NPDES Phase II Municipal Stormwater Management Program Plan

March 2010

Parametrix

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Prepared for

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KEY TERMS

AKART	known, available and reasonable methods of treatment
BMPs	best management practices
CESCL	Certified Erosion and Sediment Control Lead
City	City of Orting
Ecology Manual	Washington State Department of Ecology *2005 Stormwater Management Manual for Western Washington*
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
Group	Orting Stormwater Public Input Group
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
MEP	maximum extent practicable
MS4s	municipal separate storm sewer systems
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
Permit	Phase II Municipal Stormwater Permit
SWMP	Stormwater Management Program
SWPPPs	Stormwater Pollution Prevention Plans
USGS	U.S. Geological Survey

1. INTRODUCTION

1.1 OVERVIEW AND BACKGROUND

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the federal Clean Water Act, which is intended to protect and restore waters for "fishable, swimmable" uses. The federal Environmental Protection Agency (EPA) has delegated permit authority to state environmental agencies. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology (Ecology).

Municipalities with a population of over 100,000 (as of the 1990 census) have been designated as Phase I communities and must comply with Ecology's Phase I NPDES Municipal Stormwater Permit. With the City of Orting's (City) 1990 census falling below the 100,000 threshold, the City must comply with the Phase II Municipal Stormwater Permit (Permit). About 100 other municipalities in Washington must now comply with the Phase II Permit, along with Orting, as operators of small municipal separate storm sewer systems (MS4s).

The Permit allows municipalities to discharge stormwater runoff from municipal drainage systems into the State's waterbodies (i.e., streams, rivers, lakes, wetlands, etc.) as long as municipalities implement programs to protect water quality by reducing the discharge of "non-point source" pollutants to the "maximum extent practicable" (MEP) through application of Permit-specified "best management practices" (BMPs). The practices specified in the Permit are collectively referred to as the Stormwater Management Program (SWMP) and grouped under the following Program components:

- Public Education and Outreach
- Public Involvement
- Illicit Discharge Detection and Elimination
- Runoff Controls
- Pollution Prevention and Municipal Operations and Maintenance
- Monitoring

The Permit requires the City to report annually (March 31 of each year) on progress in Program implementation for the prior year. The Permit also requires submittal of documentation that describes proposed Program activities for the coming year. Implementation of various Permit conditions is phased throughout the 5-year Permit term from February 16, 2007, through February 15, 2012. The Permit will be revised and reissued at the end of this period.

As of March 31 of this year, the City meets the initial Permit requirements. This report is the City's Draft Stormwater Management Program compliance document. The remainder of this 2010 SWMP document describes actions Orting will take to maintain compliance over the next year of the Permit term (i.e., February 16, 2010, through February 16, 2011).

1.2 PHASED IMPLEMENTATION OF PERMIT REQUIREMENTS

Ecology began work on the Phase II Municipal Stormwater Permit for Western Washington in the fall of 2004 and posted a preliminary draft for public comment on May 16, 2005. Ecology released a formal draft of the Permit in February 2006 and issued the final Permit on January 17, 2007. The Permit issued by Ecology became effective on February 16, 2007, and expires on February 15, 2012.

Ecology is phasing in many of the Permit requirements over the 5-year Permit term. On March 31 of each year, beginning in 2008, the City must:

1. Submit its Stormwater Management Program (SWMP) document to Ecology describing compliance activities planned for the coming year.
2. Post the SWMP document on the web.
3. Submit an annual report documenting Permit compliance activities for the previous calendar year.

This document includes Appendix A – 2009 Annual Report Form for Cities, Towns, and Counties (Appendix 3 of the Permit).

Additional Permit information is located on Ecology's website:
http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phase II ww/ww ph ii-permit.html.

1.3 DOCUMENT ORGANIZATION

The content in this document is based upon Permit requirements and Ecology's *Draft Guidance for City and County Annual Reports for Western Washington Phase II Municipal Stormwater Permits*. The remainder of the Stormwater Management Program document is organized similarly to the Permit:

- Section 2.0 addresses Permit requirements for administration of the City's Stormwater Management Program for 2010.
- Section 3.0 addresses Permit requirements for Public Education and Outreach for 2010.
- Section 4.0 addresses Permit requirements for Public Involvement and Participation for 2010.
- Section 5.0 addresses Permit requirements for Illicit Discharge Detection and Elimination for 2010.
- Section 6.0 addresses Permit requirements for Controlling Runoff from New Development, Redevelopment and Construction Sites for 2010.
- Section 7.0 addresses Permit requirements for Pollution Prevention and Operation and Maintenance for Municipal Operations for 2010.
- Section 8.0 addresses Permit requirements for the Water Quality Monitoring section of the Permit for 2010.

Each section includes a summary of the relevant Permit requirements and a description of current and planned compliance activities.

2. PUBLIC EDUCATION AND OUTREACH

The Western Washington Phase II NPDES Permit requires that the City of Orting (City) develop a public education and outreach program by February 15, 2009. Per the Permit, the public education and outreach program must target the general public, businesses, homeowners and property managers, engineers, contractors, developers, review staff, and land use planners. Additionally, the City is required to track and maintain records of public education and outreach activities. This chapter summarizes the activities that the City is undertaking to meet the requirements of this portion of the NPDES Phase II Permit.

2.1 CURRENT PUBLIC EDUCATION AND OUTREACH PROGRAM

(Permit Requirement S5.C.1.a)

The City has an ongoing public education and outreach program. This program includes a variety of approaches, which includes providing educational literature, staffing outreach kiosks at community events, conducting talks and training, as well as partnerships with groups such as The Puyallup River Watershed Council. With regard to literature, the City has drafted outreach materials to educate the general public and businesses alike. These materials deal with general best management practices for stormwater runoff and preventing illicit discharges into the stormwater system. The City maintains literature related to stormwater at the City library that is available for check out by the general public.

The City regularly performs outreach at community events including fairs and festivals. City staff works at information booths to provide public education regarding environmental matters including stormwater. At events in August and October of 2008, the City used the information booth approach as a venue to issue its first stormwater management survey. The survey will be discussed in greater detail in the following section.

City staff provides training and education to the Orting community via both the telephone and on-site visits. City staff provides stormwater education during visits to homes, businesses, and construction sites. At construction sites, City staff instructs workers on proper erosion control and best management practices. Also, the City runs newspaper ads regarding maintaining storm gutters. Additionally, to further educate the general public and to prevent illicit discharges to storm drains, the City now requires that all new storm drains be stenciled "Dump No Waste, Drains to Stream."

The City is committed to community stormwater education at the student level, as well. City staff gives talks to students regarding erosion and other stormwater-related issues. Also, the City makes funds available to the Orting School District for stormwater education curriculum. Furthermore, the new middle school, which is currently being constructed, will feature a rain garden that provides a means for students to observe many aspects of the hydrological cycle, including stormwater treatment through infiltration and plant uptake.

2.2 MEASURING PROGRAM EFFECTIVENESS

(*Permit Requirement S5.C.1.b)*

The Phase II NPDES Permit requires that a permittee must assess the effectiveness of its public education and outreach program. In August of 2008, the City developed a survey to measure the baseline understanding of stormwater-related issues by various groups within the city of Orting. The survey collected demographic information and asked survey respondents a series of twelve questions related to stormwater issues. The survey was administered to a group of business owners at a Chamber of Commerce meeting in August 2008, to the general

public at community events in August and October 2008, and via the City's annual Stormwater Letter in October 2008. Surveys were collected and scored using a rating system. Data from scored surveys was entered into an Excel spreadsheet for analysis and report generation.

2.2.1 Survey Results

Results from the initial 2008 stormwater survey are summarized in Table 2-1. The survey identified existing levels of knowledge for many stormwater-related matters. The findings of the survey have been used to identify current and future needs for stormwater education and outreach.

Table 2-1. 2008 City of Orting Stormwater Survey Results

Q1. Do you know if there is a river, creek or other waterbody near your home or business?				
Yes	**No**	**Not Sure**	**No Response**	
87%	7%	4%	2%	
Q2. If you have a river, creek or other waterbody near your home or business, what term(s) best describe your opinion of its water quality?				
Very Good	**Somewhat Good**	**Bad**	**Not Sure**	**Not Sure**
26%	37%	9%	17%	11%
Q3. Have you used a pesticide or weed-killer in the last year at your home or business?				
Yes	**No**	**No Response**		
56%	43%	2%		
Q4. If you did use a pesticide or weed-killer within the last year, how did you dispose of the remainder of it?				
None Left	**Remainder Stored**	**Taken to Hazwaste**	**Other**	**No Response**
58%	23%	0%	7%	10%
Q5. Do you have a pet at home that you take for regular walks outside?				
Yes	**No**	**No Response**		
43%	54%	4%		
Q6. If you do have a pet at home you take for regular walks, how do you dispose of pet waste?				
Bagged	**Left in Place**	**No Response**		
60%	32%	8%		
Q7. Do you change your own vehicle oil at home?				
Yes	**No**	**No Response**		
22%	76%	2%		
Q8. If you do you change your own vehicle oil at home, how do you dispose of your used oil?				
Household Waste Collection	**Garbage**	**Ground**	**Other**	**No Response**
31%	0%	0%	69%	8%
Q9. Do our community's storm drains and sewer system share the same underground pipe system?				
Yes	**No**	**No Response**		
6%	78%	17%		

(Table Continues)

Table 2-1. 2008 City of Orting Stormwater Survey Results (Continued)

Q10. Do water and other substances that flow through storm drains go to a treatment plant to be processed to remove pollutants?			
Yes	**No**	**No Response**	
33%	50%	17%	
Q11. Do you know of any stormwater detention ponds near your home or business?			
Yes	**No**	**No Response**	
43%	52%	6%	
Q12. What type of treatment do you believe that stormwater receives after it leaves a stormwater detention pond?			
Treatment Plant	**Direct Discharge**	**Natural Filtration**	**No Response**
20%	11%	48%	19%

2.2.2 Future Program Measurement

(*Permit Requirement S5.C.1.b)*

In order to measure the effectiveness of the stormwater public education and stormwater program, the City issued its questionnaire again in the fall of 2009. The results of the latest survey effort will be compared to the 2008 results to identify if audience behaviors and/or understanding of stormwater-related issues have measurably improved since issuance of the 2008 survey. The results of this comparison will be used to direct needs for future public education and outreach activities.

2.2.3 Future Public Education and Outreach

(Permit Requirement S5.C.1.b)

Based on the survey results shown in Table 2-1, the majority of the citizens of Orting understand how storm drain systems in their area operate. However, the people may benefit from education on proper disposal of waste that can be detrimental to the local waterways. Approximately one third of people that walk their pets in their neighborhood leave the pet waste in place. This waste can easily be transported into the storm drain collection system via surface runoff and eventually end up in one of the two local rivers. Additionally, many people do not know where their stormwater goes and what sort of treatment it receives. The City will tailor education materials to meet the needs of the public, and continue to update the material with the assistance of future stormwater surveys.

The public involvement section of this document lists several options that Orting may consider to involve the public in stormwater-related matters. Most of these public involvement options include a public education component. Public involvement in stormwater-related activities is an effective tool for educating the public regarding stormwater issues. The City will attempt to conduct these types of education activities whenever practicable.

2.3 RECORDKEEPING

(Permit Requirement S5.C.1.c)

The City is now tracking and maintaining records of public education and outreach activities. A spreadsheet has been developed for tracking and maintaining these records. Records of public education and outreach activities are maintained at the City's public works building.

3. PUBLIC INVOLVEMENT

The Western Washington Phase II NPDES Permit requires the City to provide ongoing opportunities for public involvement using methods such as advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, and other similar activities. The following section details the City's current efforts and future plans to involve the public in stormwater-related issues.

3.1 CURRENT PUBLIC INVOLVEMENT ACTIVITIES

The City currently involves the public in two different ways. One is through participation of the public in the development of the Stormwater Management Program (SWMP) and other stormwater related policies. The other is by providing a means for the community to be involved in volunteer programs. Both methods are important in fostering a sense of ownership so that the community actively participates in improving and maintaining the quality of Orting's stormwater.

3.1.1 Stormwater Policy Development

(Permit Requirements S5.C.2.a & b)

City Web Page – The City has posted the SWMP Plan and Annual Report on its website and is currently collecting and collating input from Orting residents in the form of written and email feedback. This input will be reviewed and responded to with regard to incorporation into the City's SWMP Plan.

Orting Stormwater Public Input Group – In February 2008, the City had a public meeting and formed the Orting Stormwater Public Input Group (Group). The Group is comprised of city council members and members of the general public who have an interest in surface water issues. The Group reviewed and provided comments on the development and implementation of the City's Stormwater Management Program. The Group will be consulted regarding the development and implementation of future stormwater-related issues.

3.1.2 Volunteer Programs

(Permit Requirement S5.C.2.a)

Catch Basin/Curb Marking Program – Orting has a catch basin/curb marking program in which volunteer groups mark catch basins and storm drains with signage indicating that the structure drains to a nearby surface water body. This program improves public awareness regarding stormwater pollution and its impact on surface waters and supplements the City's ongoing program of marking storm drains with "Dump No Waste, Drains to Stream."

Stream Clean-Ups – Members of the City Council organize an annual Fishermen's Stream Clean-Up. This event utilizes volunteers to clean up near-stream areas. This not only improves the water quality and aquatic habitats of the Puyallup and Carbon Rivers, it also serves as a useful tool in demonstrating to the community the connection between pollution and surface water quality.

Car Wash Program – The City has purchased an environmentally friendly carwash kit, which it provides to groups performing car washing events. The kit includes a catch-basin insert to prevent wash water from entering storm drains. It also includes a pump to transport wash water to either nearby grassy areas or the sanitary sewer. The City also requires the use of non-toxic, biodegradable, or phosphate-free soaps.

3.2 FUTURE PUBLIC INVOLVEMENT OPPORTUNITIES

(Permit Requirements S5.C.2.a)

In addition to utilizing the Orting Stormwater Public Input Group, the City plans on using other public involvement methods to develop and implement the SWMP and to address other stormwater related issues. Below are some of the methods that the City may utilize to further involve the public in these issues.

3.2.1 Stormwater Policy Development

Orting Stormwater Public Input Group – To further ensure that the public is aware of opportunities for involvement in the Stormwater Public Input Group, the City could utilize a variety of methods for soliciting public involvement. Four possibilities include periodic ads in the local newspaper, notices on the City's website, information in the Stormwater letter, and soliciting for membership at public events like fairs and festivals.

3.2.2 Future Volunteer Programs

Gratekeeper Program – A Gratekeeper Program is one in which assigned citizens monitor catch basins and storm drains in their neighborhoods for illegal discharges. Gratekeepers could aid City maintenance personnel by helping to keep catch basins and storm drains free of trash and debris, and by notifying City maintenance personnel when problems develop with these structures.

Volunteer Stream Monitoring Teams – Volunteer teams could be trained in taking ambient water quality samples in the Puyallup and Carbon Rivers. This data could be used to augment City staff-collected data, as well as increase public knowledge of the connection between point and non-point source discharges and water quality.

Rainfall Monitoring Program – Currently, the City's wastewater treatment plant has rainfall monitoring equipment. Additionally, the U.S. Geological Survey (USGS) has a rain gauge on the Carbon River. In the future, volunteers could be utilized to collect rainfall data at various locations within the city. By combining data from across the city, Orting rainfall patterns could be analyzed and used to identify areas susceptible to erosion.

Noxious Weed Control – With this program, the City would coordinate volunteer groups to remove noxious/invasive vegetation from riparian areas. Removal of noxious vegetation would improve riparian and aquatic habitat and improve overall water quality. Additionally, it would teach participants the benefits of healthy, native riparian vegetation in improving water quality.

4. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Western Washington NPDES Phase II Permit requires that the City have a program that addresses the detection and elimination of illicit discharges into its municipal separate storm sewer. To that end, the City is required to meet several minimum performance measures related to Illicit Discharge Detection and Elimination (IDDE). The following section details the City's current efforts and future plans to comply with the IDDE portion of the Permit. The minimum performance measures for IDDE are summarized below:

- Current municipal storm sewer system maps.
- An ordinance that prohibits illicit discharges to the City's storm sewer system.
- An ongoing IDDE program.
- Public education of public employees, businesses, and general public regarding hazards associated with illicit discharges. This includes the creation of a public hotline for reporting these discharges.
- Adoption and implementation of procedures to evaluate the City's IDDE program.
- Training of City staff on IDDE-related subjects including identification, reporting, and responding to illicit discharges.

4.1 MUNICIPAL STORM SEWER SYSTEM MAPPING

(Permit Requirement S5.C.3.a)

Per the Phase II Permit, the City is required to have a storm sewer map that details the location of outfalls, conveyances, drainage areas, land use, receiving waters, and structural BMPs by February 16, 2011. The Stormwater Comprehensive Plan prepared for the City in May 2002 has a detailed stormwater system inventory for eight sub-basins delineated within the city, and a mapping system that accurately depicts the stormwater system inventory as it existed at that time.

The storm sewer system map has been updated to include detailed information regarding all stormwater infrastructure that has been added since 2002. Updates to the map include the location and labeling of all catch basins, stormwater treatment facilities, stormwater outfalls, and structural BMPs. Additionally, the City has updated the map to include information regarding the location of stormwater piping and what different type of pipe material is present. The City's mapping system also includes the location of its two receiving waters, as well as land use information. The City continues to update its stormwater map on a routine basis to ensure that it accurately depicts all known stormwater system infrastructure owned, operated, or maintained by the City.

4.2 IDDE ORDINANCE

(Permit Requirement S5.C.3.b)

As required by the Phase II Permit, the City was required no later than August 16, 2009, to develop and implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the City's municipal separate storm sewer system to the maximum extent allowable under State and Federal law. The City has existing ordinances that prohibits illicit discharges to the City's storm sewer. Illicit discharges are defined in Title 9-5A-4 of the City's code, while Title 9-5A-9.C prohibits illicit discharges. Inspection, enforcement, and penalties are currently regulated based on Titles 9-5A-11, -12, and -13 of the City's code.

4.3 IDDE PROGRAM IMPLEMENTATION

(Permit Requirement S5.C.3.c)

The Phase II NPDES Permit requires that the City develop and fully implement an ongoing program to detect and address non-stormwater discharges, illicit discharges, and dumping into the City's storm sewer system. The requirements for the program are multifaceted and have a range of deadlines. The following subsections details the City's current efforts and future plans for complying with the IDDE program implementation portion of the Phase II Permit.

4.3.1 Locating Priority Areas

(Permit Requirement S5.C.3.c.i)

In accordance with the Permit, the City is required to develop and implement procedures by August 19, 2011, for locating priority areas which are likely to have illicit discharges. Procedures to be used for priority area location include evaluating land uses and associated business/industrial activities present, past areas where complaints have been registered, and areas where large quantities of materials are stored which could result in spills.

Historically, the City has had an inspection program that includes identification of, and response to, complaints of illicit discharges. The City has now expanded and formalized this program to include location of priority areas where potential illicit discharges may occur. Priority areas for consideration include fueling stations, auto repair facilities, restaurants, and other commercial facilities that have potential for spills and related stormwater impacts. The City has identified the area of Orting zoned mixed use town center and the three outfalls (Outfalls 4, 5, and 6) that convey stormwater from it as priority areas for illicit discharge investigation.

4.3.2 Field Assessment Activities

(Permit Requirement S5.C.3.c.ii)

The City is required by the Phase II Permit to conduct field assessment activities during dry weather and for the purposes of verifying outfall locations, identifying previously unknown outfalls, and detecting illicit discharges at areas including those identified as priority areas.

The City has developed a draft methodology for screening for illicit connections in accordance with *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004.* This methodology is detailed in the City's IDDE Inspection Field Manual.

As specified in the Permit, the City is required to prioritize receiving waters for visual inspection by February 16, 2010, and perform visual inspections of three high priority waterbodies by February 16, 2011. The City has only two receiving water bodies, the Puyallup and the Carbon Rivers. These receiving waters are currently, and will continue to be, inspected visually at least annually. Additionally, while the City has only two receiving water bodies, the City will perform annual visual inspections at the three outfall locations along the Carbon River and the four outfall locations along the Puyallup River, for a total of at least seven visual inspections annually.

Note that although six additional outfall locations are present within the city limits along the Puyallup River near the Soldiers Home location, these outfalls are owned, operated, and maintained by Pierce County and will continue to be the County's responsibility with regard to Phase II NPDES Permit requirements.

4.3.3 Illicit Discharge Characterization, Tracing, and Source Removal

(Permit Requirements S5.C.3.c.iii-v)

By August 19, 2011, the Permit requires the City to have the following in place with regard to illicit discharge characterization, tracking, and source removal:

- Procedures to characterize the nature and the potential public or environmental threat of any illicit discharges discovered or reported to the City.
- Procedures for tracing illicit discharge sources including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and other investigative procedures as needed.
- Procedures for removing the discharge source 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.

As mentioned above, the City has developed a draft IDDE inspection field manual for screening for illicit connections in accordance with *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004*. All IDDE field activities performed by the City will be done per the methods detailed in its IDDE field manual. The timeframes, investigation methodologies, and enforcement capabilities described below are summarized in the field manual as well.

Illicit Discharge Characterization

(Permit Requirement S5.C.3.c.iii)

The City has an ongoing program of responding to illicit discharges. This includes both complaint-based and City staff-initiated investigations. To ensure full compliance with the Phase II Permit, the City will respond within 7 days, on average, to any complaints, reports, or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping to its storm sewer system. Additionally, the City will respond immediately to problems or violations that are determined to be emergencies, or otherwise characterized as urgent or severe.

Tracing Illicit Discharges

(Permit Requirement S5.C.3.c.iv)

The City's current program of illicit discharge investigation includes determination of illicit discharge sources. The City's program is being expanded to include the ability of camera investigation of storm sewer lines, and collecting and analyzing water samples when necessary. The City will ensure that staff is trained in the usage of any new investigation and monitoring equipment that is implemented. Additionally, protocols for the usage of any new techniques will be summarized and included in the City's IDDE Inspection Field Manual.

Illicit Discharge Source Removal

(Permit Requirement S5.C.3.c.v)

The City currently has procedures for removing illicit discharge sources. These procedures include notifying the responsible party and/or property owner, notification of any other authorities including the Department of Ecology, technical assistance for discharge elimination, performing follow-up inspections, and a process of escalating enforcement and legal actions if the discharge is not eliminated.

As discussed in the IDDE ordinance section above, the draft revisions to the City's ordinances give Orting the legal authority to escalate enforcement actions against responsible parties. In the future, the City will initiate investigations no later than 21 days after a report or discovery of suspected illicit connections to the storm sewer system. The City will use its enforcement authority to ensure that any illicit connections are terminated within 180 days of an illicit connection being confirmed.

4.3.4 Public Education

(Permit Requirements S5.C.3.d)

The NPDES Phase II Permit requires that the City inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste to the City's storm sewer system. This requirement includes distribution of appropriate information to target audiences, as well as the creation and maintenance of a public hotline for reporting spills and illicit discharges.

As discussed in Section 1, Orting has an ongoing public education and outreach program. This program includes education regarding the hazards associated with illegal discharges and improper disposal of waste. The City issues its annual stormwater letter, which includes various stormwater educational topics such as illicit discharges and disposal of waste to the storm sewer system. Additionally, the City has created public education materials in a poster format regarding polluted stormwater runoff hazards, which will be distributed to targeted audiences. The City will continue to create materials related to illicit discharges as a part of its public education and outreach program and distribute the materials as needed. As described in the public outreach section of this plan, the City will document all public education and outreach activities.

The City of Orting maintains a hotline for reporting illicit discharges and spills. The hotline is connected to a City voice mailbox, which records complaints 24 hours a day, 7 days a week. The hotline is responded to during normal business hours Monday through Friday, excluding holidays. Messages left on weekends or holidays are answered on the following business day. The City maintains records of all calls received and the associated follow-up actions performed. The City will include a summary of these records in its annual report.

4.3.5 IDDE Program Evaluation

(Permit Requirements S5.C.3.e)

The Phase II Permit requires the City to adopt and implement procedures for evaluating and assessing its IDDE program. This includes tracking the number types of spills or illicit discharges identified, the number of inspections performed, and any feedback received from public education efforts. The City has created spreadsheets for tracking IDDE-related information to use in evaluating and assessing its IDDE program.

4.3.6 IDDE Training for Municipal Field Staff

(Permit Requirements S5.C.3.f)

By August 16, 2009, the City is required by the Phase II Permit to ensure that all field personnel responsible for identification, investigation, termination, cleanup, and reporting of IDDE-related incidents are properly trained to perform those duties. In addition, by February 16, 2010, the Phase II Permit requires that the City develop and implement an ongoing training program for all municipal field staff that might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Follow-up training must be provided to address any changes in procedures, techniques, or requirements.

The City has conducted training for its field staff regarding its IDDE program and how to properly identify and address illicit discharges. The City will continue this training program for its new field personnel and continue to address updates to procedures, techniques, and requirements. The City documents and maintains records of the training provided and staff trained.

5. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITES

The Western Washington Phase II NPDES Permit has several requirements to address controlling runoff from new development, redevelopment, and construction sites. These requirements are listed below. The following sections within this chapter detail the City's current and planned activities to comply fully with the Phase II Permit.

Requirements for controlling runoff from new development, redevelopment, and construction sites include:

- An ordinance that addresses the minimum requirements, technical thresholds, and definitions in Appendix 1 of the Phase II Permit; a site planning process and BMP selection and design criteria that will protect water quality and reduce the discharge of pollutants to the maximum extent practicable (MEP) using all known, available and reasonable methods of treatment (AKART) and prevention and control; legal authority to inspect private stormwater facilities; and Low Impact Development (LID) techniques (by 11/16/2009).
- A permitting process with plan review, inspection, and enforcement capability to meet the standards required by the Permit.
- Provisions to verify adequate long-term operation and maintenance of post-construction stormwater facilities and BMPs (by 11/16/2009).
- Implementation of procedures for keeping records of inspections and enforcement actions by City staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained as well.
- Make available all copies of the Notice of Intent (NOI) for both construction and industrial activities to representatives of proposed new development and redevelopment. The City will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.
- 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 those activities (by 11/16/2009). Training shall be documented and records of training maintained for staff trained.

5.1 STORMWATER ORDINANCES

(Permit Requirement S5.C.4.a)

The City has finalized revisions of its ordinances to incorporate requirements under the Phase II Permit with regard to controlling runoff. Ordinance revisions have been completed for the following:

- Maintenance responsibility.
- Maintenance schedule.
- Enforcement.
- Adopting a manual equivalent to the Washington State Department of Ecology *2005 Stormwater Management Manual for Western Washington* (Ecology Manual).
- Thresholds for stormwater management and stormwater site plan preparation and review.

5.2 STORMWATER PERMITTING PROCESS

(Permit Requirement S5.C.4.b)

The City's stormwater program contains a permitting process that includes plan review, inspection, and enforcement capability. Plan review is performed by the City's engineers. Notices of Intent (NOIs) are submitted by the applicant to Ecology, and copies of these NOIs are maintained by the City. The City inspects all development and construction sites for compliance with BMPs, Stormwater Pollution Prevention Plans (SWPPPs), and stormwater rules. Additionally, permitted sites are inspected upon completion of construction to ensure that stormwater facilities and BMPs are in place. Any noncompliance discovered during inspections is addressed through enforcement activities as needed.

5.3 VERIFICATION OF LONG-TERM OPERATION AND MAINTENANCE OF POST-CONSTRUCTION STORMWATER FACILITIES AND BMPs

(Permit Requirement S5.C.4.c)

As mentioned in Section 3.1, the City has adopted ordinances which include maintenance responsibility, maintenance schedules, and enforcement procedures related to post-construction stormwater facilities and BMPs. The City has adopted maintenance standards for stormwater facilities as specified in Chapter 4 of Volume V of the 2005 Ecology Manual. Annual inspections are performed on all stormwater treatment and flow control facilities unless maintenance records are available that justify alternative inspection frequencies. Additionally, new flow control and water quality treatment facilities are conducted every 6 months during the period of heaviest house construction to determine maintenance needs and to enforce maintenance standards.

5.4 RECORDKEEPING FOR STORMWATER-RELATED INSPECTIONS AND ENFORCEMENT ACTIONS

(Permit Requirement S5.C.4.d)

City staff performs inspections at new development, redevelopment, and construction sites. Site inspection conditions are documented on a Site Inspection Checklist. Hard copies of inspection reports are maintained by the City. The City is currently developing a database to aid in tracking inspections performed, as well as enforcement actions taken at noncompliant sites.

5.5 NOTICES FOR STORMWATER-RELATED ACTIVITIES

(Permit Requirement S5.C.4.e)

The City maintains copies of the "Notice of Intent for Construction Activities" and "Notice of Intent for Industrial Activities." The City provides copies of NOIs to representatives of proposed new development and redevelopment activities. Additionally, the City plans to provide a hyperlink on its website to the Ecology site so that NOIs can be obtained in electronic format.

5.6 STAFF TRAINING

(Permit Requirement S5.C.4.f)

The City maintains a Certified Erosion and Sediment Control Lead (CESCL) for conducting inspections of stormwater control facilities at new development, redevelopment, and construction sites. The City also employs trained contract construction observers during construction activities, who work under the oversight of City staff. All staff responsible for stormwater runoff control activities, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. The City documents and maintains records of the training provided and the staff trained.

6. POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS

The Phase II Permit requires the following to address pollution prevention and operation and maintenance for its municipal operations:

- 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 Ecology Manual.
- Annually inspect all municipally owned or operated permanent stormwater treatment and flow control facilities, other than catch basins.
- Conduct spot checks of potentially damaged permanent treatment and flow control facilities, other than catch basins, after major storm events (greater than 24-hour 10-year recurrence interval rainfall). If spot checks reveal widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected.
- Inspect all catch basins and inlets owned or operated by the City at least once within the 5-year permit cycle.
- Inspect at least 95 percent of all sites where inspection is required either cyclically or storm event related as described above.
- 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.
- Establish and implement policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the City.
- 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 City.
- Develop and implement an ongoing training program for employees of the City whose construction, operations, or maintenance job functions may impact stormwater quality. Follow-up training shall be provided as needed to address changes in procedures, techniques, or requirements.
- Records of inspections and maintenance or repair activities conducted by the City shall be documented, and a summary of actions taken included in the O&M section of the updated SWMP annually.

The City has a proactive maintenance program, which involves periodic, routine maintenance of all stormwater treatment and conveyance structures including storm drains, catch basins, stormwater ponds, stormwater pipe, and outfalls. The following information details the City's current pollution prevention and operations and maintenance activities, as well as future actions that the City may implement to ensure continuance of effective stormwater treatment.

6.1 MAINTENANCE STANDARDS

(Permit Requirement S5.C.5.a)

The City has adopted maintenance standards for stormwater treatment facilities through adoption and implementation of Volume V, Chapter 4 of the 2005 Ecology Manual. These standards are followed for all routine operation and maintenance activities performed at City stormwater treatment facilities.

6.2 ANNUAL INSPECTIONS

(Permit Requirement S5.C.5.b)

City owned or operated stormwater treatment facilities, excluding catch basins, are inspected at least annually. All stormwater retention/detention ponds are inspected and maintained at least twice during the summer. Stormwater outfalls are inspected annually in the fall before the start of the wet season, and during and after major storm events. Photographs of the outfalls are taken on a regular basis. Site investigations at all stormwater facilities are documented on inspection forms and maintained at the public works building. The City has implemented an electronic database of inspection and maintenance or repair activities at City owned or maintained stormwater facilities. The use of a database will aid in tracking past operation and maintenance activities, as well as help dictate future facility inspection schedules.

6.3 TREATMENT SPOT CHECKS

(Permit Requirement S5.C.5.c)

The City performs spot checks on treatment and flow facilities after major storm events. Any problems noted with facilities after these events are addressed as quickly as possible.

6.4 CATCH BASIN INSPECTIONS

(Permit Requirement S5.C.5.d)

The City inspects all catch basins within the 5-year permit cycle. The City has cleaned all its catch basins within the 3 years subsequent to the date of this plan. The City has updated its stormwater facilities map, which includes all catch basin locations. The updated map breaks up stormwater facilities by basin and the City is now performing inspections by drainage basin.

6.5 INSPECTION REQUIREMENT COMPLIANCE

(Permit Requirement S5.C.5.e)

The City currently inspects at least 95 percent of its stormwater facilities annually. As mentioned in the previous subsection, the City now performs inspections by drainage basin, which improves inspection efficiency and further ensures that the 95-percent inspection goal is met annually.

6.6 STORMWATER IMPACT REDUCTION PRACTICES

(Permit Requirement S5.C.5.f)

The City has methods in place to reduce stormwater impacts associated with runoff from streets, parking lots, roads, and highways. These practices include periodic street cleaning, pipe cleaning, ditch maintenance, dust control, and cleaning of culverts that convey stormwater in ditch systems. Records of these types of activities are tracked and maintained at the public works building. In order to ensure full compliance with the Phase II Permit, the City will continue to assess the need for further stormwater impact reduction practices including, but not limited to, road repair and resurfacing, snow and ice control, utility installation, pavement striping maintenance, and roadside area maintenance.

6.7 POLICIES AND PROCEDURES TO REDUCE POLLUTANT DISCHARGE

(Permit Requirement S5.C.5.g)

The City has developed and is implementing procedures and policies to reduce pollutants in discharges from all lands owned or maintained by the City. These procedures and policies, which are incorporated into the City's O&M and IDDE manual, will also include the reduction of stormwater impacts related to runoff from parking lots, streets, and highways owned or maintained by the City, as well as any potential stormwater impacts associated with roadway maintenance activities conducted by the City.

6.8 ONGOING TRAINING PROGRAM DEVELOPMENT AND IMPLEMENTATION

(Permit Requirement S5.C.5.h)

City staff currently receives training regarding stormwater control via on-the-job training. The City has developed a formalized training program to educate workers who perform job functions that may impact stormwater quality and has conducted training for its staff. Additionally, the City will perform training as needed to address changes in procedures, techniques, or requirements. The City documents and maintains records of staff training.

6.9 STORMWATER POLLUTION PREVENTION PLANS (SWPPPs)

(Permit Requirement S5.C.5.i)

The City has developed and implemented SWPPPs for both the City's maintenance yard and the public safety building, which houses the fire department. The SWPPPs will be followed by the City to ensure that activities conducted in these areas do not adversely impact stormwater quality.

6.10 INSPECTIONS AND MAINTENANCE/REPAIR RECORDKEEPING

(Permit Requirement S5.C.5.j)

The City maintains logs for all inspection and maintenance actions performed at City owned and operated stormwater facilities. The City has implemented an electronic database of inspection and maintenance or repair activities at City owned or maintained stormwater facilities. The use of the database will aid in tracking past operation and maintenance activities, as well as help dictate future facility inspection schedules.

APPENDIX A

2009 Annual Report Form for Cities, Towns, and Counties