

11930 Cyrus Way - Mukilteo, Washington 98275 - 425.263.8000



Surface Water Management Program

March 31, 2011

Introduction

The National Pollution Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act, which is intended to protect and restore waters to “fishable, swimmable” uses. The federal Environmental Protection Agency (EPA) has delegated permit authority to the Washington State Department of Ecology (DOE). To that end DOE has issued the Western Washington Phase II Municipal Stormwater Permit.

The Permit allows municipalities to discharge stormwater from their Municipal Separate Stormwater System (MS4) into the State’s waterbodies as long as municipalities implement programs to protect water quality by reducing the discharge of “non-point source” pollutants to the “maximum extent practicable” (MEP) through application of “all known and reasonable treatment “ (AKART) “best management practices” (BMP).

The Permit required each municipality to prepare a Surface Water Management Program (SMWP) that describes the actions and activities comprising components listed in the permit to reduce the discharge of pollutants from their MS4s and to protect water quality.

The City of Mukilteo describes the cities program in this document, the SMWP. This document is organized in a manner consistent with the permit. In each section we will describe the permit requirements and the City’s plan to comply with those requirements.

The requirements of the SWMP include:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Controlling Runoff from New Development, redevelopment and Construction Sites
5. Pollution Prevention and Operation and Maintenance for Municipal operations

Section 1. Public Education and Outreach

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

The minimum measures are:

- a. No later than two years after the effective date of this Permit, the Permittee shall provide an education and outreach program for the area served by the MS4. The outreach program shall be designed to achieve measurable improvements in the target audience's understanding of the problem and what they can do to solve it.

Education and outreach efforts shall be prioritized to target the following audiences and subject areas:

i. General public

- General impacts of stormwater flows into surface waters.
- Impacts from impervious surfaces.
- Source control BMPs and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping and buffers.

ii. General public, businesses, including home-based and mobile businesses

- BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Impacts of illicit discharges and how to report them.

iii. Homeowners, landscapers and property managers

- Yard care techniques protective of water quality.
- BMPs for use and storage of pesticides and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance.
- Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.
- Stormwater pond maintenance.

iv. Engineers, contractors, developers, review staff and land use planners

- Technical standards for stormwater site and erosion control plans.

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

City of Mukilteo 2010 Public Education and Outreach

a. Minimum Measures

i. General public

- The city has posted “Scoop and Bag” signs in public access areas of the City.
- “Mutt Mitt” pet waste stations are located at City parks.
- The city is participating in a program to place signs on public transit busses.

ii. General public, businesses, including home-based and mobile businesses

- The City is cooperating with the Snohomish County health Department in their inspections and information program for businesses.

iii. Homeowners, landscapers and property managers

- The City has worked with a number of homeowners and property managers to educate them in disposal of material into the storm system.
- The City has participated in bluff management workshops to address bluff stability and erosion impact.
- The city has sent letters to bluff residents outlining vegetation management practices to address bluff stability and erosion impact.

iv. Engineers, contractors, developers, review staff and land use planners

- The City has adopted the 2005 manual by ordinance for technical standards for stormwater site and erosion control

plans. The city reviews all plans for development and redevelopment for compliance with these standards.

- The city regularly inspects all construction sites for compliance.
- The City requires separate plans and inspections for construction sites during the “wet season”.
- The City requires retention of trees and inclusion of “natural growth protection areas” in all applicable locations.
- The City is encouraging low impact development techniques and has entered active discussion on several new sites in the pre-application stage to institute measures including pervious pavements, water gardens, and bioswales.
- Stormwater treatment and flow control BMPs are required at all new development sites that meet the City thresholds of area.

b. The City is collaborating with Snohomish County and other agencies within the county to measure the understanding and adoption of targeted behaviors.

c. The City contracted with a consulting firm to conduct a telephone poll of public understanding. We have these results and will use them as a baseline for follow up action.

Section 2. Public Involvement and Participation

The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities or other similar activities. Each Permittee shall comply with applicable State and local public notice requirements when developing their SWMP.

The minimum performance measures are:

a. No later than one year from the effective date of this Permit, all permittees shall create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the Permittee’s entire SWMP. Each Permittee shall develop and implement a process for consideration of public comments on their SWMP.

b. Each Permittee shall make their SWMP, the annual report required under S9.A and all other submittals required by this Permit, available to the public. The annual report, and SWMP that was submitted with the latest annual report, shall be posted on the permittee’s website. To comply with the posting requirement, a permittee that does not maintain a website may submit the updated SWMP in electronic format to the Department for posting on the Department’s website.

City of Mukilteo 2010 Public Involvement and Participation

a. Minimum Measures

- The City will post this program on its website when it is submitted to the Department.
- The City is developing a comment form for its web site.
- The city currently encourages reporting of non-compliant conditions.
- The City accepts comments in public forums such as City Council meetings.

Section 3. Illicit Discharge Detection and Elimination

The SWMP shall include an ongoing program to detect and remove illicit connections, discharges as defined in 40 CFR 122.26(b)(2), and improper disposal, including any spills not under the purview of another responding authority, into the municipal separate storm sewers owned or operated by the Permittee. Permittees shall fully implement an ongoing illicit discharge detection and elimination program no later than 180 days prior to the expiration date of this Permit.

The minimum performance measures are:

- a. A municipal storm sewer system map shall be developed no later than four years from the effective date of this permit. Municipal storm sewer system maps shall be periodically updated and shall include the following information:
 - i. The location of all known municipal separate storm sewer outfalls and receiving waters and structural stormwater BMPs owned, operated, or maintained by the Permittee. Each Permittee shall map the attributes listed below for all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems:
 - Tributary conveyances (indicate type, material, and size where known).
 - Associated drainage areas.
 - Land use.
 - ii. 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.
 - iii. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

- iv. Each Permittee shall make available to Ecology, upon request, municipal storm sewer system map(s) depicting the information required in S5.C.3.a.i. through iv above. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided on Ecology WebPages under Core Services, GIS Data.
- vi. Upon request, and to the extent appropriate, permittees shall provide mapping information to co-permittees and secondary permittees.
- b. Each Permittee shall develop and implement an ordinance or other regulatory mechanism 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. The ordinance or other regulatory mechanism shall be adopted no later than 30 months from the effective date of this Permit.
- i. The regulatory mechanism does 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.
 - Flows from riparian habitats and wetlands.
 - Non-stormwater discharges covered by another NPDES permit.
 - Discharges from emergency fire fighting activities in accordance with *S2 Authorized Discharges*.
- ii. The regulatory mechanism 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 re-suspension of sediments in the MS4.

- Discharges from lawn watering and other irrigation runoff. These shall be minimized through, at a minimum, public education activities (see section S5.C.1) and water conservation efforts.
 - Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, volumetrically and velocity controlled to prevent re-suspension of sediments in the MS4. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
 - Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see section S5.C.1.) 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.
 - Other non-stormwater discharges. The discharges shall be in compliance with the requirements of the stormwater pollution prevention plan reviewed by the Permittee, which addresses control of construction site de-watering discharges. iii. The Permittee's SWMP shall, at a minimum, address each category in ii above in accordance with the conditions stated therein.
- iv. The SWMP shall further address any category of discharges in i or ii above if the discharges are identified as significant sources of pollutants to waters of the State.
- v. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.
- vi. The Permittee shall develop an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism.

c. Each Permittee shall develop and implement an ongoing program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the Permittee's municipal separate storm sewer system. The program shall be fully implemented no later than 180 days prior to the expiration date of this Permit and shall include:

- i. Procedures for locating priority areas likely to have illicit discharges, including at a minimum: evaluating land uses and associated business/industrial activities present; areas where complaints have been registered in the past; and areas with storage of large quantities of materials that could result in spills.
- ii. Field assessment activities, including visual inspection of priority outfalls identified in i, above, during dry weather and for the

purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges.

- Receiving waters shall be prioritized for visual inspection no later than three years from the effective date of this Permit, with field assessments of three high priority water bodies made no later than four years from the effective date of this Permit. Field assessments on at least one high priority water body shall be made each year thereafter.
- Screening for illicit connections shall be conducted using: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004, or another methodology of comparable effectiveness.

iii. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall include detailed instructions for evaluating whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

Compliance with this provision shall be achieved by investigating (or referring to the appropriate agency) within 7 days, on average, any complaints, reports or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping; and immediately investigating (or referring) problems and violations determined to be emergencies or otherwise judged to be urgent or severe.

iv. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.

v. Procedures for removing the source of the discharge; including notification of appropriate authorities; notification of the property owner; technical assistance for eliminating the discharge; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated.

Compliance with this provision shall be achieved by initiating an investigation within 21 days of a report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection. Upon confirmation of the illicit nature of a storm drain connection, termination of the connection shall be verified within 180 days, using enforcement authority as needed.

- d. Permittees shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
 - i. No later than 180 days prior to the expiration date of this Permit, distribute appropriate information to target audiences identified pursuant to S5.C.1.
 - ii. No later than two years from the effective date of this Permit, publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges. Keep a record of calls received and follow-up actions taken in accordance with S5.C.3.c.ii. through v. above; include a summary in the annual report (see section S9 Reporting and Record Keeping Requirements).
- e. Permittees shall adopt and implement procedures for program evaluation and assessment, including tracking the number and type of spills or illicit discharges identified; inspections made; and any feedback received from public education efforts. A summary of this information shall be included in the Permittee's annual report (see section S9 Reporting and Recordkeeping Requirements).
- f. Each Permittee will provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.
 - i. No later than thirty 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 requirements. Permittees shall document and maintain records of the training provided and the staff trained.
 - ii. No later than three years after the effective date of this Permit, an ongoing training program shall be developed and implemented 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 requirements. Permittees shall document and maintain records of the training provided and the staff trained.

City of Mukilteo 2010 Illicit Discharge Detection and Elimination

a. Minimum Measures

- i. The City has mapped approximately 98 percent of the catchbasins in the MS4. This map was created by GPS location and is a GIS map.
 - ii. The City is developing a connection map at this time.
 - iii. The City has not identified any geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.
 - iv. All of the City's maps are available to Ecology.
 - vi. The City has no co-permittees nor secondary permittees
- b. The City has established a full range of ordinances.
- The City has adopted the 2005 Manual by ordinance.
- c. The City has not established a detection program, but responds to reports from staff or community reports.
- d. The City has established a public information program.
- e. The City has not established program evaluation and assessment. The City does track and follow up on all reported illicit discharges.
- f. The City has established training for municipal field staff.

Section 4. Controlling Runoff from New Development, Redevelopment and Construction Sites

Each Permittee shall develop, implement, and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. This program shall be applied to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The program shall apply to private and public development, including roads. The "Technical Thresholds" in Appendix 1 shall be applied to all sites 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale.

The minimum performance measures are:

- a. The program shall include an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. Pursuant to S5.A.2., in adopting this ordinance or other regulatory mechanism, existing local requirements to apply stormwater controls at smaller sites, or at lower thresholds than required pursuant to S5.C.4., shall be retained. The ordinance or other enforceable mechanism shall be in place no later than thirty months from the effective date of this Permit. The ordinance or other enforceable mechanism shall include, at a minimum:
 - i. The Minimum Requirements, technical thresholds, and definitions in Appendix 1 or an equivalent approved by Ecology under the

NPDES Phase I Municipal Stormwater Permit, for new development, redevelopment, and construction sites. Adjustment and variance criteria equivalent to those in Appendix 1 shall 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 shall provide equal protection of receiving waters and equal levels of pollutant control to those provided in Appendix 1.

- ii. A site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 (or equivalent approved by Ecology under the Phase I Permit) 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 shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy 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 under the Phase I Permit, may cite this choice as their sole documentation to meet this requirement.

- iii. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the Permittee's MS4.
- iv. Provisions to 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 native soils and vegetation. Provisions for LID should take into account site conditions, access and long term maintenance.
- v. If the Permittee chooses to allow construction sites to apply the "Erosivity Waiver" in Appendix 1, Minimum Requirement #2, the ordinance or regulatory mechanism shall include appropriate, escalating enforcement sanctions for construction sites that provide notice to the Permittee of their intention to apply the waiver but do not meet the requirements (including timeframe restrictions, limits on activities that result in non-stormwater discharges, and implementation of appropriate BMPs to prevent violations of water quality standards) to qualify for the waiver.

- b. The program shall include a permitting process with plan review, inspection and enforcement capability to meet the standards listed in (i) through (iv)

below, for both private and public projects, using qualified personnel (as defined in *Definitions and Acronyms*). At a minimum, this program shall be applied to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The process shall be in place no later than thirty months from the effective date of this Permit.

- i. Except as provided in S5.C.4.b.vii. below, review of all stormwater site plans for proposed development activities.
 - ii. Except as provided in S5.C.4.b.vii. below, inspect, prior to clearing and construction, all known development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7 Identifying Construction Site Sediment Transport Potential.
 - iii. Except as provided in S5.C.4.b.vii. below, inspect all known permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.
- iv. Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls such as stormwater facilities and structural BMPs. Also, verify a maintenance plan is completed and responsibility for maintenance is assigned. Enforce as necessary based on the inspection.
- v. Compliance with the inspection requirements in (ii), (iii) and (iv) above shall be determined by the presence and records of an established inspection program designed to inspect all sites and achieving at least 95% of scheduled inspections.
 - vi. An enforcement strategy shall be developed and implemented to respond to issues of non-compliance.
 - vii. If the Permittee chooses to allow construction sites to apply the “Erosivity Waiver” in Appendix 1, Minimum Requirement #2, the Permittee is not required to review the construction stormwater pollution prevention plans as part of the site plan review in (i) above, and is not required to perform the construction phase inspections identified in (ii) and (iii) above related to construction sites which are eligible for the erosivity waiver.
- c. The program shall include provisions to verify adequate long-term operation and maintenance (O&M) of post-construction stormwater facilities and BMPs that are permitted and constructed pursuant to (b) above. These provisions shall be in place no later than thirty months from the effective date of this Permit and shall include:
- i. Adoption of an ordinance or other enforceable mechanism that clearly identifies the party responsible for maintenance, requires inspection

of facilities in accordance with the requirements in (ii) through (iv) below, and establishes enforcement procedures.

- ii. Each Permittee shall 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. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.
 - (1) The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standard between the period of inspections is not a permit violation.
 - (2) Unless there are circumstances beyond the Permittees control, when an inspection identifies an exceedence of the maintenance standard, maintenance shall be performed:
 - Within 1 year for wet pool facilities and retention/detention ponds.
 - Within 6 months for typical maintenance.
 - Within 9 months for maintenance requiring re-vegetation, and
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

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

- iii. Annual inspections of all stormwater treatment and flow control facilities (other than catch basins) permitted by the Permittee according to S5.C.4.b. unless there are maintenance records to justify a different frequency.

Reducing the inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.

- iv. Inspections of all new flow control and water quality treatment facilities, including catch basins, for new residential developments that are a part of a larger common plan of development or sale,

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.

- d. 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. Permittees shall keep records of all projects disturbing more than one acre, and all projects of any size that are part of a common plan of development or sale that is greater than one acre that are approved after the effective date of this Permit.
- e. The program shall make available copies of the "Notice of Intent for Construction Activity" and 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 issued by Ecology.
- f. No later than thirty months from the effective date of this Permit, each Permittee shall verify 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.

City of Mukilteo 2010 Programs Controlling Runoff from New Development, Redevelopment and Construction Sites

a. Minimum Measures

- i. The City has adopted the 2005 Manual by ordinance.
- ii. The site planning process that is in place protects water quality.
- iii. The City has legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the Permittee's MS4.

The City inspects construction sites to see that they are in compliance with their approved TESC plan before substantial clearing and grading is permitted. These inspections are documented.

- iv. The City has adopted the 2005 Manual by ordinance will be adopted.

- v. The City does not allow “Erosivity Waiver.”
- b.
- i. The City reviews all stormwater site plans for proposed development activities.
 - ii. The City inspects, prior to clearing and construction, all known development sites.
 - iii. The City periodically inspects construction sites to determine that the approved TESC measures are effective and are properly maintained. These inspections are documented.
 - iv. The City inspects all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater controls. And verifies that a maintenance plan is completed and responsibility for maintenance is assigned.
 - v. The City maintains record of inspections.
 - vi. An enforcement strategy has been developed and implemented to respond to issues of non-compliance.
 - vii. The City does not issue “Erosivity Waivers”.
- c.
- i. The City requires a maintenance plan as part of the permitting process.
 - ii. The City has established standards by adopting the 2005 manual.
 - iii. The City has established an annual inspection program.
 - iv. The City has established an inspection and compliance program.
- d. The City maintains records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records.
- e. The City will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- f. Several City staff members have received CESCL training.

Section 5. Pollution Prevention and Operation and Maintenance for Municipal Operations

Within three years of the effective date of this Permit, each Permittee shall develop and implement an operations and maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The minimum performance measures are:

- a. Each Permittee shall 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. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard.
 - i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.
 - ii. Unless there are circumstances beyond the Permittees control, when an inspection identifies an exceedence of the maintenance standard, maintenance shall be performed:
 - Within 1 year for wet pool facilities and retention/detention ponds.
 - Within 6 months for typical maintenance.
 - Within 9 months for maintenance requiring re-vegetation.
 - Within 2 years for maintenance that requires capital construction of less than \$25,000.

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

- b. Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins, and taking appropriate maintenance actions in accordance with the adopted maintenance standards. The annual inspection requirement may be reduced based on inspection records.

Reducing the inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with *G19 Certification and Signature*.

- c. Spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. 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 above, based on the results of the inspections.

- d. Inspection of all catch basins and inlets owned or operated by the Permittee at least once before the end of the Permit term. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the 2005 *Stormwater Management Manual for Western Washington*. Decant water shall be disposed of in accordance with Appendix 6 *Street Waste Disposal*.

Inspections may be conducted on a “circuit basis” whereby a sampling of catch basins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catch basin immediately upstream of any system outfall. Clean all catch basins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.4.c., above.

As an alternative to inspecting catch basins on a “circuit basis,” the Permittee may inspect all catch basins, and clean only catch basins where cleaning is needed to comply with maintenance standards.

- e. Compliance with the inspection requirements in a, b, c and d 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.

f. Establishment and implementation of practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the Permittee, and road maintenance activities conducted by the Permittee. The following activities shall be addressed:

- Pipe cleaning
- Cleaning of culverts that convey stormwater in ditch systems
- Ditch maintenance
- Street cleaning
- Road repair and resurfacing, including pavement grinding
- Snow and ice control
- Utility installation
- Pavement striping maintenance
- Maintaining roadside areas, including vegetation management
- Dust control

g. Establishment and implementation of policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the Permittee and subject to this Permit, including but not limited to: parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control facilities. These policies and procedures shall address, but are not limited to:

- Application of fertilizer, pesticides, and herbicides including the development of nutrient management and integrated pest management plans.
 - Sediment and erosion control.
 - Landscape maintenance and vegetation disposal.
 - Trash management.
 - Building exterior cleaning and maintenance.
- h. Develop and implement an on-going training program for 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 requirements. Permittees shall document and maintain records of training provided.
- i. Development and implementation of 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 required to have coverage under the Industrial Stormwater General 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 the BMP.
- j. Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained in accordance with *S9 Reporting Requirements*.

City of Mukilteo 2010 Pollution Prevention and Operation and Maintenance for Municipal Operations

- a. Minimum
- i. The City inspects their facilities and determines need maintenance.
 - ii. A schedule is being developed.
- b. A schedule is in place.
- c. Spot checks are performed on potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than

24-hour-10-year recurrence interval rainfall) storm events. Repairs or appropriate maintenance action is taken based on the results of the inspections. Major repairs are submitted for budget consideration.

- d. Inspections of approximately 30% of all catch basins and inlets owned by the City were performed in 2010.
- e. The City will reach compliance in accordance with the Permit.
- f. The City has not fully implemented practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the City. The City performs the following:
 - Pipe cleaning
 - Cleaning of culverts that convey stormwater in ditch systems
 - Ditch maintenance
 - Street cleaning
 - Road repair and resurfacing, including pavement grinding
 - Snow and ice control
 - Pavement striping maintenance
 - Maintaining roadside areas, including vegetation management
 - Dust control
- g. The City has established and implemented policies and procedures to reduce pollutants in discharges from all City owned or maintained lands, including: parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control facilities. These policies and procedures address, but are not limited to:
 - Application of fertilizer, pesticides, and herbicides including the development of nutrient management and integrated pest management plans.
 - Sediment and erosion control.
 - Landscape maintenance and vegetation disposal.
 - Trash management.
 - Building exterior cleaning and maintenance.
- h. The city has a training program for employees whose construction, operations or maintenance job functions may impact stormwater quality.
- i. The city is developing a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities.