City of Snohomish
Stormwater Management Program

SNOHOMISH

2013

Introduction

This document has been prepared to meet the Western Washington Phase II Municipal Stormwater Permit (Permit) requirement for the continued development and updating of a Stormwater Management Program (SWMP).

The National Pollutant Discharge Elimination System (NPDES) Permit is a federal permit that regulates stormwater and wastewater discharges to waters of the State. While it is a federal permit, the regulatory authority was passed on to the Washington State Department of Ecology (Ecology). In response, Ecology developed and issued the Western Washington Phase II Municipal Stormwater Permit. The Permit was issued by Ecology on January 17, 2007 and was modified on June 17, 2009. The 2007-2011 permit has been reissued by Ecology to be effective between September 1, 2012 and August 1, 2013.

All municipalities affected by the permit must create and implement a SWMP which addresses five required program elements: 1) Public Education and Outreach, 2) Public Involvement and Participation, 3) Illicit Discharge Detection and Elimination, 4) Construction Site Run-Off from New Development, Redevelopment and Construction Sites, and 5) Pollution Prevention and Operation and Maintenance for Municipal Operations. Where applicable Total Maximum Daily Loads (TMDLs) apply, permittees are required to comply with the TMDL requirements.

The City of Snohomish SWMP will be updated annually and submitted with the City's Annual Report to Ecology. The City of Snohomish is posting this document on the City of Snohomish web site, www.ci.snohomish.wa.us, so it can be viewed by the public. Comments on the City of Snohomish's SWMP can be made by submitting comments in writing to City of Snohomish. Comments can be delivered or mailed to City of Snohomish, 116 Union Avenue, Snohomish, WA 98290 ATTN: Max Selin, Project Engineer. Email comments may be sent to: selin@ci.snohomish.wa.us

Permit requirements are show in blue, *italicized* text. Permit requirements are listed by permit section number.

A. Each Permittee shall implement a Stormwater Management Program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S5.B and S5.C.l through S5.C.5, and any additional actions necessary to meet the requirements of applicable TMDLs (see S7). The SWMP shall be designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality. This section applies to all cities, towns and counties covered under this Permit, including cities, towns and counties that are co-permittees. Where the term "Permittee" is used in this section the requirements shall apply to all cities, towns and counties covered under this Permit.

1. The SWMP shall be implemented in accordance with the schedules contained in this section. At a minimum the Permittee's SWMP shall be implemented throughout the geographic area subject to this Permit as described in S1.A.

2. Each Permittee shall prepare written documentation of the SWMP. The SWMP documentation shall be organized according to the program components in S5.C. and shall be updated at least annually for submittal with the Permittee's annual reports to Ecology (see S9 Reporting and Record Keeping). The SWMP documentation shall include:

a. A description of each of the program components included in S5.C., and

b. Any additional actions implemented by the Permittee pursuant to S5.C., and

c. Any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7. Compliance with Total Maximum Daily Load Requirements.

3. The SWMP shall include an ongoing program for gathering, tracking, maintaining, and using information to evaluate SWMP development, implementation and permit compliance and to set priorities.

a. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP. This information shall be provided to Ecology upon request.

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

4. The SWMP described herein supersedes SWMP descriptions provided by permit applicants in individual applications submitted to the Department prior to the effective date of this permit. Notwithstanding the schedules for implementation of SWMP components contained in this permit, Permittees that are already implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP. Permittees shall not repeal existing local requirements to control stormwater that go beyond the requirements of this permit for new development and redevelopment sites.

5. Coordination among permittees:

a. Coordination among entities covered under municipal stormwater NPDES permits may be necessary to comply with certain conditions of the SWMP. The SWMP should include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within adjoining or shared areas.

i. Coordination mechanisms shall clarify roles and responsibilities for the control of pollutants between physically interconnected MS4 permittees covered by a municipal stormwater permit.

ii. Coordination mechanisms shall coordinate stormwater management activities for shared water bodies among permittees to avoid conflicting plans, policies and regulations.

b. The SWMP should include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit.

B. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the maximum extent practicable (MEP), meet state AKART requirements and protect water quality. Notwithstanding the schedules for implementation of SWMP components contained in

this Permit, permittees who are implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP.

PROGRAM COMPONENTS

The SWMP shall include the components listed below. To the extent allowable under state or federal law, all components are mandatory for city, town or county permittees covered under this Permit. In accordance with 40 CFR 122.35(a) and Special Conditions S3, a city, town or county may rely on another entity to implement one or more of the components in this section. (Section S5.C)

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 City of Snohomish has continued implementing a public education and outreach program in partnership with Snohomish County. It is the City's goal to provide a public education and outreach program that will be prioritized to target the recommended target audiences and subject areas. The City has been working with Snohomish County to explore regional public education and outreach activities and methods of measuring the understanding and adoption of targeted behaviors among the target audiences. The City will continue working with Snohomish County and other agencies such as the Snohomish Conservation District to expand on the programs already underway.

The minimum measures are:

a. 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 Best Management Practices (BMPs) and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping and buffers.*

The City of Snohomish met the February 2009 program implementation deadline. The City will continue working in cooperation with Snohomish County to determine methods that can be used to measure the understanding and adoption of targeted behaviors among target audiences.

In 2010 the City implemented three (3) public education and outreach programs in partnership with Snohomish County: 1) Pet Waste Management; 2) Natural Yard Care; and 3) Septic System Operation and Maintenance.

In 2011, education efforts included flyers for carpet cleaners and pressure washers, and a kick off for education on car washes including outreach for youth fundraising carwashes and general citizen car washing.

In 2012, the City distributed informational posters for restaurants, grocers and other food industries which described best management practices appropriate for these businesses. The City also worked with the Snohomish Conservation District and Sound Salmon Solutions in conducting an informational workshop for stream landowners to educate property owners on measures they could enact to prevent pollutants from entering nearby streams. The City also worked with Snohomish County who conducted an informational session at a local veterinary clinic to inform employees of these businesses on how to properly manage pet waste. In addition, the City displayed informational material during the Kla Ha Ya Days event and had an informational booth at both Kla Ha Ya Days event and at the Snohomish Farmer's Market throughout the summer.

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.*

The City's web site contains general information about the Permit and provides links to City SWMP documents and other web sites such as Snohomish County, Ecology, and EPA that provide information about the subject matters described above.

In 2012, brochures regarding youth fundraising car washes were disbursed to appropriate audiences. In addition, over 60 informational, laminated posters were distributed to food service industries within the City. The posters listed best management practices such as disposing of grease in an appropriate place, keeping dumpsters covered, measures to clean up spills, etc. The intent of these posters was to allow business owners to hang them in their kitchens or other food related areas to remind employees of acceptable BMPs in the work place. In addition, the City conducted inspections of local veterinary clinics to ensure they were up to date on the latest best management practices available to them. The City has also been working in coordination with a local Girl Scout in which she visited local businesses and youth groups regarding fundraising carwashes. She has also displayed related information in the Snohomish Library.

In 2013, the City will also seek to expand its education and outreach program to include targeted activities directed to the audiences described above including painters, construction and landscaping businesses.

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.*

As noted before, in 2010 the City implemented three (3) public education and outreach programs in partnership with Snohomish County: 1) Pet Waste Management; 2) Natural Yard Care; and 3) Septic System Operation and Maintenance.

In 2012, the City held an informational workshop aimed toward property owners abutting streams on how to protect the stream from pollutants generating on their property. The City also joined Snohomish County with their educational information session held for veterinary clinics in the local area. This session included information on how to educate their clients on proper pet waste management.

According to the City's Business Education Plan, education activities intended for landscapers are planned for 2013. These activities include distributing educational material to landscapers on proper techniques to minimize effects on water quality. The City also intends to train its field staff on what issues to look for in areas where landscaping activities are occurring throughout the City. A second round of natural yard care workshops is also planned for 2013.

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.*

The City has been assessing the current understanding of stormwater BMPs and stormwater impacts among various City departments and staff members involved in the review and inspection of land development or redevelopment projects. In areas where understanding was below a desired level, the City has provided its staff with information to increase their knowledge. In an effort to reach developers and contractors, the City has added stormwater informational sheets to all new construction and development permit application packages.

City staff will continue monitoring the progress of development of LID techniques and standards. As LID techniques are approved they will be incorporated into City standards. Ordinance No. 2173, adopted by the City on July 21, 2009, encourages the use of LID techniques. In 2013, the City will construct an LID project at their public works yard which will help educate the public on the impact of LID techniques.

c. Each Permittee shall track and maintain records of public education and outreach activities.

Public Education and Outreach activities are thoroughly documented from conceptual stage through delivery and follow up evaluation with targeted audiences and participants. Documented results and comments are evaluated and used to adjust program content or approaches as deemed appropriate. This practice will continue for future public education and outreach activities.

The City is working in cooperation with other municipalities and Snohomish County to determine methods that can be used to measure the understanding and adoption of targeted behaviors among target audiences. In 2011, the City used Survey Monkey online to evaluate the effectiveness of flyers sent to carpet cleaning and pressure washing businesses. The survey results showed that in general, email is an effective way to communicate with these businesses. Based on these results, in 2013, the City will aim for targeting businesses audiences via electronic communication such as email or the City website. The City will follow up with restaurants in the local area via Survey Monkey to receive feedback on how beneficial the 2012 informational BMP poster was.

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 City of Snohomish actively pursues citizen involvement in the development of stormwater management programs, stewardship programs, environmental activities, rate structure development, and other similar activities. Examples of this are an advisory committee that was established to guide initial development of the City's stormwater utility and first stormwater rate structure; development of parks, trails, and open spaces; and volunteer programs for planting of native trees and shrubs in environmentally critical and sensitive areas. The City will continue to examine ways to expand existing public involvement opportunities and create new ones.

The minimum performance measures are:

a. 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.

The City uses its public hearing process to provide an opportunity for the public to make comment on the City's SWMP. The SWMP is posted on the City's website with a request for public comment on the development and update of the SWMP. This process will occur yearly during the permit cycle.

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 reports, 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 Department's website.

The City has created a surface water web page on its website with links to the SWMP, annual report, educational information, public involvement opportunities, and Quality Assurance Project Plan (QAPP).

Section 3. Illicit Discharge Detection and Elimination

The SWMP shall include an ongoing program to detect and remove illicit connections, discharges as defined in 40CFR 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. 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.*

In cooperation with the cities of Snohomish, Lake Stevens, Sultan and Granite Falls, Snohomish County applied for and received a nearly $1,000,000 grant from Department of Ecology to create a Maintenance/Technical Ace Crew (M/TAC) and GIS Support Team (GST); provide technical training and technology transfer for Illicit Discharge Detection and Elimination; and provide project management.

Using City staff as matching funds for the grant, County and City personnel performed inspection, cleaning, inventorying and mapping of the City's entire stormwater system. This work was performed at *zero cost* to the City. Additional GPS inspection of private systems was conducted in 2011 and periodic updating of the storm system map will be completed by City personnel in the years to come.

Inspection, inventory, cleaning and mapping was accomplished for the City's stormwater system in 2010 consisting of:

- 1,292 catch basins
- 943 lineal feet of swale
- 4,564 lineal feet of culvert
- 5.3 miles of ditch
- 19.1 miles of pipe

The City has added 10 more catch basins to its inventory. In 2012, approximately 2 miles of ditching, 3 miles of pipe and culvert and 30 catch basins were cleaned. The City also used grant funds to purchase a sweeper attachment for gutter maintenance to minimize sediment transport to catch basins.

ii. Each Permittee shall 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.

Using its current permitting and inspection processes, the City ensures that all authorized connections to the City's municipal separate storm sewer system are documented. Connections authorized after the effective date of the Permit will be identified as such as part of the ongoing storm system inventory and mapping process.

iii. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

Mapping of the storm system is complete and evaluation of these geographic areas is underway.

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.

The City of Snohomish will provide mapping information to Ecology upon request. The most recent Stormwater basemap was sent to Ecology in 2011.

v. Upon request, and to the extent appropriate, permittees shall provide mapping information to co-permittees and secondary permittees.

The City of Snohomish will provide mapping information to co-permittees and secondary permittees upon request.

b. Each Permittee shall 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.

The City adopted the required mechanism, Ordinance 2173, on July 21, 2009.

i. The regulatory mechanism does <u>not</u> 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 <u>shall</u> 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 and 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 implement an enforcement strategy and enforcement provisions of the ordinance or other regulatory mechanism.

c. Each Permittee shall 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.

In 2011, the City of Snohomish developed and implemented an ongoing program which included the compilation of an IDDE Manual. The City had already developed an initial illicit discharge detection and elimination (IDDE) program to meet the requirements of the Permit. The Manual documents the steps necessary to inspect, prevent, educate and document IDDE related issues throughout the city. City staff presently responds to spills, illegal dumps, and actively searches out illicit connections.

Using grant money supplied by the Washington State Department of Ecology (DOE) in 2009, the City also purchased CCTV equipment to inspect for illicit connections and aid with mapping efforts. Further grant money from the 2010 DOE grant program was used in late 2009 to upgrade the City's CCTV software to make this tool as effective as possible.

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.

The City has organized high priority water bodies and in 2013, will focus on areas within the City that are likely to have illicit discharges. These areas will be evaluated first. Using current zoning maps, business license information, utility billing information, and historical areas of water quality complaints, the City has identified high priority areas, such as commercial & industrial land uses and areas served by septic systems. The City intends to incorporate this information into the GIS mapping efforts. In 2012, Blackman's Lake was surveyed for illicit discharges. The City will continue to observe potential illicit discharges along the Snohomish River and Swifty Creek during summer outfall inspections.

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.

- *Field assess at least one high priority water body each year in accordance with the requirements of this section.*

- *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.*

City staff and one experienced volunteer conducted field assessment activities in 2010. Field assessment activities followed the guidance of the recommended manual *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments,"* written by the Center for Watershed Protection and Dr. Robert Pitt, 2004. IDDE training was provided by Snohomish County in March of 2009 for select City staff. This training was then passed on to all municipal field staff in August 2009. Follow up training was conducted in 2011 and will continue every two years including in 2013. The City also intends to receive spill response training from the Department of Ecology in 2013. Documentation of training has been completed as required by the Permit.

iii. Procedures for characterizing the nature of, and potential public or environmental threats 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.

Procedures for characterizing the nature of and the potential public or environmental threat posed by an illicit discharge were incorporated into the City's IDDE Manual implemented in 2011.

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.

Procedures for tracing the source of an illicit discharge are listed in the City's 2011 IDDE Manual. Methods described in the IDDE Manual will be used to trace the discharge back to a probable source.

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.

The City intends to use the methods set forth in the 2011 IDDE Manual when removing the source of an illicit discharge.

Procedures were developed for notification of appropriate authorities and property owner when removing the source of an illicit discharge. A flow chart exists within the 2011 IDDE Manual to assist City staff with these procedures. Appropriate language has been included in the City's stormwater ordinance which gives the City authority to remove illicit discharges, provides escalating enforcement, and provides for legal actions if the discharge is not eliminated. This ordinance was adopted on July 21, 2009.

Investigation and removal of illicit discharges will be conducted within the timeframe described above.

d. Permittees shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The City trained 30 Public Works employees with follow up IDDE training conducted in 2011. This training will be renewed with Public Works staff in 2013. Snohomish also purchased a cargo trailer dedicated solely for IDDE spill response. The trailer was wrapped with educational poster-like information pointing out the hazards of illegal discharges. For businesses, the City mailed informational flyers to carpet cleaners and pressure washer businesses in the area in 2011 and distributed posters to restaurants in 2012. In addition, as an appendix of the IDDE Manual, the City has prepared a Business Education Plan for the years ahead which include educating priority businesses such as painters, landscapers and those in the construction industry.

ii. Permittees shall publicly list and publicize a hotline or another 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).

The City has listed a telephone number for the public reporting of spills and other illicit discharges on the City website.

The City presently operates an emergency after hours telephone number for the purpose of citizens reporting urgent or emergency conditions (i.e. plugged sewer, water main break, down stop sign, etc.). Calls received by the City's answering service are dispatched by pager to City standby personnel who then respond to the situation. City standby policies and procedures have been modified to include response to reports of spills and illicit discharges. Standby personnel have been educated about spills and illicit discharges and have been directed to contact appropriate City personnel to respond and conduct an investigation.

Calls received are tracked in a log book maintained by City standby personnel. In 2011, an incident response form was created and is on hand for staff to record incidents. This form was also included in the IDDE Manual. Stormwater incidents are input into the City's tracking program.

e. Permittees shall 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 Record Keeping Requirements).

The City of Snohomish has adopted and implemented these procedures for program evaluation and assessment.

f. Each Permittee will provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.

i. 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. 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.

Select City staff received initial training from Snohomish County. They then tailored this training to meet City conditions and work protocol and delivered training to all municipal field staff including maintenance workers, inspectors, code enforcement personnel, and engineers. Refresher and update training is incorporated into regularly scheduled meetings and other opportunities as they arise. In 2011, follow up training was provided to 30 Public Works staff members. This refresher training will be held in 2013 as well. The City also intends to receive spill response training from the Department of Ecology in 2013. Training is documented in accordance with Permit requirements.

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

All Permittees shall implement, and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment and construction sites, including but not limited to the ordinance or other regulatory mechanism, procedures for site plan review, and site inspection and enforcement in accordance with the requirements of S5.C.4. 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 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 1 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.

The City of Snohomish adopted the 2005 Stormwater Management Manual for Western Washington and Appendix 1 of the Municipal Stormwater Permit: Minimum Technical Requirements as standards for all new construction and redevelopment within the City's jurisdiction, through the adoption of Ordinance No. 2173 on July 21, 2009.

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 1 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 1 Permit, may cite this choice as their sole documentation to meet this requirement.

The City of Snohomish adopted the required materials, programs and processes.

iii. The legal authority, through the approval process for new development, to inspect private stormwater facilities that discharge to the Permittee's MS4.

The City established such authority by adoption of Ordinance No. 2173 on July 21, 2009.

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.

The City implemented these provisions by adoption of Ordinance No. 2173 on July 21, 2009. The City will consider further provisions for inclusion in any future stormwater ordinances drafted to meet Permit requirements.

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.*

The City is disallowing use of the "Erosivity 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 of 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale.*

i. *Except as provided in S5.C.4.b.vii below, review of all stormwater site plans for proposed development activities.*

The City of Snohomish currently has a plan review process in place. The process is in place for all sites disturbing a land area of 1 acre or greater, including projects less than 1 acre which are part of a larger common plan of development or sale as required under the 2005 DOE Stormwater Management Manual.

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.*

The City will inspect all sites as required.

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.*

The City currently has one public works inspector on staff that inspects development sites during construction. The public works inspector is CESCL certified and has been trained in the proper installation and maintenance of required erosion and sediment controls. In addition, all Public Works division leads, project engineers and operations managers have received CESCL certification. CESCL certification will be maintained for all necessary staff.

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.

The City currently has an inspection program in place. Through Ordinance 2173, the City's current inspection processes have been updated to require submittal of a maintenance plan prior to project approval.

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.

All inspections are documented and maintained in project files.

vi. An enforcement strategy shall be implemented to respond to issues of non-compliance.

This requirement has been addressed in SMC 15.16: Stormwater Management.

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.

The City will not be allowing use of 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 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.

The City has fulfilled this requirement by adoption of Ordinance No. 2173 on July 21, 2009.

ii. Each Permittee shall 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 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.

The City recognizes that the 2005 Storm Water Manual for Western Washington contains maintenance standards that will satisfy this requirement. The City formalized adoption of the 2005 Manual prior to the required date.

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.*

City staff will conduct annual inspections as required or provide justification for a reduced inspection frequency.

iv. *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.*

If the City deems it appropriate to allow a less frequent inspection schedule, the certification procedure will be followed accordingly.

v. *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.*

City inspection personnel will inspect new flow control and water quality treatment facilities as required and enforce compliance 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.

The City presently has a development review and inspection program in place for all sizes of land parcels. All inspections and enforcement actions are documented and retained in a project file.

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.

Copies of the Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity have been made available to representatives of proposed new development and redevelopment sites as part of the building permit and land use application packets. They are also available at the City Hall front counter and on the City's stormwater web page.

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 staff including five maintenance workers, the operations managers, the public works inspector, the building & fire official, and two project engineers received CESCL training. The operations managers, public works inspector, project engineers and planning staff attended training hosted by the Department of Ecology which focused on site plan review using the 2005 Manual and site inspection. Additional training will be conducted as new information becomes available, as updates are needed, or as staffing changes occur. Documentation of all training provided and staff trained will be completed in accordance with the Permit requirements.

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

Each Permittee shall 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 includes 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.

The City recognizes that the 2005 Storm Water Manual for Western Washington contains maintenance standards that will satisfy this requirement. The City formalized adoption of the 2005 Manual on July 21, 2009 through the adoption of Ordinance No. 2173.

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.

The City has developed a database and other tracking mechanisms to be used by City inspection personnel to record and analyze data collected while performing inspections of the facilities. The City will conduct inspections annually as required, and will use the inspection records to ascertain whether a reduced inspection schedule can be justified in the future.

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.*

The City has developed a list of treatment and flow control facilities to inspect when the 10-year / 24-hour threshold is reached. The City will conduct these inspections when required and will record the results of inspections and any associated facility repairs as needed.

d. Inspection of 20% 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.

Inspection and cleaning of all catch basins and inlets owned or operated by the City was finished in 2010. This work was accomplished using the M/TAC established with Ecology grant funding, secured in cooperation with Snohomish County and the Cities of Snohomish, Lake Stevens, Sultan and Granite Falls. Using City labor as matching grant funds, this work was completed at *zero out-of-pocket cost* to the City. Continued maintenance will occur as the need arises.

e. Compliance with the inspection requirements in, 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.

The City implemented a program that will meet the inspection requirements described above, achieving inspection of at least 95% of all sites. Records of inspection will be documented using the City's tracking mechanism.

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

Department specific Stormwater Pollution Prevention Plans (SWPPP's) have been developed for each department within Public Works and appropriate practices have been deployed

- *Pipe cleaning*

The City owns a vactor truck that is used for multiple functions including cleaning of stormwater system piping. Pipes that were heavily impacted with sediment and debris were cleaned through the M/TAC process. Pipes that were moderately impacted were cleaned through the M/TAC process as time allowed, or documented for later cleaning.

- *Cleaning of culverts that convey stormwater in ditch systems*

The City established and funds an annual ditch maintenance program that includes cleaning of culverts that convey stormwater in ditch systems. Some ditches commingle road runoff and waters of the state and require Hydraulic Project Approval from Washington Department of Fish and Wildlife prior to conducting maintenance activities. In 2009, the City applied for and received a five-year Hydraulic Project Approval from Washington Department of Fish and Wildlife which allows staff to perform these tasks on a regular basis.

- *Ditch maintenance*

Ditch maintenance is budgeted for annually, however City's annual ditch maintenance budget is not sufficient to clean all ditches as needed. The City of Snohomish contracts the majority of the ditch maintenance work with Snohomish County through an interlocal agreement for services due to a lack of sufficient budget and staffing available for the extensive amount of work associated with this type of maintenance. Some ditches commingle road runoff and waters of the state and require Hydraulic Project Approval from Washington Department of Fish and Wildlife prior to conducting maintenance activities. In 2009, the City applied for and received a five-year Hydraulic Project Approval from Washington Department of Fish and Wildlife which allows staff to perform these tasks on a regular basis.
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- *Street cleaning*

Street cleaning is performed weekly by Snohomish County through an interlocal agreement. County staff is trained to avoid areas of contaminants such as oil, antifreeze and other similar fluids so sweepings do not become contaminated. County staff notifies City staff of these areas so City staff can place absorbent material and remove contaminants for disposal.

- *Road repair and resurfacing, including pavement grinding*

The City contracts with either Snohomish County or private contractors to perform road repair and resurfacing, including pavement grinding. The contractor hired to provide this service is required to perform the BMPs necessary to reduce stormwater impacts.

The City performed an evaluation of practices when saw cutting and crack sealing, and modified procedures to ensure applicable BMP's are used in and around catch basins to protect the storm water system. A department specific Stormwater Pollution Prevention Plan (SWPPP) has been developed and implemented to address these types of concerns.

- *Snow and ice control*

The City of Snohomish provides snow and ice control as deemed necessary by the City's police department when unsafe road conditions exist. Washed sand is placed on primary travel routes and known problematic areas, and snow is plowed on primary travel routes. Arrangements are made to have the sand swept up by Snohomish County as quickly as possible when road conditions return to normal.

- *Utility installation*

The City of Snohomish owns and operates the storm, sewer and water utilities. Qualified staff members perform repairs and maintenance of the utility systems, and contractors are hired to install utilities. The City has developed department-specific SWPPP's to ensure City staff and contractors follow all appropriate BMPs required to protect the stormwater system. Some installations are done privately as part

of development and redevelopment activities. Procedures have been modified to ensure that appropriate BMPs are utilized during construction of utilities at developed sites.

- *Pavement striping maintenance*

Nearly all pavement striping maintenance in the City of Snohomish is hired out and performed annually by Snohomish County, while minor pavement striping maintenance of parking stalls and some stop bars is performed by City staff. Procedures will be updated as needed to integrate appropriate BMPs.

- *Maintaining roadside areas, including vegetation management*

The City Street Department conducts maintenance of roadside areas including vegetation management. Current vegetation management practices are undertaken to correct impeded visibility within the right-of-way or to clear blocked rights-of-way. Presently all vegetation is cut by boom mower during the roadside maintenance process. The City will look at its current practices and will consider modifying them to leave a grass buffer between the roadway and drainage ditch to control sediment from entering the ditch. A department-specific SWPPP has been developed which addresses these concerns.

The City adopted an Integrated Pest Management Plan in December 2009 that specifies when and where pesticides and herbicides may be applied. The City will review these procedures to ensure appropriate BMPs are utilized.

- *Dust control*

Dust control on City owned gravel roadways and parking lots is employed annually using a natural, biodegradable, tree-sap based product. Dust control is occasionally implemented at construction sites. The City's inspector oversees this process and enforces the use of appropriate BMPs. The City will regularly evaluate its dust control procedures to ensure the best practices and methods are being used and BMPs are in place.

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:

Department specific SWPPP's have been developed and implemented to address these issues. The City has also developed and implemented a SWPPP for the municipally owned maintenance yard.

- *Application of fertilizer, pesticides, and herbicides including the development of nutrient management and integrated pest management plans.*

Several City staff members are licensed to apply pesticides and herbicides. They receive regular training and recertification. The City adopted an Integrated Pest Management Plan in December 2009.

- *Sediment and erosion control.*

The City has several CESCL certified maintenance workers. The City Public Works Inspector, Building & Fire Official, Operations Managers, Public Works Director and two Project Engineers are also CESCL certified.

- *Landscape maintenance and vegetation disposal.*

Training in the area of appropriate practices for landscape maintenance and vegetation disposal is being considered. Staff members will be trained to implement procedures while performing landscape maintenance that will greatly reduce or eliminate pollutant discharges into stormwater.

- *Trash management.*

The City of Snohomish contracts with a private hauler for the collection of solid waste and recyclable materials. The City will review its current contract and will look for language that obligates the contractor to reduce pollutants in discharges during the collection process. The City will consider placing requirements in future solid waste contracts to further reduce pollutants generated during the collection process.

- *Building exterior cleaning and maintenance.*

The City of Snohomish is aware of the impacts to water quality that can be caused by building exterior cleaning and maintenance. Training has been conducted for the staff members that provide exterior cleaning and maintenance at City facilities. These staff members have been informed of BMPs available to reduce stormwater impacts. On-going training will be provided as needed to ensure that proper BMP's are being used.

h. 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.

The City has conducted numerous trainings to date and will continue with its ongoing training program. City staff will seek opportunities to train with other jurisdictions to reduce costs and benefit from the knowledge and skills of other jurisdictions. The City also intends to receive spill response training from the Department of Ecology in 2013.

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 SWPPP's 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.

The City developed and implemented the required SWPPP's. Copies are available from the Public Works Department.

j. Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained in accordance with S9 Reporting Requirements.

The City presently maintains a record of all repair and maintenance activities conducted by its staff. Efforts began in 2012 and will continue into 2013 to incorporate these records into an electronic format that can be appended to the GIS system. Currently the City is in the process of labeling its catch basins and pipes so that maintenance documentation can be incorporated more easily into GIS.

Section 8. Monitoring

Per Section 8.C.1.b of the Western Washington Phase II Municipal Stormwater Permit, Permittee's shall prepare to conduct monitoring to determine the effectiveness of the Permittee'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?

In December 2010 the City prepared a Stormwater Management Program Effectiveness Monitoring Plan (Plan) in accordance with Permit requirements. The Plan is attached hereto as "Attachment A". With the next permit cycle, it is anticipated that the City will "buy in" to the regional monitoring program.

APPENDIX 2 – Total Maximum Daily Load (TMDL) Requirements

Action Required –

During the September 1, 2012 to August 1, 2013 permit term, Permittees shall implement an Ecology-approved QAPP.

The City of Snohomish began the required QAPP water quality monitoring on March 18, 2008. Monthly collection and analysis of water quality samples at the specified locations is ongoing.