

THURSTON COUNTY, WASHINGTON

COMMERCIAL

**STORMWATER POLLUTION
PREVENTION SOURCE CONTROL
PLAN FOR:**

ASSESSOR'S PARCEL NUMBER(S): _____

ORGANIZATION: _____

ADDRESS: _____

DATE PREPARED/UPDATED: _____

RESPONSIBLE PERSON: _____

PHONE/E-MAIL: _____

[THIS PAGE INTENTIONALLY LEFT BLANK]

Table of Contents

1.0 INTRODUCTION.....1

 1.1 OBJECTIVES OF THIS PLAN1

 1.2 INSTRUCTIONS FOR PREPARING PLAN.....1

 1.3 ABOUT THIS PLAN2

 1.4 BEST MANAGEMENT PRACTICES ... WHAT ARE THEY?2

 1.4.1 SOURCE CONTROL BMPS.....2

 1.4.2 TREATMENT BMPS3

 1.5 WHAT’S IN THIS PLAN?3

2.0 GENERAL PRINCIPLES OF POLLUTION PREVENTION4

3.0 GENERAL SOURCE CONTROL BMPS7

4.0 SITE / BUSINESS SPECIFIC BMPS.....9

TABLES

TABLE 1 - GENERAL SOURCE CONTROL BMPS7

TABLE 2 - OPERATIONAL SOURCE CONTROL PRACTICES SUMMARY10

ATTACHMENTS

- ATTACHMENT A – COMMERCIAL AND INDUSTRIAL ACTIVITIES WORKSHEET
- ATTACHMENT B – ACTIVITY SHEETS
- ATTACHMENT C – SPILL CONTROL PLAN
- ATTACHMENT D – INTEGRATED PEST MANAGEMENT PLAN
- ATTACHMENT E – ANNUAL REPORT CHECKLIST
- ATTACHMENT F – QUICK REFERENCE PHONE NUMBERS AND WEB SITES

[THIS PAGE INTENTIONALLY LEFT BLANK]

1.0 Introduction

1.1 OBJECTIVES OF THIS PLAN

1. To implement and maintain best management practices (BMPs) that identify, reduce, eliminate and/or prevent the discharge of stormwater pollutants.
2. To prevent violations of surface water quality, groundwater quality, and sediment management standards.
3. 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 INSTRUCTIONS FOR PREPARING PLAN

To customize this plan for your property/business do the following:

1. **Complete the cover page** with information on your information.
2. **Complete the worksheet included in Attachment A** by selecting those activities that apply to your property/business.
3. **Copy and include in Attachment B the applicable activity sheets** based on the activities selected in step 2. Copy the applicable pages of Chapter 4, Volume IV of the *Thurston County Drainage Design and Erosion Control Manual* that address the activities selected in step 2.
4. **Complete Table 2 (Operational Source Control Practices Summary) in Section 4.0** referencing the applicable activity sheets from step 3. Indicate for each activity the required and recommended operational BMPs applicable to your business.
5. **If an Emergency Spill Control Plan (SPC) is required, include it as Attachment C.** This may be required for some business types. Prepare the plan using the appropriate guidance for your business practices (i.e. fueling, chemical handling, etc.).
6. **If an Integrated Pest Management Plan (IPM) is required, include it as Attachment D.** If one of your required BMPs is the use of an Integrated Pest Management Plan, prepare the plan using the appropriate guidance and include it as Attachment D.
7. **Customize the Annual Report checklist included in Attachment E.** This checklist needs to be completed and submitted with the Annual Report required as part of your Stormwater Agreement with Thurston County. If your business/property is not subject to a Stormwater Agreement, this checklist can be used internally to perform routine audits of your source control program.

1.3 ABOUT THIS PLAN

All commercial and industrial properties and activities, including multi-family residential complexes (i.e. apartments, condominiums), non-residential special uses, and government facilities in unincorporated Thurston County 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. Source control BMPs shall be selected, designed, and maintained in accordance with Volume IV of the *Thurston County Drainage Design and Erosion Control Manual*.

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. But 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 the 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 as described in this plan you can do your part to protect our streams, groundwater, and Puget Sound.

1.4 BEST MANAGEMENT PRACTICES ... WHAT ARE THEY?

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 can be selected from the most recent published edition of the *Thurston County Drainage Design and Erosion Control Manual*, Volume IV, “Source Control.”

1.4.1 Source Control BMPs

Source control BMPs prevent contaminants from entering stormwater by controlling them at the source.

Source control BMPs prevent contaminants from entering stormwater runoff by controlling them at the source. Some source control BMPs are operational, 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.

1.4.2 Treatment BMPs

In contrast, *treatments BMPs* are structures that treat stormwater to remove contaminants. Treatment BMPs typically require planning, 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 contaminants 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.

Keep in mind that 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.

1.5 WHAT'S IN THIS PLAN?

This plan should be customized for your business. If you are trying to get a building permit you may be required to submit a copy of this plan, or its equivalent as part of your permit application and then record it with the Thurston County Auditor's office prior to receiving final approval of your project.

The plan is divided into sections as follows:

- **Introduction**
- **General Principles of Pollution Prevention**
- **Operational BMPs Applicable to All Facilities**
- **Site/Business Specific BMPs**
- **Attachments**
 - **A – Commercial and Industrial Activities Worksheet**
 - **B – Applicable Facility Activity Sheets**
 - **C – Spill Control Plan (If applicable)**
 - **D – Integrated Pest Management Plan (If applicable)**
 - **E – Annual Report Checklist**
 - **F – Quick Reference Phone Numbers and Web Sites**

2.0 General Principles of Pollution Prevention

There are 15 general principles of pollution prevention that every business owner should consider.

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

1. Avoid the activity or reduce its occurrence

Avoid potentially polluting activity or do it less frequently. Apply lawn 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

Don't 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.

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 Thurston County Solid Waste Division at (360) 357-2491 for more information on recycling opportunities at the Thurston County Waste and Recover Center.

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 Thurston County Stormwater Utility at (360) 754-4681 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 plan. 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 plan.

Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch or any receiving water (stream, wetland, lake, etc.)

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 Thurston County Stormwater Utility at (360) 754-4681.

15. Dispose of waste properly

Every business and residence in Thurston County 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.

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 runoff...

3.0 General Source Control BMPs

This section briefly summarizes source control BMPs that are generally applicable to all types of sites. In the next section BMPs specific to your business will be identified. In some cases the Activity Sheet will reference the BMPs in this section. In that case the *Thurston County Drainage Design and Erosion Control Manual*, Volume IV, Chapter 5, 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	<ol style="list-style-type: none"> 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 Thurston County (360) 754-4681 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	<ol style="list-style-type: none"> 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 Thurston County WARC. 5. Dispose of dangerous or hazardous wastes at permitted facility. 6. Contact Thurston County for disposal options (360)754-4581. 	
S.3 Connect Process Water Discharges to Sanitary Sewer, Holding Tank, or Water Treatment System	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Construct simple roof or awning to prevent contact with stormwater. 2. Contact Thurston County for information on permits-(360) 786-5490. 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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 Measures	<ol style="list-style-type: none"> 1. IPM may be required by Thurston County Code. 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 D. 	
S.9 Clean Catch Basins	<ol style="list-style-type: none"> 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.” A list of local service providers is available at: www.co.thurston.wa.us/stormwater/facilities/facilities-contractors.html 3. Do not flush catch basin sumps into the catch basin outlet pipe. 4. Check your stormwater Maintenance Plan for additional information on catch basin cleaning frequency and inspection requirements. 	

4.0 Site / Business Specific BMPS

Every business in Thurston County is required to use the BMPs described in the Thurston County Drainage Manual to control stormwater pollution.

Table 2 (following pages) should be completed and include a list of all activities identified on the worksheet (Attachment A). Review the applicable Activity Sheet (should be included in Attachment B) and summarize those required and suggested BMPs or actions that are appropriate for your property/ business. This table should be posted in an appropriate location for employees to see.

[THIS AREA INTENTIONALLY BLANK]

[INSERT BUSINESS NAME]

TABLE 2 – OPERATIONAL SOURCE CONTROL PRACTICES SUMMARY

[Note: A1.1 is listed as an example. Complete similar entries for all applicable activities. Add or delete rows to table as necessary to complete table.]

ACTIVITY	SOURCE CONTROL BMPS (SEE ACTIVITY SHEET IN ATTACHMENT B FOR MORE INFORMATION)	✓
A1.1 Cleaning or Washing Tools, Engines, and Manufacturing Equipment	Required Practices: 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: 1. Use least toxic cleaner capable of doing the job. 2. Limit amount of water used 3. Recycle washwater if possible	

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

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

ATTACHMENT 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 4 of Volume IV of the *Thurston County 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 Thurston County Stormwater Utility at (360) 754-4681. They can provide assistance over the phone and also at your business site.

Activity Code	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
A1.1	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. 		
A1.2	Cleaning or Washing of Cooking Equipment <ul style="list-style-type: none"> • Includes vents, filters, pots and pans, grills, and related items. 		
A1.3	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. 		
A1.4	Collection and Disposal of Wastewater from Mobile Interior Washing Operations <ul style="list-style-type: none"> • Includes carpet cleaners, upholstery cleaners, and drapery cleaners. 		
A2.1	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. 		

Activity Code	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
A2.2	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. 		
A2.3	Engine Repair and Maintenance <ul style="list-style-type: none"> This covers oil changes and other engine fluids. 		
A2.4	Mobile Fueling of Vehicles and Heavy Equipment <ul style="list-style-type: none"> Includes fleet fueling, wet fueling, and wet hosing. 		
A3.1	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. 		
A3.2	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. 		
A3.3	Manufacturing and Post-processing of Metal Products <ul style="list-style-type: none"> Includes machining, grinding, soldering, cutting, welding, quenching, rinsing, etc. 		
A3.4	Wood Treatment Areas <ul style="list-style-type: none"> Includes wood treatment using pressure processes or by dipping or spraying. 		
A3.5	Commercial Composting <ul style="list-style-type: none"> Includes commercial composting facilities operating outside. 		
A3.6	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. 		
A3.7	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. 		
A3.8	Commercial Printing Operations <ul style="list-style-type: none"> Includes materials used in the printing process. 		
A3.9	Manufacturing Activities – Outside <ul style="list-style-type: none"> Includes outdoor manufacturing areas. 		
A3.10	Agricultural Crop Production <ul style="list-style-type: none"> Includes commercial scale farming. 		
A3.11	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. 		

Activity Code	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
A4.1	Storage or Transfer (Outside) of Solid Raw Materials, By-products, or Finished Products		
A4.2	Storage and Treatment of Contaminated Soils <ul style="list-style-type: none"> This applies to contaminated soils that are excavated and left on site. 		
A4.3	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. 		
A4.4	Storage of Solid Wastes and Food Wastes <ul style="list-style-type: none"> Includes regular garbage and all other discarded non-liquid items. 		
A4.5	Recyclers and Scrap Yards <ul style="list-style-type: none"> Includes scrapped equipment, vehicles, empty metal drums, and assorted recyclables. 		
A4.6	Treatment, Storage, or Disposal of Dangerous Wastes <ul style="list-style-type: none"> Refer to Ecology and the Thurston County Health Department for more information, see Chapter 7. 		
A4.7	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. 		
A4.8	Storage of Liquids in Permanent Aboveground Tanks <ul style="list-style-type: none"> Includes all liquids in aboveground tanks. 		
A4.9	Parking and Storage for Vehicles and Equipment <ul style="list-style-type: none"> Includes public and commercial parking lots 		
A4.10	Storage of Pesticides, Fertilizers, or other products that can leach pollutants		
A5.1	Demolition of Buildings <ul style="list-style-type: none"> Applies to removal of existing buildings and subsequent clearing of the rubble. 		
A5.2	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. 		
A6.1	Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots		
A6.2	Dust Control at Manufacturing Sites <ul style="list-style-type: none"> Includes grain dust, sawdust, coal, gravel, crushed rock, cement, and boiler fly ash. 		

Activity Code	Type of Activity	Check if You Are Involved in This	
		Indoor	Outdoor
A6.3	Soil Erosion and Sediment Control (ESC) at Industrial Sites <ul style="list-style-type: none"> Includes industrial activities that take place on soil. 		
A7.1	Commercial Animal Handling Areas <ul style="list-style-type: none"> Includes kennels, fenced pens, veterinarians, and businesses that board animals. 		
A7.2	Keeping Livestock in Stables, Pens, Pastures or Fields <ul style="list-style-type: none"> Applies to all types of livestock. 		
A7.3	Log Sorting and Handling <ul style="list-style-type: none"> Applies to log yards typically located at sawmills, ports, and pulp mills. 		
A7.4	Boat Building, Mooring, Maintenance, and Repair <ul style="list-style-type: none"> Includes all types of maintenance, repair, and building operations. 		
A7.5	Logging <ul style="list-style-type: none"> Applies to logging activities that fall under Class IV general forest practices. 		
A7.6	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. 		
A7.7	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. 		
A7.8	De-icing and Anti-icing Operations for Airports and Streets <ul style="list-style-type: none"> Includes aircraft, runways/taxiways, streets and highways. 		
A7.9	Roof and Building Drains at Manufacturing and Commercial Buildings <ul style="list-style-type: none"> These sites will be referred to ORCAA. 		
A7.10	Urban Streets <ul style="list-style-type: none"> BMPs for addressing pollutants found on paved surfaces, including street sweeping. 		
A7.11	Railroad Yards		
A7.12	Maintenance of Public and Private Utility Corridors and Facilities <ul style="list-style-type: none"> Includes public and private utility maintenance activities. 		
A7.13	Maintenance of Roadside Ditches		
A7.14	Maintenance of Stormwater Drainage and Treatment Facilities		
A7.15	Spills of Oil and Hazardous Substances		

ATTACHMENT B

ACTIVITY SHEETS

Best Management Practices for Commercial and Industrial Activities

This Attachment coordinates with the worksheet in Attachment A. That worksheet and the BMPs are organized by the different activities that businesses perform. If you checked the column for activities performed outdoors, match the number from the worksheet to the activities listed in Volume IV, Chapter 4 of the *Thurston County Drainage Design and Erosion Control Manual* to find the suggested BMPs you should implement. Make photocopies of the applicable Activity Sheets and insert them in this section. Use the Activity Sheets to prepare a summary of the applicable required and suggested BMPs for inclusion in Table 2 (Section 4).

Explanation of Required BMPs

Every business in Thurston County is required to use the BMPs described in the *Thurston County 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 PHOTO
COPIED FROM THE THURSTON COUNTY DRAINAGE
DESIGN AND EROSION CONTROL MANUAL,
VOLUME V, SECTION 4]**

ATTACHMENT C

SPILL CONTROL PLAN

[NOTE: IF REQUIRED, ATTACH THE COMPLETED SPILL CONTROL PLAN]

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]

ATTACHMENT D

INTEGRATED PEST MANAGEMENT PLAN

[NOTE: IF YOU ARE REQUIRED TO PREPARE AN INTEGRATED PEST MANAGEMENT PLAN ATTACH THE COMPLETED PLAN TO THIS SECTION]

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]

ATTACHMENT E

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 Thurston County along with the annual report required as part of your Stormwater Maintenance Agreement with Thurston County. 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 or hand delivered to: Thurston County Stormwater Utility; 929 Lakeridge Drive SW, Bldg 4, Room 100; Olympia, Washington 98502.

BUSINESS NAME: _____

ADDRESS: _____

ASSESSOR'S PARCEL NUMBER: _____

COMPLETED BY: _____

SIGNATURE: _____

DATE: _____

√	ACTIVITY	NOTES
	Review Activity Checklist (Attachment A) – Verify still current. List any new activities.	
	Review and Update Attachment B if new activities are identified.	
	Review and Update Table 2 for New Activities	

√	ACTIVITY	NOTES
	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.	
	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?	

✓	ACTIVITY	NOTES
	<p>Have any additional structural or treatment BMPs been implemented on the site since the last annual report was submitted? If so describe.</p>	
	<p>Any other items related to stormwater source control not noted above? Describe.</p>	
	<p>Do you desire any technical assistance from Thurston County related to stormwater issues? If so, indicate contact person and phone number.</p>	

ATTACHMENT F

QUICK REFERENCE PHONE NUMBERS AND WEB SITES

PHONE NUMBERS

Environmental Protection Agency (U.S. EPA) – Region X 800-424-4372

Thurston County:

Stormwater Utility	360-754-4681
Department of Public Works	360-754-4581
After-hours water and sewer emergencies (paging service)	800-926-7761
Thurston County Waste Line (automated information)	360-786-5494
LOTT Alliance Industrial Pretreatment Program	360-528-5708
Development Services – Permits	360-786-5490
Weed Control/ Noxious Chemical Use	360-786-5576

Thurston County Public Health and Social Services Department:

On-Site Sewage	360-754-3355 x 6518
Asbestos Removal	360-786-5461
Hazardous Waste Section	360-786-5457
Solid Waste	360-786-5461

University of Washington Center for Urban Water Resources 206-543-6272

Washington State Department of Agriculture 360-902-2010
877-301-4555

Washington State Department of Ecology 360-407-6000

Southwest Regional Office	360-407-6300
Dangerous/Hazardous Waste	360-407-6300
NPDES Stormwater or Wastewater Permits	360-407-6400
Spill Reporting	800-424-8802
Recycling	800-732-9253
Groundwater Quality and Protection	360-407-6400
Underground and Aboveground Storage Tanks	360-407-7170

Washington State University/Thurston County Cooperative Extension 360-867-2151

Industrial Materials Exchange 206-296-4899

Nisqually Tribe 360-456-5221

Confederated Tribes of the Chehalis 360-273-5911

Olympic Region Clean Air Agency (ORCAA) 800-422-5623

Underground Utility Locate “Call Before You Dig” 800-424-5555

WEB PAGES

Washington State Departments:

Washington State Department of Health
<<http://www.doh.wa.gov/>>

Washington Department of Fish and Wildlife
<<http://wdfw.wa.gov/>>

Washington State Government Information and Services
<<http://www.access.wa.gov/>>

Washington State Department of Ecology – Flood Information
<<http://www.ecy.wa.gov/programs/sea/floods/>>

Washington State Department of Ecology - Digital Coastal Atlas
<http://www.ecy.wa.gov/programs/sea/SMA/atlas_home.html>

Washington State Department of Ecology - Stormwater Home Page
<<http://www.ecy.wa.gov/programs/wq/stormwater/index.html>>

Salmon and Watershed Information Management (SWIM) Team
<<http://www.swim.wa.gov/>>

Federal Departments:

Federal Emergency Management Agency (FEMA)
<<http://fema.gov/>>

U.S. EPA Office of Water, Academy 2000
<<http://epa.gov/watertrain/>>

U.S. Geological Survey (USGS) Departments:

USGS Historical Water Resource Data
<<http://wa.water.usgs.gov/realtime/historical.html>>

USGS National Water Information System (NWISWeb)
<<http://water.usgs.gov/nwis/>>

TerraServer (zoom in on USGS aerial photos anywhere in the USA)
<<http://terraserver-usa.com/>>

Water Quality and NPDES:

Natural Resources Conservation Service (NRCS) and U.S. Department of Agriculture (USDA)
<<http://www.nrcs.usda.gov/>>

National Climatic Data Center Data Archive
<<http://www.ncdc.noaa.gov/>>

National Weather Service Hydrologic Forecasts (River Flooding)
<<http://ahps2.wr.noaa.gov/ahps2/index.php?wfo=sew>>

USGS Real Time Gauging Info
<<http://wa.water.usgs.gov/realtime/current.html>>

U.S. Army Corps of Engineers Real Time Gauge Info
<<http://www.nwd-wc.usace.army.mil/nws/hh/basins/puy.html>>

The Central Puget Sound Water Suppliers' Forum
<<http://www.ci.seattle.wa.us/Forum>>

Thurston County:

Thurston County Homepage
<<http://www.co.Thurston.wa.us/>>

Thurston County Stormwater Utility
< <http://www.co.thurston.wa.us/stormwater/>>

Thurston County Mapping
<<http://www.geodata.org>>

Thurston Conservation District
<<http://www.Thurstoncountycd.org/>>

Thurston County Public Health and Social Services
<<http://www.co.thurston.wa.us/health/ehadm/index.html>>

Other Agencies:

NWS River Forecast Center - Flood Outlook
<<http://www.nwrfc.noaa.gov/river/fop.cgi>>

NOAA Tide and Current Predictions
<<http://co-ops.nos.noaa.gov/tp4days.html>>