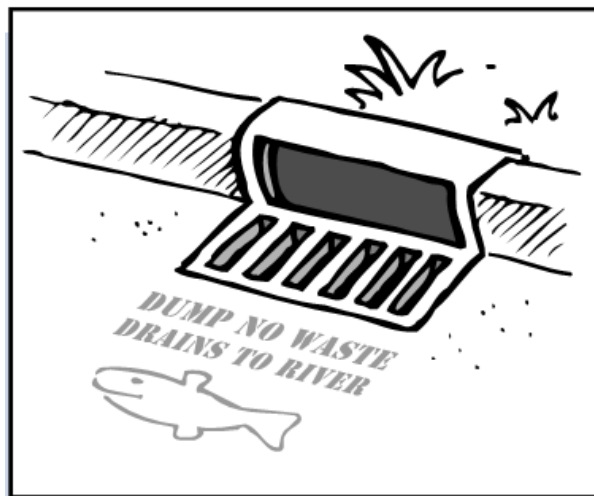


SERIES #1: Housekeeping Practices



Hands In for Healthy Streams is a cooperative effort between the City of Buford and the local business community.

HANDS IN FOR HEALTHY STREAMS

NOTE: This handbook is one in a series of handbooks that describe specific practices businesses can use to protect water quality. A complete list of all handbooks and fact sheets available through the *Hands In for Healthy Streams* program is provided on the back cover. To obtain other handbooks in this series, contact Buford City Hall at the address provided below.

City of Buford
2300 Buford Highway
Buford, GA 30518
www.cityofbuford.com

We hope you'll join with the City of Buford and other area businesses by participating in the *Hands In for Healthy Streams* program. Through this Program, you can help protect our local streams. To participate, review the enclosed Fact Sheets No. 1.1 and 1.2, and then fill out the self-assessment at the back of the Handbook. We appreciate your continued cooperation and stewardship in protection of our water quality.

This Program is modeled on the Community Partners for Clean Streams program created through a US EPA Clean Water Act Grant by the Office of Washtenaw County Drain Commissioner Janis A. Bobrin, Washtenaw County, Michigan. Portions of this Handbook are borrowed from the Community Partners for Clean Streams series, with designs and illustrations developed by David Zinn.

Fact Sheet No. 1.1

Storing Materials and Wastes

Why be concerned?

If materials and wastes aren't properly stored, pollutants can leak from stockpiles and containers and run onto the ground. From there, pollutants can filter through to the ground water table or be washed by rainwater into a lake, river or stream. Reduce risk to the environment by *reducing* the amount of materials and wastes kept in storage, whenever possible.



Choosing Safe Storage Containers

- Make sure that storage containers are in good condition and lined with a material that won't deteriorate. Outdoor storage containers should be water-tight, rodent-proof and protected from tampering.
- Keep products in their original containers, if possible. Otherwise, clearly label containers and cover the labels with transparent tape to keep them from falling off or weathering.
- Never mix different types of materials or wastes in a single container. This can create excess hazardous waste, prevent recycling, and greatly increase disposal costs.

Managing Trash

Trash containers are a common source of pollutants, especially when they contain damp or oily wastes. (Liquids should *not* be put into a trash container). Place dumpsters on concrete surfaces and keep their lids tightly closed to keep the rain out. If possible, build a cover over trash containers.

Assign someone to regularly clean up the ground around trash containers. If a container leaks, repair or replace it immediately to avoid polluting.

Indoor Storage - the Weatherproof Option

Potential pollutants should be stored indoors, unless doing so will increase risks to health and safety. Indoor storage is preferred because it prevents containers from weathering, keeps precipitation out, and prevents spills from infiltrating into the ground.

Indoor storage of certain materials, such as flammable liquids, may affect your fire insurance rating. Consult your insurance carrier regarding questions about storing a material indoors.

If materials must be stored outside, construct a covered, paved area designed to contain leaks and spills. If it's impossible to cover and pave outdoor storage areas, place each primary container within a larger, leak-proof receptacle.

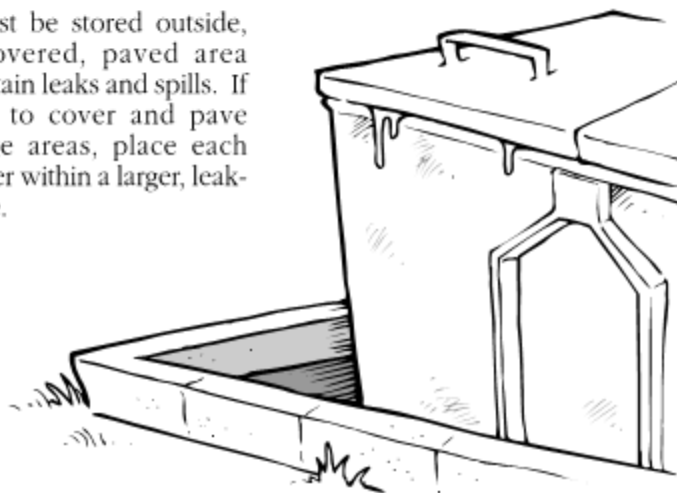
Designing Storage Areas to Contain Leaks and Spills

Converting an existing room into a secondary containment area is a logical, low-cost approach to safe storage. Prevent runoff from entering or leaving the area by making sure that cracks in floors and corners are completely sealed and that door sills are high enough to contain spills.

If the containment area is located within a larger room or outdoors, construct an impermeable berm around it. Since liquids escaping from punctures must also be contained, make sure that the area is designed (and that containers are placed) in a way that will prevent any escaping liquids from leaving the area.

Design storage areas to completely contain at least 110% of the largest container's total volume. (110% is required by law if you're storing hazardous materials: 150% is required if you're storing materials that are petroleum-based.)

*See the reverse side for information about properly **draining** storage areas.*



DANGEROUS DRAINAGE: *Never* allow storage areas to drain to any part of the storm water management system.

Storage Areas and the Storm Sewer System

If possible, connect drains to a dead-end holding tank – especially if you’re storing hazardous or petroleum products. If a spill occurs, the tank’s contents will need to be pumped out and disposed of by a licensed waste hauler. Although holding tanks incur the cost of pump outs, they avoid the risk of environmental cleanups costing thousands of dollars.

Never drain to the sanitary sewer system in an unapproved connection. Before allowing any materials to drain to the sanitary sewer, contact the City of Buford Sewer Department to make sure it can be accepted.

Unused Materials

Regularly inspect storage and other areas to make sure that unused materials don’t accumulate. Identify and properly dispose of unusable materials, including those abandoned by previous property owners. (If hazardous materials have been abandoned on-site, the original owner or generator is still legally responsible for their disposal.) For more information about waste disposal, see **Series #7 (Fact Sheets 7.2 and 7.3)**.



The Perils of Uncovered Storage

If it’s not possible to cover outside storage areas, rainwater can accumulate. Leaks or spills of chemical or petroleum substances could then be mixed with rainwater, and must be tested before disposal to determine if they have become hazardous.

- If rainwater **is** hazardous, have it pumped out and disposed of by a licensed waste hauler.



Since automatic sump pumps continuously discharge any hazardous substances that have leaked and become mixed in with rainwater, use a manual sump pump or water vacuum instead. These allow for visual inspection of rainwater before disposal.

If rainwater is **not** hazardous, reuse it on your site in an appropriate manner, such as for equipment wash water.

Managing Stockpiles

If possible, build a permanent, covered area for stockpiles. Alternatively, place stockpiles on a paved surface and keep them covered with plastic sheeting when not in use. Secure the sheeting with weighted tires or sandbags. Move temporary stockpiles to a permanent storage place as soon as possible.

Assign someone to periodically sweep the area around stockpiles to prevent any materials that escape from washing away with stormwater. If necessary, construct a berm around stockpiles to prevent stormwater from running through them.

--- Regulatory Requirements ---

Be sure that all storage practices conform to federal, state, and local requirements. Contact the City Inspection Department and the building and fire departments for more info.

GETTING HELP

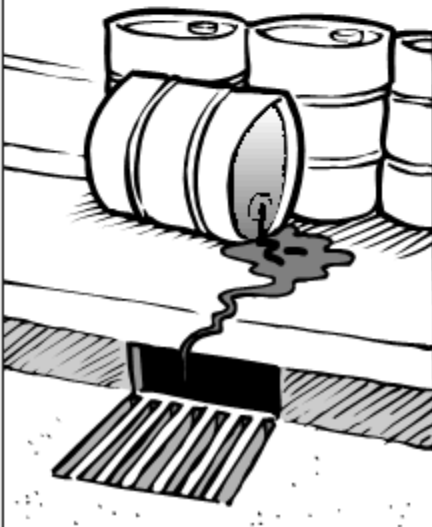
GA Dept. of Natural Resources
 Pollution Prevention
 Assistance Division (404) 651-5120
 (P2AD) or (800) 685-2443

Fact Sheet No. 1.2 Preventing & Cleaning Up Spills

Why be concerned?

Even a small spill can pollute vast amounts of water; one quart of oil can contaminate up to two million gallons of water! In addition to environmental impacts, cleaning up a spill that's reached a lake, river or stream can cost many thousands of dollars. If the source of the spill can be identified, the responsible party is legally liable for all clean-up costs.

It makes good economic sense for any business that uses chemical, petroleum, or even some bulk food products to establish basic procedures to follow in the event of a spill. You may be required to prepare a spill prevention and response plan under federal, state and/or county law (for example, if your business generates regulated amounts of hazardous waste). For more information about spill prevention and response requirements, contact one of the agencies listed under "Getting Help."



PREVENTING SPILLS is easier *and* less costly than cleaning them up

Examine your business practices for ways to prevent spills. For instance:

- Don't leave open containers or tanks that are being filled unattended.
- Use a funnel when transferring liquids from one container to another.
- Place trays under open containers and spouts of liquid storage containers.
- Buy products in smaller quantities, whenever it's cost-effective. A five gallon spill is much easier to cope with than a 55 gallon spill. Hazardous chemical reporting and compliance is also simpler with smaller containers.

Designing Work Areas to Contain Spills

Spills are more common in certain locations, such as loading, storage, and fueling areas. Design and organize these areas to reduce the chance of spills and to contain any spill that may occur. At a minimum:

- Make sure these areas are paved and, if necessary, bermed around the perimeter.
- Equip floor drains with shut-off valves and regularly inspect these valves to make sure they work. Alternatively, keep rubber mats or temporary plugs on hand so that drain inlets can be blocked immediately if a spill occurs. If plugs are used, train employees in advance about how to use them.

Preparing a Spill Response Plan

In general, a spill response plan should include the following:

- ①. A description of the facility, including:
 - the owner's name and address
 - activities performed on-site
 - chemicals used and locations of chemical storage areas
 - storm drains and the areas that slope toward each drain
 - the location of spill control devices such as drain shut-off valves
- ②. Regulatory agencies that must be notified in the event of a spill. Since laws governing spill response can be numerous, it's a good idea to protect yourself by calling all of the following numbers:

Emergency Response: call 911.

Georgia EPD: (800) 241-4113.

City of Buford: (678) 546-3514.

- ③. Specific clean-up instructions for each material handled on-site, safety requirements, and guidelines for evacuation.
- ④. Persons responsible for spill clean-up, updating the spill control plan, training staff in clean-up procedures, testing the clean-up kit equipment and maintaining the kit's inventory.

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Spill containment and clean-up kits should be easy to find and use. Include any needed safety equipment and clean-up materials appropriate to the types and quantities of materials that could spill. For hazardous materials, this information can be found on the product's Material Safety and Data Sheet (MSDS). If you're uncertain about what to include in a spill containment and clean-up kit, many companies that sell spill control materials will provide this information.

Post a summary of your spill control plan at appropriate locations. The summary should include the name(s) of clean-up coordinators, the location of clean-up materials, and who to contact in case of a spill. Periodically review the plan with the employees responsible for its implementation.

Safe and Successful Spill Response

If a spill occurs, respond immediately and follow your clean-up plan. *Never wash spilled materials down a storm drain or sanitary sewer or allow them to evaporate*, since pollutants will remain on the ground and can be washed off with the next rain. If the spill is on an unpaved surface, prevent groundwater pollution by removing contaminated soil. Dispose of this soil as hazardous waste if the substance that spilled is hazardous. Otherwise, soil can be placed in a plastic bag and put in a trash receptacle.

First and foremost, protect personal safety and the safety of others. Don't enter an area where toxic materials have spilled without proper protective clothing and gear. Stay upwind, uphill, and upstream of the spill. Get assistance from local authorities and private spill response contractors for anything your employees aren't trained and equipped to handle; names and phone numbers should be listed in your spill control plan. Be sure to:

- Refer to the appropriate MSDS for clean-up instructions and potential safety risks.
- Stop the source of the spill.
- Turn off sump pumps operating in the affected area.

- Contain the spill. If the spill could enter a drain, immediately close the control valve or, if no valve is present, plug or cover the drain inlet (for example, with a rubber mat).

If the spill involves a powder that could blow away, contain it by covering it with plastic or - if it won't react with water - by dampening it with wet towels or a light spray of water. Then, sweep or wipe it up.

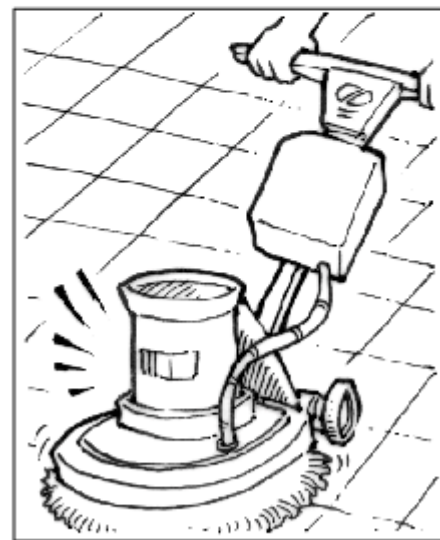
If the spill involves a liquid, cover it with an absorbent material that can be swept or picked up such as sawdust or vermiculite. Absorbent booms can be used to contain and soak up larger spills.

Unless the material has a high flash point, avoid the use of emulsifiers and dispersants. The goal is to contain the spill — not scatter it. Similarly, don't use a hose or wet mop. Using water adds to the volume of the spill and spreads the material around a larger area.

Report significant spills to the appropriate authorities and get outside help if needed. If a hazardous substance could enter the sanitary sewer system, notify the City Sewer Department immediately.

Disposing of Clean-Up Materials

- In general, absorbent materials used to clean up hazardous substances (including gasoline and solvents) must be disposed of as hazardous waste.
- Rags used to soak up non-hazardous spills should *not* be put in a trash container. Store them in a covered bin and send them to a professional cleaning service.



- Floor scrubbing machines should be discharged to a sanitary sewer – never to a storm drain or swale.

This concludes Fact Sheets 1.1 and 1.2 of the Housekeeping Practices series.

To create your own Water Quality Action Plan, please complete the Water Quality Assessment provided on the following page.

SERIES #1 Assessment

The following Assessment and Action Plan asks you to evaluate your current activities and identify any specific actions needed to prevent pollution. For each question, check the appropriate box in the Assessment column. Next, in the corresponding box in the Action Plan column, fill in the proposed *date* by which the activity will be completed. Thank you for your good faith commitment to water quality.

Series #1, Housekeeping Practices: Storing Materials and Wastes	ASSESSMENT			ACTION PLAN	
	Not Applicable	Needs Improvement	Always	Plan to Improve	Plan to Continue
1. Steps are taken to minimize the amount of potentially polluting materials and wastes kept in storage.					
2. The area around trash receptacles, stockpiles, and other outdoor storage areas is regularly cleaned.					
3. Storage areas are paved, and drain to an enclosed holding tank.					
4. Storage areas are designed to contain spills.					
5. Materials and wastes are protected from precipitation (storage areas are covered and/or containers are watertight).					
6. If storage areas aren't covered, any rainwater that accumulates is collected and disposed of properly.					
7. Steps are taken to prevent and contain spills (e.g. trays are placed under open containers and the spouts of liquid storage containers).					
8. Storage, loading, fueling and other critical areas are paved and designed to contain spills.					
9. Clean-up materials are readily available and appropriate to the types and quantities of materials that could spill.					
10. A comprehensive spill response plan has been developed and posted.					
11. Staff have been assigned responsibility for testing and implementation, and for maintaining an inventory of spill control materials.					
12. Employees are regularly trained in spill response.					