

# **Preliminary Draft**

## Phase I Municipal Stormwater NPDES and State Waste Discharge General Permit

May 16, 2005



Permit

No. \_\_\_\_\_ {PRIVATE }

Coverage Date \_\_\_\_\_

Issuance Date:

Effective Date:

Expiration Date:

**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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Dave Peeler  
Water Quality Program Manager  
Department of Ecology



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<sup>1</sup> Terms that are included in the definitions and acronyms section are indicated in italics the first time they are used in the text of the permit.

1 SPECIAL CONDITIONS

2 **S1. PERMIT COVERAGE AND PERMITTEES.**

3 A. Permit Coverage Area

4 This permit covers *discharges* from *Large and Medium Municipal Separate Storm*  
5 *Sewer Systems (MS4s)* as established at Title 40 CFR 122.26, except for *municipal*  
6 *separate storm sewers (MS3s)* owned or operated by the Washington State Department  
7 of Transportation.  
8

9 B. The following entities had coverage under a previous municipal *stormwater* permit and  
10 reapplied for coverage. Their coverage date under this permit begins on the effective  
11 date of this permit. These entities are covered under this permit as Permittees:

12 The City of Seattle

13 The City of Tacoma

14 King County

15 Snohomish County

16 Pierce County

17 Clark County

18  
19 C. King County had coverage under a previous municipal stormwater permit, as a *Co-*  
20 *Permittee* with the City of Seattle, and reapplied for coverage. Their coverage date  
21 under this permit begins on the effective date of this permit. King County is covered as  
22 a Co-Permittee with the City of Seattle for discharges it owns or operates in the City of  
23 Seattle.

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

26 1. Port of Seattle, excluding Seattle-Tacoma International Airport

27 2. Port of Tacoma

28 3. Drainage, diking, flood control, or diking and drainage districts located in the Cities  
29 or unincorporated portions of the Counties listed in S2.A., above, which own or  
30 operate municipal separate storm sewers serving non-agricultural land uses.

31 4. Other owners or operators of municipal separate storm sewers located in the Cities  
32 or unincorporated portions of the Counties listed in S2.A., above.  
33

34 E. Unless otherwise noted, the term “Permittee” shall include Permittee, Co-Permittee, and  
35 Secondary Permittee, as defined above.

36 F. Coverage for Secondary Permittees

37 1. In order to obtain coverage under this permit, each secondary Permittee identified  
38 under Special Condition S1.D shall submit a *Notice of Intent* (NOI) and provide

1 public notice of the application for coverage in accordance with WAC 173-226-  
2 130. The NOI shall constitute the application for coverage. Ecology will notify  
3 applicants in writing of their status concerning coverage under this permit within 90  
4 days of Ecology's receipt of the NOI and demonstration that the public notice  
5 requirements have been met.

6 2. NOIs shall be submitted to:

7 Department of Ecology  
8 Water Quality Program  
9 Municipal Stormwater Permit Program  
10 P.O. Box 47600  
11 Olympia, WA 98504-7600

12 **S2. AUTHORIZED DISCHARGES.**

13 A. This permit authorizes the discharge of stormwater to surface waters and to ground  
14 *waters of the state* from municipal separate storm sewers owned or operated by each  
15 Permittee, Co-Permittee, and Secondary Permittee identified in Special Condition S1 as  
16 follows:

17 1. *Existing stormwater discharges.*

18 2. *New stormwater discharges* constructed after the issuance date of this permit that  
19 have received all applicable state and local permits and use authorizations,  
20 including compliance with Ch. 43.21C RCW (the State Environmental Policy Act),  
21 and that are in compliance with Special Condition S5. COMPLIANCE WITH  
22 STANDARDS, of this permit.

23 3. Stormwater discharges to ground waters of the state are covered under this permit,  
24 except that stormwater discharges to ground waters of the state that discharge  
25 through facilities regulated under the Underground Injection Control (UIC)  
26 program, Chapter 173-218 WAC, are not covered under this permit.

27 4. Stormwater discharges to ground waters not in hydraulic continuity with surface  
28 water are covered in this permit only under state authorities, Chapter 90.48 RCW,  
29 the Water Pollution Control Act.

30 B. This permit authorizes discharges of stormwater associated with industrial and  
31 construction activity, process wastewater, and non-stormwater discharges from  
32 municipal separate storm sewers owned or operated by the Permittee, to waters of the  
33 state, only under the following conditions:

34 1. Non-stormwater discharges and process wastewater must be authorized by another  
35 *National Pollutant Discharge Elimination (NPDES)* permit or identified by and in  
36 compliance with Special Condition S7.C.8 Illicit Connections and Illicit Discharges  
37 Detection and Elimination; or

38 2. *Stormwater associated with industrial activity*, as defined by 40CFR122.26(b)(14),  
39 must be authorized by a separate individual or general NPDES permit, such as the

1 Industrial Stormwater General Permit, Construction Stormwater General Permit, or  
2 another General Permit or individual permit issued by the Department.

- 3 C. This permit authorizes discharges from fire fighting activities, except training exercises,  
4 unless the discharges from fire fighting activities are identified as significant sources of  
5 pollutants to waters of the State.
- 6 D. This permit does not authorize illicit discharges except as allowed in Special Condition  
7 *S7.C.8. Illicit Connections and Illicit Discharges Detection and Elimination*, nor does it  
8 relieve entities responsible for illicit discharges, including spills of oil or hazardous  
9 substances, from responsibilities and liabilities under state and federal laws and  
10 regulations pertaining to those discharges.

11

12 **S3. RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY**  
13 **PERMITTEES**

- 14 A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for compliance  
15 with the terms of this permit for the municipal separate storm sewers it owns or  
16 operates.
- 17 1. Each Permittee is required to comply with all conditions of this permit, except for  
18 *S8., Stormwater management program for Co-Permittees and Secondary*  
19 *Permittees.*
- 20 2. Each Co-Permittee and Secondary Permittee is required to comply with all  
21 conditions of this permit, except for Special Condition *S7., Stormwater*  
22 *management program for Permittees.*
- 23 B. Permittees, Co-Permittees and Secondary Permittees may rely on another entity to  
24 meet one or more of the requirements of this permit, if the other entity, in fact,  
25 implements the control measure, and agrees to implement the control measure on the  
26 Permittee's behalf. Permittees that are relying on another entity to satisfy one or more  
27 or their permit obligations remain responsible for permit compliance if the other entity  
28 fails to implement the permit conditions. Where permit responsibilities are shared they  
29 must be documented as follows:
- 30 1. Permittees and Co-Permittees that are continuing coverage under this permit must  
31 submit a statement that describes the permit requirements that will be implemented  
32 by other entities. The statement must be signed by all participating entities. There  
33 is no deadline for submitting such a statement, provided that this does not alter  
34 implementation deadlines.
- 35 2. Secondary Permittees must submit an NOI that describes which requirements they  
36 will implement and identify the entities that will implement the other permit  
37 requirements in the area served by the secondary Permittee's MS4. A statement  
38 confirming the shared responsibilities, signed all participating entities, must  
39 accompany the NOI. Secondary Permittees may amend their NOI, during the term

1 of the permit, to establish, terminate, or amend shared responsibility arrangements,  
2 provided this does not alter implementation deadlines.

3 C. Unless otherwise noted, all appendices to this permit are incorporated by this  
4 reference as if set forth fully within this permit.

5 **S4. TOTAL MAXIMUM DAILY LOAD ALLOCATIONS**

6 A. The following requirements apply if an applicable Total Maximum Daily Load  
7 (TMDL) is approved for stormwater discharges from MS4s owned or operated by the  
8 Permittee. Applicable TMDLs or applicable TMDL requirements are TMDLs which  
9 have been approved by EPA on or before the issuance date of this permit, or which  
10 have been approved by EPA prior to the date that the Permittees application is received  
11 by Ecology, which ever is later. All Permittees must be in compliance with applicable  
12 TMDL requirements.

13  
14 B. For TMDLs not listed in Appendix 6 of this permit, which is by this reference as if set  
15 forth fully herein, compliance with this permit shall constitute compliance with all  
16 applicable TMDLs. Permittees shall track actions required by this Permit that are  
17 relevant to applicable TMDLs within their jurisdiction. Each Permittee shall monitor  
18 implementation of actions required to achieve compliance with the TMDL. The status  
19 of TMDL implementation must be included as part of the annual reporting  
20 requirements submitted to Ecology. Documentation of all relevant actions  
21 implemented that affect MS4 discharges to the waterbody segment that is the subject of  
22 the TMDL must be included in the annual report

23  
24 C. For TMDLs and Permittees listed in Appendix 6, listed Permittees shall comply with  
25 the TMDL requirements identified in Appendix 6.

26 1. If water quality monitoring is a specific requirement of a TMDL listed in Appendix  
27 6, the Permittee must develop and implement a TMDL monitoring Quality  
28 Assurance Project Plan (QAPP). The Permittee shall submit the TMDL QAPP no  
29 later than 90 days after the effective date of this permit, unless otherwise specified  
30 in Appendix 6. The monitoring plan shall be submitted to the Department in both  
31 paper and electronic form and shall include:

32 a. A detailed discussion and description of the goal and objective(s), monitoring  
33 (experimental) design, and sampling and analytical methods.

34 b. A list and maps of the selected TMDL monitoring sites.

35 c. The frequency of data collection to occur at each station or site and the number  
36 and types of precipitation events to be targeted for sampling.

37 d. The method and location(s) of precipitation measuring devices.

38 e. The triggers for automated flow monitoring devices.

39 f. The parameters to be measured, as appropriate for and relevant to the TMDL.

1 g. The QAPP will be implemented beginning no later than 180 days after the  
2 effective date of this permit.

3 2. For TMDLs listed in Appendix 6, affected Permittees shall include, as part of the  
4 Permittee's annual report to the Department, a TMDL Summary Implementation  
5 Report. The report shall include the status and actions taken by the Permittee to  
6 implement the TMDL. The TMDL Summary Report shall document relevant  
7 actions taken by the Permittee that affect MS4 discharges to the waterbody segment  
8 that is the subject of the TMDL. The report must also identify the status of any  
9 applicable TMDL implementation schedule milestones.

10  
11 D. For TMDLs that are approved by EPA after this permit is issued, the Department may  
12 establish TMDL related permit requirements through future permit modification,  
13 administrative orders, or when this permit is reissued. Permittees are encouraged to  
14 participate in development of TMDLs within their jurisdiction and to begin  
15 implementation. The Department may modify this permit to incorporate requirements  
16 from TMDLs completed after the issuance of this permit if the Department determines  
17 implementation of actions, monitoring or reporting necessary to demonstrate reasonable  
18 further progress toward achieving TMDL waste load allocations, and other targets, are  
19 not occurring and must be implemented during the term of this permit.

## 20 21 **S5. COMPLIANCE WITH STANDARDS**

22 A. This permit does not authorize a violation of Washington State surface water quality  
23 standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200  
24 WAC), sediment management standards (chapter 173-204 WAC), or human health-  
25 based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22,  
26 1992, pages 60848-60923).

27 B. Existing Stormwater Discharges. In order to meet the goals of the Clean Water Act and  
28 make progress towards compliance with applicable surface water, ground water and  
29 sediment management standards for all existing stormwater discharges, each Permittee  
30 is required to reduce the discharge of pollutants to the Maximum Extent Practicable  
31 (MEP).

32 To meet the requirement to reduce the discharge of pollutants to the MEP, each  
33 Permittee shall comply with the requirements of this permit.

34 C. New Stormwater Discharges. All new stormwater discharges must comply with all  
35 applicable surface water, ground water and sediment management standards. New  
36 stormwater discharges, authorized or allowed by the Permittee, shall not cause or  
37 contribute to a violation of applicable standards. New stormwater discharges include  
38 *new stormwater sources* and *new stormwater outfalls*, including all sources contributing  
39 to the new stormwater *outfall*. Compliance with *water quality standards* shall be  
40 determined as follows:

1 1. If the new stormwater discharge is controlled in accordance with the technical  
2 standards in Appendix 1 (which is by this reference as if set forth fully herein) and  
3 in compliance with the terms of this permit, then the discharge is in compliance  
4 unless *site-specific information* as in 2, below, indicates otherwise. From the  
5 effective date of this permit until the date the Permittee adopts the technical  
6 standards in this permit, including, at a minimum Appendix 1, the *Best management*  
7 *Practices (BMP)* selection and site planning process, types of BMPs and design  
8 criteria for BMPs required under S7.C.5 of this permit, each Permittee must provide  
9 information to proponents of projects that will result in new stormwater discharges  
10 as follows:

- 11 a. That new stormwater discharges are not allowed to cause or contribute to a  
12 violation of applicable surface water, ground water and sediment management  
13 standards, including the State’s narrative criteria for water quality; and  
14 b. That project proponents may apply the technical standards referenced in  
15 paragraph S5.C.1, above, as a means of achieving compliance; and  
16 c. If project proponents choose not to apply the technical standards referenced in  
17 paragraph S5.C.1, above, then they must be prepared to demonstrate that the  
18 new stormwater discharge does not cause or contribute a violation of applicable  
19 surface water, ground water and sediment management standards. Project  
20 proponents must be prepared to document how stormwater BMPs were selected,  
21 the pollutant removal expected from the selected BMPs, the technical basis  
22 which support the performance claims for the selected BMPs, and an  
23 assessment of how the selected BMPs will comply with applicable State water  
24 quality standards and satisfy the state requirement under Chapter 90.48 RCW to  
25 apply all known, available, reasonable methods of prevention, control and  
26 treatment (AKART) prior to discharge.

27 2. If, prior to authorization of a new stormwater discharge, site-specific information  
28 indicates that the technical standards in this permit, including, at a minimum  
29 Appendix 1, the BMP selection and site planning process, types of BMPs and  
30 design criteria for BMPs required under S7.C.5 of this permit are not sufficient to  
31 protect beneficial uses of waters of the state from impacts which cause or contribute  
32 to loss or impairment, then additional controls necessary to protect beneficial uses  
33 must be applied. The additional controls determined necessary to protect beneficial  
34 uses must be in place prior to the discharge from the new stormwater source or  
35 outfall.

36 D. Ecology may modify or revoke and reissue this *general permit* in accordance with  
37 General Condition G14., if Ecology becomes aware of additional control measures,  
38 management practices or other actions beyond what is required in this permit, that are  
39 necessary to reduce the discharge of pollutants to the MEP or to protect water quality.

1 **S6. MONITORING**

2 Ecology is requesting comments on the objectives of the proposed monitoring program.

3  
4 We are interested in assessing the effect of implementing the stormwater management programs  
5 required under this permit. This includes looking at receiving waters, stormwater quality and  
6 BMP effectiveness. The information gained will be used to provide feedback for local  
7 stormwater management programs and Ecology’s permitting program.

8 Should Ecology require integrated, collaborative, WRIA-scale monitoring programs? WRIA-  
9 scale monitoring programs could eventually integrate monitoring among all municipal  
10 stormwater permittees, Phase I, Phase II and WSDOT. Or are independent monitoring programs  
11 adequate to development the information basis for providing feedback on stormwater  
12 management programs?

13 The Permittees, Port of Seattle and Port of Tacoma shall develop and implement a  
14 comprehensive long-term monitoring program. The monitoring program shall include two  
15 elements: stormwater and receiving water monitoring, and BMP effectiveness monitoring.  
16 The monitoring program must include long-term monitoring and may include short term  
17 studies. The results of the monitoring program shall be used to support the adaptive  
18 management process and lead to refinements of the Stormwater Management Program.  
19 The monitoring program must include Quality Assurance Project Plans (QAPPs) for each  
20 monitoring objective, written in accordance with Ecology’s QAPP guidelines at  
21 <http://www.ecy.wa.gov/biblio/0403030.html>. The monitoring program must be developed  
22 by qualified staff or contractors that have experience in applying Ecology’s or EPA’s  
23 QAPP Guidelines.

24 **A. Stormwater and Receiving Water Monitoring**

25 1. The Permittees, Port of Seattle and Port of Tacoma shall develop and implement  
26 comprehensive, long-term water quality monitoring program during the term of this  
27 permit. The monitoring program shall be designed to contribute to answering the  
28 following questions about the effectiveness of the municipal stormwater permitting  
29 and program efforts in protecting and restoring water quality and beneficial uses:

- 30 a. Is implementation of the Stormwater Management Program preventing impacts  
31 from the effects of new development by controlling construction and post-  
32 construction *runoff*?
- 33 b. Are the Permittees preventing impacts and seeing improvements to beneficial  
34 uses by implementing a comprehensive stormwater management program?

35 2. **Monitoring Program Coordination and Planning**

36 The Permittees and ports may choose to develop the monitoring program, conduct  
the monitoring, and report results through an integrated, long-term, water quality

1 monitoring program in collaboration with the other Phase I and Phase II MS4  
2 permittees in the Water Resource Inventory Area(s) (WRIA) in which their MS4 is  
3 located; or they may independently develop a monitoring program, conduct the  
4 monitoring, and report results, in accordance with the requirements, below.

5 If a Permittee chooses to participate in the development of an integrated water  
6 quality monitoring program in collaboration with the other Permittees in the WRIA  
7 in which their MS4 is located, the collaborative effort shall be conducted as  
8 follows:

- 9 a. Permittees that choose to participate in the development of an integrated water  
10 quality monitoring program shall form a committee for this purpose. The  
11 participating Permittees shall submit a written agreement, signed by all  
12 participants, that includes the monitoring program development schedule and  
13 responsibilities.
- 14 b. The development and implementation of the integrated monitoring program  
15 shall be supported by the combined resources of all the participating Permittees.
- 16 c. One permittee shall be identified as the lead permittee for purposes of reporting.  
17 The lead permittee shall be responsible for the overall monitoring program  
18 management and shall prepare and submit to the Department unified monitoring  
19 program plans and reports.

20 The activities of the lead permittee shall include, but not be limited to, the  
21 following:

- 22 i. Coordinate and conduct Monitoring Committee meetings on an as needed  
23 basis.
- 24 ii. Coordinate monitoring activities and participate in any subcommittees  
25 formed as necessary to coordinate monitoring activities.
- 26 iii. Provide technical and administrative support and inform the other  
27 permittees of the progress of monitoring activities or studies.
- 28 iv. Coordinate all the activities with the Department, including the submittal of  
29 all reports and plans developed by the committee.
- 30 v. Obtain public input for any proposed monitoring plans, where applicable.
- 31 vi. Cooperate in the WRIA-based monitoring program.
- 32 d. The non-lead permittees on the committee shall be responsible for  
33 implementing monitoring programs and coordinating among their internal  
34 departments and agencies, as appropriate, to facilitate the implementation of the  
35 monitoring program.

36 The activities of the non-lead permittees shall include, but not be limited to, the  
37 following:

- 1           i. Participate in a Monitoring Committee comprised of the lead permittee  
2           and one representative of each of the other permittees. The lead permittee  
3           will take the lead role in initiating and developing the WRIA-wide  
4           monitoring activities necessary to comply with S6.A above. The  
5           committee shall meet on a regular basis (at least six times per year). Each  
6           permittee shall designate one official representative to the Monitoring  
7           Committee.
- 8           ii. Review, approve, and comment on all plans, strategies, and monitoring  
9           programs, as developed by the lead permittee or any permittee  
10          subcommittee to comply with this permit.
- 11          iii. Conduct and coordinate with the lead permittee any monitoring and  
12          characterizations needed to implement the monitoring program.
- 13          iv. Prepare and submit all required reports to the lead permittee in a timely  
14          manner.
- 15      3. The Permittees and ports shall support the monitoring planning efforts by providing  
16      the following resources and information:
- 17      a. Counties
- 18          i. Each County shall identify potential monitoring stations in receiving  
19          waters and in outfalls associated with those receiving waters, in small sub-  
20          basins less than ten square miles in area and representing each of the  
21          following land uses:
- 22              (1) Medium- to high-density urbanized,  
23              (2) Areas of new development (urbanizing), and  
24              (3) Low-density residential basins outside the urban growth boundary.
- 25          ii. Each County shall provide maps and staff assistance as necessary to  
26          facilitate the evaluation and create a list of potential sites, and to determine  
27          land uses in the contributing areas.
- 28      b. Cities
- 29          i. Each City shall identify potential monitoring stations in receiving waters and  
30          in outfalls associated with those receiving waters, in small sub-basins less  
31          than ten square miles in area and representing each of the following land  
32          uses:
- 33              (1) High-density urbanized, and  
34              (2) Medium- to high-density urbanized.
- 35          ii. Each City shall provide maps and staff assistance as necessary to facilitate  
36          the evaluation and create a list of potential sites, and to determine land  
37          uses in the contributing areas.
- 38      c. Ports of Seattle and Tacoma

- 1           i. Each Port shall identify potential outfalls for water quality/toxicity  
2           monitoring stations and in-line sediment traps.
- 3           ii. Each Port shall provide maps and staff assistance as necessary to facilitate  
4           the evaluation of potential sites and to determine land uses in the  
5           contributing areas.
- 6           d. Other secondary Permittees will have no responsibilities for monitoring under  
7           this section during this permit term, however, they are required to provide  
8           information, maps and access for sampling efforts, as necessary. Other  
9           secondary Permittees are encouraged to participate in the monitoring program.
- 10          e. The monitoring program shall include confirmed sampling locations distributed  
11          among the geographical areas covered by the permit and among the land uses  
12          listed in 3.a.i. and 3.b.i. above. Each sub-basin selected (except for the in-line  
13          sediment traps at the Ports) must include a receiving water sampling site and  
14          should include a minimum of two outfalls.
- 15          4. Monitoring Program Development, Review, and Approval

17 Ecology is requesting comments on the question of reviewing and approving the  
18 Monitoring Programs.

19 Should the Monitoring Programs be reviewed and approved? If so, what should  
20 be the standard for review? Who is best capable of doing the review? Should an  
21 independent entity review the monitoring program? Or should Ecology build up  
22 expertise and do the review?

23 An alternative to reviewing and approving the monitoring program is to include  
24 more detailed criteria for the monitoring program in the permit. That criteria  
25 would need to be developed before the permit is issued.

26  
27 The monitoring program and implementation plan shall be submitted no later than 2  
28 years after the effective date of this permit. The monitoring program shall be  
29 submitted in both paper and electronic form and shall include all the required  
30 elements of the QAPP, including:

- 31          a. A detailed discussion and description of the purpose, design, and methods of the  
32          water quality monitoring program.
- 33          b. A list and maps of all selected receiving water and outfall sampling sites.
- 34          c. The frequency and type of sampling (data collection and analytical methods) or  
35          other monitoring effort to occur at each station or site, including but not limited  
36          to:
- 37              i. Sampling in the receiving waters:

- 1 (1) Benthic invertebrates (RIV-PAC, fine sediment and temperature
- 2 metrics),
- 3 (2) Embeddedness
- 4 (3) Temperature
- 5 (4) pH
- 6 (5) Hardness
- 7 ii. Establishing physical conditions and trends in the stream channel. The
- 8 monitoring program shall develop this strategy using information from
- 9 “Monitoring Urban Streams: Strategies and Protocols for Humid-Region
- 10 Lowland systems” (Environmental Monitoring and Assessment, **71**: 143-
- 11 164, 2001.)
- 12 iii. Flow-weighted composite storm sampling, and base flow sampling,
- 13 in outfalls for the following constituents/parameters as appropriate
- 14 for the monitoring objective: (1) Flow, Hydrograph data including
- 15 antecedent dry period, rainfall and runoff, discussion of
- 16 representativeness of storm samples and storm types,
- 17 (2) TSS and turbidity,
- 18 (3) Conductivity if tidally influenced,
- 19 (4) Chloride,
- 20 (5) Metals (including, at a minimum, total and dissolved copper, zinc, ,
- 21 cadmium, and lead; and mercury sampling as appropriate in some
- 22 high density commercial or industrial urban settings) and hardness,
- 23 (6) Base/Neutral/Acids (BNAs),
- 24 (7) Pesticides (commercially available and/or known to be applied
- 25 roadside),
- 26 (8) Nutrients (including total nitrogen, phosphorus, nitrate/nitrite and
- 27 orthophosphate),
- 28 (9) Biochemical oxygen demand (BOD), and
- 29 (10) Toxicity testing of a “seasonal first-flush” storm event (as defined
- 30 by Ecology).
- 31 iv. Grab samples in outfalls for the following constituents/parameters as
- 32 appropriate for the monitoring objective:
- 33 (1) Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and
- 34 NWTPH-Dx., and
- 35 (2) E. coli and Enterococci bacteria.
- 36 v. For in-line sediment traps, percent solids, pH, metals, and BNAs as
- 37 appropriate for the contributing area land use.

- 1 d. The number of each type of event (e.g. baseflow; “seasonal first-flush” and/or  
2 other dry season rainfall; wet season rainfall) to be sampled at each location for  
3 each of the types of sampling identified in part C above.
- 4 e. An approved or final monitoring plan must be adopted no later than 30 months  
5 after the effective date of this permit.
- 6 f. Full implementation of the stormwater and receiving water monitoring program  
7 shall begin no later than 36 months after the effective date of this permit. The  
8 third party or parties selected to develop the monitoring plan may continue to be  
9 utilized to collect and analyze the data and to write the subsequent reports  
10 required under this permit.

11 5. Monitoring Program Reporting Requirements

12 The stormwater monitoring report shall be submitted by December 31 each year,  
13 beginning in 2009. Each report shall include all monitoring data collected during  
14 the preceding period from October 1 through September 30. Each report shall also  
15 integrate data from earlier years into the analysis of results, as appropriate.  
16 Permittees that choose to participate in an integrated water quality monitoring  
17 program shall submit a single integrated monitoring report. Reports shall be  
18 submitted in both paper and electronic form and shall include:

- 19 a. A summary of the purpose, design, and methods of the monitoring program,  
20 b. The status of implementing the monitoring program,  
21 c. A comprehensive data and QA/QC report for each part of the monitoring  
22 program, with an explanation and discussion of the results of each monitoring  
23 project,  
24 d. An analysis of the results of each part of the monitoring program, including any  
25 identified water quality problems or improvements or other trends in stormwater  
26 or receiving water quality, and  
27 e. Recommended future actions based on the findings.
- 28 f. If the Permittee monitors any pollutant more frequently than required by the  
29 required monitoring program, then the results of this monitoring shall be  
30 included in the report. If the Permittee conducts any other stormwater  
31 monitoring in addition to that required in the required monitoring program, then  
32 it shall provide a description of the additional monitoring in the report.
- 33

1 B. Best Management Practice (BMP) Effectiveness Monitoring Program

2  
3 There is a need for more local information about the effectiveness of treatment and flow  
4 control BMPs. Much of the data about BMP effectiveness comes from other parts of  
5 the country *and is based on a variety of different design criteria, rainfall types, and soil*  
6 *types - factors that can influence performance and make extrapolations to our situation*  
7 *questionable*. Given the need for more data that is generated locally, how should this  
8 need be met?

9 The municipal stormwater permittees are the governmental entities that permit and  
10 regulate land development, and are responsible for the quality of water discharged to  
11 waters of the state through their storm sewer systems. Therefore, it seems appropriate  
12 to have the permittees primarily responsible for determining the effectiveness of  
13 measures intended to reduce the discharge of pollutants to the Maximum Extent  
14 Practicable. Is it appropriate to include BMP effectiveness monitoring as a requirement  
15 of this permit?

16 The Permittees and ports shall develop and implement a comprehensive, long-term  
17 BMP effectiveness monitoring program as described in this section. Structural Runoff  
18 Treatment BMPs, and Flow Reduction Strategies will be evaluated. The primary  
19 purpose of the BMP effectiveness monitoring program is to provide a feedback loop for  
20 adaptive management of the Permittees' stormwater management programs and the  
21 Department of Ecology's municipal stormwater permitting program. The BMP  
22 effectiveness monitoring program shall be designed to contribute to answering the  
23 following questions about the short term and long term performance of BMPS in  
24 protecting and restoring water quality and beneficial uses:

- 25 a. Is implementation of the Stormwater Management Program preventing impacts  
26 from the effects of new development by controlling construction and post-  
27 construction runoff?
- 28 b. Are the Permittees preventing impacts and seeing improvements to beneficial  
29 uses by implementing a comprehensive stormwater management program?

30 1. BMP Effectiveness Monitoring - Program Coordination and Planning.

31 The Permittees and ports may choose to develop the BMP effectiveness monitoring  
32 program, conduct the monitoring, and report results through a single long-term  
33 monitoring program that will be supported by the combined resources of all of the  
34 Permittees and the ports; or they may independently develop a BMP effectiveness  
35 monitoring program, conduct the monitoring, and report results, in accordance with  
36 the requirements, below. If a collaborative approach is chosen, the committee  
37 process outlined in S8.A.2., above, shall be followed.

The BMP effectiveness monitoring program shall be designed to evaluate all of the  
BMPs listed below, at no less than 2 sites per BMP, and 6 flow reduction strategies.

1 The monitoring program must include QAPPs for each BMP and flow reduction  
2 strategy being monitored. The monitoring program must be developed by  
3 qualified staff or contractors that have experience with Ecology's or EPA's  
4 Guidelines for Quality Assurance Project Plans (QAPP). The Permittees shall  
5 support monitoring planning efforts by providing the following resources and  
6 information:

7 a. Responsibilities of Counties, Cities, and Ports of Seattle and Tacoma

- 8 i. Each Permittee shall identify potential sites where the following types of  
9 BMPs are in use or planned for installation (the BMPs shall have been/will  
10 be designed using criteria similar to the 2005 Western Washington  
11 Stormwater Management Manual). QAPPs for short detention time BMPs  
12 should follow the TAPE protocols. QAPPs for long detention time BMPs  
13 will need to develop sampling protocols. BMP treatment types:

14 (1) Basic Treatment

15 Biofiltration swale

16 Filter strip

17 Basic wetpond

18 Treatment wetland

19 Sand filter

20 (2) Metals/Phosphorus Treatment

21 Amended sand filter

22 Two facility treatment train

23 Compost amended filter strips

24 Bioretention

25 Large wetpond

26 (3) Oil Control

27 Linear sand filter

28 Catch basin insert

- 29 ii. Each Permittee shall provide a prioritized list of the types of structural  
30 treatment BMPs to monitor.

- 31 iii. Each City and County Permittee shall identify and describe a flow  
32 reduction strategy that is in use or planned for installation in their  
33 jurisdiction, and is suitable for monitoring.

- 34 iv. Each Permittee shall provide staff assistance as necessary to facilitate the  
35 evaluation and selection of potential sites.

1           b. Other special Permittees will have no responsibilities for BMP effectiveness  
2           monitoring under this section during this permit term.

3           2. BMP Effectiveness Monitoring Program Development, Review, and Approval

4  
5 Ecology is requesting comments on the question of reviewing and approving the  
6 Monitoring Programs.

7 Should the Monitoring Programs be reviewed and approved, prior to  
8 implementation? If so, what should be the standard for review? Who is best capable  
9 of doing the review? Should an independent entity review the monitoring program?  
Or should Ecology build up expertise and do the review?

10 An alternative to reviewing and approving the monitoring program is to include  
11 more detailed criteria for the monitoring program in the permit. That criteria would  
12 need to be developed before the permit is issued.

13  
14  
15           The Permittees and ports shall submit a BMP effectiveness monitoring program  
16 plan no later than 2 years after the effective date of this permit. The monitoring plan  
17 shall be submitted in both paper and electronic form and shall include:

- 18           a. A detailed discussion and description of the purpose, design, and methods of the  
19           BMP effectiveness monitoring program, including Quality Assurance Project  
20           Plans (QAPPs) for each BMP being monitored.
- 21           b. A detailed discussion and description of the purpose, design, and methods of the  
22           flow reduction strategy monitoring program, and QAPPs for each flow  
23           reduction strategy being monitored.
- 24           c. A list and maps of all proposed and selected monitoring sites, including the date  
25           of installation/construction.
- 26           d. The Permittees' prioritized lists of structural treatment BMPs to monitor.
- 27           e. Records of inspection and maintenance on each of the BMPs selected.
- 28           f. The methods, protocols, analytical laboratory methods to be used.
- 29           g. The frequency of data collection to occur at each station or site and the number  
30           and types of precipitation events to be targeted for sampling.
- 31           h. The parameters to be measured in the inflow to and outflow from each BMP, or  
32           flow reduction strategy, as appropriate for the contributing area land use and  
33           performance expectations of the selected BMP:
- 34           i. Flow (rate, duration and volume)

- 1                   ii. Hydrograph data including antecedent dry period, rainfall and runoff,  
2                         discussion of representativeness of storm samples and storm types.
- 3                   iii. TSS,
- 4                   iv. pH, hardness, and temperature,
- 5                   v. Metals (including, at a minimum, total and dissolved copper, zinc, arsenic,  
6                         cadmium, chromium, and lead),
- 7                   vi. Total Petroleum Hydrocarbons ( NWTPH-Gx and NWTPH-Dx),
- 8                   vii. BNAs,
- 9                   viii. Pesticides (commercially available and/or known to be applied roadside),
- 10                  ix. Nutrients (including total nitrogen, total phosphorus, nitrate/nitrite and  
11                         orthophosphate),
- 12                  x. Biochemical oxygen demand (BOD),
- 13                  xi. E. coli and Enterocci bacteria, and/or
- 14                  xii. Toxicity
- 15                  i. The BMP effectiveness monitoring program must also describe a framework for  
16                         Phase II Permittees in western Washington to enhance BMP effectiveness  
17                         monitoring during future permit cycles.
- 18                  j. An approved BMP effectiveness monitoring plan must be adopted by no later  
19                         than 30 months after the effective date of this permit.
- 20                  k. Full implementation of the stormwater and receiving water monitoring program  
21                         shall begin no later than 36 months after the effective date of this permit. . The  
22                         third party or parties selected to develop the monitoring plan may continue to be  
23                         utilized to collect and analyze the data and to write the subsequent reports  
24                         required under this permit.

25                  3. BMP Effectiveness Monitoring Reporting Requirements

26                   The BMP effectiveness monitoring report shall be submitted by December 31 each  
27                   year, beginning in 2009. Each report shall include all monitoring data collected  
28                   during the preceding period from October 1 through September 30. Each report  
29                   shall also integrate data from earlier years into the analysis of results, as  
30                   appropriate. Permittees that choose to participate in an integrated water quality  
31                   monitoring program shall submit a single integrated monitoring report. Reports  
32                   shall be submitted in both paper and electronic form and shall include:

- 33                   a. A summary of the purpose, design, and methods of the monitoring program,
- 34                   b. The status of implementing the monitoring program,
- 35                   c. The status of implementing the QAPP for each part of the monitoring program,  
36                         with an explanation and discussion of the results of each component,

- d. An analysis of the results of each component of the monitoring program, including any identified BMP performance problems, and
- e. Recommended future actions based on the findings.

**S7. STORMWATER MANAGEMENT PROGRAM**

Note to Reviewers:

Ecology is specifically requesting comments on the organization of the Stormwater Management Program in the Phase I and Western Washington Phase II permits.

The current organization in the Phase II permit follows the EPA six minimum measures, while the organization for the Phase I municipal stormwater permit reflects the old permit and other factors. Should the two permits have a consistent organizational structure/outline for the stormwater management program? If so, should the structure follow the organization either the Phase I or Western Washington Phase II permit, or a different structure altogether?

- A. Each Permittee shall implement a Stormwater Management Program (SWMP) during the term of this permit. For the purpose of this permit a stormwater management program is a set of actions comprising the *components* listed in S7.B., S7.C.1 through S7.C.10., and additional actions and activities, where necessary, to meet the requirements of applicable TMDLs.
  - 1. Each Permittee shall prepare written documentation of their SWMP and submit it to Ecology in written and electronic formats with the first year annual report, in accordance with the requirements in S9 REPORTING REQUIREMENTS. The documentation of the SWMP shall be organized according to the program components in S7.C., and shall be updated annually. The SWMP documentation shall include a description of each of the program components included in S7.C, and any additional actions necessary to meet the requirements of applicable TMDLs.
  - 2. Each permittee shall track the cost of development and implementation of the SWMP required by this section. This information shall be included in the annual report.
- B. The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the maximum extent practicable and protect water quality.

Permittees are to continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this permit, including implementation schedules.

1 C. The SWMP shall include the components listed below. All components are mandatory  
2 and must be implemented by each Permittee. The requirements of the stormwater  
3 management program shall apply to municipal separate storm sewers and areas served  
4 by municipal separate storm sewers owned or operated by each Permittee. Co-  
5 Permittees and Secondary Permittees are responsible for implementation of Stormwater  
6 Management Programs as indicated in Special Condition S8.

7 1. Legal Authority

- 8 a. No later than the effective date of this permit, each Permittee must be able to  
9 demonstrate that they operate pursuant to adequate legal authority which  
10 authorizes or enables the Permittee to control discharges to and from municipal  
11 separate storm sewers owned or operated by the Permittee.
- 12 b. This legal authority, which may be a combination of statute, ordinance, permit,  
13 contracts, orders, interagency agreements, or similar means, shall include the  
14 ability to:
- 15 i. Control the contribution of pollutants to municipal separate storm sewers  
16 owned or operated by the Permittee from stormwater discharges associated  
17 with industrial activity, and control the quality of stormwater discharged  
18 from sites of industrial activity;
- 19 ii. Prohibit illicit discharges to the municipal separate storm sewer owned or  
20 operated by the Permittee;
- 21 iii. Control the discharge of spills and the dumping or disposal of materials  
22 other than stormwater into the municipal separate storm sewers owned or  
23 operated by the Permittee;
- 24 iv. Control the contribution of pollutants from one portion of the municipal  
25 separate storm sewer system to another portion of the municipal separate  
26 storm sewer system, where there is a physical interconnection between  
27 municipal separate storm sewers owned or operated by the municipality, and  
28 those of an adjoining municipality or other public entity, including co-  
29 Permittees;
- 30 v. Require compliance with conditions in ordinances, permits, contracts, or  
31 orders; and,
- 32 vi. Within the limitations of state law, carry out all inspection, surveillance, and  
33 monitoring procedures necessary to determine compliance and non-  
34 compliance with permit conditions, including the prohibition on illicit  
35 discharges to the municipal separate storm sewer and compliance with local  
36 ordinances.
- 37 c. Each Permittee shall submit, no later than one year from the effective date of the  
38 permit, a statement by its legal counsel that the Permittee has all necessary legal  
39 authority to comply with this permit.

40 2. Gathering, Maintaining, and Using Adequate Information

1 The SWMP shall include an ongoing program for gathering, maintaining, and using  
2 adequate information to conduct planning, priority setting, and program evaluation  
3 activities. The information and its form of retention shall include but not be limited  
4 to:

- 5 a. No later than 2 years from the effective date each permittee shall map all known  
6 municipal separate storm sewer outfalls and receiving waters, and structural  
7 stormwater BMPs owned, operated, or maintained by the Permittee.
- 8 b. No later than 4 years from the effective date of this permit each permittee shall  
9 map tributary conveyances, the associated drainage areas, and land use of all  
10 municipal separate storm sewer outfalls with a 24” inches nominal diameter or  
11 larger, or an equivalent cross-sectional area for non-pipe systems, and indicate  
12 type, material, and size where known.
- 13 c. No later than 4 years from the effective date of this permit each permittee shall  
14 map areas served by the Permittee’s MS4 that discharge stormwater to  
15 groundwater.
- 16 d. Map(s) depicting existing land use
- 17 e. Map(s) depicting zoning.
- 18 f. No later than 2 years from the effective date each permittee shall establish,  
19 maintain and make available to the public, a data base, including at least the  
20 following information.
  - 21 i. Precipitation records.
  - 22 ii. Stormwater quality and quantity records.
  - 23 iii. Water quality and physical characteristics of receiving water that may be  
24 impacted by stormwater.
- 25 g. Each Permittee shall make available to Ecology, upon request, all available GIS  
26 data layers depicting outfall locations, tributary conveyances, structural  
27 stormwater BMPs, and, if known, the associated drainage areas of 24”  
28 municipal separate storm sewer outfalls. GIS data shall be submitted in the  
29 format specified by Ecology at:  
30 <http://www.ecy.wa.gov/services/gis/data/standards.htm>. Notification of updated  
31 GIS data layers shall be included in annual reports.
- 32 h. Upon request, and to the extent appropriate, Permittees shall provide mapping  
33 information to Co-Permittees and Secondary Permittees.

34 3. Coordination

- 35 a. The SWMP shall include coordination mechanisms among Permittees, co-  
36 Permittees, and secondary Permittees to encourage coordinated stormwater-  
37 related policies, programs and projects within a watershed. The SWMP shall  
38 also include coordination among departments within each jurisdiction to ensure  
39 compliance with the terms of this permit.

- 1                   b.    Minimum Performance Measures:
- 2                   i.    No later than 6 months after the effective date of this permit, establish, in
- 3                         writing, and begin implementation of, intragovernmental (internal)
- 4                         coordination procedures to ensure compliance with the terms of this
- 5                         permit.
- 6                   ii.   No later than 6 months after the effective date of this permit, establish, in
- 7                         writing, and begin implementation of, intergovernmental coordination
- 8                         procedures on stormwater management, including
- 9                         •    Coordination mechanisms clarifying roles and responsibilities to
- 10                         ensure the control of pollutants between physically interconnected
- 11                         MS3s.
- 12                         •    Coordinating stormwater management activities, for *shared*
- 13                         *waterbodies*, among Permittees, to avoid conflicting plans, policies
- 14                         and regulations.
- 15                         •    Coordination necessary to develop an integrated monitoring program.
- 16

17                   4.    Public Involvement and Participation

- 18                   a.    The SWMP shall provide ongoing opportunities for public involvement in the
- 19                         decision making processes involving stormwater management programs and
- 20                         priorities, through advisory councils, watershed committees, participation in
- 21                         developing rate structures, stewardship programs, environmental activities, or
- 22                         other similar activities.
- 23                   b.    Minimum performance measures:
- 24                   i.    No later than 6 months after the effective date of this permit, adopt a
- 25                         process to create opportunities for public participation in the decision
- 26                         making processes involving the development, implementation and update
- 27                         of the permittees SWMP. Each Permittee must develop and implement a
- 28                         process for consideration of public comments on their SWMP.
- 29                   ii.   No later than 12 months after the effective date of this permit, begin
- 30                         implementation of the public involvement program.
- 31                   iii.  Each Permittee must make their SWMP, the SWMP documentation
- 32                         required under S7.A(1) and all submittals required by this permit,
- 33                         including annual reports, available to the public on the permittees' website
- 34                         or submitted in electronic format to the Department for posting on the
- 35                         Department's website.

36                   5.    Controlling Runoff from New Development, Redevelopment and Construction Sites

- 37                   a.    The SWMP shall include a program to prevent and control the impacts of runoff
- 38                         from new development, redevelopment, and construction activities. The
- 39                         program shall apply to private and public development, including roads.

1           b. Minimum performance measures:

2           i. The Minimum Requirements, thresholds, and definitions in Appendix 1  
3           (which is by this reference as if set forth fully herein), for new development,  
4           redevelopment, and construction sites must be included in ordinance or other  
5           enforceable documents adopted by the local government. More stringent  
6           requirements may be used, and/or certain requirements may be tailored to  
7           local circumstances through the use of basin plans or other similar water  
8           quality and quantity planning efforts. Such local requirements and thresholds  
9           must provide equal protection of receiving waters and equal levels of  
10          pollution control as compared to Appendix 1.

11          ii. Adjustment and variance criteria equivalent to those in Appendix 1 must be  
12          included.

13          iii. The local requirements must include a site planning process and BMP  
14          selection and design criteria that, when used to implement the minimum  
15          requirements on a site specific basis, will protect water quality, reduce the  
16          discharge of pollutants to the maximum extent practical, and satisfy the state  
17          requirement under chapter 90.48 RCW to apply all known, available,  
18          reasonable methods of prevention, control and treatment (AKART) prior to  
19          discharge. Permittees must document how the criteria and requirements will  
20          protect water quality, reduce the discharge of pollutants to the maximum  
21          extent practical, and satisfy the state AKART requirements.

22                 Permittees who choose to use the site planning process, and BMP selection  
23                 and design criteria in the 2005 *Stormwater Management Manual for Western*  
24                 *Washington*, or an equivalent manual approved by the Department, may cite  
25                 this choice as their sole documentation to meet this requirement.

26          iv. The program must allow non-structural preventive actions and source  
27          reduction approaches such as *Low Impact Development Techniques (LID)*,  
28          measures to minimize the creation of impervious surfaces, and measures to  
29          minimize the disturbance of soils and vegetation.

30          v. Deadlines for and Review of Local Manual and Ordinances. No later than 12  
31          months from the effective date of this permit, each Permittee must adopt a  
32          local program that meets the requirements in S7C.5.a.i through iv., above.  
33          Ecology review and approval of the local manual and ordinances is required.  
34          To ensure compliance with the 12 month deadline, Permittees may use the  
35          following review process:

36                 (1) The Permittee submits draft enforceable requirements, technical  
37                 standards and manual to Ecology no later than 8 months after the  
38                 effective date of this permit. Ecology will review and provide written  
39                 response to the Permittee.

- 1 (2) If this review process is followed, the deadline for adoption of  
2 enforceable requirements, technical standards and manual shall be  
3 automatically extended by the number of calendar days that Ecology  
4 exceeds a 60 day period for written response.
- 5 vi. No later than 12 months after the effective date of this permit, the program  
6 must establish legal authority, through approval of new development, to  
7 inspect private stormwater facilities and enforce maintenance standards.
- 8 vii. No later than 18 months after the effective date of this permit, the program  
9 must include a process of permits, plan review, inspections, and  
10 enforcement capability to meet the following standards for both private  
11 and public projects, using *qualified personnel* (staff or qualified  
12 contractors):
- 13 (1) Review all stormwater site plans for proposed development activities  
14 that meet the thresholds in Appendix 1.
- 15 (2) Inspect prior to clearing and construction, all development sites that  
16 are hydraulically near a sediment/erosion-sensitive feature or have a  
17 high potential for sediment transport as determined through plan  
18 review based on definitions and requirements in Appendix 2, which is  
19 by this reference as if set forth fully herein.
- 20 (3) Inspect all permitted development sites during construction to ensure  
21 proper installation and maintenance of required erosion and sediment  
22 controls. Enforce as necessary based on the inspection. This  
23 inspection may be combined with other inspections provided it is still  
24 performed by qualified personnel ( staff or contractors).
- 25 (4) Inspect all development sites upon completion of construction and  
26 prior to final approval/occupancy to ensure proper installation of  
27 permanent erosion controls and stormwater facilities/BMPs. Enforce  
28 as necessary based on the inspection. Also, ensure a maintenance plan  
29 is completed and responsibility for maintenance is assigned. This  
30 inspection may be combined with other inspections provided it is still  
31 performed by qualified personnel ( staff or contractors).
- 32 (5) Compliance with the inspection requirements of S7.C.5.(b)vii.(2), (3),  
33 and (4), above shall be determined by the presence of an established  
34 inspection program designed to inspect all sites.
- 35 (6) Each Permittee shall track and maintain records of all inspections and  
36 enforcement actions.
- 37 viii. No later than the effective date of this permit, the Permittee must provide  
38 the "*Notice of Intent for Construction Activity*" and/or copies of the  
39 "*Notice of Intent for Industrial Activity*" to representatives of proposed  
40 new development and redevelopment. Permittees will continue to enforce  
41 local ordinances controlling runoff from construction sites that also

1 require coverage under the Industrial Stormwater General Permit and/or  
2 the Construction Stormwater General Permit.

- 3 ix. Each permittee must provide *adequate training for staff* involved in  
4 Controlling Stormwater Runoff from New Development, Redevelopment,  
5 and Construction Sites, including permitting, plan review, construction  
6 site inspections, and enforcement, to carry out the provision of this  
7 program component.

8 6. Structural Stormwater Controls

- 9 a. The SWMP shall include a program to construct structural stormwater controls  
10 to address impacts to beneficial uses resulting from disturbances to watershed  
11 hydrology and stormwater pollutant discharges. This program shall consider  
12 impacts caused by stormwater discharges from areas of existing development,  
13 including runoff from highways, streets and roads owned or operated by the  
14 Permittee, and areas of new development, where impacts are anticipated as  
15 development proceeds. This program shall address impacts that are not  
16 adequately controlled by the other required actions of the SWMP, and shall  
17 identify necessary actions and an implementation schedule.

18 The program shall include the construction of projects such as regional flow  
19 control facilities, water quality treatment facilities, and retrofitting of existing  
20 flood control facilities. Permittees should also consider other means to address  
21 impacts from existing development, such as reduction of hydrologic changes  
22 through the use of on-site (infiltration and dispersion) stormwater management  
23 BMPs and site design techniques, habitat acquisition or restoration of forest  
24 cover and riparian buffers, for compliance with this requirement. Permittees  
25 may not use in-stream culvert replacement projects for compliance with this  
26 requirement.

27 b. Minimum Performance Measures:

- 28 i. No later than 12 months after the effective date of this permit, each  
29 Permittee shall develop and begin implementing a Structural Stormwater  
30 Control program designed to control stormwater impacts that are not  
31 adequately controlled by the other required actions of the SWMP. The  
32 program shall include a description of projects and a construction  
33 schedule, for projects that are scheduled for implementation during the  
34 term of this permit.
- 35 ii. Each Permittee shall include a description of the Structural Stormwater  
36 Control Program in the written documentation of their SWMP that must  
37 be submitted with the first year annual report. The description of the  
38 Structural Stormwater Control Program must include the following:
- 39 • The goals that the Structural Stormwater Control Program are intended  
40 to achieve.
  - 41 • The planning process used to develop the Structural Stormwater  
42 Control Program, including: the geographic scale of the planning

1 process, the issues and regulations addressed, the steps in the planning  
2 process, the types of characterization information considered, the  
3 amount budgeted for implementation, and the public involvement  
4 process.  
5

6 iii. For individual projects, provide the following information:

- 7 • The estimated pollutant load reduction that will result from each  
8 project designed to provide stormwater treatment.
- 9 • The expected outcome of each project designed to provide flow  
10 control.
- 11 • Any other expected environmental benefits.  
12

13 iv. Information about the Structural Stormwater Control Program shall be  
14 updated with each annual report.  
15

## 16 7. Source Control Program

17 a. The SWMP shall include a program to reduce pollutants in runoff from areas  
18 that discharge to municipal separate storm sewers owned or operated by the  
19 Permittee. The program shall include:

- 20 i. Requiring application of operational and structural source control BMPs,  
21 and, if necessary, treatment BMPs to pollution generating sources associated  
22 with existing land uses and activities.
- 23 ii. Inspections of pollutant generating sources at commercial, industrial and  
24 multifamily properties to ensure implementation of BMPs to control  
25 pollution discharging into municipal separate storm sewers owned or  
26 operated by the Permittee.
- 27 iii. Application and enforcement of local ordinances at all applicable sites,  
28 including those with industrial stormwater general NPDES permit coverage.  
29 Municipalities may refer stormwater discharge problems associated with  
30 violations of local ordinances only after implementing progressive  
31 enforcement as required in S7.C.7.b.iv, below. Municipalities may not refer  
32 stormwater discharge problems associated with industrial NPDES  
33 Permittees to Ecology if the Permittee has local ordinances that impose  
34 stricter standards than imposed through the permit issued by Ecology.  
35 Permittees that are in compliance with the terms of this permit will not be  
36 held liable by Ecology for water quality standard violations caused by  
37 industries covered under an NPDES permit issued by Ecology.
- 38 iv. Reduction of pollutants associated with the application of pesticides,  
39 herbicides, and fertilizer discharging into municipal separate storm sewers  
40 owned or operated by the Permittee.

1           b. Minimum Performance Measures for Source Control Program:

2           i. No later than 12 months after the effective date of this permit, adopt and  
3           begin enforcement of an ordinance requiring the application of source  
4           control BMPs for pollutant generating sources associated with existing land  
5           uses and activities (See Appendix 3, to identify pollutant generating  
6           sources). The local source control requirements must include operational  
7           and structural source control BMPs that, when used on a site specific basis,  
8           will protect water quality, reduce the discharge of pollutants to the  
9           maximum extent practical, and satisfy the state requirement under chapter  
10          90.48 RCW to apply all known, available, reasonable methods of  
11          prevention, control and treatment (AKART) prior to discharge. Permittees  
12          must document the stormwater source control BMP selection process for  
13          different urban land uses, the types of BMPs and design criteria for those  
14          BMPs, the technical basis and an assessment of how the practices will  
15          protect water quality, reduce the discharge of pollutants to the maximum  
16          extent practical, and satisfy the state AKART requirements. Permittees  
17          may choose to use the source control BMPs in Volume IV of the 2001  
18          Stormwater Management Manual for Western Washington. If the  
19          demonstration approach is chosen, the Permittee must submit the proposed  
20          source control program and all necessary documentation to Ecology for  
21          review, no later than 9 months after the effective date of this permit. If  
22          Ecology does not request changes within 30 days, the proposed source  
23          control BMPs are considered approved.

24                 Operational source control BMPs shall be required for all pollutant  
25                 generating sources. Structural source control BMPs shall be required for  
26                 pollutant generating sources that cause an illicit discharge or other pollution  
27                 problem, including: causing or contributing to a violation of surface water,  
28                 ground water, or sediment management standards; nuisance; or threat to  
29                 public health and safety, because of inadequate stormwater controls.  
30                 Implementation of source control requirements may be done through  
31                 education and technical assistance programs, provided that formal  
32                 enforcement authority is available to the Permittee and is used as necessary.

33          ii. No later than 12 months after the effective date of this permit, compile a list  
34          of existing commercial, multifamily, industrial and government sites which  
35          are potentially pollution generating (see Appendix 3 for identifying sites).  
36          The list shall be updated no later than 180 days prior to the expiration date  
37          of this permit.

38          iii. Starting no later than 24 months after the effective date of this permit,  
39          conduct an inspection program for all the listed sites, with adequate  
40          enforcement capability to ensure implementation of source control BMPs in  
41          accordance with the ordinance required in S7.C.8.b.i., above. 60% of the  
42          total of the listed properties must be inspected within 5 years of the effective  
43          date of the permit, provided that a portion of the inspections must be

1 conducted during each subsequent year of the permit term. The inspection  
2 program shall be designed to inspect all sites, to the extent allowable under  
3 state law, once every 8 years. Adjust the inspection program as needed to  
4 incorporate new sites added to the list and reflect sites already inspected.

5 iv. No later than 24 months after the effective date of this permit, each  
6 Permittee shall implement a progressive enforcement policy to ensure that  
7 facilities are brought into compliance with stormwater requirements within a  
8 reasonable time period as specified below:

9 (1) In the event that a Permittee determines, based on an inspection  
10 conducted above, that a site has failed to adequately implement all  
11 necessary BMPs, that Permittee shall take progressive enforcement  
12 action which, at a minimum, shall include a follow up inspection  
13 within 4 weeks from the date of the initial inspection.

14 (2) When a Permittee determines that a facility has failed to adequately  
15 implement BMPs after a follow-up inspection, that Permittee shall  
16 take further enforcement action as established through authority in  
17 its municipal code and ordinances, or through the judicial system.

18 (3) Each Permittee shall maintain records, including documentation of  
19 each site visit, inspection reports, warning letters, notices of  
20 violations, and other enforcement records, demonstrating a good  
21 faith effort to bring facilities into compliance. Each permittee shall  
22 also maintain records of sites that are not inspected because the  
23 property owner denies entry.

24 (4) A Permittee may refer violations of local ordinances to Ecology  
25 provided that the Permittee has made a good faith effort of  
26 progressive enforcement. At a minimum a Permittee's good faith  
27 effort must include documentation of:

- 28 • Two follow-up inspections, and
- 29 • Two warning letters or notices of violation

30 v. No later than 12 months after the effective date of this permit, adopt and  
31 implement policies and procedures to reduce pollutants associated with the  
32 application of pesticides, herbicides, fungicides, and fertilizer on all public  
33 property owned or managed by the Permittee, including parks and road  
34 right-of-ways. The program shall include the following, at a minimum:

35 (1) Identify and quantify all pesticides, herbicides, fungicides, and  
36 fertilizer used by the Permittee;

37 (2) Identify application practices of each listed product: location, timing,  
38 application rates;

1 (3) Ensure no application of pesticides, herbicides, fungicides, or  
2 fertilizers immediately before, during or after a rain event, or when  
3 water is flowing off the area to be applied;

4 (4) Ensure that staff applying pesticides or herbicides are certified by the  
5 Washington State Department of Agriculture;

6 (5) Implement procedures to use and manage herbicides, pesticides,  
7 fungicides, and fertilizer consistent with the adopted source control  
8 BMPs.

9 vi. Provide a minimum of two training sessions regarding the source control  
10 ordinance, inspection procedures and source control BMPs, for inspection  
11 and other appropriate field staff, to facilitate adequate implementation of the  
12 source control program. The first training shall be conducted no later than  
13 24 months after the effective date of this permit. The second training shall  
14 be conducted no later than 48 months after the effective date of this permit.  
15

16 8. Illicit Connections and Illicit Discharges Detection and Elimination

17 a. The SWMP shall include an ongoing program to detect, remove and prevent  
18 illicit connections and illicit discharges, including spills, into the municipal  
19 separate storm sewers owned or operated by the Permittee. The program shall  
20 include:

21 i. Effectively prohibiting all types of illicit discharges to the municipal  
22 separate storm sewers owned or operated by the Permittee other than those  
23 authorized under a separate NPDES permit. The categories of non-  
24 stormwater discharges listed in Appendix 4 must be addressed only if  
25 identified as a contributor of pollution to the MS3s owned or operated by the  
26 Permittee. As necessary, the Permittee(s) shall incorporate appropriate  
27 control measures in the stormwater management program to ensure the non-  
28 stormwater discharges listed in Appendix 4 are not sources of pollutants to  
29 waters of the state.

30 ii. Detecting and eliminating illicit connections to municipal separate storm  
31 sewers owned or operated by the Permittee.

32 iii. On-going identification of illicit discharges into the municipal separate  
33 storm sewer system, through inspections, monitoring and complaint  
34 response.

35 iv. Preventing, responding to, and cleaning up illicit discharges into the  
36 municipal separate storm sewers owned or operated by the Permittee.

37 b. Minimum Performance Measures:

38 i. No later than the effective date of this permit, each Permittee must continue  
39 implementing an on-going program to prevent, identify and respond to illicit

1 connections and illicit discharges. The program shall include adopting  
2 procedures for reporting and correcting or removing illicit connections,  
3 spills and other illicit discharges when they are suspected or identified. The  
4 program shall also include procedures for controlling pollutants entering the  
5 MS4 from an interconnected, adjoining MS4. Illicit connections and illicit  
6 discharges shall be identified through field screening, inspections,  
7 complaints/reports, construction inspections, maintenance inspections,  
8 source control inspections, and/or monitoring information, as appropriate.

9 ii. Each Permittee shall provide appropriate training for municipal field staff  
10 who are responsible for identification, investigation, termination, cleanup,  
11 and reporting illicit discharges, including spills, improper disposal and illicit  
12 connections. Training shall be completed no later than 12 months after the  
13 effective date of this permit. Refresher training shall be conducted on an  
14 annual basis thereafter.

15 iii. All municipal field staff, which as part of their normal job responsibilities  
16 might come into contact with or otherwise observe an illicit discharge or  
17 illicit connection to the storm sewer system shall be trained on the  
18 identification of an illicit discharge/connection and on the proper procedures  
19 for reporting the illicit discharge/connection. Initial training shall be  
20 completed no later than two years from the effective date of this permit.  
21 Permittees shall conduct refresher training on an annual basis thereafter.

22 iv. Each Permittee shall initiate a program to develop and maintain a map of all  
23 connections to the municipal separate storm sewer authorized or allowed by  
24 the permittee. Each Permittee shall map connections to the municipal  
25 separate storm sewer according to the following schedule:

26 City of Seattle and City of Tacoma: second year annual report

27 Snohomish, King, Pierce and Clark Counties: one half the area of the  
28 County within urban growth boundaries and urbanized areas in the 4<sup>th</sup>  
29 year annual report

30 v. Each Permittee shall continue to provide a publicly listed water quality  
31 citizen complaints/reports telephone number. This program shall be in place  
32 no later than the effective date of this permit. Complaints shall be  
33 responded to in accordance with S7.C.8.b.vii. and ix., below.

34 vi. Each Permittee shall conduct on-going screening for illicit connections,  
35 including indicator monitoring, and tracking discharges to the source. The  
36 Permittee shall conduct an ongoing program to identify illicit connections.

37 (1) City of Seattle and City of Tacoma shall schedule the screening for  
38 illicit discharges such that all of the City's municipal separate storm  
39 sewers are screened at least once during the term of this permit.

- 1 (2) Snohomish, King, Pierce and Clark Counties shall schedule the  
2 screening program such that all the municipal separate storm sewers  
3 located in one half the area of the County within urban growth  
4 boundaries and urbanized areas are screened during the term of this  
5 permit.
- 6 vii. Screening for illicit discharges shall be conducted using one or more of the  
7 methods listed below:
- 8 (1) The field screening method in 40 CFR 122.26(d)(1)(iv).
- 9 (2) Illicit Discharge Detection and Elimination: A Guidance Manual for  
10 Program Development and Technical Assessments, Center for  
11 Watershed Protection, October 2004.
- 12 (3) Other alternative methods that have been approved by Ecology.
- 13 viii. Response to Illicit Connections
- 14 (1) Investigation: Upon discovery or upon receiving a report of a  
15 suspected illicit connection, Permittees shall initiate an investigation  
16 within 21 days, to determine the source of the connection, the nature  
17 and volume of discharge through the connection, and the responsible  
18 party for the connection.
- 19 (2) Termination: Upon confirmation of the illicit nature of a storm drain  
20 connection, Permittees shall ensure termination of the connection  
21 within 180 days, using enforcement authority as needed.
- 22 ix. Each Permittee, no later than 6 months after the effective date for this  
23 permit, shall develop and implement procedures to prevent, respond to and  
24 clean up spills and improper disposal into municipal separate storm sewers  
25 owned or operated by the Permittee. Under these procedures, each  
26 Permittee shall investigate, within 7 days on average, any complaints/reports  
27 or monitoring information that indicates a potential illicit discharge,  
28 including a spill or illegal dumping. Permittees shall also investigate as  
29 soon as possible, within 24 hours, those problems/violations judged to be  
30 urgent or severe, or reported as emergencies.
- 31 x. Each Permittee shall track and maintain records of the illicit discharge  
32 detection and elimination program, including documentation of inspections,  
33 complaint/spill response and other enforcement records.
- 34
- 35 9. Operation and Maintenance Program
- 36 a. The SWMP shall include a program to conduct maintenance activities that  
37 prevent or reduce stormwater impacts. The program shall include:
- 38 i. Maintenance standards and programs to ensure proper and timely  
39 maintenance of public and private stormwater facilities.

- 1           ii. Practices for operating and maintaining public streets, roads, and highways  
2           to reduce stormwater impacts.
- 3           iii. Policies and procedures to reduce pollutants associated with the application  
4           of pesticides, herbicides, and fertilizer by the Permittee's agencies or  
5           departments.
- 6           iv. Practices for reducing stormwater impacts from *heavy equipment*  
7           *maintenance or storage yards*, and from *material storage facilities*.

8           b. Minimum Performance Measures:

- 9           i. Maintenance Standards. No later than 12 months after the effective date of  
10           this permit, each Permittee must establish maintenance standards that are as  
11           protective or more protective than those specified in Chapter 4 of Volume V  
12           of the 2005 Stormwater Management Manual for Western Washington.

13           The facility-specific maintenance standards are intended to be conditions  
14           for determining if maintenance actions are required as identified through  
15           inspection. They are not intended to be measures of the facility's required  
16           condition at all times between inspections. Exceeding these conditions at  
17           any time between inspections and/or maintenance does not automatically  
18           constitute a violation of these standards. However, based upon inspection  
19           observations, the inspection and maintenance schedules shall be adjusted to  
20           minimize the length of time that a facility is in a condition that requires a  
21           maintenance action. These standards are violated when an inspection  
22           identifies a required maintenance action, and that action is not performed in  
23           a timely manner, for example, within 90 days for typical maintenance,  
24           within 6 months for revegetation, and within 1 year for maintenance that  
25           requires capital construction of less than \$25,000.

- 26           ii. Maintenance of stormwater facilities regulated by the Permittee

- 27           (1) No later than 6 months after the effective date of this permit, each  
28           Permittee shall update existing ordinances or other enforceable  
29           documents requiring maintenance of all permanent stormwater  
30           treatment and flow control facilities regulated by the Permittee, in  
31           accordance with maintenance standards established under S7.C.9.b.i,  
32           above.
- 33           (2) No later than 12 months after the effective date of this permit, each  
34           Permittee shall develop and implement an initial inspection schedule  
35           for all stormwater treatment and flow control facilities regulated by  
36           the Permittee that ensures inspection of each facility at least once  
37           during the term of this permit to enforce compliance with adopted  
38           maintenance standards as needed based on the inspection.
- 39           (3) No later than 48 months after the effective date of this permit, each  
40           Permittee shall develop an on-going inspection schedule for  
41           implementation after the initial schedule to ensure annual inspections

1 of all stormwater treatment and flow control facilities regulated by  
2 the Permittee. The annual inspection schedule may be changed to a  
3 lesser or greater frequency of inspection, as appropriate to ensure  
4 compliance with maintenance standards, based on maintenance  
5 records of double the length of time of the proposed inspection  
6 frequency.

7 (4) No later than 24 months after the effective date of this permit each  
8 Permittee shall manage maintenance activities to inspect all new  
9 permanent stormwater treatment and flow control facilities in new  
10 residential developments every 6 months during the period of  
11 heaviest house construction (i.e., 1 to 2 years following subdivision  
12 approval) to identify maintenance needs and enforce compliance  
13 with maintenance standards as needed.

14 (5) Compliance with the inspection requirements of S7.C.9.b.ii.(2),(3),  
15 and (4), above, shall be determined by the presence of an established  
16 inspection program designed to inspect all sites.

17 iii. Maintenance of stormwater facilities owned or operated by the Permittee

18 (1) No later than 24 months after the effective date of this permit each  
19 Permittee shall begin implementing a program to inspect all  
20 stormwater treatment and flow control facilities annually and take  
21 appropriate maintenance action in accordance with adopted  
22 maintenance standards. The annual inspection schedule may be  
23 changed to a lesser or greater frequency of inspection as appropriate  
24 to ensure compliance with maintenance standards based on  
25 maintenance records of double the length of time of the proposed  
26 inspection frequency.

27 (2) No later than 24 months after the effective date of this program each  
28 Permittee shall begin implementing a program to conduct spot  
29 checks of potentially damaged treatment and flow control facilities  
30 after major storm events. If spot checks indicate widespread  
31 damage/maintenance needs, inspect all stormwater treatment and  
32 flow control facilities that may be affected. Conduct repairs or take  
33 appropriate maintenance action in accordance with maintenance  
34 standards established under S7.C.9.b.i, above, based on the results of  
35 the inspections.

36 (3) Compliance with the inspection requirements of S7.C.9.b.iii.(1) and  
37 (2), above, shall be determined by the presence of an established  
38 inspection program designed to inspect all sites.

39 iv. Catch Basin Maintenance

40 (1) No later than 24 months after the effective date of this permit each  
41 Permittee shall begin implementing a program to annually inspect  
42 catchbasins and inlets owned or operated by the Permittee.

1 Inspections may be conducted on a “circuit basis” whereby a  
2 sampling of catchbasins and inlets within each circuit is inspected to  
3 identify maintenance needs. Include in the sampling an inspection of  
4 the catchbasin immediately upstream of any system outfall. Clean  
5 all catchbasins within a given circuit at one time if the inspection  
6 sampling indicates cleaning is needed to comply with maintenance  
7 standards established under S7.C.9.b.i, above. As an alternative to  
8 inspecting catchbasins on a “circuit basis,” the Permittee may inspect  
9 all catchbasins, and clean only catchbasins where cleaning is needed  
10 to comply with maintenance standards. The disposal of decant  
11 water shall be in accordance with the requirements in Appendix 7,  
12 which is by this reference as if set forth fully herein.

13 (2) The Permittee shall require cleaning of private catchbasins and inlets  
14 whenever they are found to be out of compliance with adopted  
15 maintenance standards.

16 v. Records of inspections and maintenance or repair activities conducted by the  
17 Permittee shall be maintained.

18 vi. Establish practices to reduce stormwater impacts associated with runoff  
19 from public parking lots, public streets, public roads, highways, and road  
20 maintenance activities within 12 months of the effective date of this permit.

21 Implementation of practices shall begin no later than 18 months after the  
22 effective date of this permit, and continue on an ongoing basis throughout  
23 the term of the permit. The following activities must be addressed:

- 24 (1) Pipe cleaning
- 25 (2) Cleaning of culverts that convey stormwater in ditch systems
- 26 (3) Ditch maintenance
- 27 (4) Street cleaning
- 28 (5) Road repair and resurfacing, including pavement grinding
- 29 (6) Snow and ice control
- 30 (7) Utility installation
- 31 (8) Maintaining roadside areas, including vegetation management.
- 32 (9) Dust control
- 33 (10) Pavement striping maintenance

34 vii. No later than 12 months after the effective date of this permit each Permittee  
35 shall establish and implement policies and procedures to reduce pollutants in  
36 discharges from all lands owned or maintained by the Permittee, including  
37 but not limited to: parks, open space, road right-of-ways, maintenance yards,  
38 and at stormwater treatment and flow control facilities. These policies and  
39 procedures must address, but are not limited to:

- Application of fertilizer, pesticides, and herbicides, including the development of an Integrated Pest Management Program
- Sediment and erosion control
- Landscape maintenance and vegetation disposal
- Trash management
- Building exterior cleaning and maintenance

viii. Conduct a minimum of 2 training sessions, during the term of the permit, for appropriate employees of the Permittee whose construction, operations or maintenance job functions may impact stormwater quality. Training shall address the importance of protecting water quality, the requirements of this permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. The first training session shall be completed no later than 2 years after the effective date of this permit; the second training session shall be completed no later than the end of the permit term.

ix. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for all *heavy equipment maintenance or storage yards*, and material storage facilities owned or operated by the Permittee, that are not covered under the Industrial Stormwater General permit. The SWPPP is a documented plan to implement measures to identify, prevent, and control the contamination of discharges of stormwater to surface or ground water. The SWPPPs must be developed within 18 months of the effective date of this permit. 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. Generic SWPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of stormwater outfalls and receiving water in close proximity of known stormwater outfalls, during a storm event, to evaluate the effectiveness of BMPs.

#### 10. Education Program

- a. The SWMP shall include an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education program may be developed locally or regionally.

1           b. Minimum Performance Measures:

- 2           i. No later than 12 months after the effective date of this permit each Permittee  
3           shall implement or participate in an education program that uses different  
4           types of media (brochures alone are not adequate), and targets a wide range  
5           of interest groups to provide education on the topics listed in iii, below.
- 6           ii. The education program shall address the following topics and target  
7           audiences:
- 8               (1) Provide education opportunities for all audiences about the importance  
9               of improving water quality, reducing impervious surfaces and  
10              protecting beneficial uses of waters of the state, about potential  
11              impacts caused by stormwater discharges, and methods for avoiding,  
12              minimizing, reducing and/or eliminating the adverse impacts of  
13              stormwater runoff.
- 14              (2) Provide and encourage participation in environmental stewardship  
15              activities.
- 16              (3) Provide information to the general public about actions individuals can  
17              take to improve water quality and reduce impervious surfaces (e.g.,  
18              lawn care with less fertilizer and pesticides, more use of native  
19              vegetation for landscaping, proper disposal of pet wastes, etc.).
- 20              (4) Provide information to the general public on proper use and disposal  
21              of pesticides, herbicides, and fertilizers.
- 22              (5) Provide information to engineers, construction contractors, developers,  
23              development review staff, and land use planners on technical  
24              standards, the development of stormwater site plans and erosion  
25              control plans, and BMPs for mitigating contaminated runoff and the  
26              quantity of runoff from development sites.
- 27              (6) Provide information to engineers, contractors, developers, and the  
28              public on land development practices and non-structural BMPs, such  
29              as Low Impact Development, that eliminate, avoid, or minimize  
30              adverse stormwater impacts.
- 31              (7) Provide information to explain the definition and impacts, and promote  
32              removal of illicit discharges.
- 33              (8) Provide information to promote proper management and disposal of  
34              toxic materials (e.g. used oil, batteries, vehicle fluids, home  
35              chemicals.)
- 36              (9) Provide information to commercial target audiences in coordination  
37              with the source control inspection program.
- 38           iii. Each Permittee shall develop and implement a public education and  
39           outreach program designed to reach 100% of the target audiences

1 identified in S7.c.10.b.ii., above, within their jurisdiction, by the  
2 expiration date of this permit.

- 3 iv. Each permittee shall track and maintain records of public education  
4 activities.

5 **S8. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND**  
6 **SECONDARY PERMITTEES**

7 A. Each Co-Permittee and Secondary Permittee shall implement a stormwater  
8 management program (SWMP) during the term of this permit. For the purpose of this  
9 permit a SWMP for a Co-Permittee or Secondary Permittee is a set of actions and  
10 activities comprising the components in this Special Condition as outlined below. The  
11 SWMP shall also include any additional controls identified in Appendix 6 of this  
12 permit which are necessary to meet applicable TMDL requirements.

13 1. S8.B Coordination, and S8.C Legal Authority are applicable to all Co-Permittees  
14 and Secondary Permittees covered under this permit.

15 2. S8.D is applicable only to Port Districts Covered under this Permit.

16 3. S8.E is applicable only to King County as a Co-Permittee with the City of Seattle  
17 for MS4s owned by King County but located within the City of Seattle.

18 4. S8.F is applicable all other Secondary Permittees excluding Port Districts.

19 B. Coordination

20 The SWMP for all Co-Permittees and Secondary Permittees shall include mechanisms  
21 among Permittees, Co-Permittees, and Secondary Permittees to encourage coordinated  
22 stormwater-related policies, programs and projects within a watershed and  
23 interconnected municipal separate storm sewers. Where relevant and appropriate, the  
24 SWMP shall also include coordination among departments within each jurisdiction to  
25 ensure compliance with the terms of this permit.

26 No later than 6 months after receiving coverage under this permit the SWMP shall  
27 provide for appropriate coordination with the City and County in which the Secondary  
28 Permittee or Co-Permittee is located.

29 C. Legal Authority

30 To the extent allowable under state law, all Co-Permittees and Secondary Permittees  
31 shall operate pursuant to adequate legal authority which authorizes or enables the  
32 Secondary Permittee and Co-permittee to control discharges to and from municipal  
33 separate storm sewers owned or operated by the Secondary Permittee.

34 This legal authority, which may be a combination of statute, ordinance, permit,  
35 contracts, orders, interagency agreements, or similar means, shall include the ability to:

- 1 1. Control the contribution of pollutants to municipal separate storm sewers owned or  
2 operated by the Co-Permittee or Secondary Permittee from stormwater discharges  
3 associated with industrial activity, and control the quality of stormwater discharged  
4 from sites of industrial activity, and control the quality of stormwater discharged  
5 from sites of industrial activity into the Permittees municipal separate storm sewer
- 6 2. Prohibit illicit discharges to the municipal separate storm sewer owned or operated  
7 by the Co-Permittee or Secondary Permittee;
- 8 3. Control the discharge of spills and the dumping or disposal of materials other than  
9 stormwater into the municipal separate storm sewers owned or operated by the Co-  
10 Permittee or Secondary Permittee;
- 11 4. Control the contribution of pollutants from one portion of the municipal separate  
12 storm sewer system to another portion of the municipal separate storm sewer  
13 system;
- 14 5. Require compliance with conditions in ordinances, permits, contracts, or orders;  
15 and,
- 16 6. Carry out inspection, surveillance, and monitoring procedures necessary to  
17 determine compliance and non-compliance with permit conditions, including the  
18 prohibition on illicit discharges to the municipal separate storm sewer.

19 D. Stormwater Management Program for Port Districts:

- 20 1. Gathering, Maintaining, and Using Adequate Information. The SWMP shall include  
21 an ongoing program for gathering, maintaining, and using adequate information to  
22 conduct planning, priority setting, and program evaluation activities for Port-owned  
23 properties.

24 Minimum Performance Measures. The following information will be gathered and  
25 retained:

- 26 a. Mapping of known municipal separate storm sewer outfalls, and maps depicting  
27 land use for property owned by the Port district, and all other properties served  
28 by municipal separate storm sewers owned or operated by the Port. The  
29 mapping shall be completed within 18 months of receiving coverage under this  
30 permit.
- 31 b. Mapping of tributary conveyances, and the associated drainage areas of *major*  
32 *municipal separate storm sewer outfalls*, will be completed within 2 years of the  
33 effective date of this permit.
- 34 c. Each Port shall make available to Ecology, upon request, GIS data layers  
35 depicting outfall locations, land use, tributary conveyances and associated  
36 drainage areas of major outfalls. GIS data shall be submitted in the format  
37 specified by Ecology at:  
38 <http://www.ecy.wa.gov/services/gis/data/standards.htm>.

- 1 c. No later than 18 months after receiving coverage under this permit, develop and  
2 implement a program to maintain operation and maintenance records for  
3 stormwater management facilities, indicating the date, what actions were taken  
4 and where wastes were disposed of. The information shall be available for  
5 inspection.
- 6 d. Upon Request, mapping information and operation and maintenance records  
7 shall be provided to the City or County in which the Port is located.

- 8
- 9 2. Source Control in existing Developed Areas. The SWMP shall include a program  
10 to address impacts caused by stormwater discharges from areas of existing  
11 development through the development and implementation of Stormwater Pollution  
12 Prevention Plans (SWPPPs). SWPPPs shall be prepared and implemented for all  
13 Port-owned lands with potential pollutant-generating sources (see Appendix 3, for  
14 definition of pollutant-generating sources) that are not covered under the Industrial  
15 Stormwater General Permit, the Boatyard General Permit or an individual NPDES  
16 permit that covers stormwater discharges, and that could contribute pollutants to  
17 municipal separate storm sewers owned or operated by the Port.

18 Minimum Performance Measures

- 19 a. SWPPPs must be developed for applicable properties within 18 months of  
20 receiving coverage under this permit. The SWPPP is a documented plan to  
21 implement measures to identify, prevent, and control the contamination of  
22 discharges of stormwater to surface or ground water.
- 23 b. The SWPPP shall include a facility assessment including a site plan,  
24 identification of pollutant sources and description of the drainage system.
- 25 c. The SWPPP shall include a description of the BMPs necessary for the site to  
26 eliminate or reduce stormwater contamination and, if necessary, regulate peak  
27 flow and volume of stormwater discharge. Implementation of non-structural  
28 BMPs shall begin immediately after the pollution prevention plan is developed.  
29 A schedule for implementation of structural BMPs shall be included in the  
30 SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to  
31 comply with this requirement.
- 32 d. The Port shall maintain a list of sites for which SWPPPs are required under this  
33 permit. At least 15% of the listed sites shall be inspected annually, and 80% of  
34 the total number of listed properties will be inspected during the term of the  
35 permit.
- 36 e. The SWPPPs shall include policies and procedures to reduce pollutants  
37 associated with the application of pesticides, herbicides and fertilizer.
- 38 f. The SWPPPs shall include measures to prevent, identify and respond to illicit  
39 discharges, including illicit connections, spills and improper disposal.  
40 Immediately upon becoming aware of a spill into the drainage system owned or

1 operated by the Port, the Port shall notify the City or County it is located in, and  
2 notify Ecology.

- 3 g. The SWPPPs shall include a component related to inspection and maintenance  
4 of stormwater treatment and flow control facilities, and catchbasins, that is  
5 consistent with the Port's Operation and Maintenance Program, as specified in  
6 3., below. The SWPPP will address appropriate training for maintenance staff.  
7 Records of inspections and maintenance activities shall be maintained.

- 8 3. Operation and Maintenance Program. The SWMP shall include an operation and  
9 maintenance program for all stormwater treatment and flow control facilities, and  
10 catchbasins to ensure that BMPs continue to function properly.

11 Minimum Performance Measures:

- 12 a. Each Port must prepare an operation and maintenance manual for all  
13 stormwater treatment and flow control BMPs that are owned or maintained by  
14 the Port. The deadline for preparing the maintenance manual is 18 months after  
15 receiving coverage under this permit. A copy of the manual shall be retained in  
16 the appropriate Port department. The operation and maintenance manual shall  
17 establish facility-specific maintenance standards that are as protective, or more  
18 protective than those specified in Chapter 4 of Volume V of the 2001  
19 Stormwater Management Manual for Western Washington.

20 The facility-specific maintenance standards are intended to be conditions for  
21 determining if maintenance actions are required as identified through  
22 inspection. They are not a measure of the facilities required condition at all  
23 times between inspections. Exceeding the maintenance standards between  
24 inspections and/or maintenance does not automatically constitute a violation of  
25 these standards. However, based upon inspection observations, the inspection  
26 and maintenance schedules shall be adjusted to minimize the length of time that  
27 a facility is in a condition that requires a maintenance action. These standards  
28 are violated when an inspection identifies a required maintenance action, and  
29 that action is not performed within 90 days for typical maintenance, within 6  
30 months for re-vegetation, and within 1 year for maintenance that requires capital  
31 construction.

- 32 b. Each Port will manage maintenance activities to inspect all stormwater  
33 treatment and flow control BMPs annually and take appropriate maintenance  
34 action in accordance with the operation and maintenance manual. The annual  
35 inspection schedule may be changed to a lesser or greater frequency of  
36 inspection as appropriate to ensure compliance with maintenance standards  
37 based on maintenance records of double the length of time of the proposed  
38 inspection frequency.
- 39 c. The Port shall provide appropriate training for Port maintenance staff.

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

5 Minimum Performance Measure:

6 a. No later than 18 months after receiving coverage under this permit, all tenant  
7 and Port employees whose job duties could negatively impact stormwater will  
8 receive educational materials.

9 5. Monitoring Program. The monitoring requirements for the Port of Seattle and Port  
10 of Tacoma are included in Special Condition S6.

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

12 King County as a Co-Permittee with the City of Seattle for the Densmore Metro  
13 Drainage Basin, as defined in the Memorandum of Agreement between the City and  
14 King County dated September 25, 1995, shall participate in the City of Seattle's  
15 Stormwater Management Program in accordance with the Joint Stormwater  
16 Management Program element of the Memorandum of Agreement. The Joint  
17 Stormwater Management Program shall at a minimum include the following:

- 18 1. Stormwater controls for areas of existing development consistent with S7.C.6.
- 19 2. A source control program consistent with S7.C.7.
- 20 3. An illicit discharge reduction program consistent with S7.C.8.
- 21 4. An operation and maintenance program consistent with S7.C.9.
- 22 5. A public education program consistent with S7.C.10.

23 F. Stormwater Management Program for Secondary Permittees

24 All other Secondary Permittees shall develop and implement the following Stormwater  
25 Management Program. The term "all other Secondary Permittees" means drainage,  
26 diking, flood control, or diking and drainage districts, and any other owners or  
27 operators of municipal separate storm sewers located within the municipalities that are  
28 listed as Permittees in special condition S1.B.

29 The SWMP shall be designed to reduce the discharge of pollutants from regulated small  
30 MS4s to the maximum extent practicable and protect water quality. A SWMP is a set  
31 of actions and activities comprising the components listed in S8.F.1 through S8.F.6,  
32 below. Unless an alternate deadline is provided below, all components of the SWMP  
33 shall be fully developed and implemented within 5 years of receiving coverage under  
34 this permit.

- 35 1. Public Education and Outreach

36 Secondary Permittees must develop and implement a public education and outreach  
37 program. The program shall distribute educational materials or conduct equivalent

1 outreach activities to educate the public, businesses and other entities in the area served  
2 by the Secondary Permittees MS4.

3 The minimum performance measures are:

- 4 a. Each Secondary Permittee shall identify at least one target audience served by the  
5 Secondary Permittees MS4 for stormwater education and will provide appropriate  
6 information to that audience about proper stormwater management to prevent  
7 water quality impacts.
- 8 b. The target audience(s) must be identified within one year from the date of permit  
9 coverage; an outreach strategy designed to reach 100% of the identified target  
10 audience must be developed and implemented within four years from the date of  
11 permit coverage. This requirement may be met by participating in the education  
12 program of the permitted jurisdiction that the secondary permittee is located  
13 within.

## 14 2. Public Involvement

15 At a minimum, Secondary Permittees must comply with applicable State, tribal and  
16 local public notice requirements when implementing a public involvement and  
17 participation program. The SWMP shall include ongoing opportunities for public  
18 involvement and participation through advisory panels, public hearings, watershed  
19 committees, participation in developing rate-structures, stewardship programs,  
20 environmental activities, volunteer opportunities, or other similar activities.

## 21 3. Illicit Discharge Detection and Elimination

22 The SWMP shall include measures to prevent, identify and respond to illicit discharges,  
23 including illicit connections, spills, and improper disposals, which shall include  
24 appropriate inspections and reports, and appropriate training and procedures to be used  
25 by field staff to recognize, report, and respond to, illicit discharges.

26 The minimum performance measures are:

- 27 a. From the date of permit coverage, comply with all relevant ordinances, rules, and  
28 regulations of the local jurisdiction(s) in which the Secondary Permittee is located  
29 that govern discharges into the local jurisdictions municipal separate storm sewer  
30 system.
- 31 b. Develop and enforce appropriate policies prohibiting illicit discharges and illegal  
32 dumping. Identify possible enforcement mechanisms within one year from the  
33 date of permit coverage; and, within eighteen months from the date of permit  
34 coverage, develop and implement an enforcement plan using these mechanisms to  
35 ensure compliance with illicit discharge policies adopted by the Secondary  
36 Permittee.
- 37 c. Develop a map of the municipal separate storm sewer system owned or operated  
38 by the Secondary Permittee within 2 years from the date of permit coverage. The

1 map shall include all known storm drain outfalls to waters of the state and the  
2 name of the receiving water body or discharge points into adjacent MS4s. The  
3 map shall also include all known tributary conveyances, and their associated  
4 drainage areas, for all areas served by the MS4 owned or operated by the  
5 Secondary Permittee.

6 The storm sewer map shall be provided to the City or County in which the  
7 Secondary Permittee is located, upon the request of those entities. In accordance  
8 with S7.C.2, Secondary Permittees may request mapping information from other  
9 entities covered under this permit.

- 10 d. By the end of the permit term, develop and implement a spill response plan that  
11 includes coordination with a qualified spill responder.
- 12 e. Provide staff training or coordinate with existing training efforts to educate  
13 relevant staff on proper best management practices for identifying and preventing  
14 spills and illicit discharges. All relevant staff must be trained by the end of the  
15 permit term.
- 16 f. Identify areas of industrial activity served by the Secondary Permittee's MS4 that  
17 require coverage under the Industrial General Permit, determine whether coverage  
18 has been obtained, and inform the Department if coverage has not been obtained.

19 4. Construction Site Stormwater Runoff Control

20 The SWMP shall include a program to reduce pollutants in any stormwater runoff to  
21 the MS4 from construction activities that meet the thresholds in Appendix 1 of this  
22 permit.

23 The minimum performance measures are:

- 24 a. From the date of permit coverage, comply with all relevant ordinances, rules, and  
25 regulations of the local jurisdiction(s) in which the secondary permittee is located  
26 that govern construction phase stormwater pollution prevention measures.
- 27 b. From the date of permit coverage, seek coverage under the General NPDES  
28 Permit for Stormwater Discharges Associated with Construction Activities, when  
29 applicable.
- 30 c. Provide training or coordinate with existing training efforts to educate relevant  
31 staff in erosion and sediment control BMPs and requirements, or hire trained  
32 contractors to perform the work.

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

35 The SWMP shall include a program to address post-construction stormwater runoff  
36 from new development and redevelopment projects that meet the thresholds in  
37 Appendix 1 of this permit. The program must ensure that controls are in place that  
38 would prevent or minimize water quality impacts.

1 The minimum performance measures are:

- 2 a. From the date of permit coverage, comply with all relevant ordinances, rules and  
3 regulations of the local jurisdiction(s) in which the secondary permittee is located  
4 that govern post-construction stormwater pollution prevention measures,  
5 including proper operation and maintenance of the MS4.
- 6 b. Provide for the post-construction stormwater controls included in Appendix 1 to  
7 be included on all new construction and other land-disturbing projects and ensure  
8 that qualified staff or contractors design post-construction stormwater controls as  
9 necessary to protect water quality on all projects.

10 6. Pollution Prevention and Good Housekeeping

11 All permittees must develop and implement an operation and maintenance program  
12 (O&M Plan) that includes a training component and has the ultimate goal of preventing  
13 or reducing pollutant runoff from municipal operations into MS4s. Within three years  
14 from the date of permit coverage, each Secondary Permittee shall develop a municipal  
15 O&M Plan. The O&M plan shall be fully implemented no later than five years from  
16 the date of permit coverage.

17 The minimum performance measures are:

- 18 a. The O&M Plan shall include appropriate pollution prevention and good  
19 housekeeping procedures for the following activities and/or types of facilities  
20 carried out, or under the functional control of the of the Secondary Permittee:
- 21 • Stormwater collection and conveyance system maintenance
  - 22 • Drainage/ditch system maintenance
  - 23 • Structural stormwater controls
  - 24 • Roads, highways, and parking lots
  - 25 • Vehicle fleets (storage, washing, and maintenance)
  - 26 • Equipment storage and maintenance areas
  - 27 • Material storage areas
  - 28 • Parks and open space
  - 29 • Other facilities that that would reasonably be expected to discharge  
30 contaminated runoff
- 31 b. The O&M plan shall include pollution prevention/good housekeeping practices at  
32 all park areas and other open spaces maintained by the Secondary Permittee. The  
33 O&M Plan must address, but is not limited to:
- 34 • Application of fertilizer, pesticides, and herbicides
  - 35 • Sediment and erosion control
  - 36 • Landscape maintenance and vegetation disposal
  - 37 • Trash management
  - 38 • Building exterior cleaning and maintenance
- 39 c. The O&M Plan shall include provisions for the regular inspection and  
40 maintenance of post-construction structural BMPs. The O&M Plan shall establish

1 facility-specific maintenance standards that are as protective or more protective  
2 than those specified in Chapter 4 of Volume V of the 2005 Stormwater  
3 Management Manual for Western Washington.

4 The facility-specific maintenance standards are intended to be conditions for  
5 determining if maintenance actions are required as identified through inspection.  
6 They are not a measure of the facility's required condition at all times between  
7 inspections. Exceeding the maintenance standards between inspections and/or  
8 maintenance does not automatically constitute a violation of these standards.  
9 However, based upon inspection observations, the inspection and maintenance  
10 schedules shall be adjusted to minimize the length of time that a facility is in a  
11 condition that requires a maintenance action. These standards are violated when  
12 an inspection identifies a required maintenance action, and that action is not  
13 performed within 90 days for typical maintenance, within 6 months for re-  
14 vegetation, and within 1 year for maintenance that requires capital construction of  
15 less than \$5,000.

- 16 d. Secondary Permittees shall annually inspect all post construction stormwater  
17 BMPs. The annual inspections program shall begin no later than three years from  
18 the date of permit coverage. The annual inspection schedule may be changed to a  
19 lesser or greater frequency of inspection as appropriate to ensure compliance with  
20 maintenance standards based on maintenance records of double the length of time  
21 of the proposed inspection frequency.
- 22 e. Secondary Permittees shall properly maintain stormwater collection and  
23 conveyance systems, including but not limited to: regular inspections, cleaning,  
24 proper disposal of waste removed from the system (per Appendix 7), and record  
25 keeping.
- 26 f. From the effective date of permit coverage, Secondary Permittees shall identify,  
27 and submit a Notice of Intent for permit coverage for all facilities operated by the  
28 Secondary Permittee that are required to be covered under the General NPDES  
29 Permit for Stormwater Discharges Associated with Industrial Activities.
- 30 g. Secondary Permittees shall provide appropriate training for employees of the  
31 Secondary Permittee whose construction, operations, or maintenance job  
32 functions may impact stormwater quality. Training shall address the importance  
33 of protecting water quality, the requirements of this permit, operation and  
34 maintenance requirements, inspection procedures, ways to perform their job  
35 activities to prevent or minimize impacts to water quality, and procedures for  
36 reporting water quality concerns, including potential illicit discharges.

37  
38 **S9. REPORTING REQUIREMENTS**

- 39 A. Each Permittee, co-Permittee and secondary Permittee shall submit, no later than March  
40 31 of each year beginning in the year 2007, an annual report. The reporting period for  
41 each annual report shall be the previous calendar year.

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B. The annual report shall include the following information:

1. Status of compliance with the conditions of this permit, including the status of implementing the components of the stormwater management program, and the implementation schedule. If permit deadlines are not met, Permittees, co-Permittees and secondary Permittees shall report the reasons why the requirement was not met and how the requirements will be met in the future, including projected implementation dates. A comparison of program implementation results to performance standards established in this permit shall be included for each program area.
2. Notification of any recent or proposed annexations or incorporations resulting in an increase or decrease in permit coverage area, and implications for the stormwater management program
3. Expenditures for the reporting period, with a breakdown for the components of the stormwater management program.
4. A summary describing compliance activities, including the nature and number of official enforcement actions, inspections, and types of public education activities; and
5. Identification of known water quality improvements or degradation.

C. Report Format

Each Permittee, co-Permittee or secondary Permittee shall use the attached reporting forms, in Appendix 8, which is by this reference as if set forth fully herein. Each Permittee shall complete the applicable form in its entirety. Two copies of the annual report shall be submitted to Ecology. In addition, an electronic copy of the report, in pdf format, shall be submitted to Ecology

1 GENERAL CONDITIONS

2

3 **G1. DISCHARGE VIOLATIONS**

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

6 **G2. PROPER OPERATION AND MAINTENANCE**

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

11 **G3. NOTIFICATION OF SPILL**

12 If a Permittee has knowledge of a spill into a municipal storm sewer which could constitute  
13 a threat to human health, welfare, or the environment, the Permittee shall notify the  
14 Ecology regional office and other appropriate spill response authorities immediately but in  
15 no case later than within 24 hours of obtaining that knowledge. Spills which might cause  
16 bacterial contamination of shellfish, such as might result from broken sewer lines, shall be  
17 reported immediately to the Department of Ecology and the Department of Health,  
18 Shellfish Program. The Department of Ecology's Regional Office 24-hr. number is 425  
19 649-7000 for NWRO and 360 407-6300 for SWRO and the Department of Health's  
20 Shellfish 24-hr. number is 360-236-3330.

21 **G4. BYPASS PROHIBITED**

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

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

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

1 **G5. RIGHT OF ENTRY**

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

- 4 A. To enter upon the Permittee's premises where a discharge is located or where any  
5 records must be kept under the terms and conditions of this permit;
- 6 B. To have access to, and copy at reasonable cost and at reasonable times, any records that  
7 must be kept under the terms of the permit;
- 8 C. To inspect at reasonable times any monitoring equipment or method of monitoring  
9 required in the permit;
- 10 D. To inspect at reasonable times any collection, treatment, pollution management, or  
11 discharge facilities; and
- 12 E. To sample at reasonable times any discharge of pollutants.

13 **G6. DUTY TO MITIGATE**

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

17 **G7. PROPERTY RIGHTS**

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

19 **G8. COMPLIANCE WITH OTHER LAWS AND STATUTES**

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

22 **G9. MONITORING**

23 A. Representative Sampling:

24 Samples and measurements taken to meet the requirements of this permit shall be  
25 representative of the volume and nature of the monitored discharge, including  
26 representative sampling of any unusual discharge or discharge condition, including  
27 bypasses, upsets, and maintenance-related conditions affecting effluent quality.

28 B. Records Retention:

29 The Permittee shall retain records of all monitoring information, including all  
30 calibration and maintenance records and all original recordings for continuous  
31 monitoring instrumentation, copies of all reports required by this permit, and records of  
32 all data used to complete the application for this permit, for a period of at least five  
33 years. This period of retention shall be extended during the course of any unresolved  
34 litigation regarding the discharge of pollutants by the Permittee or when requested by  
35 the *Director*. On request, monitoring data and analysis shall be provided to Ecology.

36 C. Recording of Results:

1 For each measurement or sample taken, the Permittee shall record the following  
2 information: (1) the date, exact place and time of sampling; (2) the individual who  
3 performed the sampling or measurement; (3) the dates the analyses were performed; (4)  
4 who performed the analyses; (5) the analytical techniques or methods used; and (6) the  
5 results of all analyses.

6 D. Test Procedures:

7 All sampling and analytical methods used to meet the monitoring requirements  
8 specified in the approved stormwater management program shall conform to the  
9 Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40  
10 CFR Part 136, unless otherwise specified in this permit or approved in writing by  
11 Ecology.

12 E. Flow Measurement:

13 Appropriate flow measurement devices and methods consistent with accepted scientific  
14 practices shall be selected and used to ensure the accuracy and reliability of  
15 measurements of the volume of monitored discharges. The devices shall be installed,  
16 calibrated, and maintained to ensure that the accuracy of the measurements are  
17 consistent with the accepted industry standard for that type of device. Frequency of  
18 calibration shall be in conformance with manufacturer's recommendations or at a  
19 minimum frequency of at least one calibration per year. Calibration records should be  
20 maintained for a minimum of three years.

21 F. Lab Accreditation:

22 All monitoring data, except for flow, temperature, conductivity, pH, total residual  
23 chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory  
24 registered or accredited under the provisions of, Accreditation of Environmental  
25 Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted  
26 from this requirement pending accreditation of laboratories for analysis of these media  
27 by Ecology.

28 G. Additional Monitoring:

29 Ecology may establish specific monitoring requirements in addition to those contained  
30 in this permit by administrative order or permit modification.

31 **G10. REMOVED SUBSTANCES**

32 With the exception of decant from street waste vehicles, the Permittee shall not allow  
33 collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed  
34 in the course of treatment or control of stormwater to be resuspended or reintroduced to  
35 the storm sewer system or to waters of the state. Decant from street waste vehicles  
36 resulting from cleaning stormwater facilities may be reintroduced only when other  
37 practical means are not available and only in accordance with the Street Waste Disposal  
38 Guidelines in Appendix 7, which is by this reference as if set forth fully herein.

1 **G11. SEVERABILITY**

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

6 **G12. REVOCATION OF COVERAGE**

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

- 10 A. Violation of any term or condition of this general permit;
- 11 B. Obtaining coverage under this general permit by misrepresentation or failure to  
12 disclose fully all relevant facts;
- 13 C. A change in any condition that requires either a temporary or permanent reduction  
14 or elimination of the permitted discharge;
- 15 D. A determination that the permitted activity endangers human health or the  
16 environment, or contributes significantly to water quality standards violations;
- 17 E. Failure or refusal of the Permittee to allow entry as required in rcw 90.48.090;
- 18 F. Nonpayment of permit fees assessed pursuant to rcw 90.48.465;

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

21 **G13. TRANSFER OF COVERAGE**

22 The director may require any discharger authorized by this general permit to apply for  
23 and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter  
24 173-226 WAC.

25 **G14. GENERAL PERMIT MODIFICATION AND REVOCATION**

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

- 29 A. A change occurs in the technology or practices for control or abatement of  
30 pollutants applicable to the category of dischargers covered under this general  
31 permit;
- 32 B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or  
33 chapter 90.48RCW, for the category of dischargers covered under this general  
34 permit;
- 35 C. A water quality management plan containing requirements applicable to the  
36 category of dischargers covered under this general permit is approved; or

1 D. Information is obtained which indicates that cumulative effects on the environment  
2 from dischargers covered under this general permit are unacceptable.

3 **G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION**

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

11 **G16. APPEALS**

12 A. The terms and conditions of this general permit, as they apply to the appropriate  
13 class of dischargers, are subject to appeal within thirty days of issuance of this  
14 general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226  
15 WAC.

16 B. The terms and conditions of this general permit, as they apply to an individual  
17 discharger, are appealable in accordance with chapter 43.21b rcw within thirty days  
18 of the effective date of coverage of that discharger. Consideration of an appeal of  
19 general permit coverage of an individual discharger is limited to the general  
20 permit's applicability or nonapplicability to that individual discharger.

21 C. The appeal of general permit coverage of an individual discharger does not affect  
22 any other dischargers covered under this general permit. If the terms and conditions  
23 of this general permit are found to be inapplicable to any individual discharger(s),  
24 the matter shall be remanded to ecology for consideration of issuance of an  
25 individual permit or permits.

26 D. Modifications of this permit are appealable in accordance with chapter 43.21B  
27 RCW and chapter 173-226 WAC.

28 **G17. PENALTIES**

29 40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are  
30 hereby incorporated into this permit by reference.

31 **G18. DUTY TO REAPPLY**

32 The Permittee must apply for permit renewal at least 180 days prior to the specified  
33 expiration date of this permit. An expired permit continues in force and effect until a  
34 new permit is issued or until Ecology cancels the permit. Only Permittees who have  
35 reapplied for coverage under this permit are covered under the continued permit.

1 **G19. CERTIFICATION AND SIGNATURE**

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

4 A. All permit applications shall be signed by either a principal executive officer or  
5 ranking elected official.

6 B. All reports required by this permit and other information requested by Ecology shall  
7 be signed by a person described above or by a duly authorized representative of that  
8 person. A person is a duly authorized representative only if:

9 1. The authorization is made in writing by a person described above and submitted  
10 to Ecology, and

11 2. The authorization specifies either an individual or a position having responsibility  
12 for the overall development and implementation of the stormwater management  
13 program. (A duly authorized representative may thus be either a named individual  
14 or any individual occupying a named position.)

15 C. Changes to authorization. If an authorization under General Condition G19.B.2 is no  
16 longer accurate because a different individual or position has responsibility for the  
17 overall development and implementation of the stormwater management program, a  
18 new authorization satisfying the requirements of General Condition G19.B.2 must be  
19 submitted to Ecology prior to or together with any reports, information, or  
20 applications to be signed by an authorized representative.

21 D. Certification. Any person signing a document under this permit shall make the  
22 following certification:

23 "I certify under penalty of law, that this document and all attachments were  
24 prepared under my direction or supervision in accordance with a system designed to  
25 assure that qualified personnel properly gathered and evaluated the information  
26 submitted. Based on my inquiry of the person or persons who manage the system  
27 or those persons directly responsible for gathering information, the information  
28 submitted is, to the best of my knowledge and belief, true, accurate, and complete.  
29 I am aware that there are significant penalties for submitting false information,  
30 including the possibility of fine and imprisonment for willful violations."

31 **G20. RECORDS RETENTION**

32 Each Permittee is required to keep all records related to this permit for at least five years.

1 **DEFINITIONS AND ACRONYMS {TC \L 1 "AND ACRONYMS"}**

2 "Best Management Practices" ("BMPs") means the schedules of activities, prohibitions of  
3 practices, maintenance procedures, and structural and/or managerial practices that when used  
4 singly or in combination, prevent or reduce the release of pollutants and other adverse impacts  
5 to waters of Washington State.

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

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

10 "Component" or "Program Component" means the elements of the stormwater management  
11 program listed in Special Condition S7 or S8.

12 "Co-Permittee" means an owner or operator of a municipal separate storm sewer (other than an  
13 incorporated city) located within a large or medium municipality, that has co-applied for a  
14 permit with that municipality, and that is only responsible for permit conditions relating to the  
15 discharge for which it is operator.

16 "Director" means the Director of the Washington State Department of Ecology, or an  
17 authorized representative.

18 "Discharge" for the purpose of this permit, unless indicated otherwise, refers to discharges  
19 from Municipal Separate Storm Sewers of the Permittees.

20 "Existing Stormwater Discharge" means a discharge from a municipal separate storm sewer  
21 constructed or vested before the effective date of this permit, at the point where it discharges to  
22 receiving waters. An existing stormwater discharge serves an area of existing development and  
23 does not include new stormwater sources or new stormwater outfalls

24 "40 CFR" means Title 40 of the Code of Federal Regulations, which is the codification of the  
25 general and permanent rules published in the Federal Register by the executive departments  
26 and agencies of the federal government.

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

30 "Heavy equipment maintenance or storage yard" means an uncovered area where any heavy  
31 equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are  
32 washed or regularly maintained, or where at least five pieces of heavy equipment are stored

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

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

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

13 (a) Preventing pest problems;

14 (b) Monitoring for the presence of pests and pest damage;

15 (c) Establishing the density of the pest population, that may be set at zero, that can be tolerated or  
16 correlated with a damage level sufficient to warrant treatment of the problem based on health,  
17 public safety, economic, or aesthetic thresholds;

18 (d) Treating pest problems to reduce populations below those levels established by damage  
19 thresholds using strategies that may include biological, cultural, mechanical, and chemical  
20 control methods and that must consider human health, ecological impact, feasibility, and cost-  
21 effectiveness; and

22 (e) Evaluating the effects and efficacy of pest treatments.

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

28 “Large Municipal Separate Storm Sewer System (Large MS4)” means all Municipal Separate  
29 Storm Sewers located in an incorporated place with a population of 250,000 or more, a County  
30 with unincorporated urbanized areas with a population of 250,000 or more according to the  
31 1990 decennial census by the Bureau of Census.

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

1 "Major Municipal Separate Storm Sewer Outfall" means a municipal separate storm sewer  
2 outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent  
3 (discharge from a single conveyance other than circular pipe which is associated with a  
4 drainage area of more than 50 acres); or for municipal separate storm sewers that receive  
5 stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or  
6 the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12  
7 inches or more or from its equivalent (discharge from other than a circular pipe associated with  
8 a drainage area of 12 acres or more).

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

11 "Medium Municipal Separate Storm Sewer System (Medium MS4)" means all Municipal  
12 Separate Storm Sewers (MS3s) located in an incorporated place with a population of more than  
13 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than  
14 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of  
15 Census.

16 "Municipal Separate Storm Sewer (MS3)" means a conveyance, or system of conveyances  
17 (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches,  
18 manmade channels, or storm drains): (i) owned or operated by a state, city, town, borough,  
19 county, parish, district, association, or other public body (created by or pursuant to State Law)  
20 having jurisdiction over disposal of wastes, storm water, or other wastes, including special  
21 districts under State Law such as a sewer district, flood control district or drainage district, or  
22 similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated  
23 and approved management agency under section 208 of the CWA that discharges to waters of  
24 the United States; (ii) designed or used for collecting or conveying stormwater; (iii) which is  
25 not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works  
26 (POTW) as defined at 40 CFR 122.2.

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

33 "New Stormwater Discharge" includes new stormwater sources and new stormwater outfalls.

34 "New Stormwater Outfall" means a municipal separate storm sewer, at the point where it  
35 discharges to receiving waters, that is vested after the effective date of this permit, and is  
36 constructed at a location where a municipal separate stormwater discharge did not exist at the  
37 effective date of the permit. A new stormwater outfall may consist of new stormwater sources,  
38 existing stormwater sources or a combination of new and existing stormwater sources. A new  
39 stormwater outfall does not include a replacement of an existing outfall, provided that the

1 replacement does not increase the volume, flow rate, or pollutant load of the discharge, and  
2 discharges to the same water body at approximately the same location.

3 "New Stormwater Source" means any New Development and Redevelopment, as defined in  
4 Appendix 1, that is vested after the effective date of this permit, increases the volume, flow rate,  
5 or pollutant load of the stormwater runoff from the site, and discharges to a municipal separate  
6 storm sewer owned or operated by the Permittee or co-Permittee.

7 "Notice of Intent" (NOI) means the application for, or a request for coverage under this  
8 General Permit pursuant to WAC 173-226-200.

9 "Notice of Intent for Construction Activity," and "Notice of Intent for Industrial Activity"  
10 mean the application forms for coverage under the Construction Stormwater General Permit  
11 and the Industrial Stormwater General Permit.

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

17 "Physically Interconnected" means that one MS4 is connected to a second MS4 in such a way  
18 that it allows for direct discharges to the second system. For example, the roads with drainage  
19 systems and municipal streets of one entity are physically connected directly to a MS4  
20 belonging to another entity.

21 "Process Wastewater" means any water which, during manufacture or processing, comes into  
22 direct contact with or results from the production or use of any raw material, intermediate  
23 product, finished product, by product, or waste product.

24 "Qualified Personnel" means someone who has had professional training in the aspects of  
25 stormwater management they are responsible for.

26 "Runoff" see Stormwater.

27 "Shared Waterbodies" means waterbodies, including downstream segments, lakes and  
28 estuaries, that receive discharges from more than one Permittee.

29 "Site-specific Information" includes but is not limited to: information in water quality  
30 management plans such as watershed or stormwater basin plans, TMDLs, groundwater  
31 management plans, and lake management plans; information about hydrology, soils, or the  
32 sensitivity of the receiving waters that is obtained through professional field observations or  
33 monitoring; and information about likely pollutant sources.

34 "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

1 "Stormwater Associated with Industrial Activity" means the discharge from any conveyance  
2 which is used for collecting and conveying stormwater, which is directly related to  
3 manufacturing, processing or raw materials storage areas at an industrial plant, and is required  
4 to have an NPDES permit in accordance with 40 CFR 122.26.

5 "Stormwater Management Manual for Western Washington" means the 5-volume technical  
6 manual (Publication Nos. 05-10-029 through 05-10-033) published by Ecology in February  
7 2005.

8 "Vesting" means the date, established by local government, that is used to determine which  
9 development regulations apply to the review of a complete development permit application or  
10 approved development permit.

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

16 "Water Quality Standards" means Surface Water Quality Standards, Chapter 173-201A WAC,  
17 Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management  
18 Standards, Chapter 173-204 WAC.

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