CITY OF ALGONA

STORMWATER MANAGEMENT PROGRAM

JULY 2010

Stormwater Management Program 2010

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1. INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) permit program is a requirement of the Federal Clean Water Act. The permit was initiated to protect water quality through detection and elimination of pollutant discharges. The Federal Environmental Protection Agency (FEPA) has delegated permit authority to State Environment Agencies towards developing, implementing and enforcing stormwater regulations and policies. In Washington, the NPDES-delegated permit authority is the Washington State Department of Ecology (Ecology).

This document was prepared for the City of Algona to meet the requirements for a Stormwater Management Program (SWMP) as required by the NPDES Phase II permit issued by Ecology. The SWMP was developed to outline the reduction of pollutant discharges from the City's Municipal Separate Storm Sewer System (MS4).

The overall purpose of this program is to protect water quality by reducing pollutant discharges to the maximum extent possible (MEP). This will be done through the application of Best Management Practices (BMP/s) and compliance with the Washington State's All Known and Reasonable Treatment (AKART) requirements where applicable in the major divisions of the NPDES Permit listed below:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment and Construction Sites
- Pollution Prevention and Operation and Maintenance for Municipal Operations

The Permit requires a report annually, by March 31st of the following year. The SWMP document describes the permit requirements and previous years activities as well as a summary of potential plans based on future requirements of the Permit in the forthcoming years. An updated SWMP is required with each years report.

2. NPDES PHASE II PROGRAM COMPONENTS

Algona is defined as a Phase II community by the Washington State Department of Ecology (DOE) and therefore, is required to comply with the requirements of the Phase II National Pollution Discharge Elimination System Stormwater (NPDES) Permit. Phase II communities are those that:

- Own and operate a storm drain system
- Discharge to surface waters
- Are located in urbanized areas
- Have a population of more than 1,000

Phase II communities were required to complete an NPDES Phase II Stormwater Permit Application and submit to DOE by March 10, 2003. The NPDES Phase II Permit (Permit) was issued to the City of Algona on January 17, 2007 and went into effect on February 16, 2007. The Permit, as it stands now, expires on February 15, 2012.

The program divisions listed in the Permit are as follows:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, redevelopment and Construction Sites
- Pollution Prevention and Operation and Maintenance for Municipal Operations

This program component requires, how the City of Algona is currently addressing requirements and plans to address these requirements in the future, are discussed in greater detail in the sections below. In genera, the City of Algona has activities and programs in place that meet current NPDES Phase II Permit requirements. As future requirements are

Introduced, the City will need to develop and implement more programs to manage current demands.

2.1 PUBLIC EDUCATION AND OUTREACH

2.1.1 Permit Requirements

This component aims to implement a public education program to distribute educational materials to the community and conduct outreach activities, concerning the impacts of stormwater discharges on water bodies. These materials can be distributed in an assortment of ways, including, but not limited to: online postings, newsletters, posters and brochures.

An additional part of this program includes informative steps the public can take to reduce pollutants in stormwater runoff. The education program will target a variety of groups including: residents; businesses; industries; elected officials; policy makers; planning staff and other employees of the City, in an effort to contact and inform those most likely to impact stormwater.

2.1.2 Current Activities

The City of Algona is working toward an official public education standard. Current Algona policy requires that stormwater control facilities, serving other than single-family residential developments, be owned and maintained by the homeowner association, property owner or other designee. The developer is required to execute and record an *Agreement to Maintain Stormwater Facilities and to Implement a Pollution Source Control Plan* in instances where the City will not assume ownership and maintenance of a stormwater facility.

Also, the requirements of the Algona Municipal Code mandates that BMP's must be installed and complete before permits are issued so that all construction at new commercial operations are required to include basic water quality pollution prevention of the facility. In addition to mandatory stormwater education for commercial employees, the City encourages high customer volume businesses to display water quality practice informational brochures.

Other educational material such as brochures on lawn and yard care has been posted on the City's website or in the City's Newsletter, The Town Crier.

2.1.3 Future Activities

As a part of the ongoing requirement of the NPDES Permit, the City has fabricated an Education/Outreach Program list of innovative methods and approaches in continuing to educate the community of Algona on the topic of water quality.

This list contains several simple means towards changing detrimental behaviors, those of which include: online posting of local facilities that recycle hazardous materials like paint, oil and fluorescent light bulbs, clearly distinguishing the environmental hazards between materials that do go down the sink (sewer facilities) and those that are washed down the storm drains, and creating posters that be placed around the City.

2.2 PUBLIC INVOLVEMENT AND PARTICIPATION

2.2.1 Permit Requirements

This program component requires that the City of Algona develop a public involvement and participating program that complies with State and local public notice requirements. The City of Algona currently participates in various groups and organizations pertaining to the importance of water quality and future issues. The City also has a program available for the public to partake in the development and information of this SWMP.

2.2.2 Current Activities

The City is also an active member of Water Resource Inventory Area 9 (WRIA9). This organization meets monthly to discuss stormwater related issues and address methods of compliance regarding NPDES Permit deadlines as well as salmon recovery.

In addition to involvement in the WRIA9, the City has Algona Municipal Code (AMC's) stormwater regulations require that all industrial and commercial sites paint or emboss "DUMP NO WASTE-DRAINS TO STREAM" adjacent to all storm drain inlets. Algona also has a public involvement and participation activity for car washes.

2.23 Future Activities

The City will post an updated SWMP and annual report on its website by March 31st of each year. Any other submittals required by the Permit will also be posted as necessary on the website. The public will continue to have the opportunity to comment on the SWMP. The City also hosts regular council meetings for which the public can attend and voice their opinions.

2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

2.3.1 Permit Requirements

Compliance with this program component requires the City to implement and enforce an Illicit Discharge Detection and Elimination (IDDE) Program in the City's MS4. Required program elements are as follows:

- Develop a municipal storm sewer system map that includes information on the City's MS4 (e.g. outfalls, receiving waters, connection points, areas that don't discharge to surface water, etc.)
- Effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater, illegal discharges, and dumping into the City's MS4.

- Develop and implement a program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping into the City's MS4.
- Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.
- Implement procedures for program evaluation and assessment which includes a program to track spills and illicit discharges (both number and type) record inspections made and record any feedback from public education effort.
- Provide appropriate training to City employees on IDDE into the City's MS4.

2.3.2 Current Activities

The City of Algona has ordinances and other programs in place that meet requirements for the IDDE component of the Permit. Algona Municipal Code (AMC) and other programs currently in place concerning illicit discharge control are as follows:

- AMC 13.46.020 Illicit discharge, this code defines illicit discharge according to the City.
- AMC 13.46.020.9 Illicit discharges, this code prohibits illicit discharge.
- AMC 13.46.120 Enforcement, this code defines how the City will penalize failure to comply with the codes.
- Non-public stormwater facility operators are required to execute and record an *Agreement to Maintain Stormwater Facilities and to Implement a Pollution Source Control Plan as shown in Appendix B.*

- Stormwater Pollution Prevention Plans have been developed for Algona maintained streets.
- Illicit discharges to the Algona storm system are detected during routine catch basin and stormwater conveyance system maintenance activities. Catch basin and stormwater conveyance cleaning is typically conducted on an-needed basis.
- Documentation of activities including when inspections take place, times and types of spills, public feedback from education efforts and training for municipal staff has been implemented.

2.3.2 Future Activities

The planned activities stated earlier for public education and outreach will include information on IDDE in an effort to decrease the number of IDDE's found throughout the City.

Newly revised City code addressing issues of Illicit Discharges and Illicit Connections will be enforced by inspectors and staff.

A report will be created to recognize efforts made in IDDE public education.

The City will continue to develop its map of the MS4 including the locations of all known stormwater outfalls and structural BMP's. Methods for locating and tracking areas with a higher probability for having illicit discharges will be developed. The City will also develop and implement procedures for source identification and proper response when contamination is acknowledged.

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

2.4.1 Permit Requirements

- Compliance with this program component requires the City to develop, implement and enforce a program to reduce pollutants in stormwater runoff to the municipal stormwater infrastructure from any new development, redevelopment, and construction site activities that result in a land disturbance, development or sale. The minimum elements included in this program component are:
- An ordinance or other regulatory mechanism to address runoff from new development, redevelopment and construction site projects. City codes, ordinances and development specifications may require smaller sites to comply with these requirements as well.
- Develop and implement a permit process with plan review, inspection and enforcement capability including adequate long-term operation and maintenance of the stormwater facilities and BMP's.
- Develop and implement procedures for documenting inspections and enforcement actions.
- Make available copies of the *Notice of Intent for Construction Activity and Notice of Intent for Industrial Activity* for representatives of new developments and redevelopments.
- Develop and implement a training program for 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.

2.4.2 Current Activities

The City of Algona has adopted the Stormwater Management Manual for Western Washington as well as revised enforceable mechanisms that meet requirements for controlling runoff from new developments, redevelopment, and construction sites.

Maintenance of City owned stormwater facilities is performed annually in order to preserve the quality of water exiting the system and entering the receiving waterways.

2.4.3 Future Activities

The City will enforce newly adopted Algona Municipal Code and modified Development Specifications and Standard Details in addition to the continuation of recording inspections and enforcement actions.

Scheduled maintenance activities will be performed as planned and records will be updated and spot checks will be performed as needed.

Training of staff members responsible for regulating requirements of this program component will also be continued throughout the year.

2.5 POLLUTION PREVENTION AND OPERATION AND MAINTENANCE FOR MUNICIPAL OPERATIONS.

2.5.1 Permit Requirements

This minimum control measure requires that the City develop and implement an operations and maintenance (O&M) program, including a training component, that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The minimum elements included in this program component are:

- The City will develop and implement O&M standards for municipal facilities that are as protective, or more protective, than those in Chapter 4 of Volume V of Ecology's 2005 SWMMWW.
- The City will develop an annual inspection program for flow control facilities and will do spot checks after major storm events for damage.
- The inspection program will include inspection of all catch basins and inlets in the MS4 before the Permit expiration date.

- The inspections will be documented and work done or needed on the stormwater facilities will be noted according to the Permit requirements for reporting.
- The City will develop and implement a program to reduce the stormwater impacts from streets, parking lots, roads, highways, and other lands owned, operated or maintained by the City, including road maintenance.
- The City will develop and implement a training program for City employees whose construction, operation and maintenance job functions my impact stormwater quality.
- The City will develop s Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance yards and material storage facilities owned or operated by the City that is not required to have coverage under the Industrial Stormwater General Permit.

2.5.2 Current Activities

The City's maintenance standards are typically addressed in the *Agreement to Maintain Stormwater Facilities and to Implement a Pollution Source Control Plan* as shown in Appendix B or in a SWPPP specific to the site. The agreement standards are very similar to those specified in Chapter 4 of Volume V of Ecology's 2005 SWMMWW.

Catch basins are currently inspected with routine maintenance activities. These smaller activities are done on an as-needed basis.

Stormwater Pollution Prevention Plans (SWPPP's) were developed for City facilities likely to discharge pollutants to the City's stormwater infrastructure. These SWPPP's implement measures to reduce stormwater impacts including pollutant discharges from all the areas owned by the City and implement an on-going training program for employees that document the training completed

The City has developed and implemented a plan to inspect all of the catch basins, inlets, stormwater treatment and flow control facilities owned and operated by the City. The plan also includes spot checks on potentially damaged permanent treatment and flow control facilities after major storm events. It also includes documentation of the inspections and work performed or needed on the stormwater facilities.

2.5.3 Future Activities

The City will continue to inspect and maintain facilities as described by the SWPPP's Maintenance Agreements and in accordance with NPDES regulations established for City owned equipment and structures. Worksheets will be filled out and updated to reflect the current maintenance and operating situation.

Spot checks and annual inspections of the City's Municipal Separated Sewer Stormwater System (MS4) will continue as scheduled.

2.6 MONITORING

Phase II NPDES require municipalities to obtain an NPDES permit and to develop a stormwater management program to prevent harmful pollutants from reaching local water bodies. The current Permit cycle does not require any water quality monitoring unless it is pursuant to a TMDL requirement or part of the IDDE program.

3. CONCLUSIONS

The City of Algona has met all the minimum requirements for the initial reporting period. The City has an established stormwater utility that is and will continue to be a funding source for stormwater facilities improvements and permit requirements. There are many things that the City is doing and has been doing that line up with Permit requirements and in the coming years there are many more programs to develop and implement.

The Public Education and Outreach component has a solid agreement in place for maintaining stormwater facilities and pollution control plans. In the coming year the City will need to develop and distribute more educational materials to target audiences listed in the Permit. The City also needs to continue documenting the progress of the behaviors of the targeted audiences and compare the results with those from the administered survey.

The City is actively participating in WRIA9 as part of their Public Involvement and Participation component. This relationship should continue and involve local residents in the development of this SWMP document. The City also needs to continue to paint or emboss "DUMP NO WASTE-DRAINS TO STREAM" near all stormwater inlets.

The City has a good start on the IDDE Program. MS4 map includes the City's existing infrastructure and will continue to develop as more information is gathered. The SMC's clearly states how to deal with IDDE. More documentation on the inspections, spills, feedback and training need to take place to meet the Permit requirements in the coming years.

The City's monitoring programs are gathering a substantial amount of information about groundwater levels in the area near Algona. This information will be need to be analyzed to see of any conclusions can be made for the BMP's implemented in the City.

APPENDIX A

The Town Crier
Special Edition

City of Algona

Protecting Washington's Waters From Stormwater Pollution

Did you know Washington has a stormwater runoff problem? Stormwater runoff is damaging salmon habitat. It's the number one water pollution problem in the urban areas of our state, and it causes and contributes to flooding.

Chances are pretty good you've seen stormwater runoff. It's the water from rain or snow that runs off yards, roofs, and roadways. As gravity pulls it downhill into low spots, ditches and storm drains, the water picks up soil, chemicals and other pollutants and carries them into our lakes, rivers and marine waters. Our waters and salmon as well as other fish and wildlife species aren't the only things at risk. Stormwater problems also affect the health and safety of people. As we develop land to accommodate Washington's growing population, our state's stormwater problem grows too. The good news is we can do something about it — all of us.

In Washington, the state Department of Ecology, the U.S. Environmental Protection Agency and local governments all work together to regulate stormwater. The key to solving the problem isn't really in the rules and permits. It's in the people — how we live on the land and the everyday choices each of us makes.

What Is A Watershed?

Everyone lives in a watershed. You know your county and city, but do you know your watershed address? Unlike states and counties, watersheds have natural boundaries defined by the shape of the land and the flow of water. In basic terms, a watershed, or basin, is all the land that drains to the same body of water, such as a lake or river. Smaller watersheds become part of larger watersheds, as streams feed into rivers, and rivers flow into oceans. This means wherever you are and wherever you go, you're in a watershed.

Why Should You Care?

Your health and the health of your watershed are inseparable. This is because a watershed is an interconnected system of land, water, air, and the life they support — including people and cities. Your everyday actions affect your watershed.

When a watershed is unhealthy, everything living in it suffers. The symptoms are easy to see: beaches are closed because of pollutants; fish populations dwindle because there isn't enough water or the quality is too poor to support them; air pollution endangers our health and damages soil, water, crops, forests, and wildlife.

A polluted watershed puts our drinking water supplies at risk. Our food sources are affected: contaminated shellfish are unsafe to eat; toxic chemicals in fish can accumulate in our bodies. Your watershed's health can directly impact you and your family's health.

What Defines A Healthy Watershed?

A healthy watershed is a well-balanced system, capable of sustaining a variety of environments and many forms of life. Healthy watersheds perform a number of "jobs". As water continually cycles through, the watershed stores and releases water and filters many pollutants. Trees and plants help anchor soil and absorb rain and snowmelt, so flooding and landslides are less severe. Vegetation also provides shade, keeping water temperatures cool and stable so fish and other aquatic life can thrive. In a healthy watershed, water, soil, and air are clean. People, as well as fish and wildlife, have the water, food, shelter, and other resources they need to survive.

The Health Of Our Watersheds Is In Danger

Many of our watersheds are unhealthy and all are in need of protection. Increased population and increased pollution go hand-in-hand. In urban areas, stormwater runoff is the number one water pollution problem. Developing land typically creates changes in the natural water patterns of an area. As more surfaces can't absorb water, polluted runoff from rain or snowfall carries oil, fertilizers, pesticides, trash and pet waste into lakes, streams, and the Puget Sound. Bacteria from failing septic systems are released into the earth. Our waters, both on the surface and underground, become contaminated.

Despite occasional high snowfall years, such as the winter of 2007-2008, global warming and climate change are shrinking snow packs and lengthening droughts. Increasingly, Washington lacks water where and when it is needed for communities and the environment.

Water cycles continuously through a watershed, sustaining life as we know it. As water moves across and under the land from the highest to lowest point in a watershed, it picks up everything it touches along the way. Thus, everybody "lives downstream".

Human impacts on our watersheds will increase with continued population growth and development. It is estimated that, at Washington's current growth rate, we will add a city the size of Tacoma to our state every two to three years.

"Small" Matters

Good news, even small actions contribute to a healthy watershed. Turning off the water when you brush your teeth saves as much as three gallons of water each time! Conserving water leaves more water in the watershed to support natural processes and meet future needs. What's good for the watershed is also good for your budget: using less hot water reduces your energy bills, and less water use lowers your water bill.

Other actions you can take include driving less, cleaning up after your pets, and being smart about your use of pesticides and fertilizers. These simple steps make a difference, and the more of us who take them, the healthier our watersheds will be.

Just as there are many ways you can have a positive impact, poor choices have the opposite effect. Like a set of dominos, what you do to the watershed at one point will eventually affect everything else.

Organic materials make up over half of the solid waste generated in Washington. By composting, we can transform "wastes" such as yard debris and food scraps into valuable products. For example, compost can be applied to lawns and gardens to build soil health and replenish nutrients, and less garbage in landfills.

Residential Car Washing and Stormwater

Q: Is Ecology saying I can't wash my car at home?

A: No. you can continue to wash your car at home. Just wash your car sensibly so the soapy water does not get into our storm drains that are connected with our downstream waters. Washington citizens can have it both ways — you can wash your car and you can help keep our waters clean. Ecology's stormwater permits require cities and counties to adopt ordinances that prohibit putting anything down the storm drains with pollutants like soapy water. Because of this, the state is taking an educational approach with the public about residential car washing. Ecology recommends that local governments take the same course. See Ecology's web page Residential Car Washing and Stormwater Permits: www.ecy.wa.gov/programs/wq/stormwater/CarWash.html

Q: What is the problem with soapy, dirty water going down the storm drain?

A: Water that enters the storm drain in urban areas goes directly through the pipes to streams, lakes, bays, and Puget Sound. In most areas, the stormwater does NOT go to a sewer treatment plant like the water that goes down the drain inside your house. Stormwater carries all the pollutants with it directly to our surface waters — soapy water and all. Dirty car wash water often contains oil, grease, and toxic metals. Soapy water and the chemicals in many detergents are harmful to fish and other aquatic life. This pollution also can get in drinking water in streams where water treatment plants take in the water farther downstream. It's not uncommon for water quality inspectors to receive a complaint because the creek is full of soapsuds, especially when it rains after a dry period. In most cases people washing their cars weren't aware that the storm drain went directly to the creek.

Q: How can my few gallons of soapy water cause damage?

A: The biggest pollution challenge to Washington's streams, lakes, and marine water in urban areas is stormwater. The stormwater from one outfall may collect drainage from a large area with hundreds of homes, businesses, and parking lots. The accumulation of all the pollutants that run off those areas in the rain, especially after a dry period, adds up to a lot of pollution. We all need to be mindful of how we wash cars, pick up after our pets, and take care of our yards so we can prevent pollution.

Q: How do I wash my car and prevent pollution?

A: You can wash your car and prevent stormwater pollution if you: Park the car on grass or an area where the water can filter into the ground and not run off to the storm drain; divert the drainage away from the storm drain; use a hose with a shut-off valve to reduce runoff from the grassy area; dump your soapy water out in the sink or on an area where it will filter into the ground. If you don't have a good place at home to wash your car, we ask you take it to a commercial car wash where the wash water drains to the sanitary sewer.

Q: Is the city or county going to fine me for washing my car in my driveway?

A: Ecology recommends that the cities and counties take a public education approach to residential car washing. Over time, we expect to see people change, just as we did with littering and recycling, but it takes time and public education.

Q: What about the fundraising car washes for schools, youth groups, and Churches?

A: Local governments will provide education to those groups as well, and many already have programs to promote fundraising car washes in ways that avoid pollution, for example: Many local governments lend out pump kits at no cost. The equipment can temporarily plug the storm drain and pump the wash water to the sanitary sewer inlet. Some local governments have a list of self-serve car washes with car wash bays available for rent at low cost for a charity car wash. Some local governments have a list of commercial car washes that provide coupons to sell at a discount for a local commercial car wash.

Natural Yard Care

Spring
March—May

Summer
June-August

Flower & Vegetable Gardens

- Prepare new planting beds and gardens by mixing in 1-3 inches of compost
- Pull weeds when they first start growing while soil is moist and roots are short
- Buy plants that resist disease and use less water
- Mulch flower and vegetable beds with compost or grass clippings to conserve water and control weeds
- Use fabric row covers to keep pests off sensitive vegetables
- Identify bugs before you spray, squash, or stomp—they may be "good bugs" that eat pests.

Trees & Shrub Beds

- Prepare new tree and shrub beds by mixing compost into the entire bed (not just planting holes)
- Plant trees in native soil and mulch well
- Mulch shrub and tree beds with wood chips, leaves, or bark once a year to conserve water, reduce weeds, and feed the soil

Lawns

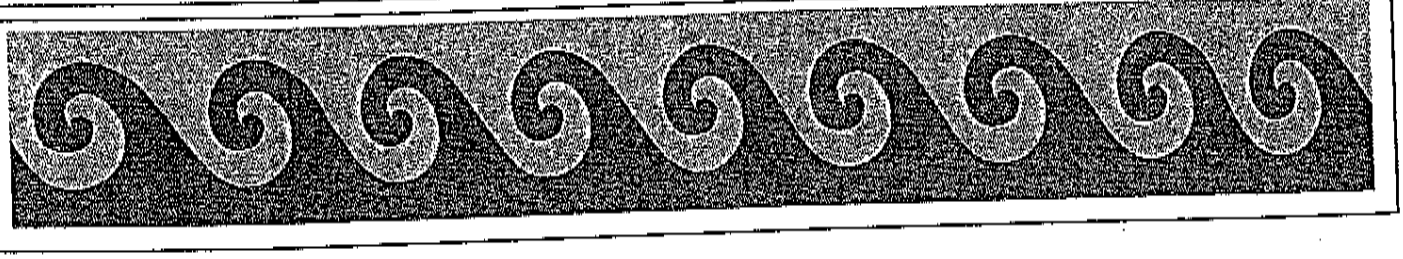
- Start mowing about 2 inches high for most lawns or 1 inch for bentgrass lawns.
- "Grasscycle" - leave the clippings for free fertilizer
- For lawns in poor condition; aerate, overseed, and top-dress with 1.2 inches of compost
- Fertilize lawns if needed in May with "natural organic" or "slow release" fertilizer.
- Mow regularly and leave clippings on the lawn
- Keep mower blades sharp to reduce lawn damage and brown tips
- Consider saving water by letting some lawn areas go brown and dormant until fall

Watering

- Prepare sprinkler systems by testing, adjusting, and repairing leaks
- Lay out soaker hoses in beds and cover with mulch
- Check soil moisture at plant roots before watering—don't water until they need it
- Start and re-check watering systems, and adjust for weather
- Water lawns 1 inch per week, or let go brown and dormant but water enough to moisten root zone once a month
- Water at dawn or in evening to reduce evaporation

Composting

- Harvest compost from you bin. Throw any uncomposted sticks or stalks back in for another cycle
- Add yard debris to compost pile and water to keep moist. Place pile in shade or cover to hold moisture.



National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention

In Washington, urban storm water harms and pollutes streams that provide habitat for fish and wildlife. Alterations to the watershed, such as building homes and other structures, and clearing away trees and shrubs, are the leading causes for storm water pollution. Storm water transports a mixture of pollutants such as petroleum products, heavy metals, animal waste and sediments from construction sites, roads, highways, parking lots, lawns, and other developed lands. In addition, more impervious surface area means less water soaks into the ground. As a result, drinking water supplies are not replenished and streams and wetlands are not recharged. This can lead to water shortages for people and inadequate stream flows and wetland water levels for fish and other wildlife.

Storm drainage systems are designed to decrease the chance of flooding in areas that have been developed with homes, businesses, and roads. The rainwater that used to seep into vegetated areas must now be collected and carried elsewhere. The storm drainage system collects this storm water runoff and carries it to the nearest wetland, lake, or stream. In Algona, the storm drainage system is in the form of ditches that carry the stormwater along a roadside or piece of property. These drainage systems are meant to carry only unpolluted stormwater to the nearest natural body of water. Putting oil, antifreeze, detergents, and other material into the storm drainage system is the same as dumping them directly into a lake or stream.

Keeping pollutants out of the water isn't just a good idea - it's the law. The Washington State Water Pollution Control Law (RCW 90.48) and the King County Code (KCC 9.12) prohibit the discharge of pollutants to the storm drainage system, surface water and groundwater. Direct dumping of material or polluted stormwater can negatively affect every water body it enters. Pollution can cause: algae blooms that cause taste and odor problems and impaired recreation and aesthetics; lesions and tumors in fish and other animals; destruction of fish spawning areas and other habitat for plants and animals; and decrease in fishing, swimming, and boating opportunities.

Let's help protect our water quality!

Comments from the Chief of Police

The Algona Police Department has noticed a spike in vehicle prowls and thefts from vehicles. Our study shows this increase started in June, and in the area of Main Street and Celery Ave between 4th Ave North and 6th Ave North. Your officers have increased patrols, talked to many residents, and continue their investigation of the thefts. Two arrests have been made in conjunction with the investigations and keen observations by one of your police officers. Please report any suspicious activity in your neighborhood by calling 911. Do you part and assure that you leave your vehicles locked, under lighting and nothing of value in plain view from outside the vehicle.

Auburn Valley YMCA

Through a grant from the Muckleshoot Tribe, and partnership with Auburn Regional Medical Center, the Auburn Valley YMCA is offering free support groups and workshops for helping people to quit tobacco and stay quit.

FREE Living Tobacco-Free Weekly Support Groups - Mondays, 5:30 to 6:30 PM at Auburn Valley YMCA **AND** Wednesdays, 6 to 7 PM at Auburn Regional Medical Center.

Please call 253-223-7538 before your first visit to confirm room location.

FREE Accelerate Your Quit! Workshops—Saturdays 12:30 to 3:30 PM July 17, September 25, or November 13. Registration required.

Call 253-223-7538 to sign up.

APPENDIX B

RETURN TO:

City of Algona
Public Works Department
402 Warde Street
Algona, WA 98001-8505

TYPE OF DOCUMENT:	Agreement to Maintain Stormwater Facilities
GRANTOR(S):	
GRANTEE:	City of Algona, a Municipal Corporation
LEGAL DESCRIPTION:	Page ____, Exhibit "__" to this document
ABBREVIATED LEGAL DESCRIPTION:	
ASSESSOR TAX PARCEL I.D. No.:	
NAME OF PROJECT	
ADDRESS OF PROJECT	
PROJECT No.:	
Recording No:	

AGREEMENT TO MAINTAIN STORMWATER FACILITIES
AND TO IMPLEMENT A POLLUTION SOURCE CONTROL PLAN

THIS AGREEMENT made and entered into this _____ day of _____, 20___, by and between the CITY OF ALGONA, a municipal corporation hereinafter referred to as "City", and **GRANTOR'S NAME**, (hereinafter referred to as "Owner").

WHEREAS, this agreement contains specific provisions with respect to maintenance of private storm water facilities to protect water quality by reducing pollutant discharges through the application of Best Management Practices (BMPs), also referred to as pollution source controls. The authority to require maintenance and pollution source control is provided in Ordinance No.____; and

WHEREAS, Owner owns the following-described real property situated in King County, State of Washington, as set forth in Exhibit 'A', which is attached hereto and made a part hereof; and

WHEREAS, Owner has constructed improvements including, but not limited to, building, pavement, and stormwater facilities on the above-described real property; now, therefore,

For and in consideration of the mutual benefits to be derived therefrom, it is mutually agreed as follows:

A. City and Owner enter into this Agreement in order to further the goals of City to insure the protection and enhancement of City's water resources. The responsibilities of each party to this agreement are identified below:

1. Owner shall:

a) Implement the stormwater facility maintenance program included herein as Exhibit "1".

b) Implement the pollution source control program included herein as Exhibit "2".

c) Maintain a record (in the form of a log book) of steps taken to implement the programs referenced in "a" and "b" above. The log book shall be available for inspection by the City staff at Owner's business address:

[insert address]

d) The log book shall catalog the action taken, who took it, when it was done, how it was done, and any problems encountered or follow-up actions recommended. Maintenance items ("problems") listed in Exhibit "1" shall be inspected on a monthly or more frequent basis, as necessary. Owner is encouraged to photocopy the individual checklists in Exhibit "1" and use them to complete its monthly inspections. These completed checklists would then, in combination, comprise the monthly log book.

e) Submit an annual report to City regarding implementation of the programs referenced in "a" and "b" above. The report must be submitted on or before May 15th of each calendar year and shall contain, at a minimum, the following:

(1) Name, address and telephone number of the business, the person or the firm responsible for plan implementation, and the person completing the report.

(2) Time period covered by the report.

(3) A chronological summary of activities conducted to implement the programs referenced in "a" and "b" above. A photocopy of the applicable sections of the log book, with any additional explanation needed, shall normally suffice. For any activities conducted by paid parties not affiliated with Owner, include a copy of the invoice for services.

(4) An outline of planned activities for the next year.

2. *City shall:*

   a. Provide technical assistance to Owner in support of its operation and maintenance activities conducted pursuant to its maintenance and source control programs. Said assistance shall be provided upon request, and as City time and resources permit, at no charge to Owner.

   b. Review the annual report and conduct a minimum of one (1) site visit per year to discuss performance and problems with Owner.

   c. Review this Agreement with Owner and if necessary consider reasonable modification hereto no more than once every three (3) years.

B. Remedies:

1. If City determines that maintenance or repair work is required to be done to the stormwater facility existing on Owner's property, the Director of the Department of Public Works shall give the owner of the property within which the drainage facility is located, and the person or agent in control of said property, notice of the specific maintenance and/or repair required. The Director shall set a reasonable time in which such work is to be completed by the persons who were given notice. If the above required maintenance and/or repair is not completed within the time set by the Director, written notice will be sent to the persons who were given notice stating City's intention to perform such maintenance and bill Owner for all incurred expenses.

2. If at any time City determines that the existing system creates any eminent threat to public health or welfare, the Director may take immediate measures to remedy said threat. Under such circumstances no notice to the persons listed in B.1 above shall be required, but the City shall give the Owner immediate notice of the remedial measures so taken

3. The persons listed in B.1 above shall assume all responsibility for the cost of any maintenance and for repairs to the stormwater facility. Such responsibility shall include reimbursement to City within thirty (30) days of the receipt of the invoice for any such work performed. Overdue payments will require payment of interest at the current legal rate for liquidated judgments. If legal action ensues, any costs or fees incurred by City will be borne by the parties responsible for said reimbursements.

4. In the event Owner of the property fails to pay City within thirty (30) days from the date that the costs were incurred, City shall have the right to file a lien against the real property for all charges and expenses incurred. A lien specifying the

expenses incurred and giving a legal description of the premises sought to be charged shall be filed with the County Auditor within ninety (90) days from the date of the completion of the work. The same may at any time thereafter be collected in the manner provided for foreclosure of mechanic's liens under the laws of the State of Washington.

C. Intent:

1. This Agreement is intended to protect the value and desirability of the real property described above and to benefit all the citizens of the City. It shall run with the land and be binding on all parties having or acquiring from Owner or their successors, any right, title or interest in the property or any part thereof, as well as their title, or interest in the property or any part thereof, as well as their heirs, successors and assigns. They shall inure to the benefit of each present or future successor in interest of said property or any part thereof, or interest therein, and to the benefit of all citizens of City.

(Notary Acknowledgement on Next Page)

IN WITNESS WHEREOF, said Grantor has caused this instrument to be executed this _____day of _____, 20___

GRANTOR

_____ _____

_____ _____

Its: Its

_____ _____

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

On this _____ day of _____, 20__, before me a Notary Public in and for the State of Washington, personally appeared _____ and _____, of _____, a corporation that executed the foregoing instrument, and acknowledged it to be the free and voluntary act of said corporation, for the uses and purposes mentioned in this instrument, and on oath stated that they were authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

_____

Printed
Name: _____
NOTARY PUBLIC in and for the State of Washington
residing at _____
My Commission Expires: _____

CITY OF ALGONA

By: _____ By: _____

David Hill Mayor City Administrator

STATE OF WASHINGTON)
) SS
COUNTY OF PIERCE)

On this _____ day of _____, 20___, before me, the undersigned, a Notary Public in the State of Washington, duly commissioned and sworn, personally appeared David Hill and _____, representing themselves as Mayor and City Administrator, respectively, of the City of Algona, the municipal corporation that executed the foregoing instrument, and acknowledged the instrument to be the free and voluntary act and deed of said municipal corporation for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute the same.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

_____
Printed
Name: _____
NOTARY PUBLIC in and for the State of Washington
residing at _____
My Commission Expires: _____

Approved to Form:

By
:

Attest:

By
:

_____ _____

Kari Sand City Attorney City Clerk

Approved by:

_____
, Public Works Director

TYPE OF DOCUMENT: Agreement to Maintain Stormwater Facilities
GRANTOR(S):
ABBREVIATED LEGAL
DESCRIPTION:
ASSESSOR TAXPARCEL I.D. No.:
NAME OF PROJECT
ADDRESS OF PROJECT
PROJECT No.:

EXHIBIT 'A' – STORMWATER MAINTENANCE AGREEMENT

Legal Description

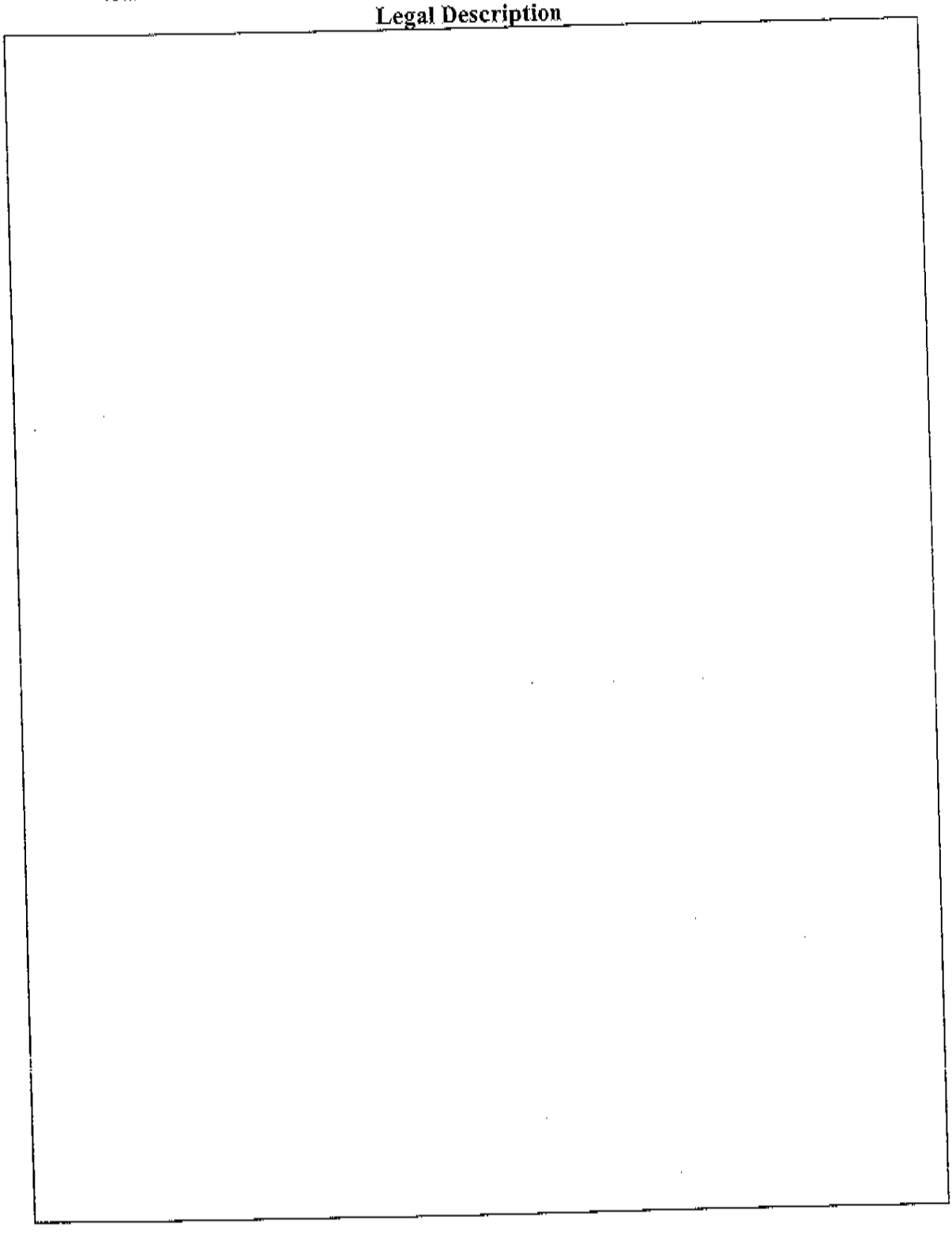


EXHIBIT 1: MAINTENANCE PROGRAM – COVER SHEET

TYPE OF DOCUMENT: Agreement to Maintain Stormwater Facilities
GRANTOR(S):
ABBREVIATED LEGAL DESCRIPTION:
ASSESSOR TAXPARCEL I.D. No.:
NAME OF PROJECT
ADDRESS OF PROJECT
PROJECT No.:
Recording No:

Inspection Period:	ANNUALLY by May 15
Number of Sheets Attached:	
Date Inspected:	
On-site Contact Name (print) (REQUIRED)	
Site Contact Mailing Address:	
Site Contact Telephone number: (REQUIRED)	
Site Contact email address:	
City inspection signature:	

EXHIBIT 1 MAINTENANCE PROGRAM

1. Maintenance checklist for Catch Basins and Inlets

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M, S	General		Trash, debris and sediment in or on basin	Trash or debris in front of the catch basin opening is blocking capacity by more than 10%.	No trash or debris located immediately in front of catch basin opening. Grate is kept clean and allows water to enter.
M				Sediment or debris (in the basin) that exceeds 1/3 depth from the bottom of basin to invert of the lowest pipe into or out of the basin.	No sediment or debris in the catch basin. Catch basin is dug out and clean.
M, S				Trash or debris in any inlet or pipe blocking more than 1/3 of height.	Inlet and outlet pipes free of trash or debris.
M, S				Dead animals or vegetation that could generate odors that would cause complaints or dangerous gases (e.g., methane).	No dead animals or vegetation present within the catch basin.
M, S				Deposits of garbage exceeding 1 cubic foot in volume.	No condition present which would attract or support the breeding of insects or rodents.
M			Structural damage to frame and/or top slab.	Corner of frame extends more than ¾ inch past curb face into the street (if applicable)	Frame is even with curb.
M				Top slab has holes larger than 2 square inches or cracks wider than ¼ inch (intent is to make sure all material is running into the basin)	Top slab is free of holes and cracks.
M				Frame is not sitting flush on top slab i.e., separation of more than ¾ inch of the frame from the top slab.	Frame is sitting flush on top slab.
A			Cracks in basin walls/bottom	Cracks wider than ½ inch and longer than 3 feet, any evidence of soil particles entering catch basin through cracks or maintenance person judges that structure is unsound.	Basin replaced or repaired to design standards. Contact a professional engineer for evaluation.
A				Cracks wider than ½ inch and longer than 1 foot at the joint of any inlet/outlet pipe or any evidence of soil particles entering catch basin through cracks.	No cracks more than ¼-inch wide at the joint of inlet/outlet pipe.
A			Settlement/ Misalignment	Basin has settled more than 1 inch or has rotated more than 2 inches out of alignment.	Basin replaced or repaired to design standards. Contact a professional engineer for evaluation.
M, S			Fire hazard or other pollution	Presence of chemicals such as natural gas, oil, or gasoline. Obnoxious color, odor, or sludge noted.	No color, odor, or sludge. Basin is dug out and clean.

EXHIBIT 1 (Continued)

1. Maintenance checklist for Catch Basins and Inlets (continued)

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M, S			Outlet pipe is clogged with vegetation.	Vegetation or roots growing in inlet/outlet pipe joints that is more than six inches tall and less than six inches apart.	No vegetation or root growth present.
M, S			Vegetation	Vegetation growing across and blocking more than 10% of the basin opening.	No vegetation blocking opening to basin.
M, S			Pollution	Non-flammable chemicals of more than ½ cubic foot per three feet of basin length.	No pollution present other than surface film.
M, S	Catch Basin Cover		Cover not in place	Cover is missing or only partially in place. Any open catch basin requires maintenance.	Catch basin cover is closed.
A			Locking Mechanism Not Working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than ½ inch of thread.	Mechanism opens with proper tools.
A			Cover Difficult to Remove	One maintenance person cannot remove lid after applying 80 lbs of lift; intent is to keep cover from sealing off access to maintenance.	Cover can be removed by one maintenance person.
A	Ladder		Ladder Rungs Unsafe	Ladder is unsafe due to missing rungs, misalignment, rust, cracks, or sharp edges.	Ladder meets design standards and allows maintenance person safe access.
M, S	Metal Grates (if applicable)		Trash and Debris	Trash and debris that is blocking more than 20% of grate surface.	Grate free of trash and debris.
M, S			Damaged or Missing	Grate missing or broken member(s) of the grate.	Grate is in place and meets design standards.

Key:
A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

2. Maintenance Checklist for Conveyance Systems

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M, S	Pipes		Sediment & debris	Accumulated sediment that exceeds 20% of the diameter of the pipe.	Pipe cleaned of all sediment and debris.
M			Vegetation	Vegetation that reduces free movement of water through pipes.	All vegetation removed so water flows freely through pipes.
A			Damaged (rusted, bent, or crushed)	Protective coating is damaged; rust is causing more than 50% deterioration to any part of pipe.	Pipe repaired or replaced.
M				Any dent that significantly impedes flow (i.e., decreases the cross section area of pipe by more than 20%)	Pipe repaired or replaced.
M				Pipe has major cracks or tears allowing groundwater leakage.	Pipe repaired or replaced.
M, S	Open ditches		Trash & debris	Dumping of yard waste such as grass clippings and branches into basin. Unsightly accumulation of nondegradable materials such as glass, plastic, metal, foam, and coated paper.	Remove trash and debris and dispose as prescribed by city Waste Management Section.
M			Sediment buildup	Accumulated sediment that exceeds 20% of the design depth	Ditch cleaned of all sediment and debris so that it matches design.
A			Vegetation	Vegetation (e.g., weedy shrubs or saplings) that reduces free movement of water through ditches.	Water flows freely through ditches. Grassy vegetation should be left alone.
M			Erosion damage to slopes	See "Ponds" Checklist	See "Ponds" Checklist
A			Rock lining out of place or missing (if applicable)	Maintenance person can see native soil beneath the rock lining.	Replace rocks to design standard.
Varies	Catch Basins			See "Catch Basins" Checklist	See "Catch Basins" Checklist
M, S	Swales		Trash & debris	See above for "Ditches"	See above for "Ditches"
M			Sediment Buildup	See above for "Ditches"	Vegetation may need to be replanted after cleaning.
M			Vegetation not growing or overgrown	Grass cover is sparse and weedy or areas are overgrown with woody vegetation.	Aerate soils and reseed and mulch bare areas. Maintain grass height at a minimum of 6 inches for best stormwater treatment or a minimum of 2 inches above the design flow depth. Remove woody growth, recontour, and reseed as necessary.
M, S			Erosion damage to slopes	See Ponds Checklist	See Ponds Checklist

EXHIBIT 1 (Continued)

2. Maintenance Checklist for Conveyance Systems

M			Conversion by homeowner to incompatible use	Swale has been filled in or blocked by shed, woodpile, shrubbery, etc.	If possible, speak with homeowner and request that swale area be restored. Contact City to report problem if not rectified voluntarily.
A			Swale does not drain.	Water stands in swale or flow velocity is very slow. Stagnation occurs.	A survey may be needed to check grades. Grades need to be in 1 - 5% range if possible. If grade is less than 1%, underdrains may need to be installed.

EXHIBIT 1 (Continued)

3. Maintenance checklist for Ponds.

Frequency	Drainage System Feature	X	Problem	Conditions for Check For	Conditions That Should Exist
M, S	General		Trash & debris buildup in pond	Any trash and debris which exceeds 1 cubic foot per 1000 square feet (this is about equal to the amount of trash it would take to fill up one standard size office garbage can). In general, there should be no visual evidence of dumping.	Trash and debris cleared from site.
M, S			Trash rack plugged or missing	Bar screen over outlet more than 25% covered by debris or missing.	Replace screen. Remove trash and debris and dispose as prescribed by City Waste Management Section.
M			Poisonous Vegetation	Any poisonous vegetation which may constitute a hazard to the public. Examples of poisonous vegetation include: tansy ragwort, poison oak, stinging nettles, devils club.	Remove poisonous vegetation. Do not spray chemicals on vegetation without obtaining guidance from the Cooperative Extension Service and approval from the City.
M, S			Fire hazard or pollution	Oil, gasoline, or other contaminants of one gallon or more or any amount found that could: 1) cause damage to plant, animal, or marine life; 2) constitute a fire hazard; or 3) be flushed downstream during rain storms. Presence of chemicals such as natural gas, obnoxious color, odor, or sludge noted.	Find sources of pollution and eliminate them. Water is free from noticeable color, odor or contamination.
M			Vegetation not growing or is overgrown.	For grassy ponds, gross cover is sparse and weedy or is overgrown. For wetland ponds, plants are sparse or invasive species are present. Wetland ponds must be kept wet--water frequently in summer.	For grassy ponds, selectively thatch, aerate and reseed ponds. Grass cutting unnecessary unless dictated by aesthetics. For wetland ponds, hand-plant nursery-grown wetland plants in bare areas. Pond bottoms should have uniform dense coverage of desired plant species.
M			Rodent holes	Any evidence of rodent holes if facility is acting as a dam or berm., or any evidence of water piping through dam or berm via rodent holes.	Rodents destroyed and dam or berm repaired.
M			Insects	When insects such as wasps and hornets interfere with maintenance activities, or when mosquitoes become a nuisance.	Insects destroyed or removed from site.
A			Tree growth	Tree growth does not allow maintenance access or interfere with maintenance activity (i.e., slope mowing, silt removal, or equipment movements). If trees are not interfering with access, leave trees alone.	Trees do not hinder maintenance activities. Selectively cultivate trees such as alder for firewood.

EXHIBIT 1 (Continued)

3. Maintenance checklist for Ponds. (continued)

Frequency	Drainage System Feature	X	Problem	Condition to Check For	Conditions That Should Exist
M	Side slopes of pond		Erosion on berms or at entrance/exit.	Check around inlets and outlets for signs of erosion. Check berms for signs of sliding or settling. Action is needed where eroded damage over 2 inches deep and where there is potential for continued erosion.	Find causes of erosion and eliminate them. Then slopes should be stabilized by using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction.
M	Storage area		Sediment buildup in pond.	Accumulated sediment that exceeds 10% of the designed pond depth. Buried or partially buried outlet structure probably indicates significant sediment deposits.	Sediment cleaned out to designed pond shape and depth; pond reseeded if necessary to control erosion.
A	Pond dikes		Settlement	Any part of dike which has settled 4 inches lower than the design elevation.	Dike should be built back to the design elevation.
A	Emergency/ overflow spillway		Rock missing	Only one layer of rock exists above native soil in area 5 square feet or larger, or any exposure of native soil.	Replace rocks to design standards.

Key:
A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.
Comments:

EXHIBIT 1 (Continued)

4. Maintenance Checklist for Infiltration Systems

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M, S	General		Trash & Debris	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M			Poisonous Vegetation	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M, S			Pollution	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M			Unmowed Grass/ Ground Cover	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M			Rodent Holes	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M			Insects	See "Ponds" Standard No. 3	See "Ponds" Standard No. 3
M	Storage Area		Sediment	A percolation test-pit or test of facility indicates facility is only working at 90% of its designed capabilities.	Sediment is removed and/or facility is cleaned so that infiltration system works according to design.
M			Sheet Cover (if applicable)	Sheet cover is visible and has more than three ¼-inch holes in it.	Sheet cover repaired or replaced.
M, S			Sump Filled With Sediment and Debris (if applicable)	Any sediment and debris filling vault to 10% of depth from sump bottom to bottom of outlet pipe or obstructing flow into the connector pipe.	Clean out sump to design depth.
M, S	Filter Bags		Filled with Sediment and Debris	Sediment and debris fill bag more than ½ full	Replace filter bag or redesign system.
M, S	Rock Filters		Sediment and Debris	By visual inspection, little or no water flows through filter during heavy rain storms.	Replace gravel in rock filter.

Key:
A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

5. Access Roads/Easements

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
W	General		Trash and Debris	Road shall be swept weekly.	Trash and debris cleared from site.
W			Blocked Roadway	Debris which could damage vehicle tires (glass or metal)	Roadway free of debris which could damage tires.
M, S				Any obstructions which reduce clearance above road surface to less than 14 feet.	Roadway overhead clear to 14 feet high.
W, S				Any obstructions restricting the access to a 10-to-20 - foot width for a distance of more than 12 feet or any point restricting access to less than a 10-foot width.	Obstruction removed to allow at least a 12-foot access.
M	Road Surface		Settlement, Potholes, Mush, Spots, Ruts	When any surface defect exceeds 6-inches in depth and 6 square feet in area. In general, any surface defect which hinders or prevents maintenance access.	Road surface uniformly smooth with no evidence of settlement, potholes, mush spots or ruts.
			Vegetation in Road Surface	Weeds growing in the road surface that are more than 6 inches tall and less than 6 inches apart within a 400-square foot area.	Road surface free to weeds taller than 2 inches.
M, S	Shoulders and Ditches		Erosion Damage	Erosion within 1 foot of the roadway more than 8 inches wide and 6 inches deep.	Shoulder free of erosion and matching the surrounding road.
M			Weeds and Brush	Weeds and brush exceed 18 inches in height or hinder maintenance access.	Weeds and brush cut to 2 inches in height or cleared in such a way as to allow maintenance access.
SA	Pavement Markings		Faded Marks	Pavement marks shall be painted yearly.	All pavement markings to be obvious.

Key:

SA = Annual (March or April preferred)
M = Monthly (see schedule)
W = Weekly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

6. Maintenance Checklist for Closed Detention Systems (Pipes/Tanks)

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Shall Exist
M	Storage area (pipe/tank)		Plugged air vents (small pipe that connects catch basin to storage pipe)	One-half of the end area of a vent is blocked at any point with debris and sediment. Plugged vent can cause storage area to collapse.	Vents free of debris and sediment.
M			Debris and Sediment	Accumulated sediment depth exceeds 15% of diameter. Example: 72-inch storage tank would require cleaning when sediment reaches depth of 10 inches.	All sediment and debris removed from storage area. Contact City Public Works for guidance on sediment removal and disposal.
A			Joints between tank/pipe section.	Any crack allowing material to leak into facility.	All joints between tank/pipe sections are sealed.
A			Tank/pipe bent out of shape.	Any part of tank/pipe is noticeably bent out of shape.	Tank/pipe repaired or replaced to design. Contact a professional engineer for evaluation.
M, S	Manhole		Cover not in place.	Cover is missing or only partially in place. Any open manhole requires maintenance.	Manhole is closed.
A			Locking mechanism not working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than ½-inch of thread (may not apply to self-locking lids).	Mechanism opens with proper tools.
A			Cover difficult to remove.	One maintenance person cannot remove lid after applying 80 pounds of lift. Intent is to keep cover from scaling off access to maintenance.	Cover can be removed and reinstalled by one maintenance person.
A			Ladder rungs unsafe	Maintenance person judges that ladder is unsafe due to missing rungs, misalignment, rust, or cracks.	Ladder meets design standards and allows maintenance persons safe access.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

7. Maintenance Checklist for Control Structure/Flow Restrictor (structure that controls rate at which water exits facility)

Frequency	Drainage Systems Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M	Structure		Trash and debris (includes sediment)	Distance between debris buildup and bottom of orifice plate is less than 1 ½ feet	All trash and debris removed.
A			Structural damage	Structure is not securely attached to manhole wall and outlet pipe structure should support at least 1,000 pounds of up or down pressure.	Structure securely attached to wall and outlet pipe.
A				Structure is not in upright position (allow up to 10% from plumb).	Structure in correct position.
A				Connections to outlet pipe are not watertight and show signs of rust.	Connections to outlet pipe are watertight; structure repaired or replaced and works as designed.
M				Any holes (other than designed holes) in the structure.	Structure has no holes other than designed holes.
M, S	Cleanout Gate		Damaged or missing	Cleanout gate is not watertight or is missing.	Gate is watertight and works as designed.
A				Gate cannot be moved up and down by one maintenance person.	Gates moves up and down easily and is watertight.
M, S				Chain leading to gate is missing or damaged.	Chain is in place and works as designed.
A				Gate is rusted over 50% of its surface.	Gate is repaired or replaced to meet design standards.
M, S			Obstructions	Any trash, debris, sediment, or vegetation blocking the plate.	Plate is free of all obstructions and works as designed.
M, S	Overflow Pipe		Obstructions	Any trash or debris blocking (or having the potential of blocking) the overflow pipe.	Pipe is free of all obstructions and works as designed.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

7a. Maintenance Checklist for Pump System

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
M	Pump wetwell		Trash & debris Includes sediment	Probe for sediment and check for floating debris	All trash, debris, and sediment to be removed.
M	Pump float switches		Red alarm light	Are the floats caught-up or intertwined.	Floats should hang freely and at the proper spacing.
M	Pumps		Pumps are kicking out	Check amp draw. If high, pull pump.	Full load amps should be less that 6.9 amps.
A	Pumps		Pumps are not pumping as they should.	Pull pump and check oil reservoir to see if there is water.	Replace oil annually and seals and/or bearing if necessary.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

8. Maintenance Checklist for Energy Dissipaters

Frequency	Drainage System Feature	X	Problem	Conditions to Check For	Conditions That Should Exist
A	Rock Pad		Missing or moved rock	Only one layer of rock exists above native soil in area 5 square feet or larger, or any exposure of native soil.	Replace rocks to design standard.
A	Rock-filled trench for discharge from pond		Missing or moved rock	Trench is not full of rock.	Add large rock (+30 lb. Each) so that rock is visible above edge of trench.
M	Dispersion Trench		Pipe plugged with sediment	Accumulated sediment that exceeds 20% of the design depth.	Pipe cleaned/flushed.
M			Perforations plugged	Over ½ of perforations in pipe are plugged with debris and sediment.	Clean or replace perforated pipe.
M, S			Not discharging water properly	Visual evidence of water at concentrated points along trench (normal condition is a "sheet flow" of water along trench). Intent is to prevent erosion damage.	Trench must be redesigned or rebuilt to standard. Elevation of lip of trench should be the same (flat) at all points.
M, S			Water flows out top of "distributor" catch basin	Maintenance person observes water flowing out during any storm less than the design storm or it is causing or appears likely to cause damage.	Facility must be rebuilt or redesigned to standards. Pipe is probably plugged or damaged and needs replacement.
M, S			Receiving area over-saturated.	Water in receiving area is causing or has potential of causing landslide.	Stabilize slope with grass or other vegetation, or rock if conditions is severe.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (Continued)

9. Maintenance Checklist for Fencing/Shrubbery Screen/Other Landscaping

Frequency	Drainage System Feature	X	Problem	Conditions to Checks For	Conditions That Should Exist
M	General		Missing or broken parts/dead shrubbery	Any debris in the fence or screen that permits easy entry to a facility.	Fence is mended or shrubs replaced to form a solid barrier to entry.
M, S			Erosion	Erosion has resulted in an opening under a fence that allows entry by people or pets.	Replace soil under fence so that no opening exceeds 4 inches in height.
M			Unruly vegetation	Shrubbery is growing out of control or is infested with weeds.	Shrubbery is trimmed and weeded to provide appealing aesthetics. Do not use chemicals to control weeds.
A	Wire fences		Damaged parts	Posts out of plumb more than 6 inches.	Posts plumb to within 1 ½ inches of plumb.
A				Top rails bent more than 6 inches.	Top rail free of bends greater than 1 inch.
A				Any part of fence (including posts, top rails, and fabric) more than 1 foot out of design alignment.	Fence is aligned and meets design standards.
A				Missing or loose tension wire.	Tension wire in place and holding fabric.
A				Missing or loose barbed wire that is sagging more than 2 ½ inches between posts.	Barbed wire in place with less than ¾-inch sag between posts.
A				Extension arm missing, broken, or bent out of shape more than 1 ½ inches.	Extension arm in place with no bends larger than ¾ inch.
A			Deteriorated paint or protective coating.	Part or parts that have a rusting or scaling condition that has affected structural adequacy.	Structurally adequate posts or parts with a uniform protective coating.
M			Opening in fabric.	Openings in fabric are such that an 8-inch diameter ball could fit through.	No openings in fabric.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 1 (continued)

10. Maintenance Checklist for Grounds (Landscaping)

Frequency	Drainage System Feature	X	Problem	Conditions to Checks For	Conditions That Should Exist
M	General		Weeds (nonpoisonous)	Weeds growing in more that 20% of the landscaped area (trees and shrubs only).	Weeds present in less than 5% of the landscaped area.
M			Safety hazard	Any presence of poison ivy or other poisonous vegetation or insect nests.	No poisonous vegetation or insect nests present in landscaped area.
M,S			Trash or litter	See Ponds Checklist	See Ponds Checklist
M, S			Erosion of Ground Surface	Noticeable rills are seen in landscaped areas.	Causes of erosion are identified and steps taken to slow down/spread out the water. Eroded areas are filled, contoured, and seeded.
A	Trees and shrubs		Damage	Limbs or parts of trees or shrubs that are split or broken which affect more than 25% of the total foliage of the tree or shrub.	Trim trees/shrubs to restore shape. Replace trees/shrubs with severe damage.
M				Trees or shrubs that have been blown down or knocked over.	Replant tree, inspecting for injury to stem or roots. Replace if severely damaged.
A				Trees or shrubs which are not adequately supported or are leaning over, causing exposure of the roots.	Place stakes and rubber-coated ties around young trees/shrubs for support.

Key:

A = Annual (March or April preferred)
M = Monthly (see schedule)
S = After major storms.

Comments:

EXHIBIT 2

POLLUTION SOURCE CONTROL PROGRAM

WHAT ARE POLLUTION SOURCE CONTROLS, AND WHY ARE THEY NEEDED?

Pollution source controls are actions taken by a person or business to reduce the amount of pollution reaching surface and ground waters. Controls, also called "best management practices" (BMPs), include:

- Altering the activity (e.g., substitute non-toxic products, recycle used oil, reroute floor drains to sanitary sewer from storm sewer).
- Enclosing or covering the activity (e.g., building a roof)
- Segregating the activity (e.g., diverting runoff away from an area that is contaminated)
- Routing runoff from the activity to a treatment alternative (e.g., to a wastewater treatment facility, sanitary sewer, or stormwater treatment area).

Pollution source controls are needed because of the contamination found in runoff from commercial areas and the effect of this contamination on aquatic life and human health. Research on urban runoff in the Puget Sound area and elsewhere has found oil and grease, nutrients, organic substances, toxic metals, bacteria, viruses, and sediments at unacceptable levels. Effects of contaminated runoff include closure of shellfish harvesting areas and swimming areas, mortality of young fish and other aquatic organisms, tumors on fish, and impairment of fish reproduction.

PROFESSIONAL SERVICES

DESCRIPTION: Presented here are the remaining service businesses including theaters; hotels/motels; finance, banking, hospitals and medical services; nursing homes, schools and universities, and legal, financial and engineering services.

MATERIALS USED AND WASTES GENERATED: The primary concern is runoff from parking areas. Stormwater from parking lots will contain undesirable concentrations of oil and grease, suspended particulates, and metals such as lead, cadmium, and zinc. It will also contain the organic byproducts of engine combustion. Some also produce Dangerous Wastes, for example, hospitals, nursing homes, and other medical services. These materials are stored within the building until disposal.

REQUIRED ACTIONS: The following actions shall be taken to ensure that pollution generated on site shall be minimized:

1. Warning signs (e.g., "Dump No Waste--Drains to Stream") shall be painted or embossed on or adjacent to all storm drain inlets. They shall be repainted as needed.

2. Parking lots shall be swept when necessary to remove debris and, at a minimum, twice a year. Use of newer model high-velocity vacuum sweepers is recommended as they are more effective in removing the more harmful smaller particles from paved surfaces.

3. Sediment removed from ponds/catch basins shall be disposed of in a proper manner. Contact the City for instruction prior to completing this task.

4. No activities shall be conducted on site that are likely to result in short-term high-concentration discharge of pollution to the stormwater system. Such activities may include, but are not limited to, vehicle washing, vehicle maintenance, and cleaning of equipment used in the periodic maintenance of buildings and paved surfaces.

5. Employees shall receive basic instruction regarding the control of pollution from commercial operations. Contact the Public Works Department at (253) 833-2897.

6. Medical offices with high volume customer contacts have potential to influence individuals' water quality practices. Owners are encouraged to have informational brochures provided by the City (see Item 5 above) available in waiting rooms.