City of Milton
NPDES Phase II
Stormwater Management Program

Introduction & Background

This document has been prepared to meet the City of Milton's Western Washington Phase II Municipal Stormwater Permit requirement for development of a Stormwater Management Program (SWMP).

According to DOE, the SWMP is designed to reduce the discharge of pollutants from the City's Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable (MEP), meet Washington State's All Known and Reasonable Treatment (AKART) requirements, and protect water quality.

This SWMP shall be updated annually for submittal with the City's Annual Report to DOE. The City of Milton Public Works Department has prepared this document and will post this and future versions on the City of Milton website, at http://www.cityofmilton.net/ so that it may be viewed and commented on by the public. Comments on the City of Milton's SWMP must be submitted in written format and sent to:

Stormwater Management Program
Public Works Department
1000 Laurel Street
Milton, WA 98354

Objectives & Requirements of this NPDES Phase II Stormwater Management Program

This document serves as a management plan for the MS4 in the incorporated area of the City of Milton. The required management program will address the existing conditions and anticipated growth under the adopted City of Milton Comprehensive Plan. This NPDES Phase II Stormwater Management Program will provide guidance to City personnel and community members to comply with the requirements of the National Pollution Discharge Elimination System (NPDES) Phase II Permit and help mitigate the impacts of previous and current activities such as development while at the same time planning for future growth in the currently designated areas and for compliant growth in the city overall. References listed in this document are taken from the City of Milton's Phase II NPDES Permit.

Critical Components

Section (1): Public Education and Outreach

Per Section S5.C.1.a –c

Education

Many stormwater issues are caused by the everyday actions of people that live in or visit the affected watersheds. Changing behavior patterns, although difficult, is a cost-effective programmatic solution to surface water problems. Imperative to the City's education programs, is establishing public knowledge of the link between human activities upon the health of a watershed. The City of Milton NPDES Phase II SWMP includes education programs aimed at:

- Residents and the general public.
- Businesses and industries.
- Elected officials and policy makers.
- Planning staff and other employees or designees of the City.

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.

No later than February 16, 2009 the City will 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:

1) For the general public (including homeowners, landscapers and property managers):

- General impacts of stormwater flows into surface waters.
- Impacts from impervious surfaces.
- Source control Best Management Practices (BMPs) and environmentally responsible actions in the areas of pet waste, vehicle maintenance, landscaping and critical area buffers.
- Yard care techniques that protect water quality.
- Low Impact Development (LID) techniques, including site design, pervious paving, retention of natural landscape features and mature trees.
- BMPs for use and storage of pesticides and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance.
- Stormwater pond maintenance.

2) For businesses (including home-based and mobile businesses):

- BMPs for use and storage of hazardous materials, including (but not limited to) automotive chemicals, hazardous cleaning supplies, and carwash soaps.
- Impacts of illicit discharges and how to report them

3) For engineers, contractors, developers, and City personnel:

- Technical standards for stormwater site and erosion control plans.
- LID techniques, including site design, pervious paving, retention of natural landscape features and mature trees.
- Stormwater treatment and flow control BMPs.

The City will develop a method to measure the understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct future education and outreach efforts most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

The City will track and maintain records of public education and outreach activities.

Section (2): Public Involvement and Participation

Per Section S5.C.2.a & b

The associated public of the City of Milton will be involved in the development of this NPDES Phase II Stormwater Management Program in order to most accurately assess watershed conditions and problems, and to address local needs and expectations. The City of Milton website will be used for the dissemination of pertinent information regarding public workshops and hearings regarding components of the SWMP, to allow for the most direct involvement and communication to the local community. Public workshops will be held throughout the course of the development of the program as it evolves, and this SWMP shall be updated annually. The City will collect and retain information received from participants at these forums and will incorporate them as appropriate.

Public Involvement

Public involvement can promote awareness of and foster a sense of responsibility for the health of the affected watersheds. The City of Milton NPDES Phase II SWMP will include ongoing opportunities for public involvement through some or all of the following forums: advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities or other similar activities. The City will comply with applicable State and local public notice requirements when developing and updating the SWMP.

The minimum performance measures are:

- The City will create opportunities for the public to participate in the decision-making processes involving the development, implementation and update of the City's NPDES Phase II SWMP. The City will develop and implement a process for consideration of public comments.
- The City will make the NPDES Phase II SWMP, the annual report required under S9.A and all other submittals required by the NPDES Permit, available to the public. The most current annual report and SWMP shall be posted on the City's website.

Section (3) Illicit Discharge Detection and Elimination

Per section S5.C.3.a-f

IDD&E

IDD&E is a NPDES Phase II Permit requirement. The Permit requires the City to have an ongoing program to detect, remove, and prevent illicit connections, discharges, and improper disposal, including spills, into the stormwater system. The Permit requires full implementation of an Illicit Discharge, Detection and Elimination Program.

Baseline Drainage System Inventory

Stormwater facilities include the stormwater conveyance system (i.e., stormwater pipe, ditches, catch basins, and other structures) and retention/detention facilities. The City of Milton has completed an inventory map of the drainage system. The inventory will be kept current by the City as part of this NPDES Phase II Stormwater Management Program. Developers will submit mapping information detailing new construction as it occurs, and the City of Milton will integrate this information into the geographic information system (GIS) and inventory by February 15, 2011.

Ordinances for IDD&E

No later than August 16, 2009, the City of Milton will develop and implement an ordinance to prohibit non-stormwater or other illegal or illicit discharges to the City's MS4, and develop enforcement provisions for the ordinance.

The ordinance does not need to prohibit the following categories of non-stormwater discharges:

- Diverted stream flows.
- Rising ground waters.
- Uncontaminated ground water infiltration (as defined in 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 DOE authorized discharges.

The ordinance will 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 public education activities (see section S5.C.1 of the NPDES Permit) and water conservation efforts.
- Dechlorinated swimming pool and spa discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted and reoxygenized if necessary, and 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 City will reduce these discharges through, at a minimum, public education activities (see section S5.C.1. of the NPDES Permit) and/or water conservation efforts. To avoid washing pollutants into the MS4, the City of Milton 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 a stormwater pollution prevention plan addressing control of construction site de-watering discharges, which has been reviewed and approved by the City of Milton.

The City of Milton will further address any category of discharges other than those listed above if the discharges are identified as significant sources of pollutants to waters of the State.

The ordinance will include escalating enforcement procedures and actions. The City will develop the following:

- An enforcement strategy and implement the enforcement provisions of the ordinance.
- An ongoing program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the City's MS4.

Ordinances must be in place by August 16, 2009, and the City will have a fully developed and implemented IDDE Program by February 16, 2011.

Location of IDD&E Priority Areas

Considerations for locating priority areas will at a minimum include:

- Land uses and associated business/industrial activities present.
- Areas where complaints have been registered in the past.
- Areas with storage of large quantities of materials that could result in spills.
- Field assessment activities, including visual inspection of priority outfalls identified above, during dry weather and for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges.

The City will, by February 16, 2010, visually prioritize by means of field assessments three (if applicable) high priority water bodies. Field assessments of at least one high priority water body will be done each year thereafter.

IDD&E Program Procedures

The screening for illicit connections will 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.

The City will develop procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the City. Procedures will include detailed instructions for evaluating the appropriate course of action, for example, whether the discharge must be immediately contained and steps to be taken for containment of the discharge. Compliance with this provision will be achieved by investigating (or referring to the appropriate agency, such as DOE) within 7 days, on average, any complaints, reports or monitoring information that indicate a potential illicit discharge, spill, or illegal dumping. Immediate investigation (or referring) problems and violations determined to be emergencies or otherwise judged to be urgent or severe will follow.

Procedures for tracing the source of an illicit discharge include:

- Visual inspections.
- Opening manholes when necessary.
- Using mobile cameras.
- Collecting and analyzing water samples.
- Other site specific inspection procedures.

Procedures for removing the source of the discharge include:

- Notification of appropriate authorities.
- Notification of the property owner.
- Technical assistance for eliminating the discharge.
- Follow-up inspections.
- Escalating enforcement and legal actions, if the discharge is not eliminated.

Compliance with this provision will 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 the 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.

The City will develop and implement procedures for program evaluation and assessment, including:

- Tracking the number and type of spills or illicit discharges identified.

- Inspections made.
- Feedback received from public education efforts.
- Include a summary in the annual report (in accordance with section S9 Reporting and Recordkeeping Requirements).

In accordance with section S5.C.3.d of the NPDES Permit, the City will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste, and do the following:

- No later than February 16, 2011, distribute appropriate information to target audiences such as residents, businesses, industries, elected officials, policy makers, planning staff and other employees, pursuant to S5.C.1 of the NPDES Permit.
- No later than February 16, 2010, the City will publicly list and publicize a hotline or other local telephone number for public reporting of spills and other illicit discharges.
- Keep records of calls received and follow-up actions taken in accordance with S5.C.3.c.ii.-v.
- Include a summary in the annual report in accordance with section S9 Reporting and Recordkeeping Requirements.

IDD&E Training and Public Education

The City will provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.

No later than August 16, 2009, the City will 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. The City will document and maintain records of the training provided and the staff trained.

No later than February 16, 2010 an ongoing training program will be developed and implemented for all municipal field staff who, 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. Municipal field staff will 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 will be provided as needed to address changes in procedures, techniques or requirements. The City will document and maintain records of the training provided and the staff trained.

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

Per section S5.C.4.a-f

The City of Milton will develop, implement, and enforce a program to reduce pollutants in stormwater runoff to regulated small MS4's from new development, redevelopment, and construction site activities, and apply the "Technical Thresholds" in accordance with Appendix 1 of the NPDES Permit. This program will be applicable 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 program will include an ordinance that addresses runoff from new development, redevelopment, and construction site projects. In accordance with section S5.A.2 of the NPDES Permit, existing local requirements to apply stormwater controls at smaller sites, or at lower thresholds than required pursuant to S5.C.4, will be retained whith the adoption of this ordinance.

The ordinance will be in place no later than August 16, 2009 and shall include the following:

- The Minimum Requirements, technical thresholds, and definitions in Appendix 1 of the NPDES Permit or an equivalent approved by DOE under the NPDES 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.
- 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 DOE under the NPDES 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. The City will 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.
- Adoption of 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 DOE, to meet this requirement.
- The legal authority of the City of Milton, through the approval process for new development, to inspect private stormwater facilities that discharge to the City's MS4.
- Provisions to allow non-structural preventive actions and source reduction approaches such as Low Impact Development (LID) Techniques, 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.

- The City may choose to allow construction sites to apply the "Erosivity Waiver" in Appendix 1, Minimum Requirement #2. The ordinance will include appropriate, escalating enforcement sanctions for construction sites that provide notice to the City 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.

The program will include a permitting process with plan review, inspection and enforcement capability to meet the standards listed below, for both private and public projects, using qualified personnel At a minimum, this process 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 August 16, 2009, and shall include the following:

- Review of all stormwater site plans for proposed development activities unless the City allows the construction site(s) to apply the "Erosivity Waiver".
- 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 of the NPDES Permit, Identifying Construction Site Sediment Transport Potential, unless the City allows the construction site(s) to apply the "Erosivity Waiver".
- 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, unless the City allows the construction site(s) to apply the "Erosivity Waiver".
- 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.
- Compliance with the inspection requirements 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.
- An enforcement strategy shall be developed and implemented to respond to issues of non-compliance.
- If the City chooses to allow construction sites to apply the "Erosivity Waiver" in Appendix 1, Minimum Requirement #2, the City is not required to review the construction stormwater pollution prevention plans as part of the site plan review above, and is not required to perform the construction phase inspections identified above related to construction sites which are eligible for the "Erosivity Waiver".

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 above. These provisions shall be in place no later than August 16, 2009 and shall include:

- Adoption of an ordinance that clearly identifies the party responsible for maintenance, requires inspection of facilities in accordance with the requirements below, and establishes enforcement procedures.
- The City will establish maintenance standards that are as protective as 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 City will develop a maintenance standard.
- 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 NPDES Permit violation.
- Unless there are circumstances beyond the City's control, when an inspection identifies an exceedance 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 City's control include:

    - Denial or delay of access by property owners.
    - Denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to emergency work. For each exceedance of the required timeframe, the City must document the circumstances and how they were beyond their control.

- Annual inspections of all stormwater treatment and flow control facilities (other than catch basins) permitted by the City 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 City may substitute written statements to document a specific less frequent inspection schedule. Written statements will be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.
- 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.

The program will 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. The City of Milton 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 the City's NPDES Permit.

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 DOE.

No later than August 16, 2009, the City will 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 will be provided as needed to address changes in procedures, techniques or staffing. The City of Milton shall document and maintain records of the training provided and the staff trained.

Section (5) Pollution Prevention and Operation and Maintenance for Municipal Operations

Per section S5.C.5.a-j

By February 15, 2010 the City of Milton will develop and implement a Maintenance and Operations program that has a training component and the ultimate goal of preventing or reducing runoff from city facilities.

The City will establish maintenance standards that are as protective as, 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 City will develop a maintenance standard.

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 NPDES Permit violation.

Unless there are circumstances beyond the City of Milton's control, when an inspection identifies an exceedance 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 City's control include:

- Denial or delay of access by property owners.
- Denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to emergency work. For each exceedance of the required timeframe, the City must document the circumstances and how they were beyond their control.

All City owned or operated permanent stormwater treatment and flow control facilities, other than catch basins, shall be inspected annually. Appropriate maintenance actions will be taken, 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 City 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 of the NPDES Permit, *Certification and Signature*.

Spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) will be performed after major (greater than 24-hour-10-year recurrence interval rainfall) storm events. If spot checks indicate widespread damage/maintenance needs, the City shall inspect all stormwater treatment and flow control facilities that may be affected and will conduct repairs or take appropriate action in accordance with maintenance standards established, and based on the results of inspections.

The City of Milton shall inspect all catch basins and inlets owned or operated by the City will be performed at least once before the end of the NPDES Permit term. The City shall 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 of the 2005 Stormwater Management Manual for Western Washington, *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. The City shall include in the sampling, an inspection of the catch basin immediately upstream of any system outfall. All catch basins shall be cleaned 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 of the NPDES Permit.

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

Compliance with the inspection requirements will be determined by the presence of an established inspection program designed to inspect all sites and achieving inspection of 95% of all sites.

The City shall establish and implement practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the City, and road maintenance activities conducted by the City. The following activities will 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.

The City shall establish and implement policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City and subject to the NPDES Permit, including but not limited to:

- Parks.
- Open space.
- Road right-of-way.
- Maintenance yards.
- Stormwater treatment and flow control facilities.

These policies and procedures will 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.
- Trash management.
- Building exterior cleaning and maintenance.
- Landscape management and vegetation disposal.

The City of Milton shall develop and implement an on-going training program for employees of the City whose construction, operations or maintenance job functions may impact stormwater quality. The training program will address the importance of protecting water quality, the requirements of the NPDES 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 will be provided as needed to address changes in procedures, techniques or requirements. The City will document and maintain records of training provided.

The City shall 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 City in areas subject to the NPDES 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 will include periodic visual observation of discharges from the facility to evaluate the effectiveness of the BMP.

Records of inspections and maintenance or repair activities conducted by the City will be maintained in accordance with the NPDES Permit (S9 Reporting Requirements).

Section (6) Compliance with Total Maximum Daily Load Requirements (TMDL)

Per section S7.A.-C.

Certain requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the City. Applicable TMDL's are those which have been approved by EPA on or before the date permit coverage is granted.

Currently, the City of Milton is not subject to any TMDL.

Section (7) Monitoring

Per section S8.A.-C.

The City of Milton is not required to conduct water sampling or other testing during the effective term of the City's current NPDES Permit, with the following exceptions:

- Any water quality monitoring required for compliance with TMDLs, pursuant to section S7 Compliance with Total Maximum Daily Load Requirements and Appendix 2 of the NPDES Permit, and
- Any sampling or testing required for characterizing illicit discharges pursuant to section S5.C.3. or S6.D.3. of the NPDES Permit.

The City will provide the following information in each annual report:

- A description of any stormwater monitoring or studies conducted by the City during the reporting period. If stormwater monitoring was conducted on behalf of the City, or if studies or investigations conducted by other entities were reported to the City, a brief description of the type of information gathered or received shall be included in the annual report(s) covering the time period(s) the information was received.
- An assessment of the appropriateness of the BMPs identified by the City for each component of the SWMP and any changes made, or anticipated to be made, to the BMPs that were previously selected to implement the SWMP, and why.
- Information required pursuant to S8.C.2. below.

Preparation for future, long-term monitoring

This section does not apply to secondary permittees, as there are none associated with the City of Milton.

The City will prepare to participate in the implementation of a comprehensive long-term monitoring program. The monitoring program will include the following two components:

- Stormwater monitoring - Stormwater monitoring is intended to characterize stormwater runoff quantity and quality at a limited number of locations in a manner that allows analysis of loadings and changes in conditions over time and generalization throughout the City.
- Targeted Stormwater Management Program (SWMP) effectiveness monitoring - Stormwater program effectiveness monitoring is intended to improve stormwater management efforts by evaluating issues that significantly affect the success of, or confidence in, stormwater controls. The monitoring program can include long-term monitoring and short-term studies. The results of the monitoring program will be used to support the adaptive management process and lead to refinements of the SWMP.

Stormwater monitoring

The City of Milton has less than 10,000 residents; therefore, this monitoring requirement is not applicable to the City of Milton's SWMP.

SWMP effectiveness monitoring

The City will prepare to conduct monitoring to determine the effectiveness of the City's SWMP at controlling stormwater-related problems that are directly addressed by actions in the SWMP. This component of the monitoring program shall be designed to answer the following types of questions:

- How effective is a targeted action or narrow suite of actions?
- Is the SWMP achieving a targeted environmental outcome?

No later than December 31, 2010, the City will identify at least two suitable questions and select sites where monitoring will be conducted. This monitoring shall include, at a minimum, plans for stormwater, sediment or receiving water monitoring of physical, chemical and/or biological characteristics. This monitoring may also include data collection and analysis of other measures of program effectiveness, problem identification and characterizing discharges for planning purposes.

For each question, the City will develop a monitoring plan containing the following elements:

- A statement of the question, an explanation of how and why the issue is significant to the City, and a discussion of whether and how the results of the monitoring may be significant to other MS4s.
- A specific hypothesis about the issue or management actions that will be tested.
- Specific parameters or attributes to be measured.
- Expected modifications to management actions depending on the outcome of hypothesis testing.

Monitoring program reporting requirements

The 2010 annual report will:

- Describe the status of identification of sites for stormwater monitoring, if required.
- Include a summary of proposed questions for the SWMP effectiveness monitoring and describe the status of developing the monitoring plan, including the proposed purpose, design, and methods.

To comply with the requirements of all or part(s) of this section, permittees in a single Urbanized Area or WRIA may choose to submit a collaborative report or reports in lieu of separate reports.

Section (8) Reporting Requirements

Per section S9.A.-E.

No later than March 31 of each year beginning in 2008, The City will submit an annual report. The reporting period for the first annual report will be from the effective date of the City's NPDES Permit through December 31, 2007. The reporting period for all subsequent annual reports will be the previous calendar year.

Two printed copies and an electronic (PDF) copy of each document shall be submitted to DOE. All submittals shall be delivered to:

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

The City will be required to keep all records related to the NPDES Permit and the SWMP for at least five years. Except for the requirements of the annual reports described in the NPDES Permit, records shall be submitted to DOE only upon request.

The City will make all records related to the NPDES Permit and the City's SWMP available to the public at reasonable times during business hours. The City will provide a copy of the most recent annual report to any individual or entity, upon request.

- A reasonable charge may be assessed by the Permittee for making photocopies of records.
- The City may require reasonable advance notice of intent to review records related to the City's NPDES Permit.

Each annual report shall include the following:

- A copy of the City's current Stormwater Management Program as required by S5.A.2 of the NPDES Permit.
- Submittal of Appendix 3 of the NPDES Permit, *Annual Report Form for Cities, Towns, and Counties,* which is intended to summarize the City's compliance with the conditions of the City's NPDES Permit, including:
    - Status of implementation of each component of the SWMP in section S5 the NPDES Permit, *Stormwater Management Program for Cities, Towns and Counties*.
    - An assessment of the City's progress in meeting the minimum performance standards established for each of the minimum control measures of the SWMP.
    - A description of activities being implemented to comply with each component of the SWMP, including the number and type of inspections, enforcement actions, public education and involvement activities, and illicit discharges detected and eliminated.

    - The City's SWMP implementation schedule and plans for meeting permit deadlines, and the status of SWMP implementation to date. If permit deadlines are not met, or may not be met in the future, include:
        - ⇒ Reasons why.
        - ⇒ Corrective steps taken and proposed.
        - ⇒ Expected dates that the deadlines will be met.
- A summary of the City's evaluation of their SWMP, according to sections S5.A.4. and S8.B.2 of the NPDES Permit.
- If applicable, notice that the MS4 is relying on another governmental entity to satisfy any of the obligations under the NPDES Permit.
- Updated information from the prior annual report plus any new information received during the reporting period, pursuant to S8.B.2 of the NPDES Permit.
- Certification and signature pursuant to G19.D of the NPDES Permit, and notification of any changes to authorization pursuant to G19.C of the NPDES Permit.

The City will include with the annual report notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the City's geographic area of permit coverage during the reporting period, and implications for the SWMP.

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 the City's NPDES Permit, or prior to the date that the permittee's application is received by DOE, or prior to a modification of the City's NPDES Permit, whichever is later.
- "Best Management Practices" ("BMPs") are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.
- "BMP" means Best Management Practice.
- "Bypass" means the diversion of stormwater from any portion of a stormwater treatment facility.
- "Common plan of development or sale" means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules, but still under a single plan. Examples include: phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (*e.g.* a development where lots are sold to separate builders); a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; and projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility. If the project is part of a common plan of development or sale, the disturbed area of the entire plan shall be used in determining permit requirements.
- "Component" or "Program Component" means an element of the Stormwater Management Program.
- "Co-permittee" means an operator of a regulated small MS4 which is applying jointly with another applicant for coverage under the NPDES Permit. A co-permittee is an owner or operator of a regulated small MS4 located within or adjacent to another regulated MS4. A co-permittee is only responsible for complying with the conditions of the NPDES Permit relating to discharges from the MS4 the co-permittee owns or operates. See also 40 CFR 122.26(b)(1)
- "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.*
- "Discharge" for the purpose of the City's NPDES Permit means, unless indicated otherwise, any discharge from the MS4 owned or operated by the City of Milton.

- "Entity" means another governmental body, or public or private organization, such as another NPDES permittee, a conservation district, or volunteer organization.
- "Equivalent document" means a technical stormwater management manual developed by a state agency, local government or other entity that includes the Minimum Technical Requirements in Appendix 1 of the City's NPDES Permit. The Department may conditionally approve manuals that do not include the Minimum Technical Requirements in Appendix 1; in general, the Best Management Practices (BMPs) included in those documents may be applied at new development and redevelopment sites, but the Minimum Technical Requirements in Appendix 1 must still be met.
- "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 NPDES 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.
- "Geographic Information System (GIS)" refers to a computer system designed to tie data and information to locations and display that information on a map.
- "Heavy equipment maintenance or storage yard" means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored.
- "Hydraulically Near" means runoff from the site discharges to a sensitive feature without significant natural attenuation of flows that allows for suspended solids removal.
- "Illicit connection" means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.
- "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES Permit (other than the NPDES Permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.
- "Impervious Surface" means a surface that prevents or significantly reduces the entry of water into the underlying soil, resulting in runoff from the surface in greater quantities and/or at an increased rate when compared to natural conditions prior to development. Examples of places that commonly exhibit impervious surfaces include parking lots, driveways, roadways, storage areas, and rooftops. The imperviousness of these areas commonly results from paving, compacted gravel, compacted earth, and oiled earth.
- "Low Impact Development (LID)" means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

- "Major Municipal Separate Storm Sewer Outfall" means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more).
- "Material Storage Facilities" means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.
- "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.
- "MEP" means Maximum Extent Practicable
- "MTRs" means Minimum Technical Requirements.
- "Municipal Separate Storm Sewer" (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains): 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; designed or used for collecting or conveying stormwater; which is not a combined sewer; and which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- "National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES Permits and, in Washington State, are administered by the Washington Department of Ecology.
- "Non-point Source (NPS) refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non-point sources include but are not limited to urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. NPS pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground,

picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

- "Notice of Intent" (NOI) means the application for, or a request for coverage under the NPDES General Permit pursuant to WAC 173-226-200.
- "Notice of Intent for Construction Activity," and "Notice of Intent for Industrial Activity" mean the application forms for coverage under the "Baseline General Permit for Stormwater Discharges Associated with Industrial Activities."
- "Outfall" means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.
- "Permittee" unless otherwise noted, the term "Permittee" includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:
    - A "Permittee" is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.
    - A "Co-Permittee" is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or adjacent to another regulated small MS4.
    - A "Secondary Permittee" is an operator of regulated small MS4 that is not a city, town or county.
- "Physically Interconnected" means that one MS4 is connected to a second MS4 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 MS4 belonging to another entity.
- "Point Source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.
- "Pollutant Generating Impervious Surfaces (PGIS)" are surfaces considered to be significant sources of pollutants in stormwater runoff. Such surfaces include those that are subject to vehicular use, industrial activities, or storage of erodible or leachable materials that receive direct rainfall or run-on or blow-in of rainfall. Metal roofs are considered to be PGIS unless coated with an inert, non-leachable material. Roofs that are subject to venting of indoor pollutants from manufacturing, commercial or other operations or processes are also considered PGIS. A surface, whether paved or not, shall be considered PGIS if it is regularly used by motor vehicles. The following are considered regularly-used surfaces: roads, unvegetated road shoulders, bike lanes within the traveled lane of a roadway, driveways, parking lots, unfenced fire lanes, vehicular equipment storage yards, and airport runways.
- "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 or Consultant" means someone who has had professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the City of Milton.
- "RCW" means the Revised Code of Washington State.
- "Regulated Small Municipal Separate Storm Sewer System (MS4)" means a Municipal Separate Storm Sewer System which is automatically designated for inclusion in the NPDES Phase II stormwater permitting program by its location within an Urbanized Area, or by designation by the NPDES permitting authority and is not eligible for a waiver or exemption under S1.C.
- "Replaced impervious surfaces" means, for structures, the removal and replacement of any exterior impervious surfaces or foundation; or, for other impervious surfaces, the removal down to bare soil, or base course, and replacement. Exemptions and partial exemptions are defined in Appendix 1 of the City's NPDES Permit.
- "Runoff" is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also "Stormwater."
- "Shared Waterbodies" means waterbodies, including downstream segments, lakes and estuaries that receive discharges from more than one NPDES permittee.
- "Secondary Permittee" is an operator of regulated small municipal separate storm sewer system which is not a city, town or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B.
- "Significant contributor" means a discharge contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions.
- "Sediment/Erosion-Sensitive Feature" means an area subject to significant degradation due to the effect of construction runoff or areas requiring special protection to prevent erosion.
- "Small Municipal Separate Storm Sewer System" or "Small MS4" is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:
    - Owned or operated by a city, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as sewer districts, flood control districts or drainage districts, or similar entity;
    - Designed or used for collecting or conveying stormwater;
    - Not a combined sewer system;
    - Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2; and
    - Not defined as "large" or "medium" pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).
- "Small MS4s" include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares. Storm sewer systems in very

discrete areas such as individual buildings do not require coverage under the NPDES Permit. "Small MS4s" do not include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

- "Source Control" means a practice, method, or technology that is used to reduce pollution from a source; for example, best management practices or end-of-pipe treatment.
- "Stormwater," means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.
- "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 a NPDES Permit in accordance with 40 CFR 122.26.
- "Stormwater Management Manual for Western Washington" means the 5-volume technical manual (Publication Nos. 99-11 through 15 for the 2001 version and Publication Nos. 05-10- 029-033 for the 2005 version (The 2005 version replaces the 2001 version) prepared by DOE for use by local governments that contains BMPs to prevent, control, or treat pollution in storm water.
- "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 the NPDES Permit and any additional actions necessary to meet the requirements of applicable TMDLs.
- "Total Maximum Daily Load" (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.
- "Urbanized Area" (UA) is a land area comprising one or more places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile. For the year 2000 Census, the U.S. Census Bureau classified "urban" as all territory, population, and housing units located within an Urbanized Area (UA) or an Urban Cluster (UC). It delineated UA and UC boundaries to encompass densely settled territory, which consists of: core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC. The U.S. Census Bureau

announced the "Census 2000 Urbanized Areas" on May 1, 2002. More information can be found at the U.S. Census Bureau website at: *http://www.census.gov/geo/www/ua/ua_2k.html*

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