as follows:

22.804.020 Grading permit or approval required.

- A. Grading Permit Required. A grading permit ((shall-be)) is required for all grading activities as specified below. Actions exempt from a grading permit are specified in Subsection C.
  - 1. Special Sites. A permit shall be required for any site located in <u>any</u> ((one (1))) of the following areas if the combined volume of excavation, fill, dredging, or other movement of earth materials is more than 25 cubic yards:
    - a. Shoreline districts as defined in SMC 23.60.010. In addition to the permit requirement established in A.1, ((except)) a permit ((shall be)) is also required for any grading within 10 feet of the line of mean higher high tide adjoining saltwater or the line of mean high water adjoining fresh water and for any grading of lands covered by water; ((of))
    - b. Environmentally critical areas as defined in SMC 25.09 ((()) except liquefaction-prone and abandoned landfills.(()) In addition to the permit requirement established in A.1:
      - i. A permit is required for any grading within wetlands and their buffers, or Riparian corridor buffers;
      - ii. Grading activities that increase the potential for earth movements or the risk of damage due to earth movement within steep slopes or other landslide hazard areas is prohibited;
    - c. The drainage basins of Thornton Creek, Pipers Creek, Longfellow Creek, and Taylor Creek, as mapped by SPU, unless stormwater runoff from the site is discharged to a combined sewer system or otherwise piped (tightlined) to a drainage basin other than the named drainage basin.
    - ((Grading may be prohibited in certain environmentally critical areas. For additional requirements see Regulations for Environmentally Critical Areas, SMC 25.09.))
  - 2. Potentially Hazardous Locations. A permit ((shall be)) is required for any site identified under the provisions of Section 22.800.050 for any volume of excavation, fill, dredging or other movement of earth materials.
  - 3. Grading Near Public Places. A permit ((shall be)) is required for all grading activities in excess of four feet (((4'))), measured vertically, on private property within any area between the vertical prolongation of the margin of a public place, and a ((one hundred percent)) ((())100%(()))slope line (((forty five degrees)) ((())45°(())) from a horizontal line) from the existing elevation of the margin of a public place to the proposed elevation of the private property.
  - 4. General Sites. For sites not included in Subsections A-1 and A-2 above, a permit ((shall be)) is required where the grade at any location is changed more than three feet and either:
    - a. The cumulative volume of excavation, fill, dredging or other movement of earth materials is more than 100 cubic yards over the lifetime of the site; or
    - b. The grading will result in a slope steeper than three horizontal to one vertical.
  - 5. In-Place Ground Modification. A permit ((shall-be)) is be required for any site where inplace ground modification will take place. The Director of ((Construction and Land Use)) DCLU may waive the requirement for a permit when the Director determines the in-place ground modification will be insignificant in amount or type.
  - 6. Temporary Stockpiles. A grading permit or approval ((shall be)) is required for temporary stockpiles which meet the thresholds of Subsections A.1, A.2 and A.4 above and are not located on sites for which a valid grading permit or grading approval has



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 been issued.

B. Grading Approvals Required.

- 1. A grading approval ((shall be)) is required for grading activities located on any site where a concurrent building permit is requested except that no approval is required for grading activities where the combined volume is less than the amounts specified for each site in Subsection A above.
- 2. Where a grading approval is required and issued as a component of a building permit, no separate grading permit shall be required. This provision shall apply to grading which is incidental to construction, the temporary stockpiling of earth materials during construction and grading needed for other site improvements. Where there will be construction or placement of a building within the lifetime of the permit, the grading approval shall be a component of the building permit.
- C. Exemptions. The following grading activities shall be exempt from a grading permit, but ((must)) shall still comply with the provisions of this Subtitle:
  - 1. Activity conducted under a street use permit ((which)) that specifically authorizes the grading work to be performed;

2. Excavations and filling of cemetery graves;

- 3. Exploratory excavations ((which)) that comply with the requirements of Section 22.804.050;
- 4. Operation of sewage treatment plant sludge settling ponds;
- 5. Operation of surface mines for the extraction of mineral and earth materials subject to the regulations and under a permit of the State of Washington;
- 6. Stockpiling and handling of earth material when the earth material is consumed or produced in a process which is the principal use of the site and which complies with the requirements of Section 22.804.050;
- 7. Maintenance or reconstruction of active tracks and yards of a railroad in interstate commerce within its existing right-of-way;
- 8. Maintenance or reconstruction of the facilities of parks and playgrounds including work required for the protection, repair, replacement or reconstruction of any existing paths, trails, sidewalks, public improvement or public or private utility, and the stockpiling of material for maintenance activities;
- 9. Excavation and filling of post holes;
- 10. On-site work required for construction, repair, repaying, replacement or reconstruction of an existing road, street or utility installation in a public right-of-way;
- 11. Trenching and backfilling for the installation, reconstruction or repair of utilities on property other than a public right-of-way;
- 12. Grading done in performance of work authorized by the City for public works projects (See also Section 22.800.070);
- 13. Public works and other publicly funded activities on property owned by public entities, when discharges from the property do not enter the public drainage control system or the public combined sewer system, and the project will not undercut or otherwise endanger adjacent property, and the Director has waived the permit requirements by interagency agreement;
- 14. Underground storage tank removal and replacement that is subject to regulation by a state or federal agency, except where excavation meets the criteria of Section 22.804.030 A (3), Grading Near Public Places.

 D. Compliance Required for All Grading. Any grading activity, whether or not it requires a grading permit or approval, shall comply with the provisions of this Subtitle.

**Section 34.** Section 22.804.040 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

## 22.804/040 Grading permit or approval: application requirements

- A. General. Application for a grading permit or approval shall be made to the Director of ((Construction and Land Use)) <u>DCLU</u> by the owner of the property to be graded. All applications shall contain the submittal information detailed in this Section.
- B. Plans required.
  - 1. Projects requiring plans. The information listed in Subsection B2 below shall be provided on plans submitted with each application for a grading permit or approval. However, when the only grading included in an application is for an approved drainage control plan or is for excavation and replacement of earth material within an area four feet or less from the footing lines of a building or structure, the only information required is the location of temporary stockpiles.
  - 2. Information to be submitted on plans. The following information shall be submitted with applications for projects requiring plans.
    - a. A general vicinity map and legal description of the site;
    - b. A plot plan showing: location of existing buildings and structures, easements, utilities and other surface and above-ground improvements on the property where the work is to be performed; the approximate location of all buildings, structures and other improvements on adjacent land; the location of existing and planned temporary and permanent drainage control facilities, existing and proposed drainage discharge points, watercourses, drainage patterns, environmentally critical areas, and areas of standing water; the approximate location, type and size of trees and other vegetation on the site; designation of trees and vegetation to be removed, and the minimum distance between tree trunks and the nearest excavation and/or fill; and areas where equipment traffic will be permitted and excluded;
    - c. The latest available topographic map, including cross-sections of the site and adjacent property, showing the present and proposed contours of the land at not more than two-foot contour intervals, and the location and amount of all temporary stockpiles and excavations. On steeper sites, the Director of ((Construction and Land Use)) DCLU may authorize plans to show a contour interval greater than two feet but in no case more than a five-foot interval. The information relating to adjacent properties may be approximated;
    - d. A drainage control plan as set forth in Section ((22.802.015)) 22.802.020, except when the grading is limited to the area providing for vehicular and pedestrian access to the building or to the temporary stockpiling of excavated material.
  - 3. Number required. A minimum of three sets of plans shall be submitted with each application for a grading permit. The number of plan sets required for grading approval applications shall be the same as required for the specific permit application. Additional



sets may be required by the Director.

- 4. Clarity of plans. Plans shall be drawn to a clearly indicated and commonly accepted scale upon substantial paper such as blueprint quality or standard drafting paper. Tissue paper, posterboard or cardboard will not be accepted. The plans shall be of microfilm quality and limited to a minimum size of 18 inches by 18 inches and a maximum size of 41 inches by 54 inches.
- 5. Preparation by Civil Engineer. The grading plans shall be prepared by, or under the direction of, a licensed civil engineer for all applications where the total amount of materials graded is more than 2,500 cubic yards. The Director of ((Construction and Land Use)) DCLU may require that grading plans for lesser quantities be prepared by or under the direction of a licensed civil engineer for sites such as, but not limited to, those in geologic hazard zones and areas with known erosion problems.
- 6. Stamping by Geotechnical((/Civil)) Engineer. When required by the Director of ((Construction and Land Use)) DCLU in accordance with the provisions of this Subtitle, the grading plans shall be reviewed and stamped by the geotechnical/civil engineer who performed the site analysis and report to indicate that the plans conform to the conclusions and recommendations of the report.
- C. Information required.
  - 1. Required with Application. The following information shall be submitted with grading plans at the time of application:
    - a. The disposal site for any excavated materials to be removed from the site. If the disposal site is located within the City limits and is not an approved disposal site, an application for a grading permit for the disposal site shall be submitted at the same time as the application for grading permit or approval at the excavation site. In the event that the applicant is unable to specify the disposal site at the time of application, the applicant shall request, in writing, a postponement of the identification of the disposal site. The request shall include a commitment that the applicant will specify a disposal site acceptable to the Director of ((Construction and Land Use)) DCLU prior to any excavation;
    - b. Where placement of a fill is proposed, a description of the composition of fill material and its structural qualities;
    - c. Where any portion of the grading will encroach on an adjacent property, proof of ownership and an easement or authorization in accordance with Section 22.804.100;
    - d. The immediate and long-term intended use of the property;
    - e. Identification of past industrial or manufacturing uses or hazardous materials treatment, disposal or storage that have occurred on the site;
    - f. Where a site is located in an area identified pursuant to Section 22.800.050, a copy of all applicable permit or approval applications, and/or permits and approvals from the appropriate regulatory agencies;
    - g. When required by Section ((22.802.015)) 22.802.020, an erosion/sediment control plan;
    - h. Where the site is located in an area of potential landslide, a draft covenant complying with the requirements of Section 22.808.130.
    - i. Each grading proposal shall contain provisions for the preservation of natural drainage patterns and watercourses; for reasonable preservation of natural land

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and water features and other indigenous natural features of the site; and for replacement, where necessary, of vegetation or other means to control runoff.

- 2. Required after Initial Screening. The Director of ((Construction and Land Use))

  <u>DCLU</u> may require the following information after the initial screening of a grading application:
  - A description of methods to be used to minimize sediment or other pollution from leaving the site during and after construction and to protect cleared areas and cut and fill slopes from erosion;
  - b. A time schedule of operations, including but not limited to, implementation of the requirements of <u>Sections</u> 22.802.015 <u>and 22.802.016</u>, clearing, minimization of grading of unprotected soil surfaces, restoration of topsoil and vegetative cover, and construction of improvements;
  - c. A survey of boundaries and topography of the site and the grades of adjacent public rights-of-way prepared by a surveyor licensed by the State of Washington;
  - d. A soils analysis complying with the following:
    - (((1)))i. When Required. A soils analysis and report may be required when an application for a grading permit or approval is made for property located:
      - (A) In areas described in Section 22.800.050;
      - (B) In areas where there is a potential for landslide;
      - (C) In areas where grading may result in instability of the site or adjoining property;
      - (D) In areas where soils may not be suitable for the use intended;
      - (E) In areas where the Director determines pollutants are likely to be present; or
      - (F) In any area where the Director determines that the information which would be supplied by a soils analysis and report is necessary for the review of the application.
      - $(((\frac{2}{2})))$ <u>ii.</u> Contents. The soils analysis and report shall include:
        - (A) Data regarding the nature, distribution and strength of existing soils and subsurface conditions;
        - (B) History of the site including history of landslides, known excavations and fills, and location of utilities;
        - (C) Where appropriate as indicated by information provided under Subsection B above, analytical testing of soils to determine the concentration of pollutants;
        - (D) Conclusions and recommendations for clearing the site, of the adequacy of the site for proposed immediate and long-term intended use, foundation, retaining and structural designs, grading methods, and construction and post-construction monitoring; and
        - (E) Other information as determined necessary by the Director to adequately evaluate compliance with the requirements of this Subtitle and accomplishment of its purposes, such as an assessment of contamination when past industrial or chemical



use have been present on the site.

- (((3)))iii. Preparation. The soils analysis and report shall be prepared by an experienced geotechnical/civil engineer or other equally qualified person approved by the Director. The Director may require that the plans and specifications be stamped and signed by the geotechnical/civil engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of the reports.
- (((4)))iv. Minimal Risk. In geologic hazard areas as identified in SMC Chapter 25.09, Regulations for Environmentally Critical Areas, the geotechnical/civil engineer who prepared the soils analysis and report may be required to submit a letter stating that the plans and specifications conform to the recommendations of the soils analysis and report. The letter shall also state that, so long as conditions stated in the soils report are satisfied, areas disturbed by construction will be stabilized, the risk of damage to the proposed development or to adjacent properties from soil instability will be minimal, and the proposed grading and development will not increase the potential for soil movement.
- e. Site Analysis. For properties located in any of the areas identified in Subsection d, an analysis and report of the following site factors. The analysis and report shall be prepared by a licensed civil engineer or other person approved by the Director.
  - (((1)))i. A description of the hydrology of the site and the drainage basin in which the development is located.
  - (((2)))ii. The effect of grading upon surrounding properties, watercourses and the drainage basin, including impacts on water quality and fish habitat when a stream, lake or other body of water is affected. Where applicable, the analysis specified in Section 22.802.015D(5) may also be required.
- f. A letter in a form acceptable to the Director from the owner of the site stating that the owner understands and accepts the risk of developing in an area with potentially unstable soils and that the owner will advise, in writing, any prospective purchasers of the site, structures or portions of a structure about the landslide potential of the site.
- g. The Director may require additional information pertaining to the specific site and any other relevant information needed in order to assess potential hazards associated with the site and to determine whether a grading permit or approval should be issued.
- Section 35. Section 22.804.050 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

# 22.804.050 Grading requirements.

A. Earth movement. Grading shall not create or increase the likelihood of earth movement,

- including but not limited to, landslides, accelerated soil creep, settlement and subsidence, and hazards associated with strong ground motion and soil liquefaction of the site to be graded and adjoining properties.
- B. Natural features. Each grading proposal shall contain provisions for the preservation of <u>natural</u> drainage patterns and watercourses; for reasonable preservation of natural land and water features and other indigenous natural features of the site; and replacement, where necessary, of vegetation or other means to control runoff.
- C. Watercourses. Grading shall not create or contribute to flooding, erosion, or increased turbidity, siltation or other forms of pollution in a watercourse, and shall comply with the requirements of ((Section 22.802.015)) Chapter 22.802.
- D. Pollution control. Grading shall be performed, and the completed work shall be in accordance with all applicable environmental laws, rules and regulations, and with the requirements of ((Section 22.802.015)) Chapter 22.802.
- E. Conformance with plans. Grading shall be performed in accordance with the plans approved by the Director of ((Construction and Land Use)) DCLU.
- F. Slopes. Final graded slopes shall be no steeper than is safe for the intended use, and shall in no case be steeper than two horizontal to one vertical. For requirements for temporary slopes see Sections 22.804.050M and 22.804.100.
- G. Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, non-approved materials, topsoil and other unsuitable materials, including but not limited to, mud, peat, and other materials with insufficient strength to satisfy the design as determined by the Director.
- H. Fills. Fills shall be located so that the base edge of the fill is located more than 12 feet horizontally from the top edge of an existing slope or a planned cut slope. A sloping fill shall not be placed on top of slopes which are steeper than one and one-half horizontal to one vertical.
- I. Requirements for fill material. Materials used in fills shall comply with the following requirements:
  - 1. Material used in filling shall be appropriate to the site and the intended use of that portion of the site.
  - 2. Fill shall be composed of earth materials. Any rock or other similar irreducible material used in a fill shall be of a maximum diameter of 12 inches and shall compose not more than 20% of the total fill material.
  - 3. Topsoil shall not be used as a fill material except that the upper 12 inches of a fill site may be covered with topsoil.
  - 4. No frozen or thawing material shall be used in a fill.
  - 5. No solid waste, hazardous waste or hazardous material may be used in a fill.
  - 6. No organic material shall be used in a fill unless approved by the Director.
  - 7. As necessary, the Director shall specify other characteristics of the fill material used, the degree of compaction, moisture content and the method of placement appropriate to the site and the intended use of that portion of the site and the requirements for water retention, drainage control and erosion control.
- J. Terraces. The Director may require steps and terraces sufficient to control surface drainage and deposit of debris. Suitable access to the terraces shall be provided to permit proper cleaning and maintenance.
- K. Subsurface Drainage. Cut and fill slopes shall be provided with subsurface drainage when



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- needed to maintain slope stability. Access. When an adjoining site relies on the site to be graded for pedestrian or vehicular
- access, the Director may require reasonable access to be maintained to the adjoining site. Stockpiling of Earth Materials. M.
  - General. Stockpiling of any kind shall not adversely affect the lateral support or significantly increase the stresses in or pressure upon any adjacent or contiguous Stockpiling shall comply with the erosion control requirements for temporarily exposed soils set forth in Section 22.802.015, 22.802.016, and rules promulgated under ((that)) those Sections.
  - Temporary Stockpiling During Construction or Grading. Temporary stockpiles of earth materials during construction or grading shall not exceed ten feet in height. Stockpiles shall have slopes no greater than one horizontal to one vertical.
  - Temporary Stockpiling During Dredging. Temporary stockpiles of earth materials excavated during dredging or maintenance dredging shall be subject to the approval of the Director of ((Construction and Land Use)) DCLU.
  - Stockpiling and Handling of Earth Materials in Processing. Earth materials consumed or produced in a process may be stockpiled and handled on a site provided the process is the principal use of the site.
  - Removal. Temporary stockpiles shall be removed prior to final inspection for a grading permit where no building permit is issued on the same site. Where grading is approved as a component of a building permit, temporary stockpiles shall be removed prior to issuance of a Final Certificate of Occupancy or approval for occupancy after a final inspection.
  - N. Exploratory Excavations. Exploratory excavations shall be under the direction of a licensed civil engineer or experienced geotechnical((/civil)) engineer. No stockpiles of materials shall remain after completion of the exploratory activities. The grading shall comply with other requirements that may be established by the Director.
- Section 36. Section 22.804.110 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is amended as follows:

#### 22.804.110 Erosion control.

- Methods. Grading operations shall comply with the requirements set forth in Section 22.802.015((, Subsections C (3) and D2, D3, D4 and D6)) and rules promulgated thereunder. Devices or procedures for erosion control shall be initiated or installed prior to commencing grading operations when technically feasible, and in any case as soon thereafter as is technically feasible, and shall be maintained to function at design capacity.
- B. Exposure. Grading operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Grading operations shall comply with requirements for exposed soils, including best management practices, promulgated pursuant to Section 22.802.015.
- Section 22.804.160 of the Stormwater, Grading, and Drainage Control Code, Section 37. adopted by ordinance 116425 and amended by ordinance 117852, is amended as follows:

#### 22.804.160 Granting or denial of grading approvals and permits.

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Approval.

- The Director of ((Construction and Land Use)) DCLU may grant a grading permit or approval that complies with the requirements of this Subtitle and rules promulgated thereunder. An approval may be granted with or without conditions, to assure compliance with the requirements of this Subtitle. Conditions may include, but are not limited to, the following: restricting permit work to specific seasons or weather limiting vegetation removal; sequencing of work; recommendations contained in the soils analysis and report to be followed; requiring observation by a licensed civil or geotechnical((/civil)) engineer; requiring special inspection pursuant to Section ((306)) 1701 of the Seattle Building Code; limiting quantities of soils; requiring structural safeguards; specifying methods of erosion, sedimentation, and drainage control; ((prescribing best management practices)) requiring compliance with other provisions of this Subtitle; specifying methods for maintenance of slope stability; retaining existing trees; requiring revegetation and grass seeding and/or long term maintenance activities; requiring compliance with SMC Chapter 25.09, Regulations for Environmentally Critical Areas, and other regulations of the City or other agencies with jurisdiction.
- 2. The Director may require that plans and specifications be stamped and signed by a licensed civil engineer or experienced geotechnical((/civil)) engineer to indicate that the grading and proposed structure comply with the conclusions and recommendations of any required reports.
- C. Denial. The application for grading permit or approval may be denied if the Director determines that the plans do not comply with the requirements of this Subtitle and rules promulgated hereunder, or do not accomplish the purposes of this Subtitle, or the grading is inconsistent with the proposed development of the site, or the plans do not comply with other applicable federal, state and local laws and regulations.
- D. The issuance or granting of a grading permit of approval shall not be construed to be permission for, or an approval of, any violation of any of the provisions of this Subtitle or rules promulgated hereunder, or of any other law or regulation.
- Section 38. Section 22.804.180 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinance 117852, is amended as follows:

#### 22.804.180 Grading inspection.

- Α. General. The Director of ((Construction and Land Use)) DCLU may conduct or require inspection of grading sites to determine that work is done according to the grading approval. The permittee and owner shall be notified if the work is in violation. Director may initiate enforcement action for work that is in violation.
- Preloading. Preloading shall be conducted as directed and supervised by a licensed civil В. or experienced geotechnical((/civil)) engineer.
- C. Special Inspections. The Director of ((Construction and Land Use)) DCLU may require periodic or continuous inspection from site inspection through foundation inspection by a



 licensed civil engineer, experienced geotechnical/civil engineer or special inspector at the permittee's expense. Licensed civil and experienced geotechnical/civil engineers or special inspectors shall be designated in accordance with Section ((306)) 1701 of the Seattle Building Code, Chapter 22.100 of the Seattle Municipal Code. The approved inspector shall inspect in accordance with the duties specified in Section ((306)) 1701 of the Seattle Building Code and rules adopted thereunder and shall:

- 1. Be present during the execution of all work the inspector has been approved to inspect;
- 2. Report to the job site in advance of grading operations to become familiar with approved plans and to inspect all materials to be used;
- 3. Not undertake or engage in other occupations which interfere or create a conflict of interest with the inspection duties during the work on the project;
- 4. Inspect the clearing, excavating, filling, compaction, grading, erosion and drainage control measures, and all other soils control aspects of the construction, and observe whether there is compliance with the approved plans;
- 5. Inspect soils for evidence of hazardous substances or wastes;
- 6. Observe whether the approved plans are sufficient to control the soil on the site and prevent off-site transport of sediment;
- 7. Immediately report all evidence of hazardous substances or wastes, irregularities, insufficiencies, substitutions of material or other changes from approved plans, and violations of this Subtitle to the owner's architect, engineer or contractor. If the project is not brought immediately into compliance, the Director of ((Construction and Land Use)) DCLU shall be immediately notified. In any event, the Director of ((Construction and Land Use)) DCLU shall be immediately notified when any condition threatens public health, safety or welfare, private or public property, or the environment, whether or not the threat is immediate or likely;
- 8. Notify ((the Department of Construction and Land Use)) DCLU of the time schedule for off-site disposal of excavated material and, when within the City limits, of the location of and permit number of the approved disposal site; and
- 9. The special inspector may require soil grading reports prepared by a licensed civil engineer or experienced geotechnical/civil engineer. These tests may include field density tests, summaries of field and laboratory tests and other substantiating data and comments on any changes made during grading but not shown on the approved plans and their effect on the recommendations.
- C. Other Inspections. Subject to the approval of the Director of ((Construction and Land Use))

  DCLU, a person other than a licensed civil or experienced geotechnical/civil engineer or special inspector may conduct the required inspection provided the person is under the supervision of a licensed civil engineer or experienced geotechnical/civil engineer and is qualified to conduct the inspection.
- Section 39. Section 22.808.020 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:
- 22.808.020 Liability and defenses of responsible parties.

- A. Who must comply. It is the specific intent of this Subtitle to place the obligation of complying with its requirements upon the responsible parties, as defined in Section 22.801.190. The City of Seattle and its agencies are intended to have the same obligation for compliance when the City is a responsible party. No provision of this Subtitle is intended to impose any other duty upon the City or any of its officers or employees.
- B. Joint and Several Liability. Each responsible party is jointly and severally liable for a violation of this Subtitle. The Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU or both of them may take enforcement action, in whole or in part, against any responsible party. All applicable civil penalties may be imposed against each responsible party. In the event enforcement action is taken against more than one responsible party, recoverable damages, costs, and expenses may be allocated among the responsible parties by the court or the Hearing Examiner based upon the extent to which each responsible party's acts or omissions caused the violation, unless this factor cannot be determined, or the party receiving the allocation under this factor is unable to correct the violation, or is unable to pay the damages, costs, expenses, and any penalty imposed, in which case the trier of fact shall consider:
  - 1. Awareness of the violation;
  - 2. Ability to correct the violation;
  - 3. Ability to pay the damages, costs, and expenses;
  - 4. Cooperation with government agencies;
  - 5.Degree to which any impact or threatened impact on water or sediment quality, human health, or the environment is related to acts or omissions by each responsible party.
  - 6.Degree to which the responsible parties made good faith efforts to avoid a violation or to mitigate its consequences; and
  - 7.Other equitable factors.
- C. Defenses. A responsible party shall not be liable under this Subtitle when the responsible party carries the burden of proving, by a preponderance of the evidence, one of the following defenses:
  - 1. The violation was caused solely by an act of God;
  - 2. The violation was caused solely by another responsible party over whom the defending responsible party had no authority or control and the defending responsible party could not have reasonably prevented the violation;
  - 3. The violation was caused solely by a prior owner or occupant when the defending responsible party took possession of the property without knowledge of the violation, after using reasonable efforts to identify violations. However, the defending responsible party shall be liable for all continuing, recurrent, or new violations after becoming the owner or occupant;
  - 4. The responsible party implemented and maintained all appropriate <u>drainage control</u> facilities, treatment facilities, erosion and sediment controls, or source controls ((best management practices)) identified in rules promulgated by the Director of ((Construction and Land Use)) <u>DCLU</u> and the Director of ((Seattle Public Utilities)) <u>SPU</u>, or in manuals published by the State Department of Ecology until superseded by rules of the Director, or as otherwise identified and required of the responsible party by the Director in writing pursuant to this Subtitle.



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Section 40. Section 22.808.080 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinances 117432 and 118396, is amended as follows:

#### 22.808.080 Public Nuisance.

- Abatement required. A public nuisance affecting stormwater quality, drainage, erosion control, grading and other public nuisances set forth in this Section are violations of this Subtitle. A responsible party shall immediately abate a public nuisance upon becoming aware of its existence.
- Dysfunctional facility or practice. Any private drainage control, treatment, erosion control, or other stormwater facility ((or other best management practice)) relating to grading, stormwater quality, drainage control, or erosion not installed or maintained as required by this Subtitle, or otherwise found to be in a state of dysfunction creating, presently or in the event of a design storm, a threat to the public health, safety or welfare, the environment, or public or private property is hereby declared to be a public nuisance.
- Obstruction of watercourse. Obstruction of a watercourse without authorization by the Director, and obstruction in such a manner as to increase the risk of flooding or erosion should a design storm occur, is hereby declared to be a public nuisance.
- Dangerous conditions. Any condition relating to grading, stormwater, drainage or erosion which creates a present or imminent danger, or which is likely to create a danger in the event of a design storm, to the public health, safety or welfare, the environment, or public or private property is hereby declared to be a public nuisance.
- Abatement by the City. The Director of ((Seattle Public Utilities)) SPU and the Director of E. ((Construction and Land Use)) DCLU are authorized, but not required, to investigate a condition that either Director suspects of being a public nuisance under this Subtitle, and to abate any public nuisance. If a public nuisance is an immediate threat to the public health, safety or welfare or to the environment, the Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU may summarily and without prior notice abate the condition. The Director of ((Seattle Public Utilities)) SPU or the Director of ((Construction and Land Use)) DCLU shall give notice of the abatement to the responsible party as soon as reasonably possible after the abatement.
- Collection of abatement costs. F. The costs of abatement may be collected from the responsible party, including a reasonable charge for attorney time and a 15 percent charge for administrative expenses as set forth in Section 22.808.060C. Abatement costs and other damages, expenses and penalties collected by the City shall go into an abatement account for the department collecting the monies. The money in the abatement account shall be used for abatements and corrections of violations conducted by the City. When the account is insufficient the Director of ((Seattle-Public Utilities)) SPU and the Director of ((Construction and Land Use)) DCLU may use other available funds.
- Section 41. Subsection 22.808.090 B. of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinance 117432, is amended as follows:

22.808.090 Violations.

DCLU/MBB Dated April 12, 2000 Page 39 of 40

## 1 2

#### B. Criminal Violations.

- 1. Failing to Comply with Orders. Failing to comply with an order properly issued pursuant to this Subtitle by the Director of ((Engineering)) SPU, the Director of ((Construction and Land Use)) DCLU, the Hearing Examiner, or a Judge is a criminal violation, punishable upon conviction by a fine of not more than \$5,000 per day of each violation or imprisonment for each violation for not more than 360 days or both such fine and imprisonment.
- 2. Tampering and Vandalism. Tampering with or vandalizing a drainage control, treatment, erosion control, or other stormwater facility ((or other best management practice)), a public or private drainage control system, monitoring or sampling equipment or records, or notices posted pursuant to this Subtitle is a criminal violation, punishable upon conviction by a fine of not more than \$5,000 or imprisonment for not more than 360 days or both such fine and imprisonment.
- 3. Repeat Violations. Anyone violating this Subtitle who has had a judgment or Hearing Examiner's order against them pursuant to this Subtitle in the preceding five years, shall be subject to criminal penalties for the present violation, and, upon conviction thereof, be fined in a sum not to exceed \$5,000 ((dollars)), or imprisonment for not more than 360 days, or both such fine and imprisonment.

**Section 42.** Section 22.808.120 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425 and amended by ordinance 117432, is amended as follows:

#### 22.180.120 Fees.

Fees for grading permits, drainage control plan review and approvals shall be as set forth in the ((Permit)) Fee ((Ordinance)) Subtitle, Subtitle IX of Title 22, Seattle Municipal Code. Fees for recordkeeping or other activities pursuant to this Subtitle shall, unless otherwise provided for in this Subtitle, be prescribed by ordinance.

Section 43. Section 22.808.150 of the Stormwater, Grading, and Drainage Control Code, adopted by ordinance 116425, is repealed.

Section 44. Unless directed otherwise by this ordinance, any reference to Construction and Land Use or Department of Construction and Land Use in the Stormwater, Grading, and Drainage Control Code, Seattle Municipal Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396, is replaced with DCLU. Unless directed otherwise by this ordinance, any reference to Seattle Public Utilities in the Stormwater, Grading, and Drainage Control Code, Seattle Municipal Code, as adopted by Ordinance 116425 and amended by Ordinances 117432, 117697, 117789, and 118396, is replaced with SPU.

**Section 45.** This ordinance shall take effect and be in force thirty (30) days from and after its approval by the Mayor, but if not approved and returned by the Mayor within ten (10) days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.



DCLU/MBB Dated April 12, 2000 Page 40 of 40

1	Passed by the City Council the day of, 2000, and signed	l by
2	me in open session in authentication of its passage this day of, 2000	).
3		
4		
5	artinaria de la companya de la comp	
6	President of the City Council	
7		
8	Approved by me this day of, 2000.	
9		
10		
11	grande a la companya de la deservação quanta de la <u>encodrá de la establicada de la companya de la companya de</u>	
12	Paul Schell, Mayor	
13		
14	Filed by me this day of, 2000.	
15		
16		
17		
18	City Clerk	
19		
20	$(\mathbf{SEAL})$ and the second of	



#### STATE OF WASHINGTON

#### DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600 (360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

April 14, 2000

Mr. Tim Croll Seattle Public Utilities Dexter Horton Building, Rm 660 710 Second Ave. Seattle, WA 98104-1712

Dear Mr. Croll:

Re: Municipal Stormwater Permit No. WASM23003

In my previous letter (dated February 17, 2000) to you, Ecology identified a list of subject areas for which Seattle needed to change its ordinances or rules to comply with its permit. Since then, representatives from our offices have been meeting to agree upon the general approach for the city to come into compliance, and to agree upon specific changes to the Seattle Municipal Code. We have concluded that the code changes proposed by your staff will satisfy three of the five equivalency review criteria established by Ecology.

This decision is based upon conversations with your staff and the text of the following documents:

- "Assessment for Determining Equivalency with Ecology (1992) Minimum Requirements," dated 4/3/00
- "Discussion Memo Regarding Equivalency," dated 4/4/00
- "Supplemental Information for Streambank Erosion Control: Analysis Methods and Justification of Discharge Rate Requirements," dated 4/3/00
- "City of Seattle Flow Control Requirements," dated 4/3/00
- Proposed Amendments to the "Stormwater, Grading and Drainage Control Code," dated 4/12/00.



Mr. Tim Croll Page 2 April 14, 2000

In particular, we acknowledge our acceptance of the city's proposals on the following subjects:

#### Compliance Date:

The new treatment, flow control, and structural source control requirements will become effective for all permit applications no later than January 1, 2001, and for projects authorized for funding in the city of Seattle adopted Fiscal Year 2001 Capital Improvement Program. All other requirements will be effective as of July 5, 2000.

#### Flow Control:

The city's proposal to require release rates of 0.15 cfs/acre in a 2-year, 24-hour storm, 0.20 cfs/acre in a 25-year, 24-hour storm are accepted. In addition a release rate of 0.5 cfs/acre in a 100-year, 24-hour storm will be required for discharges in basins leading to waters classified as Class A or Class B riparian corridors in the city municipal code.

#### Source Controls on Redevelopment Projects:

In lieu of requiring source control measures for the entire site of all large redevelopment projects, Ecology will accept the city's proposal to require all projects subject to drainage review (i.e.,  $\geq 750$  sq. ft. of developmental coverage) to comply with source control requirements as specified in the city's proposed ordinance and rules for the redeveloped portion of the site. In addition, Ecology approves of the city's approach to regulate source control based on the "high-risk pollution-generating" activities identified in the Ecology 1992 manual, rather than on Standard Industrial Classification codes.

Large Redevelopment Project Retrofit Schedule for Flow and Treatment Requirements: Rather than requiring large redevelopment projects over 1 acre to submit a schedule to address flow control and treatment requirements for the portion of the site not being redeveloped, the city will: require "operational" source controls for all existing discharges from "high-risk pollution-generating activities" to the city storm sewer system; create a full time position beginning in calendar year 2001 to conduct water quality site audits to confirm and enforce compliance with the city's code and rules. In addition, the city will proceed with a planning effort(s) to address water quality and quantity needs throughout the city's jurisdiction.

#### Water Quality Planning Commitment:

Ecology is open to the possibility of relieving projects of water quality treatment requirements if the city and Ecology can agree upon the scope, schedule, and budget for a water quality planning study. The intent of the study should be to identify effective solutions for improving water quality within the city's waters that receive stormwater runoff. It is not Ecology's intent to imply that this planning effort will supplant the need to comply with requirements in Ecology's updated stormwater manual.



Mr. Tim Croll Page 3 April 14, 2000

#### Wetlands:

The proposed ordinance statement that "discharges to wetlands of exceptional value, as defined by 25.09, shall maintain existing flows to the extent necessary to protect the functions and values of the wetland," is an acceptable alternative to the Ecology requirement to maintain the hydroperiod of wetlands.

Though the proposed amendments to the code are acceptable, the city must also establish the implementation structure for the code requirements through rules. Rules are also necessary to meet the remaining two equivalency criteria:

- Best Management Practices selection and site planning processes that have outcomes that provide equivalent or greater protection to those in Ecology's manual; and
- BMPs equivalent to those contained in Volumes II through IV of Ecology's manual must be included in Seattle's version of the manual.

The city must confirm the adoption of the ordinance and supporting rules to complete its NPDES permit obligations. We encourage the city to proceed with the ordinance and rules adoption processes expeditiously.

If you have any questions concerning this matter, please call me at (360) 407-6405, or Ed O'Brien at (360) 407-6438.

Sincerely,

Megan White, P.E., Manager

Water Quality Program

Medululita

MW:EO:pc

cc: Miranda Maupin, Seattle Public Utilities Robert Chandler, Seattle Public Utilities John Glynn, Ecology, Northwest Regional Office

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ATTACHMENT to Water Resources, Solid Waste & Public Health Committee Decision Agenda from Peter Harris, Central Staff

# Stormwater, Grading and Drainage Control Code Amendments (Council Bill 113187)

## Changes from Version 3 (introduced to full Council) to Version 4 (5/19/00):

VERSION 3	Explanation	Redline Version	VERSION 4
Page/Line		4 (excerpts in	Page/Line
		Committee	(full copy in
		notebooks)	Committee
			notebooks)
P 4, lines 3-4	Source Control cross-	P 4, lines 3-4	P 4, line 3
	reference		
P 15, lines 27-28	Clarification, typo	P 15, lines 27-28	P 15, lines 30-31
P 17, line 13	Errata Sheet, typo	P 17, line 13	P 17, line 15
P 22, lines 18-22	Errata Sheet, clarification,	P 22, lines 18-24	P 22, lines 21-28
	typo		,
P 24, lines 4-5	Clarification	P 24, lines 5-6	P 24, lines 9-10
P 36, line 27	Errata Sheet, clarification,	P 36, lines 26-29	P 36, line 31;
	typo		P 37, lines 1-3
P 38, line 25	Source Control cross-	P 38, line 28	P 39, line 3
	reference		
P 40, line 14	Errata Sheet, clarification	P 40, lines 18-21	P 40, lines 24-27
P 40, line 22 to P	Source Control cross-	P 40, line 29 to	P 41, line 4
41, line 13	reference	P 41, line 22	
P 42, lines 21,	Source Control Cross-	P 43 lines 2, 3, 7,	P 42 lines 14, 15,
22, 26; P 43,	reference	16, 30;	19, 28;
lines 4, 18, 22		P 44, line 3	P 43, lines 11, 15
P 47, line 17	Typo, clarification	P 47, line 28	P 47, line 9
P 51, line 18	Source Control cross-	P 51, line 29	P 51, line 13
	reference		
P 60, line 4	Source Control cross-	P 60, line 14	P 59, line 30
	reference		
P 63, line 20	Cross-reference	P 63, line 29	P 63, line 17
P 63, lines 27-28	Cross-reference	P 64, lines 5-7	P 63, lines 23-25

Changesv3tov4.doc



## STATE OF WASHINGTON - KING COUNTY

119404 City of Seattle, City Clerk

No.

### **Affidavit of Publication**

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

CT:119965/ORDINANCE

was published on

06/19/00

The amount of the fee charged for the foregoing publication is ount has been paid in full. the sum of \$ sworn to before me on 06/19/00

Notary Public for the State of Washington, residing in Seattle

with Enforcement.

WHEREAS the City of Seattle is subject to the terms of the National Pollutant Discharge Elimination System General Permit (NPDES Permit) issued July 5, 1995, by the State of Washington Department of Ecology ("Ecology" for discharges from municipal separate storm sewer systems for the Cedar/Green Water Quality Management Area (Permit Na WASM 28003) that are subject to the federal Clean Water Act and other law, and

WHEREAS the City is subject to the terms of an Ecology-approved City of Seattle Stormwater Management Program, dated April 11, 1997; and

WHEREAS the NPDES Permit and Sternwater Management Program require that the City adopt Ordinances and mini-mum requirements that are emuvalent to Ecology guidance for controlling ranoff from development and construction ac-tivities; and

WHEREAS the City has negotiated with Ecology an environmentally protective approach to equivalency that involves new regulation of both construction and other discharges; and

WHEREAS the City has proposed additional changes to its regulation and enforcement program to improve water quality and further the purposes of the Stormwater, Grading and Drainage Control Code, and

WHEREAS changes in state and federal regulations expected in the near future will require the Gity to again reviae the Storm-water, Grading, and Drainage Control Gods; and

Code, and

WHEREAS to prepare for these regulatory changes and to adapt Department of Ecology requirements to a fully developed acity Seattle Public Utilities has initiated a city. Seattle Public Utilities has initiated a city. Seattle Public Utilities has initiated as easier quality planning effort, the purpose of which is to outline an integrated water quality improvement program based on an essessment of regulatory, programmatic and capital improvement approaches, and essessment of regulatory programmatic same and beneficial uses of Seattle's lakes creeks and beneficial uses of Seattle's lakes creeks and beneficial uses of Seattle's lakes creeks and beneficial uses of Seattle's lakes.

WHEREAS in this upcoming water quality planning effort, Scattle Public Utilities will with stakeholder involvement:

- consider regulations that extend controls beyond the pertion of the site being developed;
- consider regulatory alternatives for public benefit projects such as affordable housing and public transportation;
- develop an adaptive management and monitoring component to evaluate the effectiveness of proposed measures;
- 4. consider specifying vegetative tech-niques as the most preferred alternative for addressing stormwater run-off; and
- 5 consider rate-based incentives to achieve water quality goals; and

actiovs water quality goals; and
WHEREAS Seattle Public Utilities will
report to the WWSHPH Committee on
progress on the water quality planning of
lett on a quarterly basis, beginning in September 2000, and will advise the committee promptly of any new timelines required as a result of changes in state of
gederal regulations, Now Therefore:

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS

SECTION 1. Section 32,900,010 of the estile Municipal Code, adopted by Or-finance 116425, is amended as follows:

22.800.010 TITLE

This Sethtile, open prised of SMC Chan-gre 22,800 through 28,300, shall be known as the "Stormsster, Grading and Drainage Control Code," and may be closed as such.

BECTION 2. Section 22.800,020 of the Seattle Municipal Code, adopted by of dinance 116425, is amended by adding a new Subsection C as follows:

22.800.020 PURPOSE

C. It is expressly acknowledged that water quality degradation can result either directly from one discharge or through the

responsible for insuring that the grading and drainage control is done in a manner consistent with the requirements of this Subtitle

- 2 Where a soils analysis and report has been prepared as required under subsec-tion A & this section, the grading shall also be inspected by the geotechnical(Vervill)) engineer who prepared the report.
- 3 A City agency need not provide an in-spector from its own agency provided ai-ther
- a the work is inspected by an ap-ropriate inspector from another City agency; or
- b the work is inspected by the licensed civil or geotechnical((leivil)) engineer who prepared the plans and specifications for the work, or
- c a permit or approval is obtained from the Director of ((Construction and Land Use) DCLL and the work is in-spected by the Director
- C. Certification of Compliance. City agencies shall meet the same standards as non-City projects, and shall certify that each individual project meets those standards.

SECTION 6. Section 22:800:080 of the Seattle Municipal Code, adopted by Or-dinance 116425 and amended by Or-dinances 117442 and 118396, is amended

#### 22.800.080 AUTHORITY.

A 1. The Director of ((Construction and Land Use shall have)) DCLU has and Land Use shall have)) DCLU has authority regarding the provisions of this Subtitle pertaining to grading, review of drainage control plans, and review of errors of the control plans, and ((shall have)) has sign control plans and ((shall have)) has inspection, and enforcement authority pertaining to temporary erosion/sediment control measures

2. The Director of ((Seattle Public Utilities shall have)) SPU has authority regarding all other provisions of this Subtilippertaining to stormwater drainings, and erosion control, including inspection and enforcement authority.

erosion control, including inspection and enforcement authority.

B. The Directors of ((Construction and Land Use)) DCLU and ((Seattle Public Utilities)) SFU are nuthorized to take actions necessary to implement the provisions and purposes of this Substitle in their respective spheres of authority, mediding but not limited to the following promulicating and amending rules and regulations, pursuant to the Administrative Code. (hapter 302 of the Seattle Minicipal Codeft, which may include prescribing best management practices ("BMFs"))) establishing and conducting inspection programs, establishing and conducting inspection programs, establishing and conducting inspection programs, establishing and conducting ducting or, as set forth in Section 22 802.

112. requiring responsible parties to conduct, monitoring programs, which may include sampling of discharges to or from drainage control system, or surface water; taking enforcement action, abating misances; promulgating guidance and policy documents, and reviewing and approving or disapproving required submittals and applications for approvals and permits.

C. The Director of (Seattle Public Utili

permits

C. The Director of ((Seattle Public Utilities)) SPU is authorized to develop itties)) SPU is authorized to develop drainage basin plans for managing surface water, drainage water, and erosion within individual surbasins ((Compliance with an adopted)) A drainage basis plan may when approved by the Director of ((Seattle Public Utilities)) SPU be used to modify requirements of this Sublille provided the requirements of this Sublille provided the requirements of this Sublille provided the requirements of the sublille provided the sublille provided the requirements

SECTION 7 Section 22.881.010 of the Seattle Municipal Code, adopted by Gr-dinance 116425, is amended as follows:

#### 22.801.010 GENERAL

For the purpose of this Subtitle the words listed in this Chapter (schall) have the following meanings, unless the context clearly indicates otherwine. Terms relating to pollutants and to hazardous wastes materials, and substances, where not defined in this Subtille, shall be as defined in Substances, where not defined in this Subtille, shall be as defined in Substances, where the Substances was substances, where the Substances in the Substance of the Substances and Substances in the substances in the substances and words used in the singular include the singular.

Effective July 5, 2060, all substances in

center of the yout. Confessing plate sepa-rators are designed to remove dispersed oil and floating debris as well as in containing

"Combined sew bined sewer." - see "Public com-

"Compaction" means the densification of a fill by mechanical means.

Containment area" means the area designated for conducting high-risk pollution generating activities for the purposes of implementing, operational source controls or treatment facilities.

"Contammate" means the addition sediment, any other pollutant or waste, any illicit discharge.

"Cut" means the changing of a grade by excavation.

SECTION 11. Section 22.801.050 of the Seattle Municipal Code, adopted by Ordinance 116425 and amended by Ordinances 117432 and 118396, is amended

22.801.050 "D "

"DCLU" means the Department of Design, Construction and Land Use

sign, Construction and Land Use

The Damages' means monetary compensation for harm, less, costs, or expenses incorred by the City, including but not imited to the following costs of abating violations of this Subtitle or public auceances, lines or penalties the City incurs as a result of a violation of this Subtitle, and costs to repair or clean the public drainage control system as a result of the violation. For the purposes of this Subtitle violation. For the purposes of this Subtitle, it does not include compensation to any person other than the City

"Design storm" means a rainfail event used in the analysis and design of drainage facilities.

Designated receiving waters' means the Duwamish River, Puget Sound, Lake Washington, Lake Union, and the Lake Washington Ship Canal, and other received washington to receive drainage discharges.

"Detention" means ((and refers to)) emperary storage of dramage water for the purpose of controlling the dramage dis-

Detention system means a facility

Detention system means a facility
designed to control the discharge rate of
designed to control from a site by detaining
sternowater runoil from a site by detaining
flows in a lank or vault.

"Development" (( - see "New Development and Redevelopment) means land disturbing activity or the addition or replacement of impervious surface.

Discement of impervious surface

"Davelopmental coverage" means all
areas within a site planned ((to be develareas within a site planned ((to be develareas within a site planned ((to be develareas) for redeveloped including, but
not limited to, rooftops, driveways,
carporrs, accessory buildings, parking
areas, accessory buildings, parking
areas, areas in which soils, slopes and
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"Director" means the Director of the De-partment authorized to take a particular action, and the Director's designees, who may be employees of that department or another City department.

Thrector of <u>Design</u>, Construction and Land Use' means the Director of the Department of <u>Design</u>, Construction and Land Use of the City of Seattle and/or the designee of the Director of <u>Design</u>, Construction and Land Use, who may be employees of that department or another City department. department

Director of Scattle Public Utilities' means the Director of Scattle Public Utilities of the City of Scattle and/or the designee of the Director of Scattle Public Utilities, who may be employees of that department or another City department.

"Discharge point" means the location to which drainage water from a specific site is

"Discharge rate" messas the rate at which drainege water is released from a specific site. The discharge rate is expressed as volume per unit of time, such as tobic feet per second.

"Drainage basin" means the tributary area through which drainage water is col-lected, regulated transported, and dis-charged to receiving waters.

charged to receiving waters.

"Drainage control" means the management of drainage water. Drainage control is accomplished through the collection, control accomplished through the collection, controlling the rate of discharge from a controlling the rate of discharge from a site, or separating, treating or preventing the introduction of points and.

Dramage control facility means my fa-cility including best management prac-tices, installed or constructed for the pur-pose of controlling the flow quantity and/ or quality of dramage water.

Drainage control plan' means a plan for collecting controlling, transporting and disposing of drainage water falling upon, disposing of drainage water falling upon, entering, flowing within, and exiting the site, including designs for drainage control facilities.

component of a building permit rela grading, as required by this Subtitle.

SECTION 15. A new Section 22.8 is added to the Seattle Municipal Cread as follows:

22.801.090 "14."

"High-risk pollution generating tes" are the following: ities

ities" are the following:

1. Fueling operations that involve ferring fuel into mobile vehicles or ferring fuel into mobile vehicles or ment at permanent stations, temp stations, and mobile liteling at a stations, and mobile liteling at a ferrament stations include facilities as, but not limited to commercial gations, maintenance yards, and private fueling stations to the storage from a dedicated fueling station. To rary fueling stations include hat no rary fueling stations include hat no rary fueling stations include hat no rary fueling stations include the form a dedicated teeling station of the stationarily storage dispensed into vehicles or equipment his fueling stations are fueling opera where fuel is delivered to vehicles where fuel is delivered to vehicles equipment on mobile tank trucks.

equipment via mobile tank trucks

2. Vehicle, equipment or building w

2. Vehicle, equipment or building w

ing or cleaning, including any of the fo

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ing, mobile vehicle steam cleaning o

tions or vehicle weathing at commercia
wash facilities, churtly far washes
wash facilities, churtly far washes
permanent parking lots such as new; i

permanent parking lots such as new; i

permanent parking lots such as new;

washing of tools or other manufactu
quipment; outside cleaning of somme

cooking equipment such as fillers,

grills, or washing of buildings inche

exteriors or mobile interior building of

mg services.

3. Truck or rail loading or unloading liquid or solid materials that invertantsferring non-containerized bulk liquid or truck or rail, or loading/unloading-liquid or industrials at a commercial or industrial loading slock.

Liquid storage in stationary of ground tanks, including storing he chemicals, ferthizers, pesticides, solve grease, or petroleum products in station above ground tanks.

5. Outside portable container storage liquide, food wastes, or dangerous was including storing any of the following including storing any of the following including storing animal grease, or other cable grease animal grease, or other cumulated food wastes; used oil; lig feedstock, cleaning compounds; chemic solid waste as delined by SMC 21.36; dangerous waste.

dangerous waste

6. Outside storage of non-container;
materials, by-products, or finished or
ucts, including outside styrage of any of
the products of finished or
ucts, including outside styrage of any of
the products of the products
food wastes; metals; building materials,
cluding but not limited to immber roos
chuding but not limited to immber outside of
material, insulation, piping and concer
products; or erodible materials, includi
but net limited to sand, gravel, road as
to the products; or erodible materials, includi
but net limited to sand, gravel, road as
topsoil, compost, excavated soil, and we
chips

7. Outside manufacturing activity inclosing any of the following: processor fatorication; repair or maintenance vehicles products or equipment; mixin milling: refining; or sand blasting; coatin painting, or finishing of whickes, product

8. Landscape construction or maints nance, including any of the following: lan disturbing artivities as described in SM 22 301 130; fertilises or pesticide applies toon near public drainage control system and disposal of yard waste near a publi drainage control system or riparien confider.

"High-use" means any project planned f enerate or accommodate any of the follow

ing:

1. Expected average dully traffic (ADT opent equal to or greater than 100 vehicle per 1,000 square fact of gross bedding area in addition, the following is high-use the responsible party demonstrates to the astisfaction of the Director of DCLL to the satisfaction of the Director of STU that the project will generate less than 100 vehicles per 1,000 square feet of gross building area uncovered parking lot accessory to any uncovered parking lot accessory to any supermarket, shopping center, discount store, more theater, athletic dul, or bank store, more than a store or transfer in except of the project of the store of th

Petroleum storage or transfer in ex-cess of 1,500 gallons per year, not including delivered heating oil.

3. Storage, or maintenance of a fleet of 25 or more diesel vehicles that are over 10 tons net weight (including, but not limited to, trudts, inness, frams, heavy equipment).

4. Road intersections with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 or more on any intersecting roadway, excluding pro-ners are proposing primarily pedestrian or acts proposing primarily pedestrian or acts proposing primarily pedestrian or acts.

SECTION 16 Section 22.801.100 of the Seattle Municipal Code, adopted by Ordi-nance (16425, is summided as follows:

22.801.100 °L"

"High discharge" means the discharges defined by Section 22.802.012.

"Impervious surface" means any surface exposed to ranawater from which most water runs off including but not limited to ((paved streets)) paving ((graveled or paved streets such as driveways nerb