

SERIES #7: Managing Wastes



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. 7.1 through 7.3, 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. 7.1 Minimizing Waste

Why be concerned?

Using the least toxic products and procedures is one of the most important ways to protect water quality. Minimizing waste is just as important. Look for opportunities to reduce the toxicity and volume of your waste whenever possible. You will not only protect the environment – you may also reduce potential liability and disposal costs.



Choosing the Least Toxic Option

First, identify potentially hazardous products and their uses. Next, look for materials and procedures that can either be eliminated completely or substituted with a less toxic alternative. For example, less hazardous options for common cleaning activities include:

- using hot water/steam cleaning methods when washing oil from metal parts.
- using non-chlorinated and aqueous compounds rather than chlorinated and petroleum-based compounds.
- using phosphate-free detergents.

When purchasing products, ask your supplier for information about less toxic alternatives. For more assistance, contact one of the agencies listed under "Getting Help."

Purchasing Power

- Buy the most durable products and parts available. Consider whether items are easily repaired, reused and/or recycled.
- Avoid disposable products and excessive packaging.
- Try to buy *only* what you need. For example, buy materials only in amounts that can be completely used in a timely manner.

*Consider hiring a contractor
To perform occasional work
So that unused materials don't
Accumulate. When possible,
Require contractors to
Implement these Hands In for
Healthy Streams practices.*

Ideas for Using, Storing and Disposing of Products



- Recondition and reuse products, instead of buying new ones.
- Avoid routine applications. When using pesticides, acids and other chemicals outdoors, consider whether application is necessary.
- Carefully read and follow label directions: never use more product than the directions suggest.
- When possible, apply products to targeted areas *only*, versus wholesale application over a larger area.
- Maintain equipment and calibrate it frequently (including sprinklers) to prevent leaks, over-application and wind drift. Don't apply products outdoors when rain or winds are forecasted.
- Use up materials *completely* and allow containers to air dry before disposing of them. When cleaning containers and applicators, try to use methods that don't generate even more waste.
- Keep stored materials dry and contained. Label and date so that the oldest materials can be used first. For more information about storing materials and wastes, see **Series #1, Fact Sheet 1.1**.
- Separate wastes. Mixing wastes can prevent reuse and recycling. It can also cause non-hazardous materials to become hazardous – increasing both their threat to the environment and disposal costs.

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• Determine whether others can use your leftover materials. If they can't be reused, recycle your wastes whenever possible. For more information about reuse and recycling, see **Series #7, Fact Sheet 7.2** or contact one of the agencies listed under "Getting Help."

Preventing Leaks and Spills

Plan ahead to prevent leaks and spills. For more information about spill prevention and clean-up, see **Series #1, Fact Sheet 1.2**.

More Ideas for Minimizing Waste

Since each business is unique, opportunities to reduce waste will vary. Common options for reducing oil, paint and solvent waste include using:

- Extended-life engine and transmission oils.
- High volume low pressure or airless paint guns.
- Cyclonic parts cleaners which spin dirt out and so extend the life of the solvent. Solvent waste can be further reduced by buying or leasing a spray gun cleaner that recirculates thinner.

When looking for ways to minimize waste, be creative. Any waste reduction that you can achieve will protect the environment by an equivalent amount. For more information about ways to reduce waste, contact one of the agencies listed under "Getting Help."

GETTING HELP

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

Georgia Environmental
Protection Division (GA EPD)
Hazardous Waste
Management Branch (404) 656-7802
Land Protection Branch ... (404) 362-2537

Fact Sheet No. 7.2 Recycling

Why be concerned?

Wastes can often be converted into a resource. Take advantage of opportunities to recycle your wastes and to buy recycled products.

Recycling fact sheets, specific to business types, are available through the Pollution Prevention Assistance Division (P²AD). For more information about the materials and services available through this program, call P²AD at (404) 651-5120 or 800-685-2443.



“Closing the Loop”

Recycling hasn't technically occurred until recycled materials are purchased as new products. This is called “closing the loop.” Buying recycled products expands product market and reduce product cost.

Whenever possible, purchase products that you know can be recycled. For example, some absorbent materials are designed to be recycled whereas others, such as cat litter, must be landfilled. Ask your vendor about substituting products you currently use with those made from recycled - and recyclable - materials.

5 STEPS TO SUCCESSFUL RECYCLING:

1. Separate wastes

Combining different types of waste can prevent or complicate recycling and greatly increase disposal costs. For example, uncontaminated waste oil can be recycled, but waste oil mixed with solvents or other products requires a much more costly disposal process.

2. Recycle what you can

The following materials can usually be recycled:

- antifreeze
- tires
- car batteries
- oil and oil filters
- uncontaminated gasoline and brake fluid
- some solvents such as degreasing agents and paint solvents
- concrete and asphalt
- building materials
- metal scraps
- latex paint
- pallets and untreated wood
- landscaping wastes
- cooking oil, fats, and greases
- paper and cardboard
- glass, plastic, aluminum and tin containers

To start your own recycling program, talk to your waste hauler or call one of the agencies listed under “Getting Help.” Look for haulers that are willing to work with you to design a recycling program based on *your* needs. Basic questions include:

- What materials are accepted?
- What quantities are accepted?
- Will the hauler pay for certain recyclable materials?
- Will the hauler provide recycling containers?
- How much will the service cost?
- Will the materials be taken to appropriate sites?
- Does the hauler provide education materials such as training videos or pamphlets?
- Can the hauler supply references?



When designing a recycling program, be sure that it's useful to all of your employees. Provide clearly marked bins for storing materials and place them where they are easy to use. Involve your staff in designing and implementing the program.

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3. Consider contracting with an industrial fluid recycling service

These services pick up and recycle a variety of used industrial fluids. Some will also recycle other materials, such as used oil filters and absorbent materials. Depending on the company, these services can offer several advantages, including:

- compliance with all applicable state and federal laws.
- financial protection in the event of a spill.
- waste stream analysis (finding ways to minimize waste and identifying wastes that are recoverable).
- assistance with paperwork, such as shipping manifests.
- equipment leasing and maintenance. Some companies lease parts cleaners, which they maintain and supply with solvent. On a regular schedule, clean solvent is exchanged for spent solvent that is recycled. This service is also available if you already own a parts cleaner. By using this type of service, over 85% of waste solvent can be turned back into fresh solvent and reused.

When choosing an industrial fluid recycling service, determine exactly what will be done with your wastes. If possible, hire a company that will refine and reuse materials instead of burning them for fuel (even though the latter is preferable to simple incineration or landfilling).

4. Properly store hazardous wastes prior to recycling

Legal requirements for storing, handling, and transporting hazardous wastes apply until the point that they are actually recycled. For more information about hazardous waste regulations, contact one of the agencies listed under "Getting Help."



5. Compost landscape wastes

Local landfills no longer accept landscaping waste. Composting this waste provides an environmentally sound alternative to landfilling. In addition, the compost can be used to enrich the soils on-site. For more information about composting, contact one of the agencies listed under "Getting Help."



GETTING HELP

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

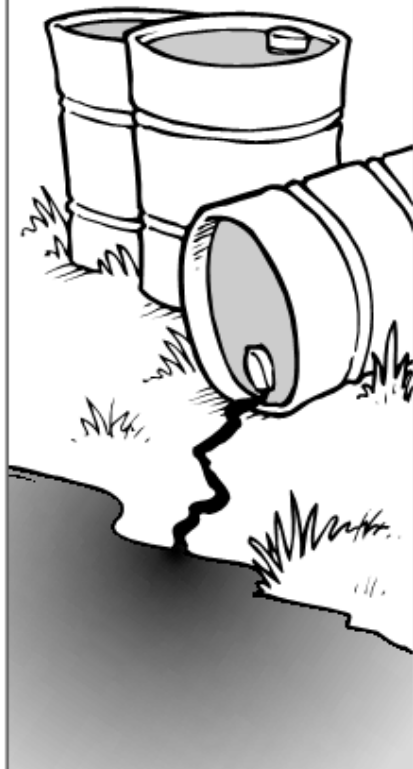


Fact Sheet No. 7.3 Disposing of Wastes

Why be concerned?

Improperly disposed of wastes don't just disappear; they may filter into our groundwater or wash off the land directly into lakes, rivers and streams.

Effective waste management is extremely important to avoid not only environmental problems, but legal ones as well. Businesses are legally responsible for their waste disposal even if it's handled by an outside contractor. And while the business owner has ultimate responsibility for disposing of wastes, employees may also be legally liable.



Maintaining a Litter-Free Landscape

Regularly remove debris from outdoor areas and dispose of it properly. This is especially important before rain storms and snow melts. Be sure to collect and compost landscape wastes. Leaves and other organic wastes can become pollutants if large quantities are allowed to enter surface waters.

Make sure that waste containers are conveniently placed and don't leak or overflow. (For more information about properly storing wastes, see **Series #1, Fact Sheet 1.1.**)

Identifying Hazardous Wastes

A waste is considered hazardous if it could be dangerous to human health, property, or the environment. The EPA lists types of hazardous wastes. In general, these materials are ignitable, reactive, corrosive, and/or toxic.

Hazardous products commonly used by businesses include:

- paints
- thinners
- solvents
- cleaning and polishing fluids
- coolants
- pesticides
- degreasers
- lead acid batteries
- acids/caustics
- metallic compounds
- petroleum products



If you don't know whether a waste is hazardous, contact one of the agencies listed under "Getting Help." Assume a material is hazardous until you find out otherwise. When in doubt, place the waste in a sealed, labeled container. Store it in a secure place where no one can accidentally use it prior to safe disposal.

Determining the Best Disposal Method

First and foremost, prevent wastes (including wash water) from entering storm drains. These lead straight to local lakes, rivers, and streams.

Proper disposal depends on how much waste is generated and the material's chemical properties. Even if a waste *isn't* hazardous, it may not be advisable to put it into a dumpster or the sanitary sewer. State law prohibits the landfilling of certain non-hazardous materials, such as uncontaminated soil and landscape wastes.

There are also limits on what can be discharged into the sanitary sewer. Dumping an unapproved substance into a sanitary sewer can cause explosions or other problems due to the incompatibility of chemicals.

Before disposing of wastes into a trash receptacle or the sanitary sewer, call your local landfill and/or wastewater treatment plant to make sure they can be accepted (phone numbers are listed under "Getting Help").

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Disposing of Hazardous Wastes

If a waste is hazardous, estimate how much of it you generate and accumulate: this will dictate how it can be transported and disposed of under state law. Next, contact the Georgia Environmental Protection Division (GA EPD) to find out whether you can transport your waste yourself or if you must use a licensed hauler. Hazardous wastes transporters must have an EPA identification number. The wastes must be delivered to a licensed treatment, storage and disposal facility (TSDF).

Be careful when deciding how to transport and dispose of wastes. As a generator, you remain legally liable for their fate "from cradle to grave." Many waste haulers, brokers, and TSDFs operate in this area. When choosing, be sure to:

- Check references. Seek referrals from businesses similar to yours.
- Make sure the hauler has a license and an EPA identification number.
- Find out if the hauler has been recently cited for violations and, if so, what changes have been made in its practices.
- Find out what steps will be taken to prevent spills (spills on the road can also be the generator's liability), as well as the type and amount of insurance the company carries. Ask for proof of this insurance.
- Find out what will be done with your waste. It must end up at a TSDF where it can be reprocessed, recycled, blended into fuels, incinerated, or taken to a special landfill. If your waste isn't delivered to the treatment or disposal facility on the same day it's picked up, find out where it will be stored. Whenever possible, further verify the information you receive.

Laws governing waste disposal can be confusing. For example, it's often difficult to distinguish between the laws that apply to all hazardous *substances* and those that apply only to hazardous *wastes*. For the most current information regarding waste regulations, contact the Georgia Environmental Protection Division (GA EPD) Hazardous Waste Management Branch.

The Importance of Shipping Manifests

Shipments of liquid industrial waste must be accompanied by a uniform waste manifest signed by the generator. A manifest is also required to transport regulated amounts of hazardous waste. Be sure that waste manifests are provided when required and that they are accurate and complete.

GETTING HELP

Georgia Environmental Protection
Division (GA EPD).....
Hazardous Waste Management
Branch.....
(404) 656-7802.
Land Protection Branch.....
(404) 362-2537.

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

This concludes Fact Sheets 7.1, 7.2, and 7.3 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 #7 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 #7, Housekeeping Practices: Managing Wastes | ASSESSMENT | | | ACTION PLAN | |
|--|-------------------|----------------------|--------|--------------------|---------------------|
| | Not Applicable | Needs Improvement | Always | Plan to Improve | Plan to Continue |
| 1. Purchasing decisions are made to minimize waste (e.g. excess materials and packaging are avoided). | | | | | |
| 2. Steps are taken to minimize waste when using chemical and petroleum products (e.g. over-application is avoided and products are used completely). | | | | | |
| 3. Steps are taken to ensure that wastes are <i>not</i> dumped onto the ground or into a storm drain. | | | | | |
| 4. All wastes that can be are reused or recycled. | | | | | |
| 5. Wastes that can't be reused or recycled are disposed of according to federal, state, and local law. | | | | | |