



Stormwater Pollution Prevention

for Businesses

Dear Owner/Manager:

You and your staff play an important role in keeping pollution out of the storm drain system and out of local streams. This stormwater protection guide is provided to help you comply with environmental storm drain system requirements within your local municipality and the County. It is illegal for unauthorized wastes or wash waters from your business to enter the **storm drain system or waterway**. You may have to pay for clean-up costs, fines, or encounter more stringent measures as a result of an incident through local, state, and federal regulations. This brochure is meant to help you avoid those situations, to promote clean stormwater runoff practices, and to make it easy for businesses to understand the water pollution regulations that affect them. If you have questions, you may contact your local municipality or the County agency contact on the back of this brochure.

Carroll County Department of
Land & Resource Management



What is Stormwater Pollution?

The term stormwater is used to describe water from rain or snow. Stormwater that does not soak into the ground becomes surface runoff from roof tops, parking lots, streets, yards, and other impervious surfaces. This runoff flows into surface waterways or is channeled through storm drains.

Improper disposal of materials, such as fuel, oil, washwater, solvents, and other fluids, that come into contact with stormwater runoff can cause pollutants to enter the storm drain system and break down in the local waters. These pollutants may increase heavy metals and toxic chemicals, affect aquatic life, and impact water quality.

Most storm drains flow directly into streams without any treatment. Newer storm drain systems may flow into a stormwater management facility and discharge to streams or infiltrate into the groundwater with potential contaminants.

Stormwater Requirements

The federal Clean Water Act, passed in 1972, authorizes the regulation of point sources of pollutants that discharge to Waters of the U.S. Point sources are associated with discrete conveyances, such as pipes or man-made ditches. Wastewater and stormwater are considered point sources. It is unlawful to discharge any pollutant from a point source into surface waters, unless a permit is obtained.

The U.S. Environmental Protection Agency (EPA) administers the National Pollutant Discharge Elimination System (NPDES) program, through which permits are required for point sources if they discharge directly to surface waters. This program is administered by the State in Maryland. Individual homes connected to a municipal system, using a septic system, or without surface discharge do not need an NPDES permit.

In Carroll County, Chapter 53, Environmental Management of Storm Sewer Systems, of the Carroll County Code of Public Local Laws provides the County with the legal authority to prohibit illicit discharges, as required by PART IV of Carroll County's NPDES Municipal Separate Storm Sewer System (MS4) permit. Each municipality adopted the same requirements, either through adding them to its own code or by reference to the County Code.

Common Pollutants

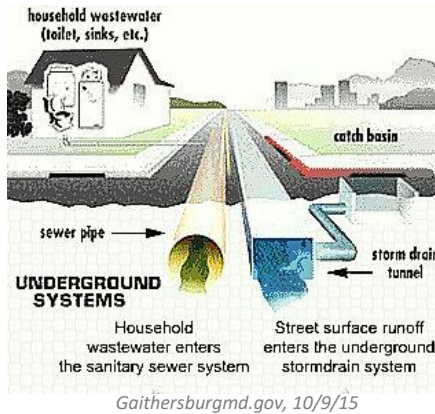
Sample Business Activities	Common Pollutants					
	Bacteria	Erosion & Debris	Excess Nutrients	Heavy Metals	Oil & Grease	Toxic Chemicals
Engine Maintenance & Repair		✓		✓	✓	✓
Food Service & Production	✓	✓	✓		✓	✓
Gas Stations		✓		✓	✓	✓
Washing Vehicles, Equipment, etc.	✓	✓			✓	✓
Waste Handling	✓	✓	✓	✓	✓	✓
Landscaping		✓	✓	✓		✓
Parking Lots, Sidewalks, Paved Areas	✓	✓	✓		✓	

Source: Clean Water Partners: Make it your business to reduce water pollution and flooding. Partnership for the Delaware Estuary, Inc., <http://www.delawareestuary.org/>, September 8, 2015.

Some business activities present a greater opportunity for pollutants to find their way into stormwater runoff.

Storm Drain vs. Sanitary Sewer?

Unlike the sanitary sewer system, the storm drain system is NOT connected to the wastewater treatment plant. The sanitary sewer system takes wastewater from your business (toilets, sinks, dishwashers, and properly connected mop/clean up sinks) and sends it to a treatment plant that removes contaminants before it is released.

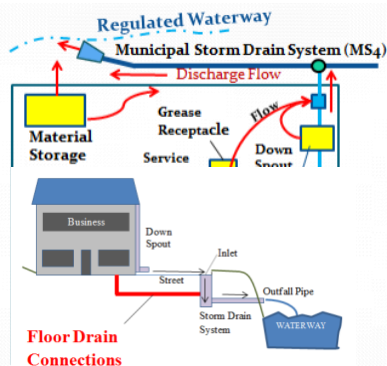


Inspecting Your Work Site

Businesses can take three simple steps to prevent pollutants from entering local waterways.



1. **Evaluate current activities that could expose pollutants to precipitation or stormwater runoff.** Use a sketch map of your site to identify where the water goes. Assess indoor site characteristics in addition to outdoor.



2. **Identify potential pollutants that could be exposed to precipitation or stormwater runoff and their sources.** Businesses that participate in the sample activities in the Common Pollutants table would particularly benefit from the following good housekeeping measures.

3. **Take action** to implement good housekeeping best management practices at your business. Use the self-inspection checklist, "Completing Your Stormwater Pollution Prevention Self-Inspection Checklist and Action Plan," to note where actions



CARROLL CLEAN WATER PARTNERSHIP

COMPLETING YOUR STORMWATER POLLUTION PREVENTION SELF-INSPECTION CHECKLIST AND ACTION PLAN

Assessment and action planning requires respondents to assess their current activities and identify any specific actions needed to prevent pollution and improve water quality stewardship.

To create your own Stormwater Pollution Prevention Action Plan, please fill out the following checklist. If you have any questions, please contact the Carroll County NPDES Compliance Specialist at (410) 386-2220 or redwards@cccg.carr.org.

If you would like to take the additional step to become a Clean Water Partner, please review the process at the end of this assessment. You will be asked to provide a copy of the completed Stormwater Pollution Prevention Self-Checklist and Action Plan and verify when the action steps have been implemented.

Business Information

Business Name: _____	
Type of Business: _____	No. of Employees: _____
Address: _____	
Zip: _____	
Contact Person: _____	
Title: _____	Phone: _____
Prepared by: _____	Date: ___/___/___
E-mail: _____	Fax: _____

Business Activities That Can Affect Water Quality

▲ Storing materials	▲ Maintaining buildings paved areas
▲ Preventing and cleaning up spills	▲ Maintaining landscapes
▲ Maintaining Equipment and Vehicles	▲ Managing wastes
▲ Disposing of Fats, Oils, and Grease (FOG)	

can be taken to make improvements that will prevent stormwater pollution. Contact the County for a courtesy site visit to review your self-inspection checklist and/or action plan with you. Feel free to

A **best management practice (BMP)** is a technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of stormwater runoff in the most cost-effective manner.

Good housekeeping BMPs are common sense measures that help businesses manage site activities and operations by preventing materials and wastes from being exposed to stormwater and thereby preventing stormwater runoff pollution.

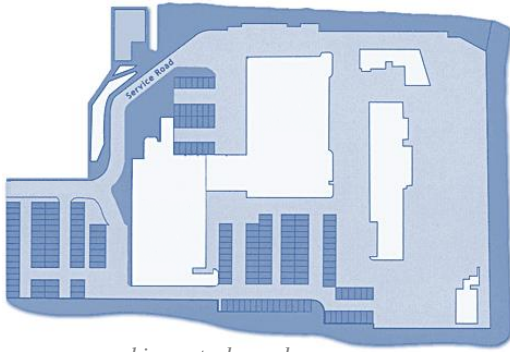
call with questions. Consider becoming a Clean Water Partner to demonstrate and be recognized for your commitment.

Good Housekeeping Best Management Practices (BMPs)

Employ these Good Housekeeping BMPs to help prevent stormwater runoff pollution into nearby storm drain systems and waterways.

Know Your Work Site

- Update site sketch plans to reflect current plumbing connections, drains, and pipes.
- Identify specific activities with potential to cause spills or leak pollutants, such as grease, oils, fuel, etc. Designate specific areas for these activities where spills could be more easily contained and cleaned up.



www.sapphirecontrols.co.uk

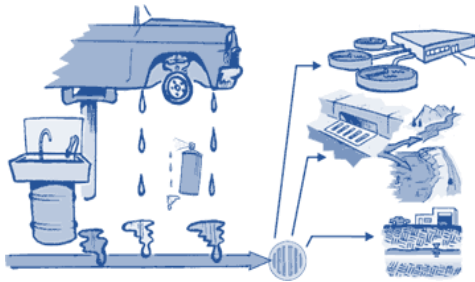
Keep Your Work Site Clean

- Keep spill clean-up kits readily accessible to all work areas.
- Sweep or vacuum the floor daily.
- Sweep sidewalks and parking lots periodically to remove debris. Dispose of debris in the garbage.
- Sweep outside around front and back doors to control litter and debris, cigarette butts, and packaging waste from customers and deliveries.



Prevent Spills & Leaks

- Check equipment, wipe up spills, and repair leaks on a daily basis.
- Ensure waste containers are in good condition and secured against wind and leakage.
- Monitor parked vehicles for leaks and place pans under leaks to collect fluids for proper disposal or recycling.



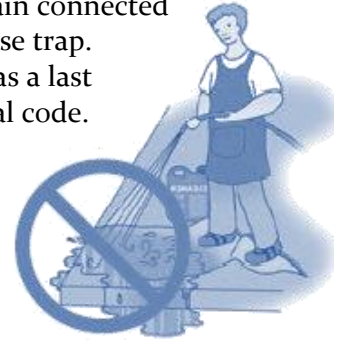
www.epa.illinois.gov, 11/4/15

Use Proper Clean Up Measures

- Use dry methods for spill cleanup (sweeping, cat litter, or absorbent). Use as little water as possible. Don't hose down spills outside.
- Use drain mats to cover drains in the event of a spill.
- Promptly dispose of collected fluids into secondary containment, using hazardous waste drum when required.

Control Outdoor Washing Activities

- Pour wash water into a janitorial or mop sink. Don't pour it outside or into the storm drain.
- Wash all equipment indoors with wastewater directed to floor drains or sinks.
- Clean floor mats, filters, and garbage cans in a mop sink, wash rack, or floor drain connected to the sewer through a grease trap.
- Wash items outdoors only as a last resort and according to local code.
- Wastewater from outdoor activities **must be contained**, recaptured, and disposed of into the sanitary sewer system. (ex. high pressure washing, etc.).
- Wash vehicles in designated areas. Never discharge wash water into the street, gutter, or storm drain.
- Use oil separators, and dispose of other soapy water into sanitary sewer (both as required or allowed by law).
- Use a spray nozzle or bucket when possible to conserve water and minimize wastewater. Use a commercial car wash facility if site is not equipped properly for vehicle washing.



www.ewashtenaw.org, 9/21/15

Control Litter, Store Trash Properly, & Recycle

- Provide employees and customers with an adequate number of receptacles for trash. Keep lids on trash/recycling cans, bins, and other outdoor containers.
- Collect trash and litter before it can be washed into the storm drain system.
- Place non-hazardous waste (trash, food, packaging, etc.) in sealed bags prior to disposal. Minimize liquids.
- Regularly inspect dumpsters for leaks and for loose trash. Cover dumpsters. Replace leaking dumpsters.
- Do not dispose of any materials in storm drain.

Reduce Waste and Recycle

- Minimize the number of solvents used to make recycling easier and to reduce hazardous waste management costs.
- Recycle and reuse solvents and other fluids where applicable and when possible.
- Carefully calculate paint and thinner needs before using.



Use Safer Alternatives

- Use non-hazardous cleaners when possible.
- Replace chlorinated organic solvents with non-chlorinated ones like kerosene or mineral spirits.

Protect Outdoor Work and Storage Areas

- Store materials, such as grease, paints, detergents, metals, and raw materials in appropriate, labeled containers.
- Ensure all outdoor storage containers have lids and that they are kept closed.
- Store materials and waste off the ground and under roof so they will not be exposed to precipitation. If not under a roof, cover securely with an impervious material.
- If work must be done outdoors, prevent runoff from reaching storm drain inlets by berming and/or covering work areas.
- Move indoor activities that could cause pollution. If not possible, move away from drainage paths outside.



<http://stormwater.pca.state.mn.us,1>
1/4/15

Use plants and landscaping to help control runoff pollution

- Plant native vegetation in sloped areas to help slow runoff and filter pollutants.
- Install rain gardens to collect and treat stormwater.
- Install rain barrels at down spouts to help collect rainwater from rooftops and prevent or minimize runoff.



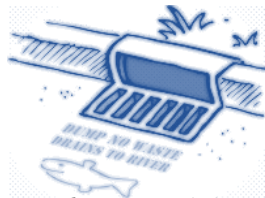
Off a commercial parking lot at the 7Sigma Corporation in Minneapolis.
<http://www.watersheddistrict.org,11/4/15>

Eliminate Illicit Drain Connections

- Plumb indoor drains according to local sanitary code. Do not discharge plumbing and drains to gutters or streams.

Label /Stencil and Inspect Storm Drain Inlets

- Label storm inlets at your site to alert employees that no fluids should be discharged to these drains.
- Regularly remove trash and debris from storm drain inlets to prevent accumulated pollutants from washing into them.



www.ewashtenaw.org,0/21/15

Train and Educate Employees and Customers

- Ensure employees understand the effect their daily activities could have on water quality, as they are more likely to respond to training.
- Include stormwater pollution prevention / water quality training in employee orientations, reviews, and staff meetings.
- Assign an employee to be responsible for effective implementation of BMPs.
- Read and review this guide, sign, and date a training log.
- Consider offering incentives to employees who practice good housekeeping.
- Use signage to help direct customers to use good housekeeping measures at your business site.



www.cliparthut.com, 11/4/15

Conduct Routine Inspections

- Perform routine inspections to help ensure your work site complies with stormwater requirements.
- Make sure all pipes inside your business are properly connected to the sanitary sewer system.
- Review your current practices and look for areas where you can improve. Use the Stormwater Pollution Prevention Self-Inspection Checklist and Action Plan to assist with this process.
- Record any changes you make to document corrections and improvements.

For more information, help, or guidance regarding your business, contact:

Carroll County Department of
Land & Resource Management
Phone: 410-386-2210



OR your municipality:

Hampstead	410-374-2761
Manchester	410-239-3200
Mount Airy	410-795-6012
New Windsor	410-635-6575
Sykesville	410-795-8959
Taneytown	410-751-1100
Union Bridge	410-775-2711
Westminster	410-848-9000

To report a concern about pollutants or possible illegal dumping into the storm drain system, contact:

Carroll County Resource Management Bureau,
Environmental Inspection Services Division
Phone: 410-386-2210

For general information about stormwater pollution prevention, visit the "Protecting Carroll County Waters" webpage at:

<https://www.carrollcountymd.gov/government/boards-commissions/environmental-advisory-council-eac/stormwater/>