

Pollution Source Control Program

[Site or Business Name]

Located at: *[Street Address]*

Assessor's Tax Parcel Number(s): *[11 digit APN, separate by commas if more than one]*

Program Operator/Property Owner: *[The person responsible for administering the program]*

Program Document Prepared by: *[person or company preparing this plan]*

Date: *[Date the program was prepared]*

Table of Contents

Cover Sheet – Program Information

- 1.0 Introduction
 - 1.1 Objectives of this Program
 - 1.2 About this Program
 - 1.3 What are Best Management Practices?
 - 1.3.1 Source Control BMPs
 - 1.3.2 Treatment BMPs
 - 1.4 What is in this document?
- 2.0 Your Stormwater Facilities
- 3.0 Principles of Pollution Prevention
- 4.0 General Source Control BMPs
 - Table 1 – General Source Control BMPs
- 5.0 Specific BMPs for your Site
 - Table 2 – Operation Source Control Practices Summary
 - Implementing this Pollution Source Control Program
 - Formation of a Pollution Prevention Team
 - Employee Training
 - Inspection
 - Record Keeping
- Appendices
 - Appendix A – Commercial and Industrial Activities Worksheet
 - Appendix B – Activity Sheets
 - Appendix C – Annual Report Checklist
 - Appendix D – Spill Control Plan [if required]
 - Appendix E – Integrated Pest Management Plan [if required]

1.0 Introduction

1.1 Objectives of This Program

To implement and maintain best management practices (BMPs) that identify, reduce, eliminate, and/or prevent the discharge of stormwater pollutants.

To prevent violations of surface water quality, groundwater quality, and sediment management standards.

To eliminate the discharges of un-permitted process wastewater, domestic wastewater, non-contact cooling water and other illicit discharges to stormwater drainage systems.

1.2 About This Program

All commercial and industrial properties and activities, including multi-family residential complexes (i.e. apartments, condominiums), non-residential special uses, and government facilities in the **City of Olympia** that have the potential to contribute pollutants to stormwater runoff or directly to receiving waters are required to implement stormwater pollution prevention source control measures. Stormwater runoff may seep into the ground, drain to a storm drain or a drainage ditch, or flow over the ground. Regardless of the way runoff leaves your site, it ends up in a stream river, lake, wetland, groundwater, or Puget Sound.

All known, available and reasonable source control BMPs shall be applied to your site. Source control BMPs shall be selected, designed, and maintained in accordance with Volume IV of the City of Olympia Drainage Design and Erosion Control Manual (DDECM).

Many people believe that stormwater runoff is “clean” and does not harm water quality. This perception is understandable since the amount of pollution from any one place is not usually significant by itself. However, when all these small amounts are combined, they can cause significant pollution problems. Contaminated stormwater can negatively affect every water body it enters. Therefore, this plan provides detailed information to reduce the contamination of surface water, groundwater, and stormwater from your property and/or business.

The federal Clean Water Act mandates that cities and counties control the quality of stormwater runoff. One way to achieve this is to implement pollution prevention measures on individual properties. By following the “Best Management Practices” for your business or stormwater management site as described in this program, you can do your part to protect our streams, groundwater, and Puget Sound.

1.3 What Are Best Management Practices?

Best Management Practices (BMPs) are a set of activities designed to reduce stormwater pollution. BMPs are separated into two broad categories: *source control* and *treatment*. Applicable BMPs for your business have been selected from the most recent published edition of the City of Olympia Drainage Design and Erosion Control Manual, Volume IV, Chapter 3, “Source Control of Pollution”.

1.3.1 Source Control BMPs

Source control BMPs prevent contaminants from entering stormwater runoff by controlling them at the source. Some source control BMPs are *operational*, meaning they are tasks or actions such as checking regularly for leaks and drips from equipment and vehicles, covering materials that have potential to add pollutants to surface water if rainwater comes in contact with the materials, and minimizing use of

pesticides, fertilizers, and insecticides. Other source control BMPs require use of a *structure* to prevent rainwater from contacting materials that will contaminate stormwater runoff such as providing a covered area or berm to prevent clean stormwater from entering work or storage areas.

1.3.2 Treatment BMPs

In contrast, **treatment BMPs** are structures that treat stormwater to remove contaminants. Treatment BMPs typically require planning, engineering design, and construction. A stormwater treatment pond is an example of a *treatment BMP*. No treatment BMP is capable of removing 100 percent of the contaminants in stormwater and the less contaminant in the stormwater the more effective the treatment BMP is.

Just because there is a stormwater collection system serving your property, it does not necessarily mean that the stormwater is treated. Many sites were developed prior to requirements to treat stormwater. Runoff from your property may go directly or indirectly to a stream or wetland without any treatment.

This plan focuses on *source control* BMPs applicable to the routine practices of your business and/or property.

1.4 What is in This Document?

This plan has been customized for your business and/or property relevant to operations that may occur. Changes to site use or types of activities that take place on your property may require an update to this program.

The plan is divided as follows:

Sections

- Introduction
- Your Stormwater Facilities
- Principles of Pollution Prevention
- General Source Control BMPs
- Specific BMPs for Your Site
- Implementing this Pollution Source Control Program

Appendices

- A – Commercial and Industrial Activities Worksheet
- B – Applicable Facility Activity Sheets
- C – Annual Report Checklist
- D – Spill Control Plan (If applicable)
- E – Integrated Pest Management Plan (If applicable)

2.0 Your Stormwater Facilities

[Use this section to provide a description of the site/business and the stormwater structures and facilities found on site. This description should include the areas that the program covers, the types of pollutants expected, and uses of the site. Locations of the permanent stormwater structures and inlets should be identified. The ultimate destination of stormwater runoff or potential pollutants should be clearly described. The location of natural and/or man-made drainage paths where pollutants may potentially leave the site shall be included here. Provide maps, drawings, or figures of the site as an attachment to this program if necessary.]

3.0 Principles of Pollution Prevention

This section describes the 15 general principles of pollution prevention that every business owner should consider. Most of these practices are common sense, “housekeeping” types of solutions to pollution prevention.

1. Avoid the activity or reduce its occurrence

Avoid potentially polluting activity or do it less frequently. Apply lawn/landscape care chemicals following directions and only as needed. Do not apply herbicides right before it rains.

2. Move the activity indoors

Move a potentially polluting activity indoors out of the weather. This prevents runoff contamination and provides more control for a cleanup if a spill occurs.

3. Cleanup spills quickly

Promptly contain and cleanup solid and liquid pollutant leaks and spills on exposed soil, vegetation, or paved areas. Use readily available absorbents such as kitty litter to absorb spills and then sweep up the material and dispose of it properly. Repair leaks on vehicles and equipment.

4. Use less material

Do not buy or use more material than you really need. This not only helps keep potential disposal, storage and pollution problems to a minimum, but will probably save you money.

5. Use the least toxic materials available

Investigate the use of materials that are less toxic. For example, replace a caustic-type detergent or solvent with a more environmentally friendly product. If you do switch to a biodegradable product, remember that only uncontaminated water is allowed to enter the stormwater drainage system.

6. Create and maintain vegetated areas near activity locations

Vegetation can filter pollutants out of stormwater. Route stormwater from parking and work areas through vegetated areas. Remember that wastewater other than stormwater runoff, such as wash water, must be discharged to a wastewater collection system (sewer or septic system).

7. Locate activities as far as possible from surface drainage paths

Locate activities away from storm drains, ditches, streams, and other water bodies to reduce the potential to pollute. It will take longer for material to reach the drainage features providing more time to react to a spill, or “housekeeping” issue and protect local waters long enough to cleanup.

8. Maintain stormwater drainage systems

Pollutants concentrate over time in catch basins, ditches, and storm drains. When a storm event occurs, turbulent runoff can mobilize these pollutants and carry them to receiving waters. Perform regular maintenance on stormwater facilities to prevent this from occurring.

9. Reduce, reuse, and recycle as much as possible

Look for ways to recycle. This saves money and keeps hazardous and non-hazardous materials out of landfills. Contact the City of Olympia Waste Resources division for more information on recycling opportunities in the City.

10. Be an advocate for stormwater pollution prevention

Help friends, neighbors, and business associates find ways to reduce stormwater pollution in their activities. Most people want clean water and do not pollute intentionally. Share your ideas and the BMPs in this plan to get them thinking about how their everyday activities affect water quality.

11. Report problems

We all must do our part to protect water, fish, wildlife, and our own health by implementing proper BMPs, and reporting water quality problems that we observe. Call the City of Olympia Storm and Surface Water Utility at 360-753-8333 to report dumping to storm drains or ditches.

12. Provide oversight and training

Talk to your employees, or if you are a landlord talk to your tenants, to ensure they understand the pollution prevention source control measures and BMPs described in this program. If you are a landlord, you are still responsible for the activities of your tenants. Monitor the activities of your tenants to ensure that they are carrying out the principles of this program. See Section 6.0 of this document regarding implementation of this program.

13. Dust control

Sweep parking and storage areas regularly to collect and dispose of dust and debris that could contaminate stormwater. Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch or any receiving water (stream, wetland, lake, etc.). Do not use oil or other petroleum products for dust control. Only light watering of dirt or gravel roads or parking areas should be conducted to prevent any runoff of stormwater from the surface.

14. Eliminate illicit connections

Occasionally businesses have internal building drains, sump overflows, sump pumps, outdoor sinks and showers, and even sanitary sewer and septic system pipes that were inadvertently connected to the storm drainage system in the past.

Examine the plumbing system for your business to determine if illicit connections exist. Toilets, sinks, appliances, showers, bathtubs, floor drains, industrial process waters, and other indoor activities found to be connected to the stormwater drainage system must be immediately rerouted to the sanitary sewer or septic system, holding tanks, or process treatment system. For assistance in methods to detect and eliminate illicit connections contact the City of Olympia Storm and Surface Water Utility.

15. Dispose of waste properly

Every business and residence in City of Olympia must dispose of solid and liquid wastes and contaminated stormwater properly. There are generally four options for disposal depending on the type of materials. These options include:

- Sanitary sewer and septic systems.

- Recycling facilities
- Municipal solid waste disposal facilities
- Hazardous waste treatment, storage and disposal facilities.

4.0 General Source Control BMPs

This section briefly summarizes source control BMPs and corrective actions that are generally applicable to all types of sites, not just your property. In the next section, BMPs specific to your business will be identified, but these general BMPs should be implemented at all times regardless of site-specific activities. In some cases, the Activity Sheets in Appendix B will reference the BMPs in this section. In that case, the *City of Olympia Drainage Design and Erosion Control Manual*, Volume IV, Section 3.6.4 should be referenced for more detail on these general source control BMPs.

Table 1: General Source Control BMPs

BMP CATEGORY	DESCRIPTION	✓
S.1 Eliminate Illicit Stormwater Drainage System Connections	1. Use building and site plans and examine plumbing systems to determine if illegal connections exist. 2. Consider dye testing to determine where a pipe or structure drains. 3. Consider smoke testing (best done by qualified professional). 4. Contact City of Olympia Storm & Surface Water Utility for assistance. 5. Plug, disconnect or reroute to sewer/septic system any drains found connected to the stormwater drainage system.	
S.2 Dispose of Collected Runoff and Waste Materials Properly	1. Discharge liquid wastes and contaminated stormwater to the sanitary sewer – contact LOTT or local sewer provider for restrictions. 2. Use sumps or holding tanks for temporary storage. 3. Consider recycling materials where feasible. 4. Dispose of solid wastes to City of Olympia Waste Resources. 5. Dispose of dangerous or hazardous wastes at permitted facility. 6. Contact City of Olympia Waste Resources for disposal options.	
S.3 Connect Process Water Discharges to Sanitary Sewer, Holding Tank, or Water Treatment System	1. Required for all industrial and commercial activities that generate contaminated process wastewater. 2. Discharge to sanitary sewer - contact LOTT or local sewer provider for restrictions. 2. Discharge to sumps or holding tanks for temporary storage – have tanks pumped for proper disposal. 3. Construct wastewater treatment system – contact Ecology for permitting requirements. 4. If activity is conducted outdoors cover the activity and/or construct curbs, dikes or berms to prevent stormwater run-on.	
S.4 Cover the Activity with a Roof or Awning	1. Construct simple roof or awning to prevent contact with stormwater. 2. Contact City of Olympia Community Planning and Development for information on permits. 3. The area of roof cover should be sufficient to prevent precipitation from reaching the covered materials.	

BMP CATEGORY	DESCRIPTION	✓
S.5 Cover the Activity with an Anchored Tarpaulin or Plastic Sheet	1. Use where raw materials are stockpiled outdoors. 2. Use weights such as bricks, tires, or sandbags to anchor the cover. 3. Use pins or stakes to anchor tarpaulin to the ground. 4. Locate stockpile to provide wind protection (leeward side of buildings, landscaping, etc.) 5. Inspect daily.	
S.6 Pave the Activity Area and Slope to a Sump or Holding Tank	1. Apply to activities that cannot be covered adequately but that may be susceptible to spills such as chemical storage areas. 2. Enclose area within a dike, curb or berm. 3. Provide a sump or holding tank to contain spills until the liquids can be pumped out and disposed properly. 4. Ensure paving is compatible with stored material, e.g. gasoline can breakdown asphalt – use concrete paving.	
S.7 Surround the Activity Area with a Curb, Dike, or Berm or elevate the Activity	1. Containment is most applicable to spill control situations. 2. If used to prevent run-on to a covered activity area place the berm underneath the covering so rain water will not pond inside it. 3. Size containment area for 6-month storm unless other containment sizing restrictions apply. 4. Install a valve in storm drainage line from area so that excess clean stormwater can be drained from area. 5. For storage of small items, consider a tub, wading pool, or specially manufactured containment systems. 6. For spill control the volume of the containment should be the greater of either 110% of the volume of the largest tank, or 10% of the volume of all tanks if there are multiple tanks.	
S.8 Implement Integrated Pest Management (IPM)Measures	1. An IPM plan may be required by Thurston County Environmental Health. 2. Commercial, agricultural, municipal and other large-scale pesticide users should adhere to integrated pest management principles. 3. Guidance information is available from Thurston County Environmental Health, the Washington State Department of Agriculture and Washington State University Extension Service. 4. If an IPM plan is required, include as Attachment E.	
S.9 Clean Catch Basins	1. Catch basins should be cleaned regularly. 2. Several companies offer catch basin cleaning services; check the yellow pages under “sewer cleaning equipment and supplies.” 3. Do not flush catch basin sumps into the catch basin outlet pipe. 4. Check your Stormwater Facility Maintenance Plan for additional information on catch basin cleaning frequency and inspection requirements.	

5.0 Specific BMPs for Your Site

Every business in the City of Olympia is required to use the BMPs described in the City of Olympia Drainage Design and Erosion Control Manual to control stormwater pollution.

Table 2 on the following pages contains a summary list of all activities identified on the worksheet (Appendix A – Activities Worksheet) as occurring on your site. This table should be posted in an appropriate location for employees to see. Full descriptions of the source control BMPs specified in Table 2 can be found in Appendix B – Activity Sheets and the City of Olympia Drainage Design and Erosion Control Manual. Where appropriate, the general source control BMPs from Section 4.0 are referenced in the Activity Sheets.

[This Area Intentionally Blank]

[Insert Business Name, Same As Cover]

Table 2 – Operational Source Control Practices Summary

[Note: S434 is listed as an example and can be removed if not applicable. Complete similar entries for all applicable activities. Add or delete rows to table as necessary to complete the table.]

[Note: S411 is required for stormwater facilities located within City drinking water (wellhead) protection areas. It is optional for stormwater facilities not located within a wellhead protection area.]

ACTIVITY	SOURCE CONTROL BMPs <small>(SEE ACTIVITY SHEET IN ATTACHMENT B FOR MORE INFORMATION)</small>	√
S434 Cleaning or Washing Tools, Engines, and Manufacturing Equipment	Required Practices: <ol style="list-style-type: none"> 1. Eliminate illicit connections to storm drain system 2. Train employees to control washing operations 3. Washwater should never discharge to stormwater system 4. Pressure wash only in designated area provided with sump drain Suggested Practices: <ol style="list-style-type: none"> 1. Use least toxic cleaner capable of doing the job. 2. Limit amount of water used 3. Recycle washwater if possible 	
S411 Landscaping and Lawn/Vegetation Management	Required practice for stormwater facilities located within a designated drinking water (wellhead) protection area: <ol style="list-style-type: none"> 1. Only slow release fertilizers shall be applied for the life of the development at a maximum amount of 4 pounds of nitrate as Nitrogen annually and no more than 1 pound per application for every 1,000 square feet of turf grass. Only fertilizer formulas with a minimum of 50% water insoluble form of nitrogen are permitted for use. Approved water insoluble forms of nitrogen include sulfur and/or polymer coated fertilizers, Isobutylidene Diurea (IBDU), Methylene Urea and Ureaform, and organic fertilizers registered with Washington Department of Agriculture. (OMC 18.32.225) 	

ACTIVITY	SOURCE CONTROL BMPS (SEE ACTIVITY SHEET IN ATTACHMENT B FOR MORE INFORMATION)	v

ACTIVITY	SOURCE CONTROL BMPS (SEE ACTIVITY SHEET IN ATTACHMENT B FOR MORE INFORMATION)	v

6.0 Implementing this Pollution Source Control Program

This section provides general guidance for implementation of this Pollution Source Control Program for your site. While not a comprehensive list of steps to implement this program, the following information will assist in using this document effectively. Inspection tasks, record keeping, and reporting should be completed in conjunction with your Stormwater Facility Maintenance Program, if applicable to your site.

6.1 Formation of a Pollution Prevention Team

The person designated as Program Operator for the site or business shall be responsible for stormwater pollution control. The Program Operator – or their designee – will hold regular meetings with the team to review the overall operation of the BMPs in this program. The Program Operator will establish responsibilities for inspections, operation, maintenance, and for emergencies. The Program Operator will be responsible for training all team members and employees in the operation, maintenance, inspection of BMPs, and reporting procedures. The Program Operator will be the primary contact for the City of Olympia regarding this Pollution Source Control Program and its implementation.

6.2 Employee Training

Training programs may be tailored as necessary by the Program Operator. At a minimum, all employees that work in pollutant source areas shall have training in:

- Identifying pollutant sources
- Understanding pollutant control measures and BMPs
- Responding to spills
- Pollutant handling practices that are environmentally acceptable. Particularly those related to vehicle/equipment liquids such as fuels, and vehicle/equipment cleaning.

6.3 Inspections

Qualified personnel shall conduct visual inspections monthly. Inspectors shall make and maintain a record of each inspection on-site. Inspections shall:

- Verify the accuracy of the pollutant source descriptions in this program.
- Verify the performance of the stormwater operational and structural source controls and treatment BMPs.
- Reflect current conditions on the site.
- Include written observations of the presence of floating materials, suspended solids, oil and grease, discoloration, turbidity and odor in the stormwater discharges; in outside vehicle maintenance/repair; and liquid handling, and storage areas. In areas where acid or alkaline materials are handled or stored use a simple litmus or pH paper to identify those types of stormwater contaminants where needed.
- Eliminate or obtain a permit for unpermitted non-stormwater discharges to storm drains or receiving waters, such as process wastewater and vehicle/equipment washwater.

When site inspections warrant or activities on the site are no longer applicable to the BMPs found in this program, this Pollution Source Control Program document shall be revised by the Program Operator as necessary to comply with local, state, and federal water quality requirements. For assistance in revising your Pollution Source Control Program, contact City of Olympia Water Resources – Storm and Surface Water Utility for guidance.

6.4 Record Keeping

Program Operators shall retain the following reports for five years:

- Visual inspection reports which should include:
 - Time and date of the inspection
 - Locations inspected
 - Statement on status of compliance with your permit (if you hold a NPDES Permit with Washington State Department of Ecology)
 - Summary report of any remediation activities required
 - Name, title, and signature of person conducting the inspection
- Reports on spills of oil or hazardous substances in greater than Reportable Quantities (Code of Federal Regulations Title 40 Parts 302.4 and 117). Report spills of the following: antifreeze, oil, gasoline, or diesel fuel, that cause:
 - A violation of the State of Washington's Water Quality Standards
 - A film, sheen, or discoloration of the waters of the State or adjoining shorelines
 - A sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

- ***To report a spill or to determine if a spill is a substance of a Reportable Quantity, call the Washington State Department of Ecology regional office and ask for an oil spill operations or a dangerous waste specialist:***

Northwest Region (425)649-7000

Southwest Region (360)407-6300

Eastern Region (509)329-3400

Central Region (509)575-2490

In addition, call the Washington Emergency Management Division at 1-800-258-5990 or 1-800-OILS-911 AND the National Response Center at 1-800-424-8802.

Also, refer to Emergency Spill Response in Washington State, Publication # 97-1165-CP.

- Maintain records of all related pollutant control and pollutant generating activities such as training, materials purchased, material use and disposal, maintenance performed, etc.

Appendix A

Commercial and Industrial Activities Worksheet

This worksheet and the associated BMPs are organized by business activity. The goal of BMPs is to ensure that **only uncontaminated stormwater is discharged** into any stormwater drainage system.

Complete the entire worksheet by checking the appropriate boxes for all activities that occur at your work place. If you checked off any of the activities **that are being performed outdoors or can drain to the stormwater drainage system**, use the activity code on the worksheet to find the BMPs recommended for you in Chapter 3 of Volume IV of the *City of Olympia Drainage Design and Erosion Control Manual*. If you perform an activity indoors and control all discharges from the activity (e.g., process water, washwater, lubricants, solvents, fugitive dust, granular material, blow down waste) so that no stormwater exposure occurs, you do not have to institute BMPs for that activity.

If you have questions, please contact the City of Olympia Storm & Surface Water Utility at (360) 753-8333. They can provide assistance over the phone and at your business site.

BMP #	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
Cleaning and Washing Activities			
S434	Cleaning or Washing of Tools, Engines, and Manufacturing Equipment <ul style="list-style-type: none"> Includes parts washers and all types of manufactured equipment components. 		
S435	Cleaning or Washing of Cooking Equipment <ul style="list-style-type: none"> Includes vents, filters, pots and pans, grills, and related items. 		
S431	Washing, Pressure Washing, and Steam Cleaning of Vehicles/Equipment/Building Structures <ul style="list-style-type: none"> Includes cleaning and washing at all types of establishments, including fleet vehicle yards, car dealerships, car washes, and maintenance facilities. 		
S436	Collection and Disposal of Wastewater from Mobile Interior Washing Operations <ul style="list-style-type: none"> Includes carpet cleaners, upholstery cleaners, and drapery cleaners. 		
Transfer of Liquid or Solid Materials			
S412	Loading and Unloading Areas for Liquid or Solid Material <ul style="list-style-type: none"> Includes raw materials, intermediate products, finished products, waste, or fuel. 		
S409	Fueling at Dedicated Stations <ul style="list-style-type: none"> Includes gas stations, pumps at fleet vehicle yards or shops, and other privately owned pumps. 		
S414	Engine Repair and Maintenance <ul style="list-style-type: none"> This covers oil changes and other engine fluids. 		

BMP #	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
S419	Mobile Fueling of Vehicles and Heavy Equipment <ul style="list-style-type: none"> Includes fleet fueling, wet fueling, and wet hosing. 		
Production and Application Activities			
S437	Concrete and Asphalt Mixing and Production at Stationary Sites <ul style="list-style-type: none"> Applies to mixing of raw materials on site to produce concrete or asphalt. 		
S438	Concrete Pouring, Concrete Cutting, and Asphalt Application at Temporary Sites <ul style="list-style-type: none"> Includes construction sites, and driveway and parking lot resurfacing. 		
S439	Manufacturing and Post-processing of Metal Products <ul style="list-style-type: none"> Includes machining, grinding, soldering, cutting, welding, quenching, rinsing, etc. 		
S432	Wood Treatment Areas <ul style="list-style-type: none"> Includes wood treatment using pressure processes or by dipping or spraying. 		
S403	Commercial Composting <ul style="list-style-type: none"> Includes commercial composting facilities operating outside. 		
S411	Landscaping and Vegetation Management Activities, Including Vegetation Removal, Herbicide and Insecticide Application, Fertilizer Application, Irrigation, Watering, Gardening, and Lawn Care <ul style="list-style-type: none"> Includes businesses involved in landscaping, applying pesticides and managing vegetation. Includes specific requirements for stormwater facilities located within a City drinking water (wellhead) protection area 		
S440	Painting, Finishing, and Coating of Vehicles, Boats, Buildings, and Equipment <ul style="list-style-type: none"> Includes surface preparation and the applications of paints, finishes, and/or coatings. 		
S404	Commercial Printing Operations <ul style="list-style-type: none"> Includes materials used in the printing process. 		
S418	Manufacturing Activities – Outside <ul style="list-style-type: none"> Includes outdoor manufacturing areas. 		
S441	Agricultural Crop Production <ul style="list-style-type: none"> Includes commercial scale farming. 		
S442	Application of Pesticides, Herbicides, Fungicides and Rodenticides for purposes other than landscaping <ul style="list-style-type: none"> Includes moss removal and outdoor insect extermination. 		
Storage and Stockpiling Activities			
S429	Storage or Transfer (Outside) of Solid Raw Materials, By-products, or Finished Products		

BMP #	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
S443	Storage and Treatment of Contaminated Soils <ul style="list-style-type: none"> This applies to contaminated soils that are excavated and left on site. 		
S444	Temporary Storage or Processing of Fruits or Vegetables <ul style="list-style-type: none"> Includes processing activities at wineries, fresh and frozen juice makers, and other food and beverage processing operations. 		
S445	Storage of Solid Wastes and Food Wastes <ul style="list-style-type: none"> Includes regular garbage and all other discarded non-liquid items. 		
S423	Recyclers and Scrap Yards <ul style="list-style-type: none"> Includes scrapped equipment, vehicles, empty metal drums, and assorted recyclables. 		
S446	Treatment, Storage, or Disposal of Dangerous Wastes <ul style="list-style-type: none"> Refer to Ecology for more information 		
S427	Storage of Liquid, Food Waste, or Dangerous Waste Containers <ul style="list-style-type: none"> Includes containers located outside a building and used for temporary storage. 		
S428	Storage of Liquids in Permanent Aboveground Tanks <ul style="list-style-type: none"> Includes all liquids in aboveground tanks. 		
S421	Parking and Storage for Vehicles and Equipment <ul style="list-style-type: none"> Includes public and commercial parking lots 		
S447	Storage of Pesticides, Fertilizers, or other products that can leach pollutants		
Construction and Demolition Activities			
S448	Demolition of Buildings <ul style="list-style-type: none"> Applies to removal of existing buildings and subsequent clearing of the rubble. 		
S449	Building Repair, Remodeling, and Construction <ul style="list-style-type: none"> Applies to construction of buildings, general exterior building repair work and remodeling of buildings. 		
Dust Control and Soil and Sediment Control			
S407	Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots		
S408	Dust Control at Manufacturing Sites <ul style="list-style-type: none"> Includes grain dust, sawdust, coal, gravel, crushed rock, cement, and boiler fly ash. 		
S425	Soil Erosion and Sediment Control (ESC) at Industrial Sites <ul style="list-style-type: none"> Includes industrial activities that take place on soil. 		
Other Activities			
S402	Commercial Animal Handling Areas <ul style="list-style-type: none"> Includes kennels, fenced pens, veterinarians, and businesses that board animals. 		

BMP #	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
S413	Log Sorting and Handling <ul style="list-style-type: none"> Applies to log yards typically located at sawmills, ports, and pulp mills. 		
S401	Boat Building, Mooring, Maintenance, and Repair <ul style="list-style-type: none"> Includes all types of maintenance, repair, and building operations. 		
S450	Logging <ul style="list-style-type: none"> Applies to logging activities that fall under Class IV general forest practices. 		
S451	Mining and Quarrying of Sand, Gravel, Rock, Minerals, Peat, Clay, and Other Materials <ul style="list-style-type: none"> This does not include excavation at construction sites. 		
S433	Swimming Pool and Spa Cleaning and Maintenance <ul style="list-style-type: none"> Includes every swimming pool and spa not at a single family residence. Commercial pool cleaners are included here for all pools. 		
S405	De-icing and Anti-icing Operations for Airports and Streets <ul style="list-style-type: none"> Includes aircraft, runways/taxiways, streets and highways. 		
S424	Roof and Building Drains at Manufacturing and Commercial Buildings <ul style="list-style-type: none"> These sites will be referred to ORCAA. 		
S430	Urban Streets <ul style="list-style-type: none"> BMPs for addressing pollutants found on paved surfaces, including street sweeping. 		
S422	Railroad Yards		
S415	Maintenance of Public and Private Utility Corridors and Facilities <ul style="list-style-type: none"> Includes public and private utility maintenance activities. 		
S416	Maintenance of Roadside Ditches		
S417	Maintenance of Stormwater Drainage and Treatment Facilities		
S426	Spills of Oil and Hazardous Substances		

APPENDIX B

Activity Sheets

Best Management Practices for Commercial and Industrial Activities

This Appendix coordinates with the worksheet in Appendix A. That worksheet and the BMPs listed are organized by the different activities that businesses perform. Use the Activity Sheets in Chapter 3, Volume IV of the City of Olympia Drainage Design and Erosion Control Manual to prepare a summary of the applicable required and suggested BMPs for inclusion in Table 2 of this document.

If you checked the column for activities performed outdoors, match the number from the worksheet to the activities listed in Volume IV, Section 3.6.3 of the *City of Olympia Drainage Design and Erosion Control Manual* to find the suggested BMPs you should implement. **You may make photocopies of the applicable Activity Sheets and insert them in this section.**

Explanation of Required BMPs

Every business in City of Olympia is required to use the BMPs described in the *City of Olympia Drainage Design and Erosion Control Manual* to control stormwater pollution. In some instances, there are BMPs mandated by various federal, state, or county laws. If you are subject to those laws and regulations via another permit or formal regulatory approval, you are encouraged, but not required to use additional BMPs to further protect water quality.

The BMPs outlined in this section are focused on source control: that is, methods to prevent pollution from reaching stormwater in the first place. The use of source control BMPs is always the first line of defense in stormwater pollution prevention.

[Attach Applicable Activity Sheets From The City Of Olympia Drainage Design And Erosion Control Manual, Volume IV, Section 3.6.3. Photocopies Are Acceptable Here.]

APPENDIX C
Annual Report Checklist

SOURCE CONTROL ANNUAL REPORT CHECKLIST

Your stormwater pollution prevention plan should be reviewed at least annually and updated as required. The following checklist should be completed and submitted to City of Olympia along with the annual report required as part of your Stormwater Maintenance Agreement with City of Olympia. If your project did not require a Stormwater Maintenance Agreement and Maintenance Plan then submittal of this annual report is not required. If submittal is required, it should be mailed to: City of Olympia Water Resources – Environmental Services; PO Box 1967, Olympia, WA 98507. The report may also be delivered directly to Olympia City Hall at 601 4th Avenue East, Olympia WA 98507.

Annual reporting for stormwater facility inspections is due to the City of Olympia by May 15th.

Business Name: _____

Address: _____

Assessor Tax Parcel Number: _____

Completed By: _____

Signature: _____

Date: _____

✓	Activity	Notes
	Review Activity Checklist (Appendix A) – Verify still current. List any new activities.	
	Review and Update Appendix B if new activities are identified.	

✓	Activity	Notes
	Review and Update Table 2 for New Activities	
	Was any employee training held? If so describe.	
	Review Table 2 and verify compliance. Attach copy indicating each item has been checked.	
	Describe any significant events such as spills, illicit discharges detected/fixed, etc.	
	Was catch basin cleaning conducted? If so when, and by what company?	

✓	Activity	Notes
	Conduct visual inspection of property for evidence of leaks, improper operations, etc. Note any items requiring attention.	
	Is a copy of Table 2 posted where visible to employees?	
	Have any additional structural or treatment BMPs been implemented on the site since the last annual report was submitted? If so describe.	

✓	Activity	Notes
	Any other items related to stormwater source control not noted above. Describe.	

✓	Activity	Notes
	Do you desire any technical assistance from City of Olympia related to stormwater issues? If so, indicate contact person and phone number.	

Appendix D

Spill Control Plan

[Note: If Required, Attach The Completed Spill Control Plan. Otherwise, This Appendix May Be Removed]

Spill Control Planning Guidance

If required to prepare and implement an Emergency Spill Cleanup Plan follow the appropriate guidance required for your activity. General guidelines for implementing an Emergency Spill Cleanup Plan include:

- Prepare an Emergency Spill Control Plan (SCP), which includes:
 - A description of the facility including the owner's name and address and the name of the designated person with spill cleanup and notification responsibility.
 - The nature of the activity at the facility;
 - The general types of chemicals used or stored at the facility;
 - A site plan showing the location of storage areas for chemicals, the locations of storm drains, the areas draining to them, and the location and description of any devices to stop spills from leaving the site such as positive control valves;
 - Cleanup procedures;
 - Notification procedures to be used in the event of a spill, such as notifying key personnel, the fire department, Ecology, State Patrol, and the local Sewer Authority.
- Train key personnel. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to be contacted in the event of a spill;
- Update the SCP regularly;
- Immediately notify Ecology and the local Sewer Authority if a spill may reach sanitary or storm sewers, ground water, or surface water, in accordance with spill reporting requirements;
- Immediately clean up spills. Do not use emulsifiers unless an appropriate disposal method for the resulting oily wastewater is implemented. Absorbent material shall not be washed down a floor drain or storm sewer; and,
- Locate emergency spill containment and cleanup kit(s) in high potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

Spill Kit Contents: Spill kits should include appropriately lined drums, absorbent pads, and granular or powdered materials for neutralizing acids or alkaline liquids where applicable. In fueling areas: absorbent should be packaged in small bags for easy use and small drums should be available for storage of absorbent and/or used absorbent. Spill kits should be deployed in a manner that allows rapid access and use by employees.

[Attach Spill Control Plan]

Appendix E

Integrated Pest Management Plan

[Note: If You Are Required To Prepare An Integrated Pest Management Plan Attach The Completed Plan To This Section. If No IPMPs Required For Your Project, This Section May Be Removed.]

Integrated Pest Management Guidance

Integrated Pest and Vegetation Management (IPM) is a natural, long-term, ecologically-based systems approach to controlling pest populations. IPM is used to reduce pest populations, maintain them at levels below those causing health concerns or economic damage. The goals of IPM are to both encourage optimal selective pesticide use (away from prophylactic, broad spectrum use), and to maximize natural controls to minimize environmental side effects.

Thurston County requires Integrated Pest Management Plans for certain land use projects located in Category I or II Aquifer Recharge Areas, where drinking water sources are vulnerable to contamination. These include:

1. Subdivisions of 10 lots or greater (excluding large lots).
2. Any land use project that incorporates maintained open space totally more than five acres.
3. All land use projects located within a delineated wellhead capture zone for a Group A public water supply.

For more information on Thurston County's IPM policy, visit the County web site at:
<http://www.co.thurston.wa.us/health/ehipm/index.html>

Introduction

True integrated pest and vegetation management is a powerful approach that anticipates and prevents most problems through appropriate cultural practices and careful observation. Knowledge of the life cycles of host plants and both beneficial and pest organisms is also important. The integrated pest management section of this guidance is adapted from *Least Toxic Pest Management for Lawns* by Sheila Daar. Following the integrated pest management process gives you the information you need to minimize damage by weeds, diseases, and pests and to treat those problems with the least toxic approaches.

The IPM Process

Step One: Correctly identify problem pests and understand their life cycle.

Learn more about the pest. Observe it and pay attention to any damage that may be occurring. Learn about the life cycle. Many pests are only a problem during certain seasons, or can only be treated effectively in certain phases of the life cycle.

Step Two: Establish tolerance thresholds for pests.

Every landscape has a population of some pest insects, weeds, and diseases. This is good because it supports a population of beneficial species that keep pest numbers in check. Beneficial organisms may compete with, eat, or parasitize disease or pest organisms. Decide on the level of infestation that must be exceeded before treatment needs to be considered. Pest populations under this threshold should be monitored but don't need treatment. For instance, European crane flies usually don't do serious damage

to a lawn unless there are 25 to 40 larvae per square foot feeding on the turf in February (in normal weather years). Also, most people consider a lawn healthy and well maintained even with up to 20 percent weed cover, so treatment, other than continuing good maintenance practices, is generally unnecessary.

Step Three: Monitor to detect and prevent pest problems.

Regular monitoring is a key practice to anticipate and prevent major pest outbreaks. It begins with a visual evaluation of the lawn or landscape's condition. Take a few minutes before mowing to walk around and look for problems. Keep a notebook, record when and where a problem occurs, then monitor for it at about the same time in future years. Specific monitoring techniques can be used in the appropriate season for some potential problem pests, such as European crane fly.

Step Four: Modify the maintenance program to promote healthy plants and discourage pests.

A healthy landscape is resistant to most pest problems. Lawn aeration and over-seeding along with proper mowing height, fertilization, and irrigation will help the grass out-compete weeds. Correcting drainage problems and letting soil dry out between waterings in the summer may reduce the number of crane-fly larvae that survive.

Step Five: If pests exceed the tolerance thresholds ...

Use cultural, physical, mechanical, or biological controls first. If those prove insufficient, use the chemical controls described below that have the least non-target impact. When a pest outbreak strikes (or monitoring shows one is imminent), implement integrated pest management then consider control options that are the least toxic, or have the least non-target impact. Here are two examples of an integrated pest management approach:

- 1. Red thread disease** is most likely under low nitrogen fertility conditions and most severe during slow growth conditions. Mow and bag the clippings to remove diseased blades. Fertilize lightly to help the grass recover, then begin grasscycling and change to fall fertilization with a slow-release or natural-organic fertilizer to provide an even supply of nutrients. Chemical fungicides are not recommended because red thread cannot kill the lawn.
- 2. Crane fly damage** is most prevalent on lawns that stay wet in the winter and are irrigated in the summer. Correct the winter drainage and/or allow the soil to dry between irrigation cycles; larvae are susceptible to drying out, so these changes can reduce their numbers. It may also be possible to reduce crane fly larvae numbers by using a power de-thatcher on a cool, cloudy day when feeding is occurring close to the surface. Studies are being conducted using beneficial nematodes that parasitize the crane fly larvae; this type of treatment may eventually be a reasonable alternative.

Only after trying suitable non-chemical control methods or determining that the pest outbreak is causing too much serious damage, should chemical controls be considered. If chemical controls prove necessary, determine what products are available and choose a product that is the least toxic and has the least non-target impact. Refer to the operational BMPs for the use of pesticides below for guidelines on choosing, storing, and using lawn and garden chemicals.

Step Six: Evaluate and record the effectiveness of the control, and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.

Keep records! Note when, where, and what symptoms occurred, or when monitoring revealed a potential pest problem. Note what controls were applied and when, and the effectiveness of the

control. Monitor next year for the same problems. Review your landscape maintenance and cultural practices to see if they can be modified to prevent or reduce the problem.

A comprehensive integrated pest management program should also include the proper use of pesticides as a last resort, and vegetation/fertilizer management to eliminate or minimize the contamination of stormwater.

[Attach Integrated Pest Management Plan]