

Issuance Date: January 17, 2007
Effective Date: February 16, 2007
Expiration Date: February 15, 2012

PHASE I MUNICIPAL STORMWATER PERMIT

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit
for discharges from
Large and Medium Municipal Separate Storm Sewer Systems

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
OLYMPIA, WASHINGTON 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.



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Water Quality Program
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SPECIAL CONDITIONS

Notice: If Legislation related to this permit is passed into law, Ecology will, as necessary, modify, revoke and re-issue, or terminate this permit to carry out Legislative requirements. Any such modification will be in accordance with General Condition G14 *General Permit Modification and Revocation*, and in accordance with the provisions of WAC 173-226-230.

S1. PERMIT COVERAGE AND PERMITTEES

A. Geographic Area of Permit Coverage

This permit covers *discharges* from Large and Medium *Municipal Separate Storm Sewer Systems* (MS4s) as established at Title 40 *CFR* 122.26, except for *municipal separate storm sewers* (MS3s) owned or operated by the Washington State Department of Transportation. Large and medium MS4s include all MS3s located within cities or counties required to have permit coverage.

For *Secondary Permittees* required to obtain coverage under this permit, the minimum geographic area of coverage includes the portion of the MS4 which is located within the unincorporated areas of Clark, King, Snohomish, and Pierce Counties and the incorporated areas of the cities of Seattle and Tacoma. Ecology may establish additional geographic areas of coverage specific to an individual Secondary permittee.

B. The following Cities and Counties are covered under this permit as Permittees:

1. The City of Tacoma and the City of Seattle.
2. Clark, King, Pierce, and Snohomish Counties.

C. King County is covered as a *Co-Permittee* with the City of Seattle for discharges from outfalls King County owns or operates within the City of Seattle.

D. Upon application and coverage in accordance with Special Condition S1.F., the following entities are covered under this permit as *Secondary Permittees*:

1. Port of Seattle, excluding Seattle-Tacoma International Airport.
2. Port of Tacoma.
3. Active drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S1.B. above, which own or operate municipal separate storm sewers serving non-agricultural land uses.
4. Other owners or operators of municipal separate storm sewers located in the Cities or unincorporated portions of the Counties listed in S1.B above.

E. Unless otherwise noted, the term "Permittee" includes Permittee, Co-Permittee, and Secondary Permittee, as defined above in Special Conditions S1.B., S1.C. and S1.D.

F. Coverage for Secondary Permittees

1. To obtain coverage under this permit, each Secondary Permittee identified under Special Condition S1.D. shall either:

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- a. Submit a *Notice of Intent* (NOI) and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of a complete NOI.
 - b. Submit a co-application jointly with a permittee named in S1.B. and provide public notice of the application for coverage in accordance with WAC 173-226-130. The co-application shall consist of an amendment to the Phase I Part 1, and Part 2 permit applications. Ecology will notify applicants in writing of their status concerning their co-application.
2. Secondary Permittees required to get coverage under this permit, and the NPDES and State Waste Discharge Permit for discharges from Small Municipal Separate Storm Sewers in Western Washington and/or the NPDES and State Waste Discharge Permit for discharges from Small Municipal Separate Storm Sewers in Eastern Washington may obtain coverage by submitting a single NOI.
 3. NOIs and co-applications shall be submitted to:

Department of Ecology
Water Quality Program
Municipal Stormwater Permit Program
P.O. Box 47696
Olympia, WA 98504-7696
- G. All MS4s and MS3s owned or operated by Permittees named in S1.B. and located in another city or county area requiring coverage under this permit or either the *Western Washington Phase II Municipal Stormwater Permit* or the *Eastern Washington Phase II Municipal Stormwater Permit* are also covered under this permit.

S2. AUTHORIZED DISCHARGES

- A. This permit authorizes the discharge of stormwater to surface waters and to ground *waters of the state* from municipal separate storm sewers owned or operated by each Permittee covered under this permit in the geographic area covered by this permit pursuant to S1.A., subject to the following limitations:
 1. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not covered under this permit.
 2. Discharges to ground waters not subject to regulation under the federal *Clean Water Act* are covered in this permit only under state authorities, Chapter 90.48 RCW, the Water Pollution Control Act.
- B. This permit authorizes discharges of non-stormwater flows to surface waters and ground waters of the state from municipal separate storm sewers owned or operated by each Permittee covered under this permit, in the geographic area covered pursuant to S1.A, only under the following conditions:

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1. The discharge is authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit; or
 2. The discharge is from emergency fire fighting activities; or
 3. The discharge from another illicit or non-stormwater discharge that is managed by the Permittee as provided in Special Condition S5.C.8., S6.D.3., or S6.E.3.
 4. These discharges are also subject to the limitations in S2.A.1. and S2.A.2. above.
- C. This permit does not relieve entities that cause illicit discharges, including spills of oil or hazardous substances, from responsibilities and liabilities under state and federal laws and regulations pertaining to those discharges.
- D. Discharges from municipal separate storm sewers constructed after the effective date of this permit shall receive all applicable state and local permits and use authorizations, including compliance with Chapter 43.21C RCW (the State Environmental Policy Act).
- E. This permit does not authorize discharges of stormwater to waters within Indian Reservations except where authority has been specifically delegated to Ecology by the U.S. Environmental Protection Agency. The exclusion of such discharges from this permit does not waive any rights the State may have with respect to the regulation of the discharges.

S3. RESPONSIBILITIES OF PERMITTEES

- A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for complying with the terms of this permit for the municipal separate storm sewers it owns or operates.
1. Each Permittee, as listed in S1.B., is required to comply with all conditions of this permit, except for S6. *Stormwater Management Program for Co-Permittees and Secondary Permittees*.
 2. King County, as a Co-Permittee, is required to comply with all conditions of this permit except for S6.D. and S6.E.
 3. The Port of Tacoma and the Port of Seattle, are required to comply with all conditions of this permit except for S5. *Stormwater Management Program* and conditions S6.D. and S6.F.
 4. All other Secondary Permittees, except for the Port of Tacoma and the Port of Seattle are required to comply with all conditions of this permit except for S5. *Stormwater Management Program* and conditions S6.E., S6.F., and S8.C. through S8.H.
- B. Permittees may rely on another *entity* to satisfy one or more of the requirements of this permit. Permittees that are relying on another entity to satisfy one or more of their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. Where permit responsibilities are shared they shall be documented as follows:

1. Permittees and Co-Permittees that are continuing coverage under this permit shall submit a statement that describes the permit requirements that will be implemented by other entities. The statement must be signed by all participating entities. There is no deadline for submitting such a statement, provided that this does not alter implementation deadlines. Permittees and Co-Permittees may amend their statement during the term of the permit to establish, terminate, or amend their shared responsibilities statement, and submit the amended statements to Ecology.
 2. Secondary Permittees shall submit an NOI that describes which requirements they will implement and identify the entities that will implement the other permit requirements in the area served by the Secondary Permittee's MS4. A statement confirming the shared responsibilities, signed by all participating entities, shall accompany the NOI. Secondary Permittees may amend their NOI, during the term of the permit, to establish, terminate, or amend shared responsibility arrangements, provided this does not alter implementation deadlines.
- C. Unless otherwise noted, all appendices to this permit are incorporated by this reference as if set forth fully within this permit.

S4. COMPLIANCE WITH STANDARDS

- A. In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such violations is defined in section S4.F., below.
- B. This permit does not authorize a violation of Washington State surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), or human health-based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22, 1992, pages 60848-60923). The required response to such violations is defined in section S4.F, below.
- C. The Permittee shall reduce the discharge of pollutants to the *maximum extent practicable* (MEP).
- D. The Permittee shall use all known, available, and reasonable methods of prevention, control and treatment (AKART) to prevent and control pollution of waters of the State of Washington.
- E. In order to meet the goals of the Clean Water Act, and comply with S4.A., S4.B., S4.C. and S4.D., each Permittee shall comply with all of the applicable requirements of this permit as defined in S3 Responsibilities of Permittees.
- F. Required response to violations of Water Quality Standards pursuant to S4.A. and/or S4.B:
 1. Pursuant to G20 *Non-Compliance Notification*, the Permittee shall notify Ecology in writing within 30 days of becoming aware that a discharge from the municipal separate storm sewer is causing or contributing to a violation of Water Quality

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Standards. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.

2. In the event that Ecology determines that a discharge from a municipal separate storm sewer is causing or contributing to a violation of Water Quality Standards in a receiving water, and the violation is not already being addressed by a Total Maximum Daily Load or other water quality cleanup plan, Ecology will notify the Permittee in writing that:
 - a. Within 60 days of receiving the notification, or by an alternative date established by Ecology, the Permittee shall review their Stormwater Management Program and submit a report to Ecology. The report shall include:
 - i. A description of the operational and/or structural BMPs that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards, including a qualitative assessment of the effectiveness of each BMP.
 - ii. A description of additional operational and/or structural BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the violation of Water Quality Standards.
 - iii. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.
 - b. Ecology will, in writing, either approve the additional BMPs and implementation schedule or require the Permittee to modify the report. If modifications are required, the Permittee shall submit a revised report to Ecology.
 - c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval.
 - d. The Permittee shall include with each subsequent annual report a summary of the status of implementation, and any information from assessment and evaluation procedures collected during the reporting period.
 - e. Provided the Permittee is implementing the approved BMPs, pursuant to the approved schedule, the Permittee is not required to further modify the BMPs or implementation schedule unless directed to do so by Ecology.
- G. Ecology may modify or revoke and reissue this General Permit in accordance with G14 *General Permit Modification and Revocation* if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this permit, that are necessary to:
 1. Reduce the discharge of pollutants to the MEP;
 2. Comply with the state AKART requirements; or
 3. Control the discharge of toxicants to waters of the State of Washington.

- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.
- Stormwater treatment and flow control BMPs.
- ii. Each Permittee shall implement or participate in an effort to measure understanding and adoption of the targeted behaviors by the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.
- iii. Each Permittee shall track and maintain records of public education activities.

S6. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES

- A. This section applies to all Secondary Permittees, whether coverage under this Permit is obtained individually, or as a Co-Permittee with a City and/or Town and/or County and/or another Secondary Permittee.
1. To the extent allowable under state, federal and local law, all components are mandatory for each Secondary Permittee covered under this permit, whether covered as an individual Permittee or as a Co-Permittee.
 2. Each Secondary Permittee shall develop and implement a stormwater management program (SWMP). The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the maximum extent practicable and protect water quality.
 3. Unless an alternate implementation schedule is established by Ecology as a condition of permit coverage, the SWMP shall be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented no later than 180 days before the expiration date of this Permit. Notwithstanding the schedules in this Permit, Secondary Permittees that are already implementing some or all of the required SWMP components shall continue implementation of those components.
 4. Secondary Permittees may implement parts of their SWMP in accordance with the schedule for cities, towns and counties in *S5 Stormwater Management Program*, provided they have signed a memorandum of understanding or other agreement to jointly implement the activity or activities with one or more jurisdictions listed in S1.B., and submitted a copy of the agreement to Ecology.
 5. Secondary Permittees and Co-Permittees shall prepare written documentation of the SWMP. The SWMP documentation shall be organized according to the program components and shall be updated at least annually for submittal with the Permittee's annual reports to Ecology.
 - a. For all Secondary Permittees except the Port of Seattle and the Port of Tacoma, The SWMP documentation shall include:

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- i. A description of each of the program components included in S6.D.1. through S6.D.6., and
 - ii. Any additional actions necessary to meet the requirements of applicable TMDLs pursuant to *S7 Compliance with Total Maximum Daily Load Requirements*.
 - b. For the Port of Tacoma and the Port of Seattle the SWMP documentation shall include:
 - i. A description of each of the program components included in S6.E.1. through S6.E.7., and
 - ii. Any additional actions necessary to meet the requirements of applicable TMDLs pursuant to *S7 Compliance with Total Maximum Daily Load Requirements*.
6. Conditions S6.A., S6.B., and S6.C. are applicable to all Co-Permittees and Secondary Permittees covered under this permit. In addition:
 - a. S6.D. is applicable to all Secondary Permittees except the Port of Seattle and the Port of Tacoma. S6.D. does not apply to Permittees listed in S1.B., or S1.C.
 - b. S6.E. is applicable only to the Port of Seattle and the Port of Tacoma.
 - c. S6.F. is applicable only to King County as a Co-Permittee with the City of Seattle for MS4s owned by King County but located within the City of Seattle.

B. Coordination

The SWMP shall include mechanisms to encourage coordinated stormwater-related policies, programs and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall also include coordination among departments of the Secondary Permittee to ensure compliance with the terms of this permit.

C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee shall be able to demonstrate that it can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from municipal separate storm sewers owned or operated by the Secondary Permittee.

This legal authority may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar instruments.

D. Stormwater Management Program for Secondary Permittees

The term “Secondary Permittees” means drainage, diking, flood control, or diking and drainage districts, Ports (other than the Ports of Seattle and Tacoma, (see S6.E.)), public colleges and universities, and any other owners or operators of municipal separate storm sewers located within the municipalities that are listed as Permittees in S1.B. The Stormwater Management Program (SWMP) for Secondary Permittees shall include the following components:

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- iv. External building maintenance. The O&M Plan shall address, building exterior cleaning and maintenance including cleaning, washing, painting and other maintenance activities.
 - v. Parks and open space. The O&M Plan shall address, but is not limited to: proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash management.
 - vi. Material storage areas, heavy equipment storage areas, and maintenance areas. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities owned or operated by the Secondary Permittee and not covered under the General NPDES Permit for Stormwater Discharges Associated with *Industrial Activities* or under another NPDES permit that covers stormwater discharges associated with the activity.
 - vii. Other facilities that would reasonably be expected to discharge contaminated runoff. The O&M Plan shall address proper stormwater pollution prevention practices for each facility.
- b. From the date of coverage under this Permit, Secondary Permittees shall also have permit coverage for all facilities owned or operated by the Secondary Permittee that are required to be covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities.
 - c. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.D.6.a.i. through vii above.
 - d. Train all employees whose construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:
 - i. The importance of protecting water quality,
 - ii. The requirements of this Permit,
 - iii. Operation and maintenance requirements,
 - iv. Inspection procedures,
 - v. Ways to perform their job activities to prevent or minimize impacts to water quality, and
 - vi. Procedures for reporting water quality concerns, including potential illicit discharges.

E. Stormwater Management Program for the Port of Seattle and Port of Tacoma

The Stormwater Management Program (SWMP) for the Port of Seattle and the Port of Tacoma shall be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented no later than three years from the effective date of coverage.

Notwithstanding the schedules for implementation of SWMP components contained in this permit, Permittees that are already implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP.

The SWMP for the Port of Seattle and the Port of Tacoma shall include the following components:

1. Education Program

The SWMP shall include an education program aimed at tenants and Port employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Minimum Performance Measure

- a. No later than 18 months after receiving coverage under this permit, the Permittee shall make educational materials available to tenants and Port employees whose job duties could impact stormwater.

2. Public Involvement and Participation

No later than 180 days before the expiration date of this Permit, each Port shall:

- a. Publish a public notice in the local newspaper and solicit public review of its SWMP.
- b. Make the latest updated version of the SWMP available to the public. The SWMP shall be posted on the Port's website.

3. Illicit Discharge Detection and Elimination

The SWMP shall include a program to detect, remove and prevent illicit connections and illicit discharges, including spills, into the municipal separate storm sewers owned or operated by the Port.

Minimum Performance Measures

- a. From the date of permit coverage, comply with all ordinances, rules, and regulations of the local jurisdiction(s) in which the Port district's MS3 is located that govern non-stormwater discharges.
- b. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping no later than one year from the date of permit coverage. Identify possible enforcement mechanisms no later than one year from the date of permit coverage and, no later than eighteen months from the date of permit coverage, develop and implement an enforcement plan using these mechanisms to ensure compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined below; and spilling, dumping, or otherwise improperly disposing of hazardous materials, pet waste, and litter.
 - i. Non-stormwater discharges covered by another NPDES permit and discharges from emergency fire fighting activities are allowed in the MS4 in accordance with *S2 Authorized Discharges*.

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- ii. The policies do not need to prohibit the following categories of non-stormwater discharges:
 - Diverted stream flows,
 - Rising ground waters,
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
 - Uncontaminated pumped ground water,
 - Foundation drains,
 - Air conditioning condensation,
 - Irrigation water from agricultural sources that is commingled with urban stormwater,
 - Springs,
 - Water from crawl space pumps,
 - Footing drains, and
 - Flows from riparian habitats and wetlands.
- iii. The policies shall prohibit the following categories of non-stormwater discharges unless the stated conditions are met:
 - Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.
 - **Discharges from lawn watering and other irrigation runoff.** These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.
 - Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
 - Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Ports of Seattle and Tacoma shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Port and/or the local jurisdiction. To avoid washing pollutants into the MS4, the amount of street wash and dust control water used shall be minimized. At active construction sites, street sweeping shall be performed prior to washing the street.
 - Other non-stormwater discharges shall be in compliance with the requirements of a stormwater pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

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- iv. The SWMP shall, at a minimum, address each category in iii above in accordance with the conditions stated therein.
- v. The SWMP shall further address any category of discharges in ii or iii above if the discharge is identified as a significant source of pollutants to waters of the State.
- c. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned properties. The following information will be gathered and retained:
 - i. Mapping of known municipal separate storm sewer outfalls, and maps depicting land use for property owned by the Port, and all other properties served by municipal separate storm sewers known to and owned or operated by the Port. The mapping shall be completed within 2 years of receiving coverage under this permit.
 - ii. Mapping of tributary conveyances, and the associated drainage areas of municipal separate storm sewer outfalls owned or operated by the Port, with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for nonpipe systems. The mapping shall be completed within 2 years of receiving coverage under this permit.
 - iii. To the extent consistent with national security laws and directives, each Port shall make available to Ecology upon request, GIS data layers generated by the Port depicting outfall locations, land use, tributary conveyances and associated drainage areas of outfalls owned or operated by the Port. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at Ecology's website.
 - iv. No later than 24 months after receiving coverage under this permit, develop and implement a program to document operation and maintenance records for stormwater facilities covered under this permit. The information shall be available for inspection by Ecology.
 - v. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the City or County in which the Port is located.
- d. Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than 24 months from the date of permit coverage. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.
- e. 180 days before the expiration date of this Permit, develop and implement a spill response plan that includes coordination with a qualified spill responder.

- f. Provide staff training or coordinate with existing training efforts to educate relevant staff on proper best management practices for preventing spills and illicit discharges.

4. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff from construction activities under the functional control of the Permittee.

Minimum performance measures:

- a. Comply with all relevant, rules, and regulations of the local jurisdiction(s) in which the Port is located that govern construction phase stormwater pollution prevention measures. Within one year of the effective date of coverage, and to the extent allowed by local ordinances, rules, and regulations, comply with the applicable minimum technical requirements for new development and redevelopment contained in Appendix 1.
- b. When applicable, seek and obtain coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities.
- c. Coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into interconnected MS3s, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).
- d. Provide training or coordinate with existing training efforts to educate port staff responsible for implementing construction stormwater erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.
- e. Coordinate as requested with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the control of the Port during the active grading and/or construction period.

5. Post-Construction Stormwater Management for New Development and Redevelopment

The SWMP shall include a program to address post-construction stormwater runoff from new development and redevelopment projects. The program shall establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Port is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS3. Within one year of the effective date of permit coverage, and to the extent allowed by local ordinances, rules, and regulations, comply with the applicable the minimum technical requirements for new development and redevelopment contained in Appendix 1.
- b. Coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into interconnected MS3s, to assist the local

jurisdiction in achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

6. Operation and Maintenance Program

The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control facilities, and catch basins to ensure that BMPs continue to function properly.

Minimum Performance Measures:

- a. Each Port shall prepare an operation and maintenance manual for all stormwater BMPs that are under the functional control of the Permittee and which discharge stormwater to its MS3, or to an interconnected MS3.
 - (i) The O&M manual shall be completed no later than 2 years after receiving coverage under this permit. A copy of the manual shall be retained in the appropriate Port department.
 - (ii) The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington. For existing stormwater facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.
 - (iii) The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance is not a permit violation. Maintenance actions shall be performed within the time frames specified in S6.E.6.b.ii.
- b. The Port will manage maintenance activities to inspect all stormwater BMPs listed in the O&M manual annually, and take appropriate maintenance action in accordance with the O&M manual.
 - (i) The Permittee may change the inspection frequency to less than annually, provided the maintenance standards are still met. Reducing the annual inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.
 - (ii) Unless there are circumstances beyond the Permittees control, when an inspection identifies an exceedence of the maintenance standard, maintenance shall be performed:
 - Within 1 year for wet pool facilities and retention/detention ponds.
 - Within 6 months for typical maintenance.

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- Within 9 months for maintenance requiring re-vegetation, and
- Within 2 years for maintenance that requires capital construction of less than \$25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedence of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

- c. The Port shall provide appropriate training for Port maintenance staff.
- d. The Port will maintain records of inspections and maintenance activities.

7. Source Control in existing Developed Areas

The SWMP shall include the development and implementation of one or more Stormwater Pollution Prevention Plans (SWPPPs). A SWPPP is a documented plan to identify and implement measures to prevent and control the contamination of discharges of stormwater to surface or ground water. SWPPP(s) shall be prepared and implemented for all Port-owned lands that are not covered by either a General Permit or an individual NPDES permit issued by Ecology that covers stormwater discharges.

Minimum Performance Measures

- a. SWPPP(s) shall be developed within 24 months of receiving coverage under this permit.
- b. The SWPPP(s) shall include a facility assessment including a site plan, identification of pollutant sources, and description of the drainage system.
- c. The SWPPP(s) shall include a description of the BMPs used or proposed for use by the Permittee. Stormwater BMPs shall be selected from the 2005 *Stormwater Management Manual for Western Washington* (or an equivalent Manual approved by Ecology). Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP(s).
- d. The Port shall maintain a list of sites covered by the SWPPP(s) required under this permit. At least 15% of the listed sites shall be inspected annually, and 80% of the total number of listed properties shall be inspected by 180 days before the expiration date of the permit.
- e. The SWPPP(s) shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides and fertilizer.
- f. The SWPPP(s) shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills and improper disposal. Immediately upon becoming aware of a spill into the drainage system owned or operated by the Port, the Port shall notify the City or County it is located in, and notify Ecology.

- g. The SWPPP(s) shall include a component related to inspection and maintenance of stormwater facilities and catch basins that is consistent with the Port's Operation and Maintenance Program, as specified in S6.E.6. above.
- 8. Monitoring Program. Monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.

F. Stormwater Management Program for King County as a Co-Permittee

King County, as a Co-Permittee with the City of Seattle for the discharges from outfalls King County owns or operates in the City, shall participate in the City of Seattle's Stormwater Management Program in accordance with the Joint Stormwater Management Program element of the Memorandum of Agreement between the City and County dated September 25, 1995. The apportionment of responsibilities for stormwater management within the City shall be governed solely by the MOA or its amendment, provided the City's stormwater management program, including King County participation, shall fully comply with Section S5 of this permit. Any amendments to the MOA shall be approved by Ecology before becoming effective.

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the date permit coverage is granted. All Permittees shall be in compliance with the requirements of applicable TMDLs.

- A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology.

Where monitoring is required in Appendix 2, the permittee shall conduct the monitoring according to a Quality Assurance Project Plan (QAPP) approved by Ecology.

- B. For applicable TMDLs not listed in Appendix 2, compliance with this permit shall constitute compliance with those TMDLs.
- C. For TMDLs that are approved by EPA after this permit is issued, Ecology may establish TMDL-related permit requirements through future permit modification if Ecology determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and shall be implemented during the term of this permit or when this permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation.

S8. MONITORING

- A. Except for the Port of Seattle and the Port of Tacoma, Secondary Permittees are not required to conduct water sampling or other testing during the effective term of this permit, with the following exceptions:
 - 1. Any water quality monitoring required for compliance with TMDLs, pursuant to section *S7 Compliance with Total Maximum Daily Load Requirements* and Appendix 2 of this permit; and
 - 2. Any sampling or testing required for characterizing illicit discharges pursuant to section *S6.D.3.* of this permit.
- B. Permittees shall provide the following information in each annual report:
 - 1. A description of any stormwater monitoring or studies conducted by the Permittee during the reporting period. If stormwater monitoring was conducted on behalf of the Permittee, or if studies or investigations conducted by other entities were reported to the Permittee, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) during which the information was received.
 - 2. An assessment of the appropriateness of the BMPs identified by the Permittee for each component of the SWMP; and any changes made, or anticipated to be made, to the BMPs that were previously selected to implement the SWMP, and why.
 - 3. Information required pursuant to *S8.C.2.* below.
- C. The Permittees listed in *S1.B.*, and the Port of Seattle, and the Port of Tacoma shall develop and implement a long-term monitoring program.
 - 1. The monitoring program shall include three components
 - a. Stormwater monitoring which is intended to characterize stormwater runoff quantity and quality at a limited number of locations in a manner that allows analysis of loadings and changes in conditions over time and generalization across the Permittees' jurisdiction. Stormwater monitoring requirements are outlined in *S8.D.*
 - b. Targeted stormwater management program effectiveness monitoring which is intended to improve stormwater management efforts by evaluating at least two stormwater management practices that significantly affect the success of or confidence in stormwater controls. Stormwater management program effectiveness monitoring requirements are outlined in *S8.E.*
 - c. BMP evaluation monitoring is intended to evaluate the effectiveness and operation and maintenance requirements of stormwater treatment and hydrologic management BMPs. BMP evaluation monitoring requirements are outlined in *S8.F.*
 - 2. Each of the components of the monitoring program shall include a Quality Assurance Project Plan (QAPP). QAPPs shall be prepared in accordance with Ecology's QAPP guidelines, available from Ecology's website. The monitoring

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program shall be developed by qualified staff or contractors with experience in applying Ecology's or EPA's QAPP Guidelines.

All QAPPs shall be submitted to Ecology for review, in accordance with the deadlines in S8.G. below. QAPPs for Stormwater Monitoring (S8.D.), and Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring (S8.F.) shall be reviewed and approved by Ecology prior to monitoring.

D. Stormwater Monitoring

1. Stormwater monitoring site selection

- a. Stormwater monitoring sites shall have the tributary conveyance system and drainage area mapped, and be suitable for permanent installation and operation of flow-weighted composite sampling equipment. Permittees shall document how sites are selected and the basin size based on comparison of the times of concentration with rainfall durations for typical seasonal storms.

Each site must represent a discernible type of land use, but not a single industrial or commercial complex. Ideally, to represent a particular land use, no less than 80% of the area served by the outfall or conveyance will be classified as having that land use. Permittees may move upstream in the conveyance system to achieve the desired land use.

- b. Counties shall monitor one outfall or conveyance representing each of the following land uses: Commercial, Low density residential, and High density residential.
- c. Cities shall monitor one outfall or conveyance representing each of the following land uses: Commercial, High density residential, and Industrial.
- d. The Ports of Seattle and Tacoma shall each monitor one outfall or conveyance.

2. Stormwater monitoring frequency and type of sampling

- a. Each stormwater monitoring site shall be sampled according to the following frequency:

Seventy-five percent of the qualifying storms, up to a maximum of 15 storm events per year, shall be sampled. Sampling must be distributed throughout the year, approximately reflecting the distribution of rainfall between the wet and dry seasons (75-85% of the samples collected during the wet season).

- i. The wet season is from October 1, through April 30. A qualifying wet season storm event is defined as follows:
 - Rainfall volume: 0.10" minimum, no fixed maximum
 - Rainfall duration: No fixed minimum or maximum
 - Antecedent dry period: Less than 0.02" rain in the previous 24 hours
 - Inter-event dry period: 6 hours
- ii. The dry season is from May 1 through September 30. A qualifying dry season storm event is defined as follows:

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- Rainfall volume: 0.10” minimum, no fixed maximum
- Rainfall duration: No fixed minimum or maximum
- Antecedent dry period: less than 0.02” rain in the previous 72 hours
- Inter-event dry period: 6 hours

- b. Storm events shall be sampled using flow-weighted composite storm sampling. Automatic samplers shall be programmed to begin sampling as early in the runoff event as practical and to continue sampling past the longest estimated time of concentration for the tributary area.

For storm events lasting less than 24 hours, samples shall be collected for at least seventy-five percent (75%) of the storm event hydrograph. For storm events lasting longer than 24 hours, samples shall be collected for at least seventy-five percent 75% of the hydrograph of the first 24 hours of the storm.

Each composite sample must consist of at least 10 aliquots. Composite samples with 7 to 9 aliquots are acceptable if they meet the other sampling criteria and help achieve a representative balance of wet season/dry season events and storm sizes.

Continuous flow recording of all storm events (not just sampled storm events) is necessary for at least one year to establish a baseline rainfall/runoff relationship.

Precipitation and flow data shall be reported, and samples shall be analyzed and results reported for the constituents/parameters listed below. Chemicals below detection limits after two years of data analysis may be dropped from the analysis. Refer to Appendix 9 for a listing of acceptable laboratory analysis methods and target reporting limits.

- i. Precipitation event data including antecedent dry period and rainfall distribution throughout the event, flow and hydrograph data including sampled and total runoff time periods and volumes
- ii. Conventional Parameters Including: TSS, turbidity, Conductivity, Chloride, Biochemical oxygen demand (BOD₅), Hardness, and Methylene Blue Activating Substances (MBAS).
- iii. Bacteria: Fecal Coliform.
- iv. Nutrients: Total phosphorus, Orthophosphate, Total kjeldahl nitrogen, and Nitrate – nitrite.
- v. Metals, including, at a minimum: total and dissolved copper, zinc, cadmium, and lead; and mercury sampling in commercial and industrial land use areas.
- vi. Organics: PAHs; phthalates.
- vii. Pesticides including:
 - Herbicides: 2,4-D, MCP, Triclopyr,
 - Insecticides: Diazinon, Malathion, Chlorpyrifos, Dichlobenil, Prometon
 - Fungicides: Pentachlorophenol

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- c. If the volume of stormwater sample collected from a qualifying storm is insufficient to allow analysis for all parameters listed S8.D.2.b. above, the sample shall be analyzed for as many parameters as possible in the following priority order:
- i. All land use types: 1. TSS; 2. Conductivity; 3. MBAS; 4. Metals and hardness;
 - ii. Industrial/Commercial: 5. PAH's and phthalates; 6. Pesticides; 7. Nutrients 8. BOD₅; and 9. Chlorides
 - iii. Residential: 5. Nutrients; 6. Pesticides; 7. PAH's and phthalates; 8. BOD₅; and 9. Chlorides

If insufficient sample exists to run the next highest priority pollutant, that analysis should be bypassed and analyses run on lower priority pollutants in accordance with the remaining priority order to the extent possible.

- d. The seasonal first-flush shall be tested for toxicity. One composite sample from each monitoring site shall be tested annually. A seasonal first-flush storm event is an event in August or September, with at least a one-week antecedent dry period. An EC₅₀ and, if possible, an EC₂₅ shall be reported for each test.
- i. Sampling and Reporting Requirements for seasonal first-flush toxicity tests
 - The Permittee shall submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee shall send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
 - The Permittee shall conduct the toxicity test using untreated stormwater collected in accordance with section S8.D.2.b. above. The Permittee must attempt to collect sufficient sample for the toxicity test and the chemical analyses specified in S8.D.2. The Permittee must cool the samples to 0 – 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
 - The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing as specified in the most recent version of Department of Ecology publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
 - Testing procedures should follow: Environment Canada, Pacific Environmental Science Center, Environmental Toxicology Section, SOP ID: RBTELS11.SOP, 1999. The test procedure may take advantage of the smaller volume modification described in: Canaria, E.C., Elphick,

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J.R. and Bailey, H.C. 1999. A simplified procedure for conducting small scale short-term embryo toxicity tests with salmonids is found in *Environ. Toxicol.* 14:301-307.

- Toxicity tests must meet quality assurance criteria in the most recent versions of the Environment Canada manual EPS 1/RM/28 and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing must be repeated with freshly collected stormwater.
 - The Permittee may sample receiving water at the same time as the stormwater and instruct the lab to measure the hardness of both and increase the hardness of the stormwater sample to match the hardness of the receiving water sample prior to beginning the toxicity test. Otherwise, the Permittee must conduct whole effluent toxicity tests on an unmodified sample of stormwater.
 - Control water and dilution water must be a moderately hard reconstituted laboratory water or pristine natural water of sufficient quality for good control performance.
 - The EC₂₅ must be calculated using probit analysis. If probit analysis is not appropriate for the data, then the EC₅₀ must be calculated by the trimmed Spearman-Kärber procedure. Abbott's correction may be applied to the data before deriving these point estimations. A minimum of five (5) concentrations and a control must be used in the testing
- ii. Response to Toxicity. If the EC₂₅ from any valid test is 100% stormwater or less, the Permittee must implement a Toxicity Identification/Reduction Evaluation (TI/RE) plan and submit a report to Ecology as part of the Permittee's annual report. If a valid EC₂₅ cannot be calculated for any test, then the EC₅₀ must be calculated and used instead of the EC₂₅ to determine if a TI/RE plan is required in accordance with this paragraph. The TI/RE plan must be based on the results of the chemical analyses in accordance with S8.D.2.b for the same volume of water, and a Gas Chromatograph/Mass Spectrometer analysis of the yolks from the highest test concentration (usually 100% sample). The report must explain how the Permittee's stormwater management actions are expected to reduce stormwater toxicity.
- e. Each storm event shall be sampled using grab samples for the following constituents/parameters:
- i. Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and NWTPH-Dx. (sample must be collected early in the storm event and skimmed from the surface), and
 - ii. Fecal coliform bacteria.

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- f. Annual sediment monitoring. Sediments samples shall be collected at each stormwater monitoring site, or in the vicinity of each stormwater monitoring site. Use of in-line sediment traps or similar collection system is preferred. Sampling of receiving water sediment deposits is an alternative where approved by Ecology.
 - i. Sediment samples shall be analyzed for: total solids, grain size, total organic carbon, copper, zinc, cadmium, lead, and mercury (mercury not necessary for residential land use sites), PAHs, phthalates, phenolics, PCBs (not necessary for residential sites), and pesticides.
 - ii. Parameters that are below detection limits after two years of data may be dropped from the analysis. A minimum of one independent sample per year shall be collected.
 - iii. If the volume of sediment sample is insufficient to analyze for all of the parameters listed above, the sample shall be analyzed for as many parameters as possible in the following priority order:
 - All land use types: 1) Grain size; 2) Total organic carbon; 3) Hardness and metals;
 - Industrial/Commercial: 4) PAH's and Phthalates; 5) Phenolics; 6) PCB's; and 7) Pesticides.
 - Residential: 4) Pesticides; 5) PAH's and Phthalates; and 6) Phenolics
 - g. For each stormwater monitoring site calculate the Event Mean Concentrations (EMCs), total annual pollutant load and the seasonal pollutant load for the wet and dry seasons. The loadings shall be expressed as total pounds and as pounds per acre, and must take into account potential pollutant load from base flow.
- E. Targeted Stormwater Management Program Effectiveness Monitoring
1. Each Permittee shall conduct monitoring designed to determine the effectiveness of the Permittee's SWMP at controlling a stormwater related problem directly addressable by targeted actions in the SWMP. The stormwater management program effectiveness monitoring component shall be designed to answer one of each type of the following questions:
 - a. The effectiveness of a targeted action (or narrow suite of actions), and
 - b. The effectiveness of achieving a targeted environmental outcome.
 2. The monitoring shall at a minimum include stormwater, sediment or receiving water monitoring of physical, chemical and/or biological characteristics. The monitoring may also include data collection and analysis of other programmatic measures of effectiveness such as surveys and polls. Monitoring to identify sub-basin-specific water quality problems and characterize discharges for planning purposes may also be included.
 3. For each of the two questions selected for monitoring, Permittees shall develop a monitoring program containing the following elements:

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- a. Description of the targeted action/targeted environmental outcome and a explanation of why it is significant to the Permittee, and if the problem is significant to other stormwater managers;
 - b. Specific hypotheses about the targeted action/targeted environmental outcome that will be tested by the monitoring problem;
 - c. Specific parameters of attributes to be measured; and
 - d. Expected modifications to management actions depending on the outcome of hypotheses testing.
- F. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring

1. Each Permittee listed in S1.B. and the Ports of Seattle and Tacoma shall conduct full scale field monitoring to evaluate the effectiveness and operation and maintenance requirements of stormwater treatment and hydrologic management BMPs applied in their jurisdiction. A QAPP is required for each BMP and flow reduction strategy being monitored.
2. Each Permittee listed in S1.B. shall monitor at least two treatment BMPs, at no less than two sites per BMP. The Port of Seattle and the Port of Tacoma shall each monitor at least one treatment BMP, at no less than two sites.

To ensure a range of BMP types are monitored, Ecology will restrict the total number of monitoring sites for a BMP category to no more than four. BMPs shall be selected from the following list:

- a. Basic Treatment Category: Biofiltration swale, Filter strip, Basic wetpond, Treatment wetland, and Sand filter.
 - b. Metals/Phosphorus Treatment Category: Amended sand filter, Two facility treatment train, Compost amended filter strips, Bioretention, and Large wetpond.
 - c. Oil Control Category: Linear sand filter, and Catch basin insert.
3. BMPs shall be designed in accordance with the 2005 *Stormwater Management Manual for Western Washington* unless Ecology approves of an alternate design in the QAPP review. Permittees may also petition Ecology to monitor a BMP that is not on the above list.
 4. Permittees must use appropriate sections of Ecology's guidance for "Evaluation of Emerging Stormwater Treatment Technologies" (available on Ecology's website) for preparing, implementing, and reporting on the results of the BMP evaluation program.

The statistical goal is to determine mean effluent concentrations and mean percent removals for each BMP type with 90 - 95% confidence and 75 - 80% power.

Permittees must use USEPA publication number 821-B-02-001, "Urban Stormwater BMP Performance Monitoring," as additional guidance for preparing the BMP evaluation monitoring, and must collect information pertinent to fulfilling the

“National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.

5. The parameters to be monitored in whole water at each test site include:
 - a. For Basic, Enhanced, or Phosphorus treatment BMPs: Total suspended solids, Particle size distribution, pH, Total and ortho-phosphorus, Hardness, and Total and dissolved copper and zinc.
 - b. For Oil Control BMPs: Total suspended solids, Particle size distribution, pH, NWTPH-Dx and -Gx, and Oil sheen
6. Parameters to be monitored in accumulated sediment at each test site for Basic, Enhanced, Phosphorus treatment, or Oil Control BMPs include: Percent total solids, Grain size, Total volatile solids, NWTPH-Dx, Total phosphorous, and Total cadmium, copper, lead, and zinc.
7. Each Permittee listed in S1.B. shall monitor the effectiveness of one flow reduction strategy that is in use or planned for installation in their jurisdiction.

Monitoring of a flow reduction strategy shall include continuous rainfall and surface runoff monitoring. Flow reduction strategies shall be monitored through either a paired site study or against a predicted outcome.

G. Monitoring Program Development

Permittees may choose to develop one, two or all of the components of the monitoring program, conduct the monitoring, and report results through an integrated, long-term, water quality monitoring program in collaboration with other municipal stormwater Permittees; or they may independently develop one, two, or all of the components of the monitoring program, conduct the monitoring, and report results.

Collaborative monitoring programs may be developed by a third party (or parties) that are not a Permittee, provided that the Permittee complies with the provisions of Special Condition S3.B (relying on another entity to meet permit requirements).

The schedule for the development of monitoring programs is as follows:

1. Collaboratively developed monitoring programs.
 - a. Permittees that intend to meet all or part of the monitoring requirements through a collaborative process shall submit a statement to Ecology explaining their commitment to the collaborative process no later than 6 months after the effective date of this permit
 - b. The summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 1.5 years after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.
 - c. Approved or final QAPPs shall be completed no later than 2 years after the effective date of this permit, provided that this deadline will be extended by the number of days by which Ecology exceeds 90 days for QAPP review.

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- d. Full implementation of the monitoring program shall begin no later than 2.5 years after the effective date of this permit. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.
 - e. Final reports, including data and analysis for S8.F. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program that are completed during the permit term shall be submitted to Ecology no later than the fourth year annual report. The fourth year annual report shall also describe Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring programs that are still in progress at the end of the reporting period, and the expected date for submittal of the final reports.
2. Independently developed monitoring programs.
- a. A summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 1 year after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.
 - b. Approved or final QAPPs shall be completed no later than 1.5 years after the effective date of this permit, provided that this deadline shall be extended by the number of days by which Ecology exceeds 90 days for QAPP review.
 - c. Full implementation of the monitoring program shall begin no later than 2 years after the effective date of this permit.
 - d. Final reports, including data and analysis for S8.F. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program completed during the permit term shall be submitted to Ecology no later than the fourth year annual report. The fourth year annual report shall also describe Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring programs that are still in progress at the end of the reporting period, and the expected date for submittal of the final reports.

H. Monitoring Program Reporting Requirements

1. The stormwater monitoring report shall be submitted with the annual report each year, beginning in 2009 for independent monitoring, and 2010 for collaborative monitoring. Each report shall include all monitoring data collected during the preceding period from January 1 through December 31. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:
 - a. Stormwater Monitoring Reporting
 - i. A summary including the location, land use, drainage area size, and hydrology for each site,

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- ii. A comprehensive data and QA/QC report for each component of the monitoring program, with an explanation and discussion of the results of each monitoring project,
 - iii. The annual pollutant load for each site expressed in total pounds, and pounds/acre, and
 - iv. The wet and dry season pollutant loads, expressed in total pounds, and pounds/acre.
 - b. Stormwater Management Program Effectiveness Monitoring Reporting
 - i. A summary of the purpose, design, and methods of the monitoring program,
 - ii. The status of implementing the monitoring program,
 - iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
 - iv. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements or other trends in stormwater or receiving water quality, and
 - v. Recommended future actions based on the findings.
 - c. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring Reporting
 - i. A summary including the BMP type location, land use, drainage area size, and hydrology for each site.
 - ii. The status of implementing the monitoring program,
 - iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
 - iv. Performance data or flow reduction performance. Performance data for treatment BMPs shall be reported consistent with:
 - The guidelines in appropriate sections of Ecology’s guidance for “Evaluation of Emerging Stormwater Treatment Technologies”, and
 - USEPA publication number 821-B-02-00, “Urban Stormwater BMP Performance Monitoring,” including information pertinent to fulfilling the “National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.
2. If the Permittee monitors any pollutant more frequently at monitoring stations associated with the monitoring programs described in Section S8.D., S8.E., and S8.F., then the results of this monitoring shall be included in the report. If the Permittee conducts any other stormwater monitoring in addition to that required in the required monitoring program, then it must provide a description of the additional monitoring in the report.

S9. REPORTING REQUIREMENTS

- A. No later than March 31, of each year beginning in 2008, each Permittee shall submit an annual report. The reporting period for the first annual report will be from the effective date of this permit through December 31, 2007. The reporting period for all subsequent annual reports shall be the previous calendar year.
- B. Two printed copies and an electronic (PDF) copy of the annual report shall be submitted to Ecology. All submittals shall be delivered to:

Department of Ecology
Water Quality Program
Municipal Stormwater Permits
P.O. Box 47696
Olympia, WA 98504-7696

- C. Each Permittee is required to keep all records related to this permit and the SWMP for at least five years. Except as required as a condition of the annual reports, records need to be submitted to Ecology only upon request.
- D. Each Permittee shall make all records related to this permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent annual report to any individual or entity, upon request.
 - 1. A reasonable charge may be assessed by the Permittee for making photocopies of records.
 - 2. The Permittee may require reasonable advance notice of intent to review records related to this permit.
- E. The annual report for Permittees listed in S1.B. and S1.C.

Each annual report shall include the following:

- 1. A copy of the Permittee's current Stormwater Management Program as required by S5.A.1.
- 2. For each component of the SWMP the Permittee shall include the following:
 - a. Describe the current implementation status including whether the Permittee has met the required implementation deadlines. If permit deadlines are not met, Permittees shall report the reasons why the requirement was not met and how the requirements will be met in the future.
 - b. Compare program implementation results to the performance standards established in the permit.
 - c. A summary of the number and nature of inspections performed by the Permittee as required by S5.C.5., S5.C.7., and S5.C9.
 - d. A summary of the nature and number of official enforcement actions taken to enforce provisions of this permit.

The above information shall be submitted in a format approved by Ecology.

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3. A summary of any actions taken by the Permittee pursuant to S4.F.
 4. A summary of the status of any TMDL implementation requirements and any associated monitoring as required by S7.A.
 5. The Stormwater Monitoring Report required pursuant to S8.H.
 6. Any reporting requirements associated with S8.B. not included elsewhere in the annual report.
 7. If the Permittee is relying on another governmental entity to satisfy any of the obligations under this permit provide the name of the other entity and a description of the permit requirements preformed by the other entity.
 4. Notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period, and implications for the SWMP.
 5. The annual report shall include certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
- F. Annual Report for Secondary Permittees, except for the Port of Seattle and the Port of Tacoma

All Secondary Permittees (except the Port of Seattle and the Port of Tacoma) shall complete the *Annual Report Form for Secondary Permittees* (Appendix 4) and submit it along with any supporting documentation to Ecology.

1. The *Annual Report Form for Secondary Permittees* is intended to summarize the Permittees compliance with the conditions of this permit, including:
 - a. Status of implementation of each component of the SWMP in section S6 *Stormwater Management Program for Co-Permittees, and Secondary Permittees*, as applicable to the Permittee.
 - b. An assessment of the Permittee's progress in meeting the minimum performance standards established for each of the minimum control measures of the SWMP.
 - c. A summary of the Permittee's evaluation of their SWMP, according to section S8.B.2.
 - d. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.
 - e. Updated information from the prior annual report plus any new information received during the reporting period pursuant to S8.B.1 and S8.B.2.
 - f. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
2. Secondary Permittees shall include with the annual report a notification of any jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period, and implications for the SWMP.

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G. Annual Report for the Port of Tacoma and the Port of Seattle

The annual report shall include the following:

1. A current copy of the Permittees Stormwater Management Plan as required by S6.A.5.
2. Appendix 3 – *Annual Report Form for the Port of Seattle and the Port of Tacoma*, which is intended to summarize the Permittees compliance with the conditions of this permit including the status of implementation of each component of the SWMP required by *S6 Stormwater Management Program for Co-Permittees, and Secondary Permittees*, as applicable to the Permittee.
3. The Permittee’s SWMP implementation schedule and plans for meeting permit deadlines, and a discussion of the status of SWMP implementation to date. If Permit deadlines are not met, or may not be met in the future, include reasons why, corrective steps taken, and proposed, and expected dates that the deadlines will be met.
4. The stormwater monitoring report required pursuant to S8.H.
5. Notification of any jurisdictional boundary changes resulting in an increase or decrease in the Permittee’s geographic area of permit coverage during the reporting period, and implications for the SWMP.
6. If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under this permit.
7. Updated information from the prior annual report plus any new information received during the reporting period, according to S8.B.
8. Certification and signature pursuant to G19.D. and notification of any changes to authorization pursuant to G19.C.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this permit.

G3. NOTIFICATION OF SPILL

If a Permittee has knowledge of a spill into a municipal storm sewer which could constitute a threat to human health, welfare, or the environment, the Permittee shall notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge. Spills which might cause bacterial contamination of shellfish, such as might result from broken sewer lines, shall be reported immediately to the Department of Ecology and the Department of Health, Shellfish Program. The Department of Ecology's Regional Office 24-hr. number is 425 649-7000 for NWRO and 360 407-6300 for SWRO and the Department of Health's Shellfish 24-hr. number is 360-236-3330.

G4. BYPASS PROHIBITED

The intentional *bypass* of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss.

G5. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

- A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

- B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

G6. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

G7. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

G9. MONITORING

- A. Representative Sampling: Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.
- B. Records Retention: The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology. On request, monitoring data and analysis must be provided to Ecology.
- C. Recording of Results: For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.
- D. Test Procedures: All sampling and analytical methods used to meet the monitoring requirements specified in the approved stormwater management program shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by Ecology.

- E. Flow Measurement: Where flow measurements are required by other conditions of this Permit, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.
- F. Lab Accreditation: Where data collection is required by other conditions of this Permit, all monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology.
- G. Additional Monitoring: Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee must not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 6.

G11. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G12. REVOCATION OF COVERAGE

The director may terminate coverage under this *General Permit* in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

- A. Violation of any term or condition of this general permit;
- B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

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- D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;
- E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090;
- F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465;

Revocation of coverage under this general permit may be initiated by Ecology or requested by any interested person.

G13. TRANSFER OF COVERAGE

The director may require any discharger authorized by this general permit to apply for and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

This general permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to the following:

- A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this general permit;
- B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or chapter 90.48RCW, for the category of dischargers covered under this general permit;
- C. A water quality management plan containing requirements applicable to the category of dischargers covered under this general permit is approved;
- D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this general permit are unacceptable; or
- E. Changes made to State law reference this permit.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12, G14, or 40 CFR 122.62 shall report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this permit until it is modified or reissued.

G16. APPEALS

- A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this general permit, as they apply to an individual discharger, can be appealed, in accordance with Chapter 43.21B RCW, within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of

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general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.

- C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.
- D. Modifications of this permit can be appealed in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G17. PENALTIES

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this permit by reference.

G18. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G19. CERTIFICATION AND SIGNATURE

All applications, reports, or information submitted to Ecology shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to Ecology, and
 - 2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the stormwater management program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under General Condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the stormwater management program, a new authorization satisfying the requirements of General Condition G19.B.2 must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this permit must make the following certification:

"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 information, the information submitted 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."

G20. NON-COMPLIANCE NOTIFICATION

In the event the Permittee is unable to comply with any of the terms and conditions of this permit, including discharges from the Permittees MS4 which may cause a threat to human health or the environment, the Permittee must:

- A. Take appropriate action to correct or minimize the threat to human health or the environment or otherwise stop or correct the condition of noncompliance.
- B. Notify Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance.
- C. Notify Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittees MS4 which may cause or contribute to an immanent threat to human health or the environment.

G21. UPSETS

Permittees shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets." The conditions are as follows:

- A. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- B. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (C) of this condition are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, will not constitute final administrative action subject to judicial review.
- C. Conditions necessary for demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - 1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - 2. The permitted facility was at the time being properly operated; and
 - 3. The Permittee submitted notice of the upset as required in 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice of noncompliance).

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4. The Permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).
- D. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

DEFINITIONS AND ACRONYMS

“40 CFR” means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

“AKART” means All Known, Available and Reasonable methods of prevention, control and Treatment. See also State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

“All Known, Available and Reasonable methods of prevention, control and Treatment” refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

“Applicable TMDL” means a TMDL which has been approved by EPA on or before the date permit coverage is granted.

“Beneficial Uses” means uses of waters of the state, which include but are not limited to: use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.

“Best Management Practices” are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

“BMP” means Best Management Practice.

“Bypass” means the diversion of stormwater from any portion of a stormwater treatment facility.

“Certified Erosion and Sediment Control Lead” (CESCL) means an individual who is knowledgeable in the principles and practices of erosion and sediment control. The CESCL must have the skills to assess: the site conditions and construction activities that could impact the quality of stormwater; and the effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. The CESCL must have current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology.

“CESCL” means Certified Erosion and Sediment Control Lead.

“Component” or “Program Component” means the elements of the stormwater management program listed in Special Condition S5 Stormwater Management Program for Permittees or S6 Stormwater Management Program for Co-Permittees and Secondary Permittees.

“Co-Permittee” means an owner or operator of a municipal separate storm sewer that has co-applied for permit coverage with another permittee, and that is only responsible for permit conditions relating to the discharge for which it is operator. See also 40 CFR 122.26(b)(1).

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“CWA” means the federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

“Detailed Implementation Plan” means the formal TMDL implementation plan, also known as a Water Quality Improvement Plan.

“DIP” means detailed implementation plan.

“Director” means the Director of the Washington State Department of Ecology, or an authorized representative.

“Discharge” for the purpose of this permit, unless indicated otherwise, refers to discharges from municipal separate storm sewers of the Permittees. See also 40 CFR 122.2.

“Entity” means a governmental body or a public or private organization.

“Equivalent document” means a technical stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of this permit and BMPs approved by Ecology.

“General Permit” means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

“Ground water” means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

“Heavy equipment maintenance or storage yard” means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored on a long term basis.

“Hyperchlorinated” means water that contains more than 10 mg/Liter chlorine.

“Illicit connection” means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

“Illicit discharge” means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

“Industrial or Construction Activity” means manufacturing, processing or raw materials storage areas at an industrial plant; or clearing, grading and/or excavation. These activities are required to NPDES permit coverage in accordance with 40 CFR 122.26.

“Integrated Pest Management (IPM)” means a coordinated decision-making and action process that uses the most appropriate pest control methods and strategy in an environmentally and economically sound manner to meet agency programmatic pest management objectives. The elements of integrated pest management include:

- (a) Preventing pest problems;
- (b) Monitoring for the presence of pests and pest damage;
- (c) Establishing the density of the pest population, that may be set at zero, that can be tolerated or correlated with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic, or aesthetic thresholds;
- (d) Treating pest problems to reduce populations below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical, and chemical control methods and that must consider human health, ecological impact, feasibility, and cost-effectiveness; and
- (e) Evaluating the effects and efficacy of pest treatments.

“Pest” means, but is not limited to, any insect, rodent, nematode, snail, slug, weed, and any form of plant or animal life or virus, except virus, bacteria, or other microorganisms on or in a living person or other animal or in or on processed food or beverages or pharmaceuticals, which is normally considered to be a pest, or which the director of the department of agriculture may declare to be a pest.

“Large Municipal Separate Storm Sewer System (Large MS4)” means all municipal Separate Storm Sewers located in an incorporated place with a population of 250,000 or more, a County with unincorporated urbanized areas with a population of 250,000 or more according to the 1990 decennial census by the Bureau of Census. See also 40 CFR 122.26(b)(4).

“Low Density Residential Land Use” means, for the purpose of permit section S8, one dwelling unit per 1-5 acres.

“Low Impact Development” (LID) means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

“Major Municipal Separate Storm Sewer Outfall” means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more). See also 40 CFR 122.26(b)(5).

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“Material Storage Facilities” means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

“MBAS” means Methylene Blue Activated Substances.

“Methylene Blue Activated Substances” are anionic surfactants, including linear alkylate sulfonate and alkyl sulfate, which react with a chemical called methylene blue to form a blue-chloroform-soluble complex; the intensity of color is proportional to concentration

“Maximum Extent Practicable (MEP)” refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

“Medium Municipal Separate Storm Sewer System (Medium MS4)” means all Municipal Separate Storm Sewers (MS3s) located in an incorporated place with a population of more than 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of Census. See also 40 CFR 122.26(b)(7).

“Municipal Separate Storm Sewer (MS3)” means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (a) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (b) designed or used for collecting or conveying stormwater;
- (c) which is not a combined sewer; and
- (d) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2

“Municipal separate storm sewer system (MS4)” means all separate storm sewers that are defined as large” or “medium” or “small” municipal separate storm sewer systems. See also 40 CFR 122.26(b)(18)

“National Pollutant Discharge Elimination System (NPDES)” means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

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“Notice of Intent” means the application for, or a request for coverage under a General NPDES Permit pursuant to WAC 173-226-200.

“NPDES” means National Pollutant Discharge Elimination System.

“Outfall” means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

“Permittee” means any Primary Permittee, Co-Permittee, or Secondary Permittee unless specifically stated otherwise for a particular section of this permit.

“Physically Interconnected” means that one municipal separate storm sewer is connected to a second municipal separate storm sewer in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a municipal separate storm sewer belonging to another entity

“Qualified Personnel” means staff members or contractors who have had professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee.

“RCW” means the Revised Code of Washington State.

“Runoff” means water that travels across the land surface, or laterally through the soil near the land surface, and discharges to water bodies either directly or through a collection and conveyance system. Runoff includes stormwater and water from other sources that travels across the land surface. See also “Stormwater.”

“Secondary Permittee” is an operator of municipal separate storm sewer which is not a city, town or county. Secondary Permittees include special purpose districts and other public entities identified in S1.D which operate municipal separate storm sewers.

“Shared Waterbodies” means waterbodies, including downstream segments, lakes and estuaries, that receive discharges from more than one permittee.

“Significant contributor” means a discharge contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.

“Stormwater” means runoff during and following precipitation and snowmelt events, including surface runoff, drainage, and interflow.

“Stormwater Associated with Industrial and Construction Activity” means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant, or

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associated with clearing grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

“Stormwater facilities regulated by the Permittee” means permanent stormwater treatment and flow control BMPs located in the geographic area covered by the permit and which are not owned by the Permittee, and are known by the permittee to discharge into municipal separate storm sewers owned or operated by the Permittee.

“Stormwater Management Manual for Western Washington” means the 5-volume technical manual (Publication Nos. 05-10-029 through 05-10-033) published by Ecology in February 2005.

“Stormwater Management Program (SWMP)” means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs.

“Total Maximum Daily Load” (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for reasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

“Urban/higher density rural sub-basins” means all areas within or proposed to be within the urban growth area (UGA), or any sub-basin outside the UGA with 50% or more area comprised of lots less than 5 acres.

“Vehicle Maintenance or Storage Facility” means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

“Water Quality Standards” means Surface Water Quality Standards, Chapter 173-201A WAC, Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards, Chapter 173-204 WAC.

“Waters of the state” includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.