KING COUNTY PERMIT MARK-UP COMMENTS/EDITS

ON THE

Draft

Phase I Municipal Stormwater NPDES and State Waste Discharge General Permit

[All comments on this permit apply as well to identical or similar elements of the Phase II permit.]

February 15, 2006

[CONVENTION USED FOR KING COUNTY COMMENTS AND EDITS]

- **All comments are bracketed and shown in bold, underlined font.**
- **All suggested edits are shown in strikeout and underline format.**
- **Some comments and edits are tiered to reflect an order of preference for their application. Tier 1 comments and edits are first preference, Tier 2 are second preference, and so on. All comments and edits are Tier 1 unless otherwise specified.**

NOTE: COMMENTS ON SELECTED PERMIT APPENDICES ARE FOUND AT THE END OF THIS DOCUMENT.

Permit No._____

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.

_____

Dave C. Peeler
Water Quality Program Manager
Department of Ecology

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APPENDIX 1. Minimum Technical Requirements for New Development and Redevelopment **[Note: Comments on Appendix 1 are found at the end of this document]**

APPENDIX 2. TMDL Requirements

APPENDIX 3. Annual Report Form for Permittees **[Note: Comments on Appendix 3 are found at the end of this document]**

APPENDIX 4. Annual Report Form for Secondary Permittees and Co-permittees **[Note: Comments on Appendix 4 are found at the end of this document]**

APPENDIX 5. Notice of Intent

APPENDIX 6. Street Waste Disposal

APPENDIX 7. Determining Construction Site Sediment Damage Potential

APPENDIX 8. Urban Land Uses and Pollutant Generating Sources

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[1] 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.

SPECIAL CONDITIONS

S1. PERMIT COVERAGE AND PERMITTEES

A. Permit Coverage Area

This permit covers *discharges* from Large and Medium Municipal Separate Storm Sewer Systems (MS4s) as established at Title *40 CFR* 122.26, except for municipal separate storm sewers (MS3s) owned or operated by the Washington State Department of Transportation. Large and medium MS4s include all MS3s located within cities or counties required to have permit coverage. **[Does "permit" here refer to both Phase I and Phase II permits? If yes, this would suggest that, for example, MS3s owned or operated by King County in a Phase II city would be covered under *this* permit, an outcome that we like. (See our comment letter.) It would be good for Ecology to clarify in S1 of both the Phase I and Phase II Western Washington permits what the status is of MS3s owned or operated by Phase I municipalities located outside their jurisdiction. Currently, much reading of definitions and flipping back and forth between the two permits is necessary to reach a conclusion about whether these MS3s require their owners to be secondary permittees, are covered under the Phase I permit, or require no municipal permit coverage, and reasonable minds reach different conclusions. Please decide on an outcome, preferably one that does not require more than one permit for Phase Is, and put language in at least one place in both permits clarifying what that decision is.]**

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

- The City of Seattle
- The City of Tacoma
- Unincorporated King County
- Unincorporated Snohomish County
- Unincorporated Pierce County
- Unincorporated Clark County

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

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

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

3. Active ~~D~~drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S1.B., above, which own or operate municipal separate storm sewers serving non-agricultural land uses. (The Green River Flood Control Zone District is included in King County's coverage and does not require a separate permit.)

4. Other owners or operators of municipal separate storm sewers located in the Cities or unincorporated portions of the Counties listed in S1.B., above.

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

F. Coverage for Secondary Permittees

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

a. Submit a *Notice of Intent* (NOI) and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and demonstration that the public notice requirements have been met. OR

b. Submit a co-application jointly with a permittee named in S1.B. and provide public notice of the application for coverage in accordance with WAC 173-226-130. The co-application shall consist of an amendment to the Phase I Part 1 and Part 2 permit applications. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and demonstration that the public notice requirements have been met.

2. NOIs and co-applications shall be submitted to:

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

S2. AUTHORIZED DISCHARGES

A. This permit authorizes the discharge of stormwater to surface waters and to ground *waters of the state* from municipal separate storm sewers owned or operated by each Permittee covered under this permit in the geographic area and from Permittee-owned or operated MS3s located outside the geographic area **[if Ecology, as per our comments under S1, decides that all MS3s owned or operated by a Phase I municipality should be covered under this permit (a preferred outcome) then this,**

or other language should extend the authorizations of the permit to those facilities]covered by this permit pursuant to S1.A, subject to the following limitations:

1. All discharges ~~into and~~ from municipal separate storm sewers owned or operated by Permittees must be in compliance with this permit. **[Federal CWA regulates discharges from the MS4 system, not into the system.]**
2. Discharges from municipal separate storm sewers constructed after the effective date of this permit must receive all applicable state and local permits and use authorizations, including compliance with Ch. 43.21C RCW (the State Environmental Policy Act).
3. Discharges to ground waters of the state through designed infiltration facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not covered under this permit. **[Stormwater structures that are not specifically designed to discharge directly to the water table are excluded from the UIC program. Incidental discharges through other types of facilities such as pipes and catch basins are not to be included in the UIC program.]**
4. Discharges to ground waters not subject to regulation under the federal *Clean Water Act* are covered in this permit only under state authorities, Chapter 90.48 RCW, the Water Pollution Control Act

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

1. Stormwater associated with construction or industrial activity, as defined by 40CFR122.26, must be authorized by a separate individual or general *National Pollutant Discharge Elimination* (NPDES) permit; or
2. Process wastewater must be authorized by another NPDES permit.

C. This permit authorizes discharges from emergency fire fighting activities unless the discharges from fire fighting activities are identified as significant sources of pollutants to waters of the State.

D. This permit does not authorize any other illicit or non-stormwater discharges except as provided in Special Condition S5.C.8 or S6., nor does it relieve ~~entities~~ responsible parties for illicit discharges, including spills of oil or hazardous substances, from responsibilities and liabilities under state and federal laws and regulations pertaining to those discharges. **[Change "entities responsible" to "responsible parties" to be consistent with Chapters 173-303 WAC, 173-340 WAC.]**

S3. RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY PERMITTEES

A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for compliance with the terms of this permit for the municipal separate storm sewers it owns or operates.

1. Each Permittee, as listed in S1.B., is required to comply with all conditions of this permit, except for S6., *Stormwater management program* for Co-Permittees and Secondary Permittees.

2. Each Co-Permittee and Secondary Permittee, as defined in S1.C. and S1.D., is required to comply with all conditions of this permit, except for Special Condition S5., Stormwater management program for Permittees. This provision includes Secondary Permittees that co-apply under Special Condition S1.F.1.b.

B. Permittees may rely on another *entity* to meet one or more of the requirements of this permit, if the other entity, in fact, implements the control measure, and agrees to implement the control measure on the Permittee's behalf. Permittees that are relying on another entity to satisfy one or more ~~or~~ of their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. Where permit responsibilities are shared they must be documented as follows:

1. Permittees and Co-Permittees that are continuing coverage under this permit must submit a statement that describes the permit requirements that will be implemented by other entities. The statement must be signed by all participating entities. There is no deadline for submitting such a statement, provided that this does not alter implementation deadlines.

2. Secondary Permittees must submit an NOI that describes which requirements they will implement and identify the entities that will implement the other permit requirements in the area served by the secondary Permittee's MS4. A statement confirming the shared responsibilities, signed by all participating entities, must accompany the NOI. Secondary Permittees may amend their NOI, during the term of the permit, to establish, terminate, or amend shared responsibility arrangements, provided this does not alter implementation deadlines.

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

S4. COMPLIANCE WITH STANDARDS

A. ~~In accordance with RCW 90.48.520, the discharge of toxicants to waters of the state of Washington which would violate any *water quality standard*, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited.~~ **[Delete this section. It is not applicable to stormwater discharges. See legal argument for elimination of this section enclosed with the comment letter.]**

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

C. The Permittee shall reduce the discharge of pollutants to the *maximum extent practicable* (MEP).

D. The Permittee shall use *all known, available, and reasonable methods of prevention, control and treatment (AKART)* to prevent and control pollution of waters of the state of Washington.

E. Full implementation of applicable Stormwater Management Program elements described in Special Conditions S5 and S6, applicable TMDL requirements described in Special Condition S7, and applicable monitoring requirements described in S8 satisfies the requirements of S4.C and S4.D~~In order to meet the goals of the Clean Water Act, to demonstrate compliance with S4.C and S4.D, and make progress towards compliance with applicable surface water, ground water and sediment management standards, each Permittee shall comply with the requirements of this permit.~~ **[This language clarifies what exactly Permittees must do to satisfy MEP and AKART.]**

F. Ecology may modify or revoke and reissue this *general permit* in accordance with General Condition G14. GENERAL PERMIT MODIFICATION AND REVOCATION, if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this permit, that are necessary to:

1. Reduce the discharge of pollutants to the MEP;
2. Comply with the state AKART requirements.~~; or~~
3. ~~Control the discharge of toxicants to waters of the state of Washington.~~ **[Consistent with our comments deleting S4.A from the permit, S4.F.3 should also be deleted as it, too, is based in RCW 90.48.520.]**

S5. STORMWATER MANAGEMENT PROGRAM [Language should be added to this section in both the Phase I and Phase II permits, along with appropriate adjustments to the timelines, that either requires WRIA-wide SWMPs or tees them up for the next permit term in much the same way that monitoring has been teed up for the Phase IIs in their permit.]

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 S5.B., S5.C.1 through S5.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 S5.C., and shall be updated annually. The SWMP documentation shall include a description of each of the program components included in S5.C, and any additional actions necessary to meet the requirements of applicable TMDLs.

2. Each permittee shall track the estimated cost of development and implementation of the SWMP required by this section, and report this information in the annual report. Cost estimates may be based on actual expenditure data, or on surrogate parameters such as engineer's cost estimates for permit-related elements of construction projects, or similar estimates based on documentable information and commonly-accepted professional practices. In the event that estimates of expenditures are used, the permittee shall describe the estimation method and the documentation used as a basis~~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~~. **[The changes to this paragraph are intended to replace the cost reporting instructions of Appendix 3 & 4, which are far too complicated and will not lead to useful cost comparisons. The methods must be robust, simple, and lead to documentable estimates.]**

3. Each Permittee shall track the number of inspections, official enforcement actions and types of public education activities as stipulated by the respective program component. This information shall be included in the annual report.

B. The SWMP shall be designed and implemented as specified in S5.C, which is deemed sufficient to reduce the discharge of pollutants from MS4s to the maximum extent practicable, meet state AKART requirements, 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.

C. The SWMP shall include the components listed below. All components are mandatory and must be implemented by each Permittee within the limits of state and federal law. The requirements of the stormwater management program shall apply to all municipal separate storm sewers and areas served by municipal separate storm sewers owned or operated by each Permittee. Co-Permittees and Secondary Permittees are responsible for implementation of Stormwater Management Programs as indicated in Special Condition S6.

1. Legal Authority

a. No later than the effective date of this permit, each Permittee must be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Permittee to control discharges to and from municipal separate storm sewers owned or operated by the Permittee.

b. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall authorize or enable the Permittee, at a minimum, to:

i. Control the contribution of pollutants to municipal separate storm sewers owned or operated by the Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity;

ii. Prohibit illicit discharges to the municipal separate storm sewer owned or operated by the Permittee;

iii. Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewers owned or operated by the Permittee;

iv. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the municipal separate storm sewer system to another portion of the municipal separate storm sewer system;

v. Require compliance with conditions in ordinances, permits, contracts, or orders; and,

vi. Within the limitations of state law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the municipal separate storm sewer and compliance with local ordinances.

2. Municipal Separate Storm Sewer System Mapping and Documentation

a. The SWMP shall include an ongoing program for mapping and documenting the MS4.

b. Minimum performance measures. The information and its form of retention shall include:

i. No later than 2 years from the effective date of this permit each permittee shall map all known municipal separate storm sewer *outfalls* and receiving waters, and structural stormwater BMPs owned, operated, or maintained by the Permittee.

ii. No later than 4 years from the effective date of this permit each permittee shall map ~~the attributes listed below for~~ all of its MS4 storm sewer outfalls with a 24" inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. In addition, each permittee shall map, or demonstrate its ability to map when needed, the attributes listed below for all of these storm sewer outfalls. **[Permittees should not have to map these attributes unless and until the mapping is needed for something. We estimate that it will take about 2 hours of staff time to map these attributes for each outfall. With over 1,000 such outfalls in King County, we think it would be better to use the 2,000 hours of staff time required for this mapping on something of more benefit.]** For Counties, the mapping shall be done within *urban/higher density rural sub-basins*. For Cities, the mapping shall be done throughout the City.

(1) Tributary conveyances (indicate type, material, and size where known);

(2) Associated drainage areas; and

(3) Land use.

iii. Each Permittee shall initiate a program to develop and maintain a map of all connections to the municipal separate storm sewer authorized or allowed by the permittee after the effective date of this permit.

iv. Each Permittee shall map existing connections over 8" to municipal separate storm sewers tributary to all storm sewer outfalls with a 24" inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems, according to the following schedule:

City of Seattle and City of Tacoma: 2 years after the effective date of this permit

Snohomish, King, Pierce and Clark Counties: one half the area of the County within urban/higher density rural subbasins 4 years after the effective date of this permit.

v. No later than 4 years from the effective date of this permit each permittee shall map geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface water, excluding areas that discharge stormwater to a facility regulated under the UIC program, Chapter 173-218 WAC..

vi. Each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.2b.i. through v., above. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at http://www.ecy.wa.gov/services/gis/data/standards.htm where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports. **[The Spatial Data Standards for submittal on the referenced Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10,000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS**

purposes are in Washington North by policy. Coordinates should be reported in the zone specified by RCW 58.20.]

vii. Upon request, and to the extent appropriate, Permittees shall provide mapping information to Co-Permittees and Secondary Permittees at a cost that compensates the Permittees for the cost of providing the data and may include the cost of maintenance and upkeep of the mapping system.

3. Coordination **[Add this section to the Phase II permit as well.]**

a. The SWMP shall include coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within a watershed. The SWMP shall also include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit.

b. Minimum Performance Measures:

i. No later than 12 months after the effective date of this permit, establish, in writing, and begin implementation of, an intragovernmental (internal) coordination agreement to facilitate compliance with the terms of this permit.

ii. No later than 12 months after the effective date of this permit, establish, in writing, and begin implementation of, intergovernmental coordination procedures on stormwater management, including

- Coordination mechanisms clarifying roles and responsibilities ~~to~~ for the control of pollutants between *physically interconnected* MS3s of the Permittee and any other Permittee covered by a municipal stormwater permit.
- Coordinating stormwater management activities, for *shared waterbodies*, among Permittees, to avoid conflicting plans, policies and regulations.
- If the integrated monitoring program option from S8 is chosen, the ~~C~~coordination necessary to develop ~~an integrated monitoring program~~it.

4. Public Involvement and Participation

a. The SWMP shall provide ongoing opportunities for public involvement in the Permittee's stormwater management program and implementation priorities.

b. Minimum performance measures:

i. Document and ~~No later than 6 months after the effective date of this permit, develop and begin implementing a process to create opportunities for the public to participate in an advisory role in the decision making processes involving the development, implementation and update of the permittee's SWMP. Each Permittee must develop and implement a process for consideration of public comments on their SWMP~~continue existing public involvement activities. **[See comments in letter.]**

ii. Each Permittee must make their SWMP, the SWMP documentation required under S5.A.1. and all submittals required by this permit, including annual reports, available to the public, starting with the first annual report, on the permitee's website or submitted in electronic format to Ecology for posting on Ecology's website.

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

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

b. Minimum performance measures:

i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or Minimum Requirements, thresholds, and definitions determined by Ecology to be equivalent to Appendix 1,), for new development, redevelopment, and construction sites must be included in ordinance or other enforceable documents adopted by the local government. Adjustment and variance criteria equivalent to those in Appendix 1 must be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds must provide equal protection of receiving waters and equal levels of pollutant control as compared to Appendix 1.

ii. The local requirements must include a site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 (or equivalent requirement approved by Ecology), will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.

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

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

iv. Deadlines for and Review of Local Manual and Ordinances. No later than 12 months from the effective date of this permit, each Permittee must adopt a local program that meets the requirements in S5C.5.b.i through iii., above.

Ecology review and approval of the local manual and ordinances is required. To ensure compliance with the 12 month deadline, Permittees may use the following review process:

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

(2) If this review process is followed, the deadline for adoption of enforceable requirements, technical standards and manual shall be automatically extended by the number of calendar days that Ecology exceeds a 60 day period for written response.

(3) In the case of circumstances beyond the Permittee's control, such as litigation or administrative appeals, that may result in noncompliance with the requirements of this section, the Permittee shall promptly notify Ecology and submit a written request for an extension. Extensions may be granted by Ecology.

v. No later than 12 months after the effective date of this permit, the program must establish legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved under the provisions of this section.

vi. No later than 18 months after the effective date of this permit, the program must include a process of permits, plan review, inspections, and enforcement capability to meet the following standards for both private and public projects, using *qualified personnel*:

(1) Review all stormwater site plans for proposed development involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above.

(2) Inspect prior to clearing and construction, all development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7.

(3) Inspect all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, during construction to ensure proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.

(4) Inspect all development sites upon completion of construction and prior to final approval/occupancy to ensure proper installation of permanent erosion controls and stormwater facilities/BMPs. Enforce as necessary based on the inspection. Also, complete a maintenance plan and assign responsibility for maintenance.

(5) Compliance with the inspection requirements of S5.C.5.(b)vi.(2), (3), and (4), above shall be determined by the presence of an established

inspection program designed to inspect all sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, and achieve inspection of 95% of sites.

(6) The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

(7) The program shall include an enforcement strategy to respond to issues of non-compliance.

vii. No later than the effective date of this permit, the Permittee must make available the "*Notice of Intent for Construction Activity*" and/or copies of the "*Notice of Intent for Industrial Activity*" to representatives of proposed new development and redevelopment. Permittees will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits that are issued by Ecology.

viii. No later than 18 months after the effective date of this permit, each permittee shall ensure that all staff responsible for implementing the program to Control Stormwater Runoff from New Development, Redevelopment, and Construction Sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

ix. No later than 18 months after the effective date of this permit, each permittee shall ensure that training is available or provided as needed to design engineers, construction contractors, developers, and land use planners on the use of adopted technical standards to develop stormwater site plans and erosion control plans, and the use of adopted *Best Management Practices* to mitigate contaminated runoff and the quantity of runoff from development sites. Permittees shall document the training available/provided and how its availability is communicated to the development community. Permittees shall maintain records of any training they provide and the number of professionals trained. **[This is an item from the Education and Outreach Program, Section S5.C.10.b.ii.(5), that should be moved here because it does not fit well with the education program performance measures being proposed. In addition, it is vital to the successful implementation of adopted technical standards.]**

6. Structural Stormwater Controls

a. The SWMP shall include a program to construct structural stormwater controls to address impacts to ~~beneficial~~ designated uses **[Assuming this requirement refers back to the protection of designated uses for which the Water Quality Standards and NPDES permitting program were designed,**

"designated," not "beneficial," is the operative term—include a definition in the Definitions and Acronyms section] resulting from disturbances to watershed hydrology and stormwater pollutant discharges. This program shall consider impacts caused by stormwater discharges from areas of existing development, including runoff from highways, streets and roads owned or operated by the Permittee, and areas of new development, where impacts are anticipated as development proceeds. This program shall address impacts that are not adequately controlled by the other required actions of the SWMP, and shall provide proposed projects and an implementation schedule.

The program shall consider the construction of projects such as regional flow control facilities, water quality treatment facilities, and retrofitting of existing flood control facilities to provide water quality functions. Permittees should also consider other means to address impacts from existing development, such as reduction of hydrologic changes through the use of on-site (infiltration and dispersion) stormwater management BMPs and site design techniques, habitat acquisition or restoration of forest cover and riparian buffers, for compliance with this requirement. Permittees may not use in-stream culvert replacement projects for compliance with this requirement. **[Given the Governor's goal for recovery of Puget Sound by 2020 through actions to be determined by the Puget Sound Partnership and given the significant role that stormwater plays in this recovery, Ecology should consider requiring an ongoing retrofit stormwater control program for already developed areas that, together with other actions, targets a fixed percentage reduction of pollutants across each permittee's jurisdiction during the life of the permit (e.g., a 1% reduction in TSS). Such a requirement, however, would be a substantial change to this final draft permit, and therefore should be considered for the next permit term.]**

b. Minimum Performance Measures for Structural Stormwater Controls:

i. No later than 18 months after the effective date of this permit, each Permittee shall develop and begin implementing a Structural Stormwater Control program designed to control stormwater impacts that are not adequately controlled by the other required actions of the SWMP. Permittees shall provide a list of planned individual projects that are scheduled for implementation during the term of this permit. Updates and revisions to the list will be provided in the annual report.

The Structural Stormwater Control program may also include a program designed to implement small scale projects that are not planned in advance.

ii. Each Permittee shall include a description of the Structural Stormwater Control Program in the written documentation of their SWMP that must be submitted with the first year annual report. The description of the Structural Stormwater Control Program must include the following:

- The goals that the Structural Stormwater Control Program are intended to achieve.

- The planning process used to develop the Structural Stormwater Control Program, including: the geographic scale of the planning process, the issues and regulations addressed, the steps in the planning process, the types of characterization information considered, the amount budgeted for implementation, and the public involvement process.

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

- The estimated pollutant load reduction that will result from each project designed to provide stormwater treatment.
- The expected outcome of each project designed to provide flow control.
- Any other expected environmental benefits.
- Planned monitoring or evaluation of the project and monitoring/evaluation results.

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

7. Source Control Program for Existing Development

a. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Permittee. The program shall include the following elements within the limits of state and federal law, and implemented by the minimum performance measures, below:

i. Requiring application of operational and structural source control BMPs, and, if necessary, treatment BMPs to pollution generating sources associated with existing land uses and activities.

ii. Inspections of pollutant generating sources at commercial, industrial, ~~and~~ multifamily, and residential properties to enforce implementation of required BMPs to control pollution discharging into municipal separate storm sewers owned or operated by the Permittee.

iii. Application and enforcement of local ordinances at applicable sites, including sites that are also covered by stormwater permits issued by Ecology. Permittees that are in compliance with the terms of this permit will not be held liable by Ecology for water quality standard violations caused by industries covered under an NPDES permit issued by Ecology.

iv. Reduction of pollutants associated with the application of pesticides, herbicides, and fertilizer discharging into municipal separate storm sewers owned or operated by the Permittee.

b. Minimum Performance Measures for Source Control Program:

i. No later than 12 months after the effective date of this permit, adopt and begin enforcement of an ordinance, or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (See Appendix ~~3~~8, to identify pollutant generating sources).

The local source control requirements must include operational and structural source control BMPs that, when used on a site specific basis, will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state requirement under chapter 90.48 *RCW* to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document how the stormwater source control BMP selection process for different activities and land uses, the types of BMPs and design criteria for those BMPs will protect water quality by reducing the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.

Permittees who choose to use the source control BMPs in Volume IV of the 2005 Stormwater Management Manual for Western Washington, or an equivalent manual approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

Ecology review and approval of the ordinance, or other enforceable documents, and source control BMPs is required. Each Permittee must submit the proposed source control program and all necessary documentation to Ecology for review, the deadline for doing so is no later than 9 months after the effective date of this permit. If Ecology does not request changes within 30 days, the proposed source control BMPs are considered approved. Operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs shall be required for pollutant generating sources if operational source control BMPs are determined not to be effective, resulting in an illicit discharge or causing or contributing to a violation of surface water, ground water, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as necessary.

ii. No later than 12 months after the effective date of this permit, establish a program to identify sites ~~which~~ that are potentially pollution generating. The program shall include:

(1) Estimating the inventory of land uses/businesses using the categories of land uses and businesses in Appendix 8. The permittee shall update the inventory ~~regularly~~as new businesses are identified and business ownership/management and responsibilities change.

(2) Complaint-based response to identify other pollutant generating sources, such as mobile or home-based businesses

iii. Starting no later than 24 months after the effective date of this permit, implement a self audit/inspection program for sites identified pursuant to S5.C.7.b.ii above , with adequate enforcement capability to ensure implementation of source control BMPs in accordance with the ordinance required in S5.C.7.b.i., above.

(1) All identified sites with a business address shall be provided, by mail, telephone, or in person, with information about activities that may generate pollutants and the source control requirements applicable to those activities. This information may be provided all at once or spread out over the last three years of the permit term to allow for some tailoring and distribution of the information during site inspections. Businesses may self-certify compliance with the source control requirements at the discretion of the permittee. The permittee shall inspect 20% of these sites annually to assure BMP effectiveness and compliance with source control requirements. The permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or subbasin.

(2) Each permittee shall inspect 100% of sites identified through legitimate complaints.

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

(1) In the event that a Permittee determines, based on an inspection conducted above, that a site has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement including, as appropriate, phone calls, reminder letters or follow up inspections within 30 days from the date of the initial inspection, or other time period as specified in the corrective action letter.

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

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

(4) A Permittee may refer violations of local ordinances to Ecology provided that the Permittee also makes a good faith effort of progressive enforcement. At a minimum a Permittee's enforcement effort must include documentation of inspections and warning letters or notices of violation.

v. No later than 24 months after the effective date of this permit, each permittee shall ensure that all staff responsible for implementing the source

control program are trained to conduct these activities. The training shall cover the legal authority for source control (adopted codes, ordinances, rules, etc.), source control BMPs and their proper application, inspection protocols, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained

8. *Illicit Connections* and Illicit Discharges Detection and Elimination (IDDE)

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

   b. Minimum Performance Measures for IDDE:

      i. No later than the effective date of this permit, each Permittee must continue implementing an on-going program to prevent, identify and respond to illicit connections and illicit discharges. The program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4. Illicit connections and illicit discharges shall be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.

      ii. No later than 12 months after the effective date of this permit, each Permittee shall evaluate, and if necessary update, existing ordinances or other regulatory mechanisms to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the Permittee's municipal separate storm sewer system, to the maximum extent allowable under State and federal law.

         (1) The regulatory mechanism required in S5.C.8.b.ii, above, does not need to prohibit the following categories of non-stormwater discharges, unless the discharges are identified as significant sources of pollutants to waters of the State:

            - Diverted stream flows;
            - Rising ground waters;
            - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
            - Uncontaminated pumped ground water;
            - Foundation drains;
            - Air conditioning condensation;
            - Irrigation water from agricultural sources that is commingled with urban stormwater;

- Springs;
- Water from crawl space pumps;
- Footing drains; and
- Flows from riparian habitats and wetlands.

(2) The regulatory mechanism required in S5.C.8.b.ii, above, shall prohibit the following categories of non-stormwater discharges unless the following conditions are met:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
- Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education activities (see S5.C.10) and water conservation efforts.
- Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.10) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees must minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.
- <u>Single-family Residential Car/Boat Washing. The permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.10) and/or establishing Residential Best Management Practices (BMPs) for car and boat washing.</u>

(3) The Permittee's SWMP shall, at a minimum, address each category in (2) above in accordance with the conditions stated therein.

(4) The SWMP must further address any category of discharges in (1) or (2) above if the discharges are identified as significant sources of pollutants to waters of the State.

(5) The regulatory mechanism required in S5.C.8.b.ii, above, shall include all appropriate enforcement provisions and procedures as allowed under State Law.

iii. No later than 18 months after the effective date of this permit, each Permittee shall ensure that all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

iv. No later than 24 months after the effective date of this permit, develop and implement an ongoing training program for all municipal field staff, which as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system shall be trained on the identification of an illicit discharge/connection and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

v. Each Permittee shall continue to provide a publicly listed water quality citizen complaints/reports telephone number. This program shall be in place no later than the effective date of this permit. Complaints shall be responded to in accordance with S5.C.8.b.vii. and viii., below.

vi. Each Permittee shall conduct on-going screening to detect illicit connections ~~using the methods identified in Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004~~.

(1) Each City covered under this permit shall complete an Outfall Reconnaissance Inventory for each stream and shoreline within the Permittee's incorporated area 180 days prior to expiration of the permit.

(2) Each County covered under this permit shall prioritize ~~streams and shorelines~~conveyances and outfalls in urban/higher density rural subbasins for screening and shall complete a~~n Outfall~~ Reconnaissance Inventory for at least half of ~~streams and shorelines~~conveyance systems in these areas 180 days prior to expiration of this permit.

[The guidance manual identified above relies on an inventory of outfalls to receiving water. This is not an appropriate method for illicit connection screening because: 1) Most/Many outfalls to receiving water are on private property and are therefore not part of the MS4. It is more appropriate to survey points in the conveyance system that discharge from the MS4, but not necessarily to the

receiving water. 2) Performing reconnaissance of the stream requires that the County obtain permission from each property owner. Obtaining this permission is cost prohibitive, and it is questionable whether we would be successful in obtaining permission for the entire stream corridor.]

vii. Response to Illicit Connections

(1) Investigation: Upon discovery or upon receiving a report of a suspected illicit connection, Permittees shall initiate an investigation within 21 days, to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.

(2) Termination: Upon confirmation of the illicit nature of a storm drain connection, Permittees shall use their enforcement authority and work with the property owner in an attempt ~~documented effort~~ to eliminate the illicit connection within 6 months. The permittee shall document their enforcement efforts. **[6 months may not be sufficient in many cases, especially if the violator is not cooperative or the case goes into appeal.]**

(3) A permittee may refer illicit connection violations to Ecology provided that the Permittee also makes a good faith effort of progressive enforcement. At a minimum a Permittee's enforcement effort must include documentation of inspections and warning letters or notices of violation.

viii. No later than 6 months after the effective date of this permit, each Permittee shall develop and implement procedures to prevent, respond to and clean up spills and improper disposal into municipal separate storm sewers owned or operated by the Permittee. Investigate, within 7 days on average, any complaints/reports or monitoring information that indicates a potential illicit discharge, including a spill or illegal dumping. Immediately respond to problems/violations judged to be urgent, severe, or an emergency.

ix. Each Permittee shall track and maintain records of the illicit discharge detection and elimination program, including documentation of inspections, complaint/spill response and other enforcement records.

9. Operation and Maintenance Program

a. The SWMP shall include a program to regulate maintenance activities and to conduct maintenance activities by the Permittee that prevent or reduce stormwater impacts. Within the limits of state and federal law the program shall include:

i. Maintenance standards and programs for proper and timely maintenance of public and private stormwater facilities.

ii. Practices for operating and maintaining Permittee's streets, roads, and highways to reduce stormwater impacts.

iii. Policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer by the Permittee's agencies or departments.

iv. Practices for reducing stormwater impacts from *heavy equipment maintenance or storage yards*, and from *material storage facilities* owned or operated by the Permittee.

v. A training component.

b. Minimum Performance Measures for Operation and Maintenance Program:

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

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not intended to be measures of the facility's required condition at all times between inspections. Exceeding these conditions at any time between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. Therefore, compliance with these standards ~~are violated~~ requires that when an inspection identifies a required maintenance action related to facility function, ~~and~~ that action ~~is not~~must be performed within 6 months for typical maintenance, within 9 months for revegetation, and within 2 years for maintenance that requires capital construction of less than $25,000, unless there are documented circumstances beyond the permittee's control that prevent meeting these timeframes. Examples of circumstances beyond the permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, unexpected reallocations of maintenance staff to perform emergency work or recover from a disaster, an unexpected/abnormally high amount of newly identified maintenance work in any one year, and unexpected extreme weather or field conditions. For each exceedance of the required timeframe, the permittee must document the circumstances and how they were beyond their control.

ii. Maintenance of *stormwater facilities regulated by the Permittee*

(1) No later than 1 year after the effective date of this permit, each Permittee shall evaluate and, if necessary, update existing ordinances or other enforceable documents requiring maintenance of all permanent

stormwater treatment and flow control facilities regulated by the Permittee (including catch basins), in accordance with maintenance standards established under S5.C.9.b.i, above.

(2) No later than 1 year after the effective date of this permit, each Permittee shall develop and implement an initial inspection schedule for all known, permanent stormwater treatment and flow control facilities (other than catch basins) regulated by the Permittee to inspect each facility at least once during the term of this permit to enforce compliance with adopted maintenance standards as needed based on the inspection.

(3) No later than 4 years after the effective date of this permit, each Permittee shall develop an on-going inspection schedule for implementation after the initial schedule to annually inspect all stormwater treatment and flow control facilities (other than catch basins) regulated by the Permittee. The annual inspection schedule may be changed to a lesser or greater frequency of inspection, as appropriate to meet the maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

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

(5) Compliance with the inspection requirements of S5.C.9.b.ii.(2),(3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of 95% of all sites.

(6) The Permittee shall require cleaning of catch basins regulated by the permittee if they are found to be out of compliance with established maintenance standards in the course of inspections conducted at facilities under the requirements of S5.C.7 (Source Control Program), and S5.C.8 (Illicit Connections and Illicit Discharges Detection and Elimination), or if the catch basins are part of the treatment or flow control systems inspected under the requirements of S5.C.9.

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

(1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to inspect all permanent stormwater treatment and flow control facilities (other than catch basins) owned or operated by the Permittee annually, and implement appropriate maintenance action in accordance with adopted maintenance standards. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as appropriate to meet the maintenance

standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for permanent stormwater treatment and flow control facilities, the permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, based on actual inspection and maintenance experience.

(2) No later than 24 months after the effective date of this program each Permittee shall begin implementing a program to conduct spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major storm events (24 hour storm event with a 10 year recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established under S5.C.9.b.i, above, based on the results of the inspections.

(3) Compliance with the inspection requirements of S5.C.9.b.iii.(1) and (2), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of 95% of all sites.

iv. Maintenance of Catch Basins Owned or Operated by the Permittee

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

- Inspections may be conducted on a "circuit basis" whereby a sampling of catchbasins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catchbasin immediately upstream of any system outfall. Clean all catchbasins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.9.b.i, above.
- As an alternative to inspecting catchbasins on a "circuit basis," the Permittee may inspect all catchbasins, and clean only catchbasins where cleaning is needed to comply with maintenance standards.

(2) The annual inspection schedule for may be changed to a lesser or greater frequency of inspection as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, not to exceed three years, based on actual inspection and maintenance experience.

(3) The disposal of decant water shall be in accordance with the requirements in Appendix 6.

v. Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained. Records of maintenance or repair requiring capital construction of $25,000 or more shall be maintained and provided in the annual report.

vi. Establish practices to reduce stormwater impacts associated with runoff from parking lots, streets, roads, and highways owned or operated by the permittee; and road maintenance activities conducted by the permittee, within 12 months of the effective date of this permit. Adoption and implementation of the Regional Road Maintenance Endangered Species Act Program Guidelines is deemed to meet this permit requirement.

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

(1) Pipe cleaning

(2) Cleaning of culverts that convey stormwater in ditch systems

(3) Ditch maintenance

(4) Street cleaning

(5) Road repair and resurfacing, including pavement grinding

(6) Snow and ice control

(7) Utility installation

(8) Maintaining roadside areas, including vegetation management.

(9) Dust control

(10) Pavement striping maintenance

vii. No later than 12 months after the effective date of this permit each Permittee shall establish and implement policies and procedures to reduce pollutants in discharges from lands owned or maintained by the Permittee subject to this permit, including but not limited to: parks, open space, actively open and maintained road right-of-ways **[Unopened or privately maintained road right-of-way is not considered a King County responsibility even though it might be considered public property.]**, maintenance yards, and at stormwater treatment and flow control facilities. These policies and procedures must address, but are not limited to:

(1) Application of fertilizer, pesticides, and herbicides, including the development of Nutrient management and *Integrated Pest Management* Plans

(2) Sediment and erosion control

(3) Landscape maintenance and vegetation disposal

(4) Trash management

(5) Building exterior cleaning and maintenance

viii. No later than 2 years after the effective date of this permit, develop and implement an ongoing training program for appropriate employees of the Permittee whose construction, operations or maintenance job functions may impact stormwater quality. The training program 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. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained. For road maintenance staff, completion of the training available through the Regional Road Maintenance Endangered Species Act Program Guidelines is deemed to meet this permit requirement.

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 in areas subject to this permit, that are not covered under the Industrial Stormwater General permit. 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 SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of BMPs.

10. Education and Outreach Program **[The changes proposed to this section are designed to clarify which actually measurable goals are associated with which targeted audience and issue. Ecology's #5 was moved to S5.C.5.ix, where it really belongs. Adoption of LID requirements in technical standards should be an alternative to education and outreach.]**

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 increase behaviors that reduce or eliminate ~~behaviors and practices that cause or contribute to adverse stormwater impacts~~adverse water quality impacts. An education program may be developed locally or regionally.

b. Minimum Performance Measures:

i. No later than 12 months after the effective date of this permit each Permittee shall implement or participate in an education and outreach program that uses a variety of methods, not just brochures, to target the audiences and topics listed in ~~H~~ii, below. The outreach program shall be designed to achieve measurable improvements in each target audience's awareness/understanding of the problem and what they can do to solve it, and/or measurable improvements in the percentage of each target audience regularly carrying out the intended action or behavior change.

ii. The education and outreach program shall address the following topics and target audiences and be designed to increase awareness/understanding and produce the following identified behaviors ~~increase regular adoption of the following behaviors in the following target audiences~~by the expiration date of this permit:

(1) General understanding of stormwater impacts and role of individuals in contributing/helping to solve the problem

- Audience: general public, especially homeowners

  Awareness/understanding goal: measurable increase in percentage of people who are aware that stormwater flows directly to water bodies

(2) Natural Yard Care (NYC) Techniques

- Audience: General public, especially homeowners

  Awareness/understanding goal: measurable increase in percentage of people with lawns/yards who are aware of, and interested in, NYC techniques (mulch mowing, soil improvement, etc.)

  Behavior goal: measurable increase in percentage of people with lawns/yards who practice NYC techniques

- **Audience**: Targeted homeowners / targeted neighborhoods

  Awareness/understanding goal: measurable increase in percentage of targeted population reached by NYC messages directly and/or through the 'multiplier effect.'

  Behavior goal: measurable increase in percentage of targeted population who practice NYC techniques

- Audience: landscape professionals

  Awareness/understanding goal: measurable increase in percentage of professional landscape industry reached by NYC messages (through regional program)

  Behavior goal: Measurable increase in number of landscape professionals / companies participating in regional NYC program

- Audience: Property Management Companies

  Awareness/understanding goal: measurable increase in number of property management companies reached with NYC messages

  Behavior goal: measurable increase in number of property management companies participating in NYC-related programs

(3) Proper purchase, storage, use, disposal of hazardous yard care chemicals

- Audience: General Public, especially Homeowners

  Awareness/understanding goal: measurable increase in percentage of people with lawns/yards who are aware of, and interested in, the benefits of avoiding and/or properly using, storing, and disposing of hazardous yard care chemicals

  Behavior goal: measurable increase in percentage of people with lawns/yards who use only organic or slow release fertilizer, use only natural organic pest controls, and properly dispose of hazardous yard care products

(4) Proper purchase, storage, use, disposal of other hazardous products – e.g. automotive, cleaning

- Audience: General Public

  Awareness/understanding goal: measurable increase in percentage of people who are aware of, and interested in, benefits of buying less toxic materials and properly disposing of paints and other hazardous materials

  Behavior goal: measurable increase in the percentage of people who purchase less-toxic alternatives and properly dispose of paints and other hazardous materials

- Audience: Businesses

  Awareness/understanding goal: measurable increase in number of businesses reached through WQ audits/ site visits

  Behavior goal: measurable increase in percentage of businesses in compliance with WQ BMPs

(5) Minimize discharge of automotive and other washwater

- Audience: General Public

  Awareness/understanding goal: measurable increase in percentage of people aware of the benefits of washing car at commercial carwash or on lawn

  Behavior *goal*: measurable increase in number of charity carwash events using carwash kits and/or carwash vouchers and number of

people using commercial carwashes or washing their cars on the lawn

- Audience: Businesses

Behavior goal: measurable increase in number of businesses hosting charity carwashes that have/require use of carwash kits

(6) Use of LIDs (for municipalities that do not require LID BMPs as part of their technical standards)

- Audience: development industry professionals (architects, contractors, realtors, etc.)

Behavior goal: measurable increase in percentage of development permits utilizing LID components

(7) Illicit discharges

- Audience: Businesses

Behavior goal: measurable increase in percentage of businesses in compliance

(8) Public involvement in stewardship

- Audience: General Public

Awareness/understanding goal: measurable increase in number of people reached with water quality-related messages through workshops and other events and the multiplier effect (e.g. participants spreading the word to their neighbors/friends)

Behavior goal: measurable increase in numbers of participants and volunteer *hours* contributed at hands-on events such as plant salvage and plantings

(9) General understanding of stormwater impacts from vehicle use and role of individuals in contributing/helping to solve the problem

- Audience: General public

Awareness/understanding goal: measurable increase in percentage of people who are aware of the contribution of vehicle-related pollutants to stormwater and the impacts to water bodies

~~(1)~~iii.~~Awareness among the general public of the importance of improving water quality, reducing impervious surfaces, and protecting the existing and designated uses of waters of the state and the potential impacts caused by stormwater discharges, and promote specific actions and opportunities for avoiding, minimizing, reducing and/or eliminating the adverse impacts of stormwater runoff, especially through the use of source control BMPs.~~

~~(2)Awareness of natural yard care techniques (e.g. composting lawn and yard clippings, using compost and mulch, using natural organic fertilizers, watering infrequently and deeply) among homeowners, the general public, landscape professionals, and property managers to protect water quality.~~

~~(3)Awareness by homeowners, the general public, landscape professionals, and property managers of the need to protect water quality by reducing their purchase of and properly storing, using and disposing of pesticides, fertilizers, and other yard care chemicals.~~

~~(4)Awareness by the general public and businesses of the need to protect water quality by reducing their purchase of and properly storing, using, and disposing of automotive chemicals, hazardous cleaning supplies, and other hazardous materials, and by facilitating use of source control BMPs that minimize the discharge of soap/detergents (e.g., supplying or providing grant funding for carwash kits, etc.).~~

~~(5)Use of technical standards to develop stormwater site plans and erosion control plans, and the use of *Best Management Practices* to mitigate contaminated runoff and the quantity of runoff from development sites by engineers, construction contractors, developers, development review staff, and land use planners.~~

~~(6)Understanding and use of Low Impact Development (LID) techniques (e.g. appropriate site design, pervious paving, full dispersion BMPs, and retention of forests and mature trees) among engineers, contractors, developers, architects, landscape architects, realtors, and potential home buyers to avoid or minimize stormwater impacts of new development.~~

~~(7)Awareness by small businesses and the general public about the impacts of illicit discharges and encourage their identification and removal to avoid impacts to water quality.~~

~~(8)Involvement the general public in environmental stewardship activities (e.g. habitat restoration and community involvement and education projects) to increase awareness of the importance of water quality and mitigate, reduce, or eliminate adverse impacts of stormwater runoff.~~

~~iii.~~Each permittee shall implement or participate in an effort to measure awareness/understanding and adoption of the targeted behavior (when applicable) for~~among~~ the topics and targeted audiences outlined in ii above. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in awareness/understanding and in the adoption of the targeted behaviors.

~~iv.~~iv. Each permittee shall track and maintain records of public education activities.

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

[Apply changes made to permit in other sections to the comparable sections of this Special Condition.]

A. This section applies to all Secondary Permittees, whether coverage under this Permit is obtained individually or as a Co-Permittee with a City and/or Town and/or County and/or another Secondary Permittee.

Each Co-Permittee and Secondary Permittee shall develop and implement a stormwater management program (SWMP) during the term of this permit. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the maximum extent practicable and protect water quality. For the purpose of this permit a SWMP for a Co-Permittee or Secondary Permittee is a set of actions and activities comprising the components in this Special Condition as outlined below. All applicable components are mandatory and must be implemented by each Co-Permittee or Secondary Permittee within the limits of state and federal law. The SWMP must be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented 180 days before the expiration date of this Permit. Notwithstanding the schedules contained in this section for implementation of SWMP components, Secondary Permittees that are already implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP.

Each Co-Permittee and Secondary 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.

1. S6.B Coordination, and S8.C Legal Authority are applicable to all Co-Permittees and Secondary Permittees covered under this permit.

2. S6.D is applicable only to the Port of Seattle and the Port of Tacoma.

3. S6.E is applicable only to King County as a Co-Permittee with the City of Seattle for MS4s owned by King County but located within the City of Seattle.

4. S6.F is applicable all other Secondary Permittees.

B. Coordination

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

C. Legal Authority

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

This legal authority, which may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar means, shall include the ability to:

1. Control the contribution of pollutants to municipal separate storm sewers owned or operated by the Secondary Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity into the Secondary Permittee's municipal separate storm sewer;

2. Prohibit illicit discharges to the municipal separate storm sewer owned or operated by the Secondary Permittee;

3. Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewer owned or operated by the Secondary Permittee;

4. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;

5. Require compliance with conditions in ordinances, permits, contracts, or orders; and,

6. Within the limitations of state law, carry out inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the MS4.

D. Stormwater Management Program for the Port of Seattle and Port of Tacoma:

1. Mapping and Documentation. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned properties.

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

   a. Mapping of known municipal separate storm sewer outfalls, and maps depicting land use for property owned by the Port district, and all other properties served by municipal separate storm sewers known to and owned or operated by the Port. The mapping shall be completed within 2 years of receiving coverage under this permit.

   b. Mapping of tributary conveyances, and the associated drainage areas of municipal separate storm sewer outfalls owned or operated by the Port, with a

24 inch nominal diameter or larger, or an equivalent cross-sectional area for nonpipe systems. The mapping will be completed within 2 years of receiving coverage under this permit.

c. To the extent consistent with national security laws and directives, each Port shall make available to Ecology, upon request, GIS data layers generated by the Port depicting outfall locations, land use, tributary conveyances and associated drainage areas of outfalls owned or operated by the Port district. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at http://www.ecy.wa.gov/services/gis/data/standards.htm where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports.

d. No later than 2 years after receiving coverage under this permit, develop and implement a program to maintain operation and maintenance records for stormwater facilities covered under this permit. The information shall be available for inspection.

e. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the City or County in which the Port is located.

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

Minimum Performance Measures

a. SWPPPs must be developed for applicable properties within 24 months of receiving coverage under this permit.

b. The SWPPP shall include a facility assessment including a site plan, identification of pollutant sources and description of the drainage system.

c. The SWPPP shall include a description of the BMPs determined to be appropriate under the 2005 Stormwater Management Manual for Western Washington (or its approved equivalent) to eliminate or reduce stormwater contamination. 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

SWPPPs that can be applied at multiple sites may be used to comply with this requirement.

d. The Port shall maintain a list of sites for which SWPPPs are required under this permit. At least 15% of the listed sites shall be inspected annually, and 80% of the total number of listed properties will be inspected by 180 days before the expiration date of the permit.

e. The SWPPPs shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides and fertilizer.

f. The SWPPPs shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills and improper disposal. Immediately upon becoming aware of a spill into the drainage system owned or operated by the Port, the Port shall notify the City or County it is located in, and notify Ecology.

g. The SWPPPs shall include a component related to inspection and maintenance of stormwater facilities and catchbasins that is consistent with the Port's Operation and Maintenance Program, as specified in S6.D.3, below.

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

Minimum Performance Measures:

a. Each Port must prepare an operation and maintenance manual for all stormwater BMPs that are under the functional control of the Port District that discharge to its MS3s. The deadline for preparing the O&M manual is 2 years after receiving coverage under this permit. A copy of the manual shall be retained in the appropriate Port department. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. These standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed within 6 months for typical maintenance, within 9 months for re-vegetation, and within 2 years for maintenance that requires capital construction of less than $25,000.

b. The Port will manage maintenance activities to inspect all stormwater BMPs listed in the O&M manual annually, and take appropriate maintenance action in accordance with the O&M manual. The Port may change the annual inspection to a lesser or greater frequency of inspection, as appropriate to comply with maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

c. The Port shall provide appropriate training for Port maintenance staff.

d. The Port will maintain records of inspections and maintenance activities.

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

Minimum Performance Measure:

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

5. Monitoring Program. The monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.

6. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff to the MS3s owned or operated by the Port District from the Port District's construction activities that meet the thresholds in Appendix 1 of this permit.

Minimum performance measures:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Port is located that govern construction phase stormwater pollution prevention measures.

b. Seek coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities, when applicable.

c. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

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

The SWMP shall include a program to address post-construction stormwater runoff to the MS3s owned or operated by the Port District from the Port District's new development and redevelopment projects that meet the thresholds in Appendix 1 of this permit. The program must establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Port District's MS3 is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS3.

b. Provide for the post-construction stormwater controls in Appendix 1 to be included on all land-disturbing projects which exceed regulatory thresholds.

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

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

1. Stormwater controls for areas of existing development consistent with S5.C.6.
2. A source control program consistent with S5.C.7.
3. An illicit discharge detection and elimination program consistent with S5.C.8.
4. An operation and maintenance program consistent with S5.C.9.
5. A public education program consistent with S5.C.10.

F. Stormwater Management Program for all other Secondary Permittees

All other Secondary Permittees shall develop and implement the following Stormwater Management Program. The term "all other Secondary Permittees" means drainage, diking, flood control, or diking and drainage districts, Ports (other than the Ports of Seattle and Tacoma), public colleges and universities, and any other owners or operators of municipal separate storm sewers located within the municipalities that are listed as Permittees in Special Condition S1.B.

SWMP components

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

a. Storm drain inlets owned and operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump no waste" and indicating the point of discharge as a river, lake, bay, or groundwater. No later than three years from the date of permit coverage, at least 50 percent of these inlets must be labeled; and no later than the expiration date of this Permit, all of these inlets shall be labeled. As identified during visual inspection and regular maintenance of storm drain inlets per the

requirements of S6.F.3.iv and S6.F.6.a.i below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable must be re-labeled within 90 days.

b. Each year beginning no later than three years from the date of permit coverage, Public Ports, Colleges and Universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year, and, before the expiration date of this Permit, tenants and residents shall receive educational information about the following topics, where relevant:

i. How stormwater runoff affects local waterbodies;

ii. Proper use and application of pesticides and fertilizers;

iii. Benefits of using well-adapted vegetation;

iv. Alternative equipment washing practices including cars and trucks that minimize pollutants in stormwater;

v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of wastes, including the location of hazardous waste collection facilities in the area;

vi. Hazards associated with illicit connections; and

vii. Benefits of litter control and proper disposal of pet waste.

Compliance with this requirement can be achieved through participation in the local jurisdiction's public education and outreach programs.

2. Public Involvement and Participation

180 days before the expiration date of this Permit, each Secondary Permittee shall:

a. Publish a public notice in the local newspaper and solicit public review of their SWMP.

b. Make the latest updated version of the SWMP available to the public. If the Secondary Permittee maintains a website, the SWMP shall be posted on the Secondary Permittee's website.

3. Illicit Discharge Detection and Elimination

Each Secondary Permittee shall:

a. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.

b. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping no later than one year from the date of permit coverage. Identify possible enforcement mechanisms no later than one year from the date of permit coverage; and, no later than eighteen months from the date of permit coverage,

develop and implement an enforcement plan using these mechanisms to ensure compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined below; and spilling, dumping, or otherwise improperly disposing of: hazardous materials, pet waste, and litter.

i. Non-stormwater discharges covered by another NPDES permit and discharges from emergency fire fighting activities are allowed in the MS4 in accordance with S2 Authorized Discharges.

ii. The policies do not need to prohibit the following categories of non-stormwater discharges:

- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- Uncontaminated pumped ground water;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water from agricultural sources that is commingled with urban stormwater;
- Springs;
- Water from crawl space pumps;
- Footing drains; and
- Flows from riparian habitats and wetlands.

iii. The policies shall prohibit the following categories of non-stormwater discharges unless the stated conditions are met:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
- Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.
- Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to

prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.

iv. The Secondary Permittee's SWMP shall, at a minimum, address each category in iii above in accordance with the conditions stated therein.

v. The SWMP must further address any category of discharges in ii or iii above if the discharge is identified as a significant source of pollutants to waters of the State.

c. 180 days before the expiration date of this Permit, develop a storm sewer system map showing the locations of all known storm drain outfalls, labeling the receiving waters, and delineating the areas contributing runoff to each outfall. Make the map (or completed portions of the map) available on request to the Department and/or to other Permittees or Secondary Permittees. The preferred, but not required, format of submission will be an electronic format with fully described mapping standards. An example description is provided at http://www.ecy.wa.gov/services/gis/data/standards.htm.

d. Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than two years from the date of permit coverage. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.

e. 180 days before the expiration date of this Permit, develop and implement a spill response plan that includes coordination with a qualified spill responder.

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

4. Construction Site Stormwater Runoff Control

From the date of permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.

b. For all construction projects under the control of the Secondary Permittee which require an NPDES permits under 40 CFR 122.26 and where required by departments General NPDES Permit for Stormwater Discharges Associated with Construction Activities the Secondary Permittees shall obtain coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities or an alternative individual NPDES permit prior to discharging.

c. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements for Construction Stormwater Pollution Prevention contained in Appendix 1, Minimum Requirement #2.

d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

e. Coordinate as requested with the Department or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the control of the Secondary Permittee during the active grading and/or construction period.

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

From the date of permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures.

b. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements in Appendix 1.

c. No later than one year from the date of permit coverage, and to the extent allowable under local, state and federal law, new projects owned or operated by the Secondary Permittee, must comply with the Minimum Technical Requirements in Appendix 1 for post construction stormwater controls.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Each Secondary Permittee shall:

a. No later than three years from the date of permit coverage, develop and implement a municipal operation and maintenance (O&M) plan to minimize

stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan must include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities that are present within the Secondary Permittee's boundaries. Record keeping is required to track performance of operational source control activities; performance of scheduled inspections and maintenance activities; and response to spills and other potential pollution incidents not addressed in S6.F.3

i. Stormwater collection and conveyance system, including catch basins, stormwater sewer pipes, open channels, culverts, structural stormwater controls, and structural runoff treatment and/or flow control facilities. The O&M Plan must address, but is not limited to: scheduled inspections and maintenance activities, including cleaning and proper disposal of waste removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and regularly inspect and maintain all structural post-construction stormwater BMPs to ensure facility function. The Secondary Permittee shall establish maintenance standards that are as protective or more protective of facility function as those specified in Chapter 4 Volume V of the 2005 Stormwater Management Manual for Western Washington.

   Secondary Permittees shall conduct spot checks of stormwater treatment and flow control facilities following a 24 hour storm event with a 10-year or greater recurrence interval.

ii. Roads, highways, and parking lots. The O&M Plan must address, but is not limited to: deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g. salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4. Secondary Permittees shall store all de-icing and anti-icing materials in a permanent walled and roof structure.

iii. Vehicle fleets. The O&M Plan must address, but is not limited to: storage, washing, and maintenance of municipal vehicle fleets; and fueling facilities. Secondary Permittees shall conduct all vehicle and equipment washing and maintenance in a self-contained covered building or in designated wash and/or maintenance areas.

iv. External building maintenance. The O&M Plan must address, building exterior cleaning and maintenance including cleaning, washing, painting and other maintenance activities.

v. Parks and open space. The O&M Plan must address, but is not limited to: proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash management.

vi. Material storage areas, heavy equipment storage areas, and maintenance areas. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities

owned or operated by the Secondary Permittee and not covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities or under another NPDES permit that covers stormwater discharges associated with the activity.

vii. Other facilities that would reasonably be expected to discharge contaminated runoff. The O&M Plan must address proper stormwater pollution prevention practices for each facility.

viii. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.F.6.a.i through vii above.

b. From the date of coverage under this Permit, also have permit coverage for all facilities owned, operated or maintained by the Secondary Permittee that are required to be covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities.

c. Train all employees whose construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:

i. The importance of protecting water quality,

ii. The requirements of this Permit,

iii. Operation and maintenance requirements,

iv. Inspection procedures,

v. Ways to perform their job activities to prevent or minimize impacts to water quality, and

vi. Procedures for reporting water quality concerns, including potential illicit discharges.

S7. TOTAL MAXIMUM DAILY LOAD ALLOCATIONS

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs or applicable TMDL requirements are TMDLs which have been approved by EPA on or before the issuance date of this permit, or TMDLs which have been approved by EPA prior to the date that the Permittees application is received by Ecology. All Permittees must be in compliance with applicable TMDL requirements. Actions or activities identified in a Detailed Implementation Plan (DIP) developed for a TMDL shall be implemented after the DIP has been finalized and implementation schedules have been established. **[There is a 1-2 year lag between the time a TMDL is approved by EPA and a DIP is finalized. Permitees can not be in compliance with portions of the TMDL that rely on implementation actions/activities identified in a DIP until the DIP is finalized]**

A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2 in addition to the requirements of this permit. The status of the TMDL implementation must be included as part of the annual report submitted to Ecology for this Permit.

1. Where monitoring is required in Appendix 2, the permittee shall submit a Quality Assurance Project Plan (QAPP) to Ecology for review and approval, or, if available, conduct the monitoring according to a QAPP developed by Ecology.

B. For applicable TMDLs not listed in Appendix 2, compliance with this permit shall constitute compliance with those TMDLs. Each Permittee shall keep records of all actions required by this permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation must be included as part of the annual report submitted to Ecology for this permit.

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

S8. MONITORING

The Permittees listed in S1.B, Port of Seattle and Port of Tacoma shall develop and implement a ~~comprehensive long-term~~ monitoring program. The monitoring program shall include three components:

Stormwater Monitoring,

Stormwater Management Program effectiveness monitoring

Stormwater Treatment and Hydrologic Management BMP evaluation monitoring.

The results of the monitoring program shall be used to support the adaptive management process and lead to refinements of the Stormwater Management Program. The monitoring program must include Quality Assurance Project Plans (QAPPs) for each monitoring objective, written in accordance with Ecology's QAPP guidelines at http://www.ecy.wa.gov/biblio/0403030.html. The monitoring program must be developed by qualified staff or contractors that have experience in applying Ecology's or EPA's QAPP Guidelines.

Secondary Permittees other than Ports have no requirement for monitoring under this section during this permit term, however, in accordance with S6.F.3.c, they are required to provide information, maps and access for sampling efforts, as necessary. Secondary Permittees are encouraged to participate in the monitoring program

A. Stormwater Monitoring

1. Stormwater monitoring site selection
   a. Adequate sites will have the tributary conveyance system and drainage area mapped, and be suitable for ~~permanent~~ installation and operation of flow-weighted composite sampling equipment. Selected sites can be changed as prioritized planning areas change.
   b. Counties shall monitor one outfall or conveyance representing each of the following land uses:
      i. Commercial,
      ii. Low density residential, and
      iii. High density residential.
   c. Cities shall monitor one outfall or conveyance representing each of the following land uses:
      i. Commercial,
      ii. High density residential, and
      iii. Industrial.
   d. The Ports of Seattle and Tacoma shall each monitor one outfall or conveyance.
2. Stormwater monitoring frequency and type of sampling shall be as follows:
   a. Each stormwater monitoring site shall be sampled according to the following frequency:
      i. 75% of the qualifying storms up to a maximum of ~~15~~ 5 storm events per year, with sampling distributed throughout the year, reflecting the 80%/20% distribution of rainfall between the wet and dry seasons as follows:
         (1) 75% of the qualifying storms during the wet season, from October 1 through April 30. A wet season storm event is defined as follows:
            - Rainfall volume — 0.10" minimum; No fixed maximum
            - Rainfall duration — No fixed minimum or maximum
            - Antecedent dry period — less than 0.02" rain fall in the previous 24 hours
            - Inter-event dry period — 6 hours

            [Please clarify the antecedent dry period vs. Inter-event dry period]
         (2) 75% of the qualifying storms during the dry season, from May 1 through September 30. A dry season storm event is defined as follows:
            - Rainfall volume — 0.10" minimum; No fixed maximum

- Rainfall duration — No fixed minimum or maximum
- Antecedent dry period — less than 0.02" in the previous 72 hours
- Inter-event dry period — 6 hours

[Please clarify the antecedent dry period vs. Inter-event dry period]

b. Each storm event shall be sampled using flow-weighted composite storm sampling, for the full duration of the storm event, for the constituents/parameters listed below. Chemicals that are below detection limits after two years of data may be dropped from the analysis.

i. Flow, Hydrograph data including antecedent dry period, rainfall and runoff,

ii. TSS and turbidity,

iii. Conductivity if tidally influenced,

iv. Chloride,

v. Metals including, at a minimum, total and dissolved copper, zinc, cadmium, and lead; and mercury sampling in commercial and industrial land use areas,

vi. Hardness,

vii. PAHs associated with vehicles, roads and parking lots; phthalates

viii. Pesticides including:

- Herbicides: 2,4-D, MCPP, Dichlobenil, Prometon, Triclopyr,
- Insecticides: ~~Diazinon,~~ Malathion~~, Chlorpyrifos~~**[Although these were detected in past studies, these pesticides have been banned and therefore are not expected to be detected at past levels]**
- Fungicides: Pentachlorophenol

ix. Nutrients including total nitrogen, phosphorus, nitrate/nitrite and orthophosphate,

x. Biochemical oxygen demand (BOD), and

xi. Nonylphenol, and **[to characterize the presence of surfactants]**

c. Toxicity testing of ~~a~~ one "seasonal first-flush" storm event during the permit cycle. A "seasonal first-flush" storm event is defined as an event in August or September, with at least a 1 week antecedent dry period. Required test is the Daphnid acute test, Ceriodaphnia dubia or Daphnia pulex (48-hour static test, method: EPA-821-R-02-012).

d. Each storm event shall be sampled using grab samples for the following constituents/parameters:

i. Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and NWTPH-Dx. (sample must be collected early in the storm event and skimmed from the surface), and

ii. Fecal coliform bacteria.

e. Sediments will be collected and analyzed for percent solids, total organic carbon, metals, PAHs, phthalates, phenolics and PCBs at all sites in the system proposed for monitoring. Chemicals that are below detection limits after two years of data may be dropped from the analysis. A minimum of 1 independent sample~~, up to a maximum of 3 independent samples~~ per ~~year~~ permit cycle should be collected. Use of in-line sediment traps or similar collection system is preferred. Sampling of sediment deposits is an alternative where approved by the department.

3. The objective of the stormwater monitoring is to identify subbasin-specific water quality problems and characterize discharges for planning purposes ~~measure and track long term trends in annual and seasonal pollutant loading of stormwater discharges~~. A QAPP is required for the stormwater monitoring program. For each stormwater monitoring site, calculate the Event Mean Concentrations (EMCs), total annual pollutant load and the seasonal pollutant load for the wet and dry seasons. The loadings shall be expressed as total pounds and as pounds per acre, and must take into account potential pollutant load from base flow.

B. Stormwater Management Program Effectiveness Monitoring

1. Each permittee and the Ports of Seattle and Tacoma shall conduct monitoring designed to determine the effectiveness of the permittee's SWMP at controlling a stormwater related problem directly addressable by actions in the SWMP. Each Permittee and the Ports of Seattle and Tacoma shall develop and implement a monitoring program designed to answer one of each type of the following questions, at minimum 2 questions must be addressed:

a. The effectiveness of a targeted action (or narrow suite of actions), and

b. The effectiveness of achieving a targeted environmental outcome.

2. The monitoring shall at a minimum include either stormwater or receiving water monitoring of physical, chemical and/or biological characteristics. The monitoring may also include evaluation of regulatory processes, programmatic actions or other similar evaluations.

3. For each of the 2 questions selected for monitoring, the permittee must develop a monitoring program containing the following elements:

a. Statement of the problem selected and explanation of why the problem is significant to the permittee, and if the problem is significant to other stormwater managers;

b. Specific hypotheses about the problem or management actions that will be tested by the monitoring problem;

c. Specific parameters of attributes to be measured;

d. A QAPP written in accordance with Ecology's QAPP guidelines

e. Expected modifications to management actions depending on the outcome of hypotheses testing.

C. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring

1. Each Permittee listed in S1.B and the Ports of Seattle and Tacoma shall conduct full scale field monitoring to evaluate the effectiveness and operation and maintenance requirements of stormwater treatment and hydrologic management BMPs applied in their jurisdiction. A QAPP is required for each BMP and flow reduction strategy being monitored.

2. Each Permittee listed in S1.B shall monitor at least 2 treatment BMPs, at no less than 2 sites per BMP. The Ports of Seattle and Tacoma shall each monitor at least 1 treatment BMP, at 2 sites. BMPs shall be selected from the following list:

a. BMP treatment types:

i. Basic Treatment

(1) Biofiltration swale

(2) Filter strip

(3) Basic wetpond

(4) Treatment wetland

(5) Sand filter

ii. Metals/Phosphorus Treatment

(1) Amended sand filter

(2) Two facility treatment train

(3) Compost amended filter strips

(4) Bioretention

(5) Large wetpond

iii. Oil Control

(1) Linear sand filter

(2) Catch basin insert

b. BMPs shall be designed in accordance with the 2005 Stormwater Management Manual for Western Washington unless Ecology approves of an alternate design in the QAPP review. Permittees may also petition Ecology to monitor a BMP that is not on the above list that they wish to evaluate as a potential option for common use in their jurisdiction.

[NOTE: It may not be possible to monitor facilities within the timeframe provided. Facilities that were designed to the 1998 KC requirements are just beginning to come into the inventory, even though the requirements have

been in place for over 8 years. Because of this lag time, there may not be a sufficient number of facilities in the ground and ready for monitoring (build-out conditions with pollutant-generating activities in place) within the time frame for monitoring.]

c. Permittees shall prepare QAPPs consistent with Ecology (guidelines available at: http://www.ecy.wa.gov/biblio/0403030.html) and shall use appropriate sections of "Guidance for Evaluating Emerging Stormwater Treatment Technologies" (Publication Number 02-10-037) - or its updated version if published before the issuance date of this permit – including the "Technology Assessment Protocol-Ecology" (TAPE) for preparing, implementing, and reporting on the results of the BMP evaluation program. The statistical goal is to determine mean effluent concentrations and mean percent removals for each BMP type with 95% confidence and 80% power. However, a maximum of 35 influent and effluent sample pairs will suffice.

Permittees shall use USEPA publication number 821-B-02-001 , "Urban Stormwater BMP Performance Monitoring," as additional guidance for preparing the BMP evaluation monitoring, and shall collect information pertinent to fulfilling the "National Stormwater BMP Data Base Requirements" in section 3.4.3. of that document.

d. Parameters to be monitored in whole water at each test site for Basic, Enhanced, or Phosphorus treatment BMP's include:

i. Total suspended solids

ii. Particle size distribution

iii. pH

iv. Total and ortho-phosphorus

v. Hardness

vi. Total and dissolved copper and zinc

e. Parameters to be monitored in whole water at test sites for Oil Control BMP's include:

i. Total suspended solids

ii. Particle size distribution

iii. pH

iv. NWTPH-Dx and -Gx

v. Visible sheen

f. Parameters to be monitored in accumulated sediment at each test site for Basic, Enhanced, Phosphorus treatment, or Oil Control BMP's include:

i. Percent total solids

ii. Grain size

iii. Total volatile solids

iv. NWTPH-Dx

v. Total cadmium, copper, lead, and zinc

vi. Total phosphorus

3. Each Permittee listed in S1.B. shall monitor the effectiveness of 1 flow reduction strategy that is in use or planned for installation in their jurisdiction.

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

D. Monitoring Program Development

1. The Permittees listed in S1.B and the Ports of Seattle and Tacoma may choose to develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results through an integrated, long-term, water quality monitoring program in collaboration with other municipal stormwater Permittees; or they may independently develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results.

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

2. All QAPPs must be submitted to Ecology, for review, in accordance with the deadlines below. QAPPs for S8.A, Stormwater Monitoring, and S8.C., Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program must be reviewed and approved by Ecology prior to monitoring. **[There is significant concern as to whether Ecology will have the staff time to review and comment on the QAPPs in a timely enough manner to allow the permittees to meet permit deadlines contained in this permit]**

E. Monitoring Program Deadline

1. The deadlines for collaborative, integrated monitoring program are as follows:

   a. Permittees that intend to meet all or part of the monitoring requirements through a collaborative process must submit a statement to Ecology explaining their commitment to the collaborative process no later than 1 year after the effective date of this permit

   b. The summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 2 years after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.

c. Approved or final QAPPs must be completed no later than 2.5 years after the effective date of this permit dependant upon Ecology's completion of review and commenting in a time that allows completion of the QAPP within this timeframe.

d. Full implementation of the stormwater ~~and receiving water~~ monitoring program shall begin no later than 3 years after the effective date of this permit or 90 days after receipt of approved QAPPs from Ecology, whichever is later. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.

e. Data collection and analysis for S8.C. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program must be complete and submitted to Ecology no later than 4 years from the effective date of this permit.

2. The deadlines for an independently developed monitoring program are as follows:

a. A summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 1 year after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.

b. Approved or final QAPPs must be completed no later than 1.5 years after the effective date of this permit.

c. Full implementation of the stormwater ~~and receiving water~~ monitoring program shall begin no later than 2 years after the effective date of this permit or 90 days after receipt of approved QAPPs from Ecology, whichever is later.

d. Data collection and analysis for S8.C. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program must be complete and submitted to Ecology no later than 4 years from the effective date of this permit.

F. Monitoring Program Reporting Requirements

1. The stormwater monitoring report shall be submitted by December 31 each year, beginning in 2009 for independent monitoring, and 2010 for collaborative monitoring. Each report shall include all monitoring data collected during the preceding period from October 1 through September 30. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:

a. Stormwater Monitoring Reporting

i. A summary including the location, land use, drainage area size, and hydrology for each site,

ii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,

iii. The annual pollutant load for each site expressed in total pounds, and pounds/acre, and

iv. The wet and dry season pollutant loads, expressed in total pounds, and pounds/acre.

b. Stormwater Management Program Effectiveness Monitoring Reporting

i. A summary of the purpose, design, and methods of the monitoring program,

ii. The status of implementing the monitoring program,

iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,

iv. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements ~~or other trends~~ in stormwater ~~or receiving water~~ quality, and

v. Recommended future actions based on the findings.

c. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring Reporting

i. A summary including the BMP type location, land use, drainage area size, and hydrology for each site.

ii. The status of implementing the monitoring program,

iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,

iv. Performance data or flow reduction performance. Performance data for treatment BMPs shall be reported consistent with:

(1) The guidelines in appropriate sections of "Guidance for Evaluating Emerging Stormwater Treatment Technologies" (Publication Number 02-10-037) - or its updated version if published before the issuance date of this permit – including the "Technology Assessment Protocol-Ecology (TAPE), and

(2) USEPA publication number 821-B-02-00, "Urban Stormwater BMP Performance Monitoring," including information pertinent to fulfilling the "National Stormwater BMP Data Base Requirements" in section 3.4.3. of that document.

d. Monitoring Cost Reporting. Report the cost of development and implementation of the monitoring program including the preparation of

monitoring plans, sample collection, sampling equipment, laboratory analysis, data analysis and reporting.

2. If the Permittee monitors any pollutant more frequently than required by the required monitoring program, then the results of this monitoring shall be included in the report. If the Permittee conducts any other stormwater monitoring in addition to that required in the required monitoring program, then it shall provide a description of the additional monitoring in the report.

S9. REPORTING REQUIREMENTS

A. Each Permittee, co-Permittee and secondary Permittee shall submit, no later than March 31 of each year beginning in the year 2008, an annual report. The reporting period for each annual report shall be the previous calendar year.

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 Appendices 3 and 4, respectively. 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 or web link to an electronic copy of the report, in pdf format, shall be submitted to Ecology.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

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

G2. PROPER OPERATION AND MAINTENANCE

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

G3. NOTIFICATION OF SPILL

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

G4. BYPASS PROHIBITED

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

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

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

G5. RIGHT OF ENTRY

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

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

~~B~~. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the permit in compliance with state disclosure laws;

C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;

D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities owned by the Permittee; and

E. To sample at reasonable times any discharge of pollutants.

G6. DUTY TO MITIGATE

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

G7. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or the right to enter private property, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

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

G9. MONITORING

A. Representative Sampling:

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

B. Records Retention:

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least ~~five~~

three years **[to be consistent with state law]**. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology in compliance with state disclosure laws. On request, monitoring data and analysis shall be provided to Ecology.

C. Recording of Results:

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

D. Test Procedures:

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

E. Flow Measurement:

Where flow measurements are required by other conditions of this Permit, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. Lab Accreditation:

Where data collection is required by other conditions of this Permit, all monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology.

G. Additional Monitoring:

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification by following due process in accordance with state law for rule development.

G10. REMOVED SUBSTANCES

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

G11. SEVERABILITY

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

G12. REVOCATION OF COVERAGE

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

A. Violation of any term or condition of this general permit;

B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;

E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090;

F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465;

[Delete indent]Revocation of coverage under this general permit may be initiated by Ecology~~ or requested by any interested person~~.

G13. TRANSFER OF COVERAGE

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

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

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

A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this general permit;

B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or ~~chapter~~ Chapter 90.48 RCW, for the category of dischargers covered under this general permit;

C. A water quality management plan containing requirements applicable to the category of dischargers covered under this general permit is approved; or

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

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

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

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

G16. APPEALS

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

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

C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter

shall be remanded to ~~ecology~~ Ecology for consideration of issuance of an individual permit or permits.

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

G17. PENALTIES

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

G18. DUTY TO REAPPLY

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

G19. CERTIFICATION AND SIGNATURE

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

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

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

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

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

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

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

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons

directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

G20. RECORDS RETENTION

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

~~G21. NON-COMPLIANCE NOTIFICATION~~

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

~~**A. Take appropriate action to correct or minimize the threat to human health or the environment or otherwise stop or correct the condition of noncompliance.**~~

~~**B. Notify Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance.**~~

~~**C. Notify Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittees MS4 which may cause or contribute to an eminent threat to human health or the environment.**~~**[Condition G21, (G20 in the Phase II permit) while adapted to municipal stormwater discharges by using the term "MS3" appears to be designed for a process or wastewater discharge of the type that would have effluent limits and need to report violations of those limits. This is not appropriate or applicable for MS4 permits that rely on a system-wide program for compliance.]**

DEFINITIONS AND ACRONYMS

"AKART" means All Known, Available, and Reasonable methods of prevention, control and Treatment.

"All known, available and reasonable methods of prevention, control and treatment" refers to the State Water Pollution Control Act, Chapter 90.48.010 ~~and 90.48.520~~ RCW.

"Applicable TMDL" means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that the Permittee's application is received by Ecology, or prior to a modification of this Permit, whichever is later.

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

"Beneficial uses" means....**[This term is still being used in the permit and therefore should be defined.]**

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

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

"Commercial land use" for the purposes of S8.a means...

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

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

"Discharge" for the purpose of this permit, unless indicated otherwise, refers to discharges to or from Municipal Separate Storm Sewers of the Permittees. See also 40 CFR 122.2.

"DIP" means a Detailed Implementation Plan approved by Ecology for addressing an EPA-approved non-point source or mixed source TMDL in accordance with the October 29, 1997 Memorandum of Agreement between EPA and Ecology regarding implementation of Section 303(d) of the Clean Water Act. A DIP details the actions and the timeframe for those actions to be taken by dischargers and responsible parties to meet the pollution prevention or reduction goals of a TMDL.

"Entity" means another governmental body, or public or private organization, such as another permittee, a conservation district, or volunteer organization.

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

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

"Heavy equipment maintenance or storage yard" means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or regularly maintained at an established heavy equipment washing facility, or where at least five pieces of heavy equipment are stored on a permanent basis.

"High density residential land use" for the purposes of S8.A means…

"Illicit connection" means any man-made conveyance that is connected to a municipal separate storm sewer without a permit or other legal justification, excluding roof drains and other similar type connections designed to convey drainage, surface water and ground water. Examples of illicit connections include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

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

"Industrial land use" for the purposes of S8.A means…

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

(a) Preventing pest problems;

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

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

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

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

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

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

"Low density residential land use" for the purposes of S8.A means…

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

"Maintenance" means those actions and activities which are performed to maintain the original line and grade, hydraulic capacity, or original purpose of a structure or facility.

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

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

"Material Storage Facilities" means an uncovered area used on a permanent basis for outside storage of uncontained bulk materials (liquid, solid, granular, etc.) in piles, barrels, tanks, bins, crates, or other means.

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

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

(a) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

(b) designed or used for collecting or conveying stormwater;

(c) which is not a combined sewer; and

(d) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

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

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

"Notice of Intent" (NOI) means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200. See Appendix 5 for the NOI for this permit.

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

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

"Physically Interconnected" means that one MS3 is connected to a second MS3 in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a MS3 belonging to another entity.

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

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

"RCW" means the Revised Code of Washington State.

"Runoff" means that portion of water originating from rainfall and other precipitation that flows over the surface or just below the surface from where it fell and is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands, and shallow groundwater as well as on ground surfaces. ~~see Stormwater.~~

"Secondary Permittee" is an operator of municipal separate storm sewer which is not a city, town or county. Secondary Permittees include special purpose districts and other public entities identified in S1D which operate municipal separate storm sewers.

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

"Stormwater" means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.~~stormwater runoff, snow melt runoff, and surface runoff and drainage.~~ **[There has been a lack of consistency between permits and other regulations issued by Ecology. The term "stormwater" should have one definition across all permits and regulations. This should apply to all definitions, terms, acronyms or even concepts generated by Ecology irregardless of what law, regulation, or permit the word or term is located.]**

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

"Stormwater facilities regulated by the Permittee" means all known, permanent stormwater treatment and flow control BMPs not owned by the Permittee, that discharge into municipal separate storm sewers owned or operated by the Permittee.

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

"Stormwater Management Program (SWMP)" means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent

practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs.

"Urban/higher density rural sub-basins" means any sub-basin or portion thereof that is within or proposed to be within the urban growth area (UGA), or any rural area sub-basin or portion thereof, fifty percent or more of which is comprised of lots smaller than 5 acres in size.

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

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

"TMDL" means....

[COMMENTS ON THE APPENDICES:]

APPENDIX 1:

[General Comment: Every reference to the Stormwater Management Manual for Western Washington (SMMWW) should include an entry indicating that the Permittee is allowed to use relevant sections from an equivalent document, or establish a program that is equal to or as restrictive as the referenced section. Every reference to the SMMWW should also state that only the required portions of the referenced sections are mandated and that the recommended sections are not.]

[The following are language excerpts from Appendix 1 that should be edited as shown:]

(Page 2) All other new development is subject to one or more of the Minimum Requirements ~~(see Section 2.4)~~.

(Page 2) ***Effective Impervious surface*** **-** Those impervious surfaces that are connected via sheet flow or discrete conveyance to a drainage system. Impervious surfaces on residential development sites are considered ineffective if the runoff is dispersed through at least one hundred feet of native vegetation in accordance with BMP T5.30 – "Full Dispersion," as described in ~~Chapter 5 of Volume V~~ the required sections of the *Stormwater Management Manual for Western Washington* (SMMWW), or a BMP that is as restrictive, or a BMP found in an equivalent manual.

(Page 3) ***Maintenance*** - Repair and maintenance includes activities conducted on currently serviceable structures, facilities, and equipment that involves no expansion or use beyond that previously existing and results in no significant adverse hydrologic impact. It includes those usual activities taken to prevent a decline, lapse, or cessation in the use of structures and systems. Those usual activities may include and replacement of dysfunctioning facilities, including cases where environmental permits require replacing an existing structure with a different type structure, as long as the functioning characteristics of the original structure are not changed. One example is the replacement of a collapsed, fish blocking, round culvert with a new box culvert under the same span, or width, of roadway. ~~For further details on the application of this manual to various road management functions, please see Section 2.2.~~

(Page 5) ***Redevelopment*** **-** On a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure;~~;~~ replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

(Page 5) ***Source control BMP*** **-** A structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful

management of activities that are sources of pollutants. This manual separates source control BMPs into two types. *Structural Source Control BMPs* are physical, structural, or mechanical devices, or facilities that are intended to prevent pollutants from entering stormwater. *Operational BMPs* are non-structural practices that prevent or reduce pollutants from entering stormwater. ~~See Volume IV for details.~~

(Page 6) ~~2.4~~ Applicability of the Minimum Requirements

(Page 6) The Minimum Requirements themselves are presented in ~~Section 2.5~~ the Minimum Requirements Section.

(Page 9) ~~2.4.1~~ New Development

(Page 9) ~~2.4.2~~ Redevelopment

(Page 10) ~~2.5~~ Minimum Requirements

(Page 11) All projects meeting the thresholds in the Applicability of the Minimum Requirements Section ~~2.4~~ shall prepare a Stormwater Site Plan for local government review. Stormwater Site Plans shall be prepared in accordance with the required sections of the plans described in the SMMWW or in an equivalent manual or using plans that are equally restrictive~~Chapter 3 of this volume~~.

(Page 12) Stormwater BMPs shall be consistent with the required sections of the 2005 edition of the ~~*Stormwater Management Manual for Western Washington*~~SMMWW, or an equivalent manual approved by Ecology.

(Page 22) The soil suitability criteria for infiltration treatment are met (use infiltration treatment; as an example, see Chapter 3 of Volume III of the SMMWW),

(Page 23) Natural Resource Conservation Service curve number equations such as is found in Chapter 2 of Volume III of the SMMWW, for the 6-month, 24-hour storm.

(Page 24) • selected in accordance with the process identified in Chapter 4 of Volume I of the SMMWW or equivalent manual,

(Page 24) • designed in accordance with the design criteria in Volume V of the SMMWW or equivalent manual, and

(Page 24) • maintained in accordance with the maintenance schedule in Volume V of the SMMWW or equivalent manual.

(Page 24) …except for projects that discharge to a water in Appendix I-E of the SMMWW - Flow Control-Exempt Receiving Waters in accordance with the following restrictions:

(Page 28) (Standard Requirement) A wetland can be considered for hydrologic modification and/or stormwater treatment in accordance with Guide Sheet 1B in Appendix I-D of the SMMWW or equivalent manual.

(Page 29) Minimum Requirement #10: Operation and Maintenance An operation and maintenance manual that is consistent with the provisions in Volume V of ~~this manual~~ the SMMWW or equivalent manual shall be provided for all proposed stormwater facilities and BMPs, and the party (or parties) responsible for maintenance and operation shall be identified. At private facilities, a copy of the operations and maintenance manual shall be retained onsite or within reasonable access to the site, and shall be transferred with the property to the new owner. For public facilities, a copy of the manual shall be retained in the appropriate department. A log of maintenance activity that indicates what actions were taken shall be kept and be available for inspection by the local government.

(Page 30) ~~2.7~~ Adjustments

(Page 30) ~~2.8~~ Exceptions/Variances

APPENDIX 3:

Form 3-1:

[There should be language that gives the Permittee flexibility to modify Form 3-1 as needed to address any discrepancies between the form and permit text and to allow reporting of subtasks not included in the form.]

Form 3-2:

[A column should be added for the current reporting year's expenditures.]

[*TIER 1 Comment*** Delete the Form 3-2 instructions and add language to S5.A.2 saying that cost estimates may be based on actual expenditure data, or on surrogate parameters such as engineer's cost estimates for permit-related elements of construction projects, or similar estimates based on documentable information and commonly-accepted professional practices. In the event that estimates of expenditures are used, the permittee shall describe the estimation method and the documentation used as a basis]**

[*TIER 2 Comment*** If the Form 3-2 instructions are retained, the following language excerpted from the instructions should be edited as shown:]**

Cost data are needed to make determinations of practicability, ~~compare effectiveness of programs~~ and gauge budget and assistance needs. **[Each jurisdiction has different organizational structures and accounting practices, so reported costs will be incomparable. It is improbable that Ecology will be able to compare reported costs and effectiveness, even for like programs, across municipalities.]**

- The cost for labor of stormwater staff and benefits should be tracked for each program component or allocated to each component on a reasonable basis. (A program component

(or component) is a section of the SWMP ~~as listed in the permit and~~ on Form 3-2.) **[reduces confusion]**

- Overhead allocation for the entire stormwater program should be distributed to each cost category as listed in Form 3.2.

- Do not include stormwater conveyance costs, only include permit compliance costs. **[Need to state what is meant by "stormwater conveyance costs" and what is considered a cost that should not be included (e.g., capital construction cost, maintenance cost, etc.). Also, does it include stormwater conveyance in the form of tightlines down steep erosive slopes, which could be considered a water quality protection measure in the Structural Control Program.]**

~~This program also includes permittees costs for source control activities relating to pet waste collection, automobile maintenance, vehicle washing, illegal dumping control, landscaping and lawn care, pest control, parking lot and street cleaning, roadway and bridge maintenance, storm drain system cleaning, and alternative discharge options for chlorinated water.~~ **[This is too onerous and the cost of tracking this information is not worth the value it will provide.]**

~~Costs for materials management would include alternative products, hazardous materials storage, road salt application and storage, used oil recycling, and materials management.~~ **[This is too onerous and the cost of tracking this information is not worth the value it will provide.]**

APPENDIX 4:

[Same comments as those for Appendix 3]