

Economic Evaluation Form

Date completed: _____ Person completing form: _____
Waste Reduction Option: _____

	Yes	No	Not Sure
Is this option within your price range?			
Does this option have an acceptable payback period (under one year is considered excellent)?			
Does this option reduce your raw material costs?			
Does this option reduce your utilities costs?			
Does this option reduce material and waste storage costs?			
Does this option reduce regulatory compliance costs?			
Will this option reduce the costs associated with worker injury or illness?			
Will this option reduce your insurance premiums?			
Will this option reduce your waste disposal costs?			

Technical Evaluation Form

Date completed: _____ Person completing form: _____
Waste Reduction Option: _____

	Yes	No	Not Sure
Does this option have a proven track record?			
Will this option maintain product quality?			
Will this option adversely affect productivity?			
Will this option require additional staff?			
Are you certain that this option will create less waste?			
Are you certain that this option will not move waste problems from one form to another?			
Is your plant layout and design capable of incorporating this option?			
Will the vendor guarantee this option?			
Does this option reduce waste at its source?			
Are materials and parts readily available?			
Are other businesses using this option?			
Does this option promote recycling?			



FACILITY POLLUTION PREVENTION CHECKLIST

Pollution prevention, through waste reduction and energy efficient practices, can result in cost savings for businesses, while at the same time protecting environment. The following series of questions is meant to stimulate thinking about possible pollution prevention actions that might be undertaken by many manufacturing facilities. Each set of questions begins with the phrase, "Have you considered..."

YOUR MANAGEMENT STRATEGY

- developing a usable source reduction plan for your facility?
- training employees to be aware of hazardous waste reduction opportunities?
- accounting for waste treatment and disposal expenses as a direct cost of producing a product?

WATER USE/REUSE

- flow control valves?
- identifying water inflow and outflow from each unit process?
- evaluating reuse of clean or contaminated water?
- using timers or foot pedals to control water usage?
- reactive rinsing?

MATERIAL HANDLING

- segregating raw and waste material containers?
- segregating different waste materials in separate containers?
- purchasing materials in bulk or larger containers?
- controlling inventory to reduce waste?
- labeling all containers properly?
- labeling process tanks?

SOLVENT CLEANERS

- avoiding cross-contamination of solvent?
- avoiding water contamination of solvent?
- removing sludge continuously?
- using a tank cover or air knife to reduce surface evaporation?
- monitoring solvent composition?
- consolidating cold cleaning operations?
- using cryogenic or plastic media blasting for paint stripping instead of solvent stripping?
- using nonchlorinated solvents instead of chlorinated solvents?
- installing a vapor recovery system to capture vaporized solvents?
- installing on-site distillation units?
- evaluating work removal rate?

ALKALINE/ACID CLEANERS

- removing sludge more frequently?
- avoiding cross-contamination of solvent?
- reusing cleaners by filtering and rejuvenating?

PLATING/ETCHING/METAL FINISHING

- using low temperature baths to reduce surface evaporation?
- prolonging plating solution bath life through filtration, reducing drag-out, avoiding contamination, etc.?
- using lower concentration plating bath?
- redesigning part racks to reduce drag-out before the rinse, possibly with air blow-off?
- using trivalent chromium instead of hexavalent chromium?
- using noncyanide plating solutions such as chloride or sulfate solutions?
- using in-line recovery techniques?
- regenerating spent bath solutions?
- segregating all waste streams?
- using spray or fog nozzle rinses to reduce drag-out?
- using wetting agents to reduce surface tension, this minimizing drag-out?
- reusing rinse water?
- recovering chrome and nickel plating solutions by an evaporation unit?

RINSE WATER

- using multiple rinse tanks?
- using countercurrent rinsing?
- installing drainboards and drip tanks?
- installing racks above plating tanks to reduce drag-out?
- using fog nozzles and spray units?
- agitating rinse bath (air or solution agitation)?
- recycling and reusing spent rinse water through such metal recovery techniques as ion exchange, reverse osmosis, and electro-chemical recovery?
- segregating all waste streams?
- using an evaporator for material recovery from rinse tanks and reuse in plating bath?

PAINT APPLICATION

- using equipment with high transfer efficiency such as electrostatic applicators?
- using high-solids coatings such as powder coatings?
- segregating all waste streams?
- using cheesecloth over filters to reduce spent filter generation?
- recycling over-spray, for instance, from powder coatings?
- evaluating the use of different types of paint arrestors such as water wash and filters?
- arranging formal training for spray operators?
- optimizing spray conditions in terms of speed, distance, angle, pressure, etc.?
- using booth coatings for easy booth cleaning?
- inspecting all parts, such as racks, for cleanliness?
- using gun washer equipment for equipment clean-out?
- reducing the use of solvent-based and metal-based paints, where possible, by using water-based coatings?
- using a charged screen with electrostatic system to reduce edge buildup and to capture and reuse over-spray paint?

LEAK AND SPILLS

- using seal-less pumps?
- installing spill basins on dikes?
- installing splash guards and drip boards?
- installing overflow control devices?
- maximizing use of welded pipe joints?

SLUDGE DEWATERING

- using mechanical dewatering devices such as filter presses, centrifuges, vacuum filters, or compression filters?
- keeping different metals sludges segregated?
- using filter bags?
- using sludge dryers?

PARTS WASHING

- covering all solvent cleaning units?
- using refrigerated freeboard on vapor degreaser units?
- improving parts draining before and after washing?

OIL/WATER SEPARATION

- using a centrifuge system to cover cutting fluids?
- chemical treatment?
- filtration?
- coolant regeneration?

GENERAL LIGHTING, HEATING AND WATER

- using fluorescent overhead lamps?
- installing motion detectors for rest room lights?
- trying less expensive lamps for exit signs?
- adding set back thermostat for heating system(s)?
- testing water valves regularly throughout building to eliminate leaks?
- checking for leaks around windows and doors?

For more information about pollution prevention approaches contact:

DEP's Office of Pollution Prevention & Compliance Assistance
P.O. Box 2063, 16th Floor, RCSOB
Harrisburg, PA 17105-2063
(717) 783-0540
FAX: (717) 783-8926

This fact sheet and related environmental information are available electronically via Internet. Access the DEP website at <http://www.dep.state.pa.us> (choose Information by Subject/Pollution Prevention and Compliance Assistance).



OFFICE ENVIRONMENTAL PRACTICES CHECKLIST

This checklist was compiled by the Bullitt Foundation from various sources and is provided to their grantees. The Foundation requires grantees to complete this checklist with grant contracts and encourages them to take the steps outlined below.

Yes No N/A

Reduce

- Offer incentives to staff and volunteers to travel to work and meetings without driving alone in a motorized vehicle.
- Provide advice or assistance with ridesharing, mass transit or nonmotorized transportation options for workshops, conferences or other special events hosted by your organization.
- Replace disposable plates and utensils with durable dishes and flatware.
- Keep a supply of extra mugs and glasses in a common area.
- Keep cloth towels next to the sink to be used instead of paper towels.
- Make two-sided copies, and print letters and reports on both sides of the page.
- Use electronic mail whenever possible.
- Avoid using cover sheets to send fax transmittals.
- Buy a plain paper fax, so the paper can be recycled.
- Use canvas shopping bags when buying office supplies.
- Purchase products (including take-out meals) in recycled and recyclable containers.
- Purchase items in bulk packages or in concentrated form.
- Be selective with mailing lists for annual reports and newsletters.
- Reduce junk mail by taking your name off unwanted mailing lists.

Reuse

- Reuse paper that is clean on one side for in-house drafts and photocopies.
- Refill toner cartridges used in photocopiers and laser printers.
- Give preference to products that incorporate post-consumer recycled materials.
- Do research at libraries or on-line, rather than ordering written materials.

- Share periodicals with associates instead of receiving multiple copies.
- Donate old or outdated equipment or furniture.

Recycle

- Recycle office paper, aluminum, steel, glass, newspaper and cardboard.
- When possible, recycle magazines, colored paper, wood, oil and plastics.
- Reduce or eliminate the use of colored paper.
- Purchase recycled paper with high post-consumer content that is not bleached with chlorine. Use Green Seal-certified products whenever they are available.

Toxics & Hazardous Materials

- Use only non-hazardous supplies for cleaning, landscaping and maintaining the office.
- If hazardous materials cannot be used up or recycled, take them to a hazardous waste disposal facility.
- Switch to soy-based and other non-toxic inks for your printing needs.
- Use rechargeable batteries instead of disposable ones.
- Avoid chemical pesticides for insect control.

Score: Total Yes _____

Total No _____

Total N/A _____

Organization _____

Date _____

Note: Purchasing officers or buyers can contact Green Seal at (202) 331-7337 for more information or to become a Green Seal Environmental Partner.

ENVIRONMENTAL CHECKLIST FOR PRINTERS

How can you determine if a particular printer has a true commitment to the environment. The bottom line is that it is at best difficult to gauge a company's overall environmental score, and that score will probably change depending upon the type of printing a company does (heatset web, for example, is inherently more polluting than sheetfed printing).

Short of going on-site with an expert in environmental compliance and conducting an audit, what can you do? The following list will help evaluate the company that does your printing. You may be able to use this list of concerns to help determine a printer's degree of environmental sensitivity.

Is the printer...

- Actively stocking and promoting the use of environmentally desirable papers?
- Knowledgeable about new developments in papers?
- Knowledgeable about new developments in inks?
- Pro-actively training their staff members to be flexible in work habits and to be open to new environmental innovations? Or are you often warned that using a new paper or ink will probably result in compromising quality and turnaround?
- A signatory of the CERES principles-a public commitment to an environmental code of ethics?
- Conducting regular environmental audits of shop operations?
- In compliance with the federal Clean Air Act and EPA regulations, as well as state and local laws?
- Recycling their waste ink to the maximum extent possible, thus minimizing the amount hauled away as hazardous waste?
- Recovering photochemical (silver) wastes from darkroom chemicals? Has sewage effluent been tested for compliance with local regulations?
- Recycling other waste from their manufacturing operations:
 - Wash-up solvents?
 - Paper trimmings and plates? (Nearly all printers now do this.)
 - Cardboard?
 - Steel banding from pallets?
 - The pallets themselves?
- Conducting an annual audit of energy consumption and comparing it to sales volume?

- Taking steps to improve lighting, heating, and air conditioning efficiency?
- Monitoring water usage?
- Providing on-site recycling for employees?
- Considering environmental impact when making purchasing decisions on equipment and chemicals:
 - Using low-volatility wash-up solvents and cleaning agents?
 - Eliminating chlorinated hydrocarbons wherever possible?
 - Eliminating ozone-depleting compounds wherever possible?
 - Eliminating the use of alcohol in press fountain solutions?
 - Using vegetable off-based inks with under 10% VOCs as their standard ink?
- Actively educating customers about the environmental impact of printed products and offering production alternatives?

Reprinted with permission from *Newsletter for the Environmentally Responsible Print Buyer*, Jan/Feb 1995, © Ecoprint, 1995.

It's Easy to Register for the EcoWise Program

To receive a registration packet for the EcoWise program, just tear off and return the postage pre-paid reply card in this brochure. Your registration packet will include EcoWise registration forms, a list of materials and fees, a schedule for upcoming collection events and a copy of *Hazardous Waste Management in Montgomery County*, the County's handbook for businesses generating small quantities of hazardous waste.

For questions or more information about the EcoWise Program, call the Division of Solid Waste Services at (301) 217-2770.

Bulk Rate
Postage
PAID
Permit #138
Rockville, MD

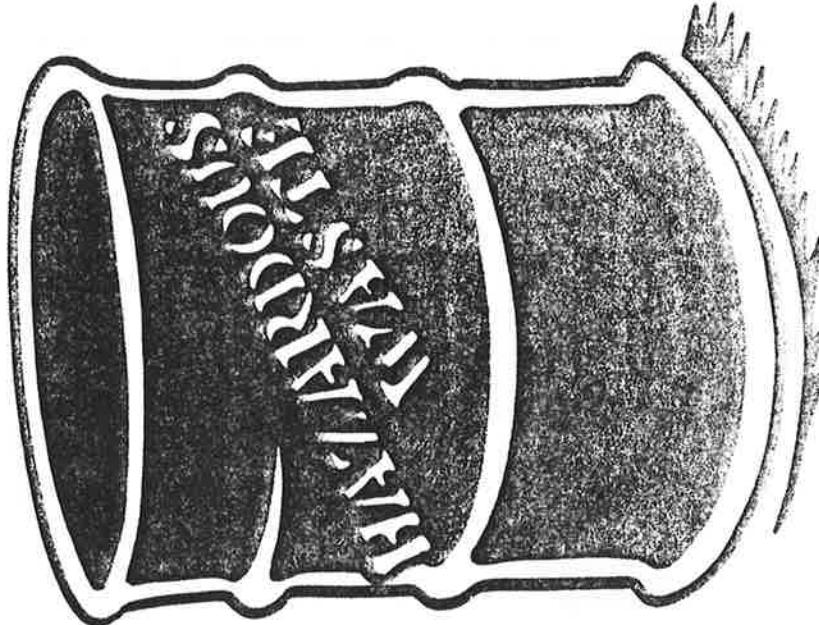
MONTGOMERY COUNTY'S PROGRAM FOR BUSINESSES GENERATING SMALL AMOUNTS OF HAZARDOUS WASTES



Montgomery County, Maryland
Division of Solid Waste Services

Printed on recycled paper.

Montgomery County, Maryland
Division of Solid Waste Services
101 Monroe Street, 6th Floor
Rockville, MD 20850



Does Your Business Generate Hazardous Waste?



You probably want to answer, "no." But many businesses and organizations produce some hazardous materials that may be flammable, toxic, corrosive or reactive. If you do, it is very important to dispose of these wastes in a way that protects human health and the environment — and complies with all federal, state and local regulations.

Many small businesses in Montgomery County may be eligible for the EcoWise program, a cost-effective, environmentally responsible disposal option for small quantities of hazardous waste.

What Is the EcoWise Program?

The EcoWise program is a partnership between the Montgomery County Division of Solid Waste Services (DSWS) and County businesses and organizations. EcoWise provides organizations with the opportunity to dispose of small quantities of hazardous wastes in an environmentally responsible manner.

Disposal through the EcoWise program costs less than contracting with a hazardous waste management firm, and participating organizations stand to benefit from County-sponsored publicity recognizing the environmental stewardship of EcoWise partners.

Eligibility for EcoWise

To be eligible to participate in the EcoWise program, your business or organization:

- must be located in Montgomery County and
- must produce less than 100 kilograms of hazardous waste per month as detailed in Maryland regulations.

How the EcoWise Program Works

The EcoWise program consists of a series of County-sponsored collection events during which eligible hazardous waste generators may deliver certain toxic, flammable, corrosive or reactive waste products for recycling, treatment or disposal.

Where: Collection events occur at the Montgomery County Solid Waste Transfer Station near the intersection of Maryland Route 355 and Shady Grove Road.

When: Collection events occur on the second Wednesday of each month from 1 pm to 5 pm. The County may schedule more frequent collections as demand for the service increases.

What Will Be Accepted

Eligible hazardous waste generators may dispose of up to 100 kilograms (approximately 220 pounds) per visit of the following materials:

- acids
- bases
- fuels
- solvents
- oil-based paints and stains
- photographic chemicals
- oxidizers
- reactive materials
- batteries
- pesticides
- heavy metals

The EcoWise program does not accept acutely hazardous wastes, radioactive materials, explosives and medical waste.

EcoWise Program Fees

There is no fee to pre-register for the EcoWise program, but you will pay a fee each time you bring hazardous materials to a collection event. The type and weight of the materials you bring for disposal will determine the fee you pay.

The cost to a typical EcoWise participant will be approximately one quarter the cost of paying for disposal through a hazardous waste management firm.

Benefits of Participating in the EcoWise Program

Participating in the EcoWise program not only benefits the environment but also will benefit your business or organization. As an EcoWise participant, you will:

- be included in press releases identifying businesses and organizations that have demonstrated environmental stewardship and
- receive signs, posters and decals to inform your customers about your environmentally responsible practices.



Montgomery County recognizes the business or organization for doing its share to protect the environment through proper handling of special wastes.

1997/1998

EcoWise participants receive signs, decals and posters.

WHAT PARTICIPATE?

Excessive research exists today to provide businesses with alternatives to pollution and waste generation that save money, reduce liability and improve worker safety and morale.

At the heart of the Businesses for a Cleaner River program is our commitment to helping you find solutions that save you money.

Well documented methods will be relayed to help you:

- ◆ Reduce costs for energy, water and raw materials.
- ◆ Reduce the cost of waste disposal.
- ◆ Improve aesthetics of your property and reduce landscape maintenance costs.
- ◆ Develop strong employee volunteer support for wildlife habitat programs.
- ◆ Improve community relations and achieve positive recognition.
- ◆ Achieve regulatory compliance through voluntary, win-win actions.

Partners

working with
The Elizabeth River Project
to make Businesses for a
Cleaner River a success:

Alliance for the Chesapeake Bay

Chesapeake Bay Foundation

Chesapeake Bay Program

City of Chesapeake

City of Norfolk

City of Portsmouth

City of Virginia Beach

Hampton Roads Chamber of
Commerce

Hampton Roads Planning District
Commission

Hampton Roads Sanitation District
Virginia's Center for Innovative
Technology

Virginia Department of
Environmental Quality.

Elizabeth River Project

109 E. Main Street, Suite 305
Norfolk, VA 23510

(757) 625-3648 Fax 625-4435

e-mail: erp@norfalk.intu.net

Website: <http://www.infi.net/~erp/>

Printed on recycled paper

Businesses for a Cleaner River



Resource & Referral Service

Logo courtesy of Mark Carey,
Norfolk Naval Shipyard.
Photography - copyright 1996
BM Turner

Resource Assistance Line (757) 625-3648



Call the independent, non-profit Elizabeth River Project, a partnership of business, government, scientific and citizen interests working together since 1992. We're a non-regulatory organization committed to finding positive, cooperative solutions to our river's problems.

Discover win-win solutions that help your bottom line while helping the Elizabeth River.

Be recognized in the community for your work resulting in a cleaner river.

Become known as a "River Star" of the Elizabeth River Project's new certification program, Businesses for a Cleaner River!

Businesses for a *Cleaner River* - River Stars A Special Program of the Elizabeth River Project



Solutions to Pollution Resources and Referrals

- Free, confidential research and training on cost-effective alternatives to reduce pollution at the source and minimize costly waste.

- Volunteer pool of peer expertise to help us find solutions tailored to your industry.

- "Green Directory" of pollution prevention and waste reduction services.

- Facilitation between government sources of information and the private sector. We're working in partnership with Businesses for the Bay and state and local efforts.

River Stars

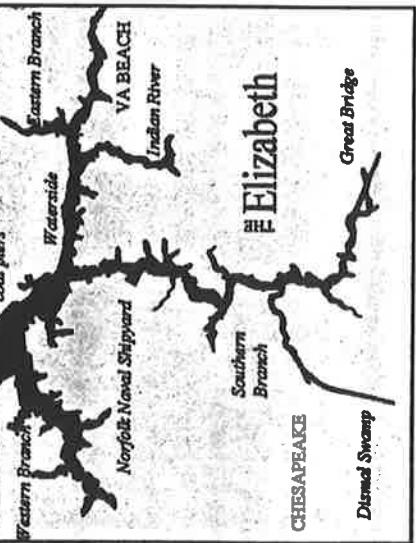
Voluntary Certification and Recognition

River Stars, our certification and recognition program, will help you communicate your commitment to environmental protection through decals, plaques, news releases, and a recognition banquet. In addition, successful participants will be highlighted in our Annual State of the River Report to the public.

For more information, call Jill Goodman Bieri or Laura Dukat, (757) 625-3648.

Demonstration Projects to Be Chosen

The Elizabeth River Project is selecting businesses, schools, neighborhoods and government facilities to serve as demonstration projects during 1997 for both Solutions to Pollution and Wildlife Habitat Enhancement efforts. Successes will serve as potential case studies for others seeking assistance.



- Create a wildlife habitat while increasing employee morale and improving community relations.

- Free advice on low-cost projects to restore wildlife habitat, control erosion and filter pollutants.
- "Green Directory" of sources of plants and materials. Volunteer pool of peer expertise.

The Elizabeth River Project - businesses, citizens and government working together for a cleaner river.



Appendix D

Promoting P2 Activities to Citizens

Survey Questionnaires

Pollution Prevention

Water Pollution Action Alternatives

Educational Brochures

Rain Gardens, Prince George's County, MD

Recycle, Let's Separate Together, Lancaster County, PA

Creating a Water-Wise Landscape, Virginia Cooperative Extension

Household Hazardous Waste, Pennsylvania Environmental Council



CITIZEN QUESTIONNAIRE-POLLUTION PREVENTION SURVEY QUESTIONNAIRE #1



Thank you for taking a few moments to answer the questions below. The results of this survey will be used by the *Baltimore County Department of Environmental Protection and Resource Management* (DEPRM) in an environmental education program for pollution reduction.

1. Is there a creek, stream or other waterway near your home (within a mile)?

Yes No Don't know

If Yes, what is it called? _____ Don't know _____

2. Do you believe the water in the creek or stream nearest your home to be clean enough for:

Yes No Don't know

Drinking	_____	_____	_____
Fishing	_____	_____	_____
Swimming/Wading	_____	_____	_____

3. Is the place where you live:

Single family detached house Apartment Mobile home Townhouse or duplex

Street name: _____ Zip: _____

4. Have you ever planted a tree or a shrub? Yes No

5. Approximately how much of your lawn do you and your family members use on a regular basis?

All Most Half Less than half None N/A

6. Would you be willing to convert some of your lawn to ground cover, shrubs, or trees?

Yes No Not Sure N/A

7. Who performs the lawn care/landscape maintenance where you live?

Property Owner Lawn care company Both Other: _____

8. How often is fertilizer applied to the lawn where you live?

<input type="checkbox"/> Not used	Season: _____
<input type="checkbox"/> Once every 2 to 3 years	Season: _____
<input type="checkbox"/> Once every year	Season: _____
<input type="checkbox"/> Twice a year	Seasons: _____
<input type="checkbox"/> More than twice a year	Season/s: _____
<input type="checkbox"/> Other	Season/s: _____
<input type="checkbox"/> Don't know	Season/s: _____

If used, approximately how much is applied per year (lbs)? _____

9. How often are chemical pesticides used on the property where you live?

Applied on a regular schedule Applied as needed Not Used Don't know

Do you ever use non-chemical pest control methods?
(attractants, barriers, traps, hand-picking of weeds, etc.) Yes No

10. Is your home served by Baltimore County's "One and One" curbside recycling service? Yes No Don't know
11. Does anyone in you household regularly recycle?
 Yes No If Yes, where? Home Office School
12. Do you have a compost pile where you live? Yes No Don't know
13. When someone in you household washes the car, where is it done? (Check all that apply)
 On the grass On gravel On a concrete driveway
 On bare soil At a commercial car wash On the street
14. Approximately how often is the car washed?
 Weekly Monthly Every other month Once a year Twice a year Other
15. When the oil or antifreeze in your car must be changed, where is the work done?
 At a dealer, gas station, or lube center At home If you change it yourself, how do you dispose of used oil?
 Recycle Other(specify)
16. Use the appropriate letter to indicate how you would dispose of the following materials:
(T) TRASH (R) RECYCLE (D) HOUSEHOLD DRAIN (O) OTHER (specify) (X) DON'T KNOW
 Paint (water based) Yard waste Fertilizer Paint (oil based)
 Metal polishes Gasoline Turpentine Pesticides
 Chlorine bleach Wood stain Pet waste Batteries
17. When choosing a product to buy, do any of the following factors influence your decision? please check (✓)
 Amount of packaging Product safety Packaging material Ease of disposal None of these
18. Do you have a pet? Yes No If Yes, what type: _____
How do you dispose of pet waste? _____
19. Do you own a "Bay" license plate? Yes No
20. Is your age: Under 10 10-19 20-29 30-39 40-49 50-59 60-69 Over 70
21. Sex: M F
22. What is the highest grade of school you completed?
 Less than high school: present grade level _____
 High school or GED
 Some college, university or technical school
 College graduate (4 years)
 Post graduate degree

Comments: _____

THANK YOU!! If you would like information about this project, call DEPRM at (410) 887-5683, Monday thru Friday 8:30 a.m. - 4:30 p.m.
PLEASE RETURN SURVEYS TO: Baltimore County Department of Environmental Protection and Resource Management (DEPRM)
401 Bosley Avenue, Suite 416
Towson, Maryland 21204



WATER POLLUTION ACTION ALTERNATIVES SURVEY QUESTIONNAIRE #2



Thank you for taking a few moments to answer the questions below. The results of this survey will be used by the *Baltimore County Department of Environmental Protection and Resource Management* (DEPRM) to determine the effectiveness of the "Let's Be Partners" educational program.

As a direct result of the information you received in the program, have you begun to use any of the environmental action alternatives listed below? Place an (✓) in the appropriate space for each action. (Leave the question blank if it is not applicable to you).

Action	<u>I already do this</u>	<u>I am considering doing this</u>	<u>I will do this</u>	<u>No Change</u>	<u>Comments:</u>
1. buy low or non-toxic products	_____	_____	_____	_____	_____
2. buy products with less packaging	_____	_____	_____	_____	_____
3. for pest control: a. use attractants	_____	_____	_____	_____	_____
b. use barriers	_____	_____	_____	_____	_____
c. use traps	_____	_____	_____	_____	_____
d. use <u>less</u> chemicals	_____	_____	_____	_____	_____
4. wash car on grass	_____	_____	_____	_____	_____
5. use a hand mower	_____	_____	_____	_____	_____
6. recycle: a. oil	_____	_____	_____	_____	_____
b. antifreeze	_____	_____	_____	_____	_____
c. paper	_____	_____	_____	_____	_____
d. yard waste	_____	_____	_____	_____	_____
7. reduce lawn area	_____	_____	_____	_____	_____
8. plant trees or shrubs	_____	_____	_____	_____	_____
9. plant ground cover	_____	_____	_____	_____	_____
10. compost at home	_____	_____	_____	_____	_____
11. buy less fertilizer	_____	_____	_____	_____	_____
12. remove some paved surfaces	_____	_____	_____	_____	_____
13. take household hazardous waste to a collection center	_____	_____	_____	_____	_____

—Please turn over—

<u>Action</u>	<u>I already do this</u>	<u>I am considering doing this</u>	<u>I will do this</u>	<u>No Change</u>	<u>Comments:</u>
14. take a soil sample	_____	_____	_____	_____	_____
15. use recommended grass seed varieties	_____	_____	_____	_____	_____
16. collect pet waste	_____	_____	_____	_____	_____
17. flush pet waste (dog)	_____	_____	_____	_____	_____
18. use biodegradable detergent	_____	_____	_____	_____	_____
19. use marine pumpout	_____	_____	_____	_____	_____
20. join a greening committee	_____	_____	_____	_____	_____
21. remove trash and leaves from a storm drain	_____	_____	_____	_____	_____
22. paint a storm drain	_____	_____	_____	_____	_____
23. buy a Bay License Plate	_____	_____	_____	_____	_____
24. join or support an environmental non-profit organization	_____	_____	_____	_____	_____
25. help with a clean-up	_____	_____	_____	_____	_____
26. Is your age: <input type="checkbox"/> Under 10 <input type="checkbox"/> 10-19 <input type="checkbox"/> 20-29 <input type="checkbox"/> 30-39 <input type="checkbox"/> 40-49 <input type="checkbox"/> 50-59 <input type="checkbox"/> 60-69 <input type="checkbox"/> Over 70					
27. Sex: <input type="checkbox"/> M <input type="checkbox"/> F					
28. What is the highest grade of school you completed?	<input type="checkbox"/> Less than high school: present grade level: _____ <input type="checkbox"/> High school or GED <input type="checkbox"/> Some college, university or technical school <input type="checkbox"/> College graduate (4 years) <input type="checkbox"/> Post graduate degree				

Comments: _____

THANK YOU!! If you would like information about this project, call DEPRM at (410) 887-5683, Monday thru Friday 8:30 am-4:30 pm.

PLEASE RETURN SURVEYS TO: Baltimore County Department of Environmental Protection and Resource Management (DEPRM)
 401 Bosley Avenue, Suite 416
 Towson, Maryland 21204



READING LIGHTLY.

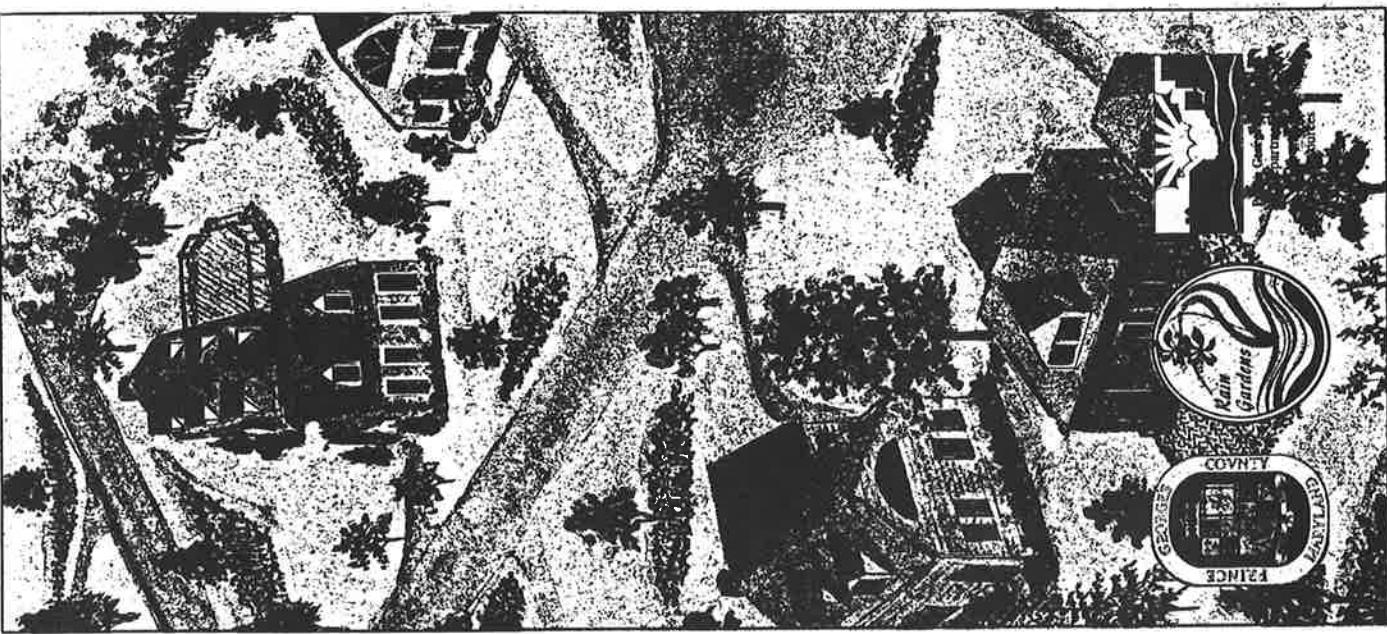
Using nature to protect nature, our lifestyles can have a low impact on the environment. By placing a Rain Garden in your yard, you reduce stormwater pollution and provide a natural habitat for birds.



How about a natural hummingbird feeder outside your window? Plant cardinal flower and enjoy the scenery. Each garden is planted with a variety of grasses, flowers, and trees, and can be personalized to create a unique look.

Rain Gardens are only one part of a low environmental impact lifestyle. Prince George's County offers many programs to educate and inform residents about ways to help protect the environment and the quality of our water.

The County provides information about recycling, smart lawn care, and suggestions for caring for your car without harming the environment. Residents can get involved in the Stream Teams program, adopting and monitoring a local stream. You can call 95-CLEAN to learn how to recycle hazardous wastes such as paint and motor oil! By using all of these programs we are treading lightly on our environment.



Rain Gardens

THE
NATURAL
SOLUTION

RAIN... it's nature's way of nourishing our world and replenishing our water sources. Many of our daily activities, from washing cars to fertilizing lawns, can turn this



precious resource into an environmental problem.

The flow of water created by a rainstorm—stormwater runoff—can be polluted by oil, chemicals, pesticides, and sediments built up on our lawns, driveways, streets, and parking lots as a result of our daily activities. Rain washes these pollutants into storm drains, and ultimately, into local streams and rivers.

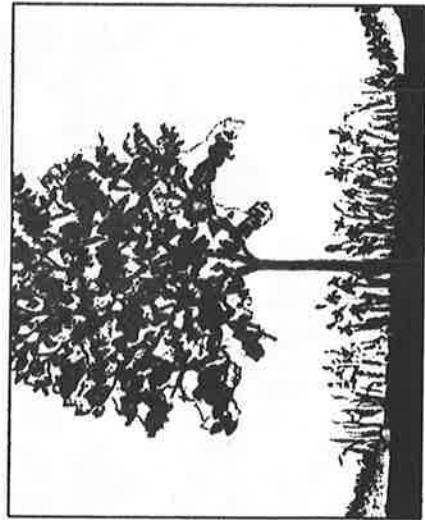
The Prince George's County Department of Environmental Resources has developed an innovative and environmentally sensitive approach to reducing stormwater pollution. Rain Gardens are a natural solution to the challenge of protecting our water quality, providing many benefits to the homeowner and the environment.

W H A T I S T H E R A I N G A R D E N C O N C E P T ?

W H A T D O I H A V E T O D O ?

As a homeowner you are responsible for the care of your garden. Gardens planted in common areas are maintained by the Homeowner's Association. As an environmentally sensitive system, these gardens require less time and work than a yard—no mowing, no pesticides—and very little maintenance other than the occasional weeding. While your role is to be

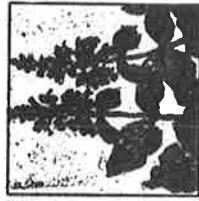
responsible for the care of your garden, your reward is enjoying the beauty of this natural setting and a cleaner, healthier environment.



Rain Gardens use the concept of bioretention, a water quality practice in which plants and soils remove pollutants from stormwater. The traditional system of curbs, gutters, and storm drains carries stormwater runoff directly to local streams and rivers. These gardens filter and reuse this water, reducing stormwater pollution.

A B E N E F I C I A L S Y S T E M

A neighborhood planted with Rain Gardens receives many benefits. Each home has a beautifully landscaped area, enhancing the look of the overall community. Such areas help protect the environment by providing shade and wind breaks. And, because they are in your yard, less mowing is required. These gardens are cost-effective, too. They require little maintenance and



Please call the
Prince George's County
Department of Environmental Resources
at (301) 883-5833

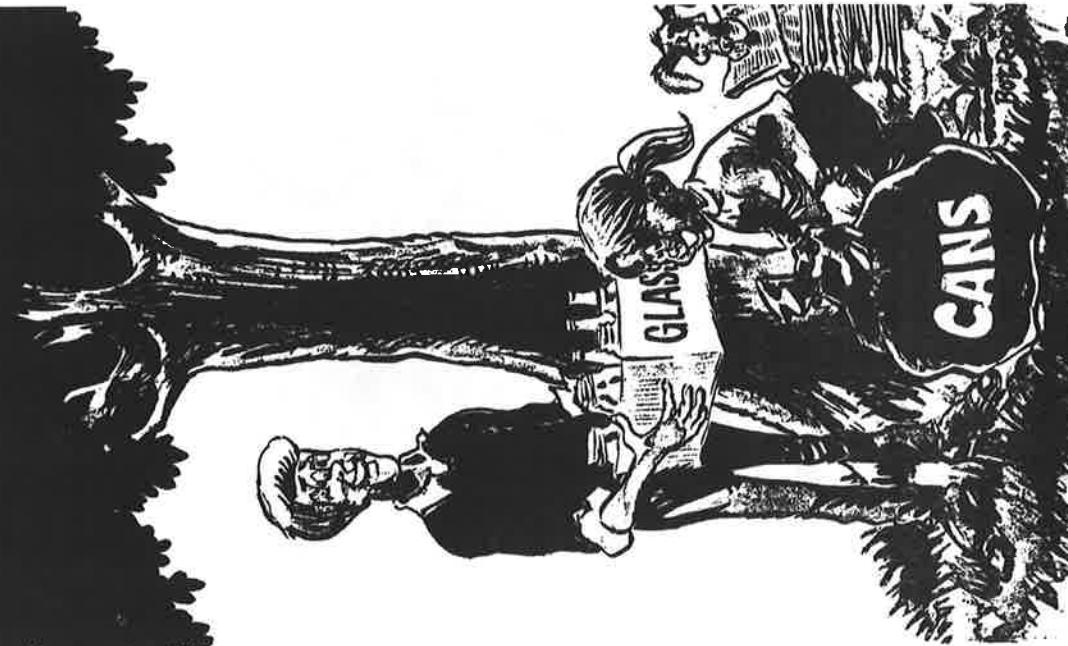
For More Information...

reduce the need for other costly stormwater systems. Gardens can also serve as educational tools for you and your children. Plants can be added to attract hummingbirds or butterflies—you can have a nature center right in your own yard!

Wayne K. Curry, County Executive
Samuel E. Wynkoop, Jr., Director

Recycle

LANCASTER COUNTY
LET'S SEPARATE TOGETHER



3. SAVES THE ENVIRONMENT

Recycling Paper

- ♦ One ton = 17 trees saved
- ♦ 60% less water used to produce new paper products

Recycling Glass

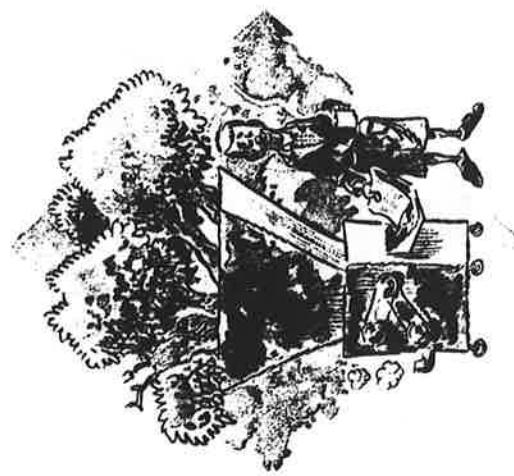
- ♦ 50% less water used to produce new glass products
- ♦ 79% less mining waste produced

Recycling Aluminum

- ♦ 98% less air & water pollution produced
- ♦ Lessens dependency on imports

For more information on the recycling opportunities available to you, contact your municipal office or the Lancaster County Solid Waste Management Authority at (717) 397-9968.

The first step is separation of recyclables from trash by the homeowner. The second step is delivery of recyclables to a recycling center. In many municipalities, a curbside collection service for recyclable materials is provided to homeowners. In other municipalities, drop-off centers are nearby, where homeowners can deliver their recyclables. At some drop-off centers you can receive payment for delivering your recyclables.



BENEFITS OF RECYCLING

1. SAVES MONEY – By reducing your trash volume you may reduce your trash bill.

2. SAVES ENERGY

- ♦ Making one ton of paper from recycled paper uses 70% less energy
- ♦ Making one ton of aluminum from recycled aluminum cans uses 95% less energy

LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY

1299 HARRISBURG PIKE
PO BOX 4425
LANCASTER, PA 17604

LANCASter COUNTY'S TRASH PROBLEM - AND SOLUTIONS

The average person throws away about five pounds of trash daily. That is almost one ton of trash every year! Collectively, Lancaster Countians generate more than 1100 tons of trash every day. That is over 400,000 tons every year!

Solid waste disposal has become a serious problem for our County. In the past, all of

All three of the components are equally important. A recycling program is necessary because it saves valuable landfill space, conserves energy, and is good for the environment. Waste-to-energy incineration plants recover valuable electricity from trash and reduce the volume of the trash by 90% or more, also saving landfill space. A landfill is necessary for the final disposal of incinerator ash and for items that cannot be burned or recycled.



our trash has been buried in landfills. As land becomes more scarce, the cost of this traditional method of disposal will rise. We need alternatives.

In Lancaster County, a solid waste system is being developed that is comprised of three major components. These three components – recycling, waste-to-energy and landfilling – when combined with one another will provide us with an efficient, reliable and environmentally sound trash disposal system for the future.

MINIMIZE YOUR YARD WASTE

- Grass clippings and leaves should not be put in your trash. They can be composted and used as mulch or soil conditioner in your garden and flower beds.

THINK WHEN YOU BUY

- Buy items in the grocery store that are recyclable or packaged using a recycled mate-



HOW CAN YOU HELP SOLVE THE TRASH PROBLEM?

The best way to help solve the problem is to reduce the amount of our trash. A goal has been set to reduce by 25% the volume of trash from the County. Currently only 10% of our trash is recycled. It is the responsibility of all trash producers – all of us – to reduce the volume of our waste. We can do this through recycling, smart purchasing and reducing yard waste.

RECYCLE

Recycling means separating valuable items from trash and reusing those items for the production of new products. Many items in your trash, such as aluminum cans, glass, paper, cardboard, used motor oil, car batteries and some plastics are recyclable.

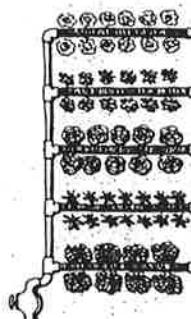


Use the Best Watering Method

While soils vary greatly in their ability to hold water, your garden and lawn should receive enough water to wet the soil to the bottom of the root zone each time you water — generally 1 inch per week. Determine this by digging a hole 5 to 6 inches deep in the watered area the day *after* watering so the water has a chance to seep in. Adjust weekly watering to your soil needs.

Avoid watering by hand — it often wastes water as there is excess runoff, and water does not penetrate beyond the top 1 inch of soil. This irrigation practice harms plants by forcing root growth too close to the surface. If you must water by hand, place a 5-gallon bucket with a few holes in the bottom next to the plant and fill it with water; when it is has drained, move it to the next plant and refill.

Properly used sprinkler systems can deliver a large quantity of water in a short time. They have the disadvantage, however, of excessive evaporation, both during watering and from the plant and soil surface. Early morning watering minimizes water loss. However, sprinkler systems that deliver the water from overhead are the most effective means of watering turfgrass. Be sure to position sprinklers to shower areas of vegetation, not driveways, streets, or patios. Water until the soil is moist 6 inches deep, usually 1 inch per week applied at one time.

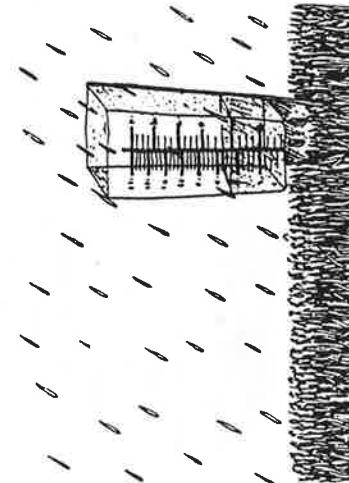


Trickle or drip irrigation systems and soaker hoses are very efficient, slowly applying water to vegetable and ornamental gardens. Soil moisture can be maintained at a level most suitable to plant uptake. If properly installed and maintained, little water is lost to evaporation or runoff and water use can be reduced by up to 50 percent. For many situations, the expense of installing a good-trickle irrigation system will be compensated by reduced water usage, less replacement of plant materials, and less work. On any irrigation system, replace leaky parts promptly.

Virginia Nurserymen's Association,
providing Professional Nurserymen's Certification

For more information on selection, planting, cultural practices, and environmental quality, contact your local Virginia Cooperative Extension Office. If you want to learn more about horticulture through training and volunteer work, ask your Extension agent about becoming an Extension Master Gardener. For monthly gardening information, subscribe to *The Virginia Gardner Newsletter* by sending your name and address and a check for \$5.00 made out to "Treasurer, Va. Tech" to The Virginia Gardner, Department of Horticulture, Virginia Tech, Blacksburg, VA 24061-0349. Horticultural information is also now available on the Internet by connecting with Virginia Cooperative Extension's gopher server at [gopher.ext.vt.edu](gopher://ext.vt.edu).

The development of this series was funded by USDA Smith Lever 3(d) National Water Quality Initiative Funds and the Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.



Measure the Quantity of Water

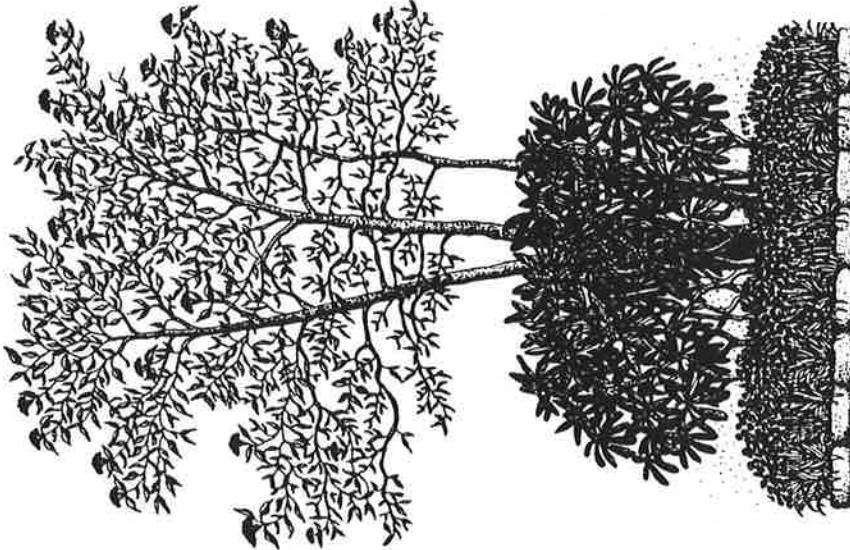
To measure the amount of water — whether from a sprinkler or rain — use a rain gauge or a tin can set in the lawn or garden area to be measured. The soil has received an inch of water when the water in the container is an inch deep.

Reprinted 1996

Publication 426-713

Virginia Cooperative Extension
Program, Virginia State, P.O. Box VTP-100, 1900 University Street, Blacksburg, VA 24061-0349

Virginia Tech
Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. C. Clark Jones, Interim Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Lauren W. Lyons, Administrator, 1890 Extension Program, Virginia State; Peter Knapp, Virginia State, P.O. Box VTP-100, 1900 University Street, Blacksburg, VA 24061-0349



Creating a Water-Wise Landscape



Virginia Cooperative Extension
Program, Virginia State, P.O. Box VTP-100, 1900 University Street, Blacksburg, VA 24061-0349

Virginia State University

Creating a Water-Wise Landscape

What is Water-Wise Landscaping?

Water-wise landscape design and management focus on working with nature and natural forces (such as rainfall) to create an aesthetically pleasing, livable landscape, while using less water from the local supply.

Minimizing the need for watering in your landscape requires careful observation, planning, and common sense. Several principles for water-wise landscaping include choosing the best design and plants, preparing soils, and watering properly for efficient water use.

Water-wise landscaping is also known as xeriscaping, a word trademarked by the National Xeriscape Council. The word is a combination of the prefix *xero-* or *xer-* meaning dry or dryness and the suffix *-scape* meaning scene or view.

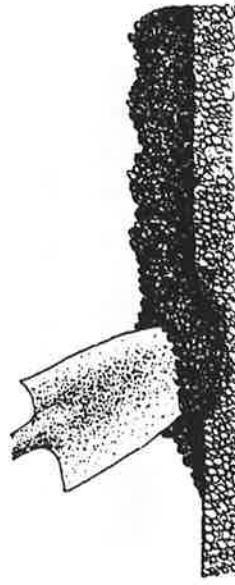
Plan Your Landscape

The first step in any successful landscape is a good plan. Observe the site and take notes on the current use of different areas or their desired use. Indicate high-use areas, desirable views, environmental concerns (such as wind direction, slopes, dense shade), and traffic flow through the yard. Sketch the property, including any permanent structures, trees, and shrubs that you plan to leave, grass areas, driveways, and sidewalks.

Based on your notes, develop a plan that meets your needs for use, appearance, and budget. Consider maintenance and water requirements in making your decisions. For example, maintaining a high-quality lawn area for entertaining will require frequent fertilizing and mowing, as well as high water use. A more maintenance-free choice for get-togethers is a deck or patio, but don't overdo the use of wood or concrete on your land. Leave plenty of vegetative surface for rain to reach the soil and soak in; otherwise, runoff and erosion problems are created. Whatever plan you develop, the cost can be distributed over a period of time if you implement your design over several years.

Prepare Soil Adequately

Good soil is the basis for healthy plants and optimum use of water. The key to good soil is the addition of organic matter, such as compost. Sandy soil will hold water and nutrients better if organic matter is incorporated. Clay will absorb water faster, reducing runoff and erosion, if it is loosened with organic matter. Incorporate approximately 2 to 3 inches of compost, shredded leaves, or other fine organic material to the soil annually.



In locations with established trees and shrubs, it is difficult to incorporate organic matter, but applying and maintaining a 2- to 3-inch layer of an organic mulch (coarse leaves, shredded bark, pine needles, or wood chips) will gradually improve the soil as the humic acid formed by the decomposing material leaches into the ground.

Select Plants Wisely

Decide on the trees, shrubs, and ground covers for your water-wise landscape based on their natural ability to grow well in your area. Select plants that do well with little or no addition of water. Consider native plants as well as introduced species for residential landscapes. Your local Extension agent and nursery personnel can help you identify suitable plants for your location.

Based on your notes, develop a plan that meets your needs for use, appearance, and budget. Consider maintenance and water requirements in making your decisions. For example, maintaining a high-quality lawn area for entertaining will require frequent fertilizing and mowing, as well as high water use. A more maintenance-free choice for get-togethers is a deck or patio, but don't overdo the use of wood or concrete on your land. Leave plenty of vegetative surface for rain to reach the soil and soak in; otherwise, runoff and erosion problems are created. Whatever plan you develop, the cost can be distributed over a period of time if you implement your design over several years.

Mulch Your Gardens

Use mulch to conserve soil moisture. Organic mulches help retain moisture so there is less need to water. They also recycle plant materials that might otherwise end up in the landfill. In addition, mulches control annual weeds that compete with desired plants for water. Organic mulches improve soil structure as they decompose and moderate the soil temperature, two factors that also help plants use water efficiently.

Use Optimum Cultural Practices

Proper mowing and fertilizing of the lawn help conserve moisture. Mowing at the proper height (do not remove more than one third of the grass at any one mowing) allows the grass to develop deeper roots that are more efficient in using soil moisture, and reduces annual weeds. Fertilizing *at the proper time* (your Extension agent or local nursery experts can help you determine this) encourages healthier turf that needs less watering.

Leaving shrubs in their natural forms reduces stress to the plants and, therefore, lessens their need for water.

Keeping weeds, insects, and diseases under control reduces the competition and stress to plants that increase their water demands.



These principles minimize the water demands in your landscape, help you save money and time, and reduce your impact on the local water supply.

Use Turfgrass Appropriately

Limit the amount of turfgrass you use in the landscape to areas in which grass provides a functional benefit (i.e., a play area for children) that exceeds the benefit of other ground covers or surfacing materials. Select turfgrass suitable to your climate and site.

Design the grass area to make watering easier. Long, narrow areas and small, odd shapes are hard to water efficiently. Avoid turf in the strip between the sidewalk and the road; most irrigation water will land on the paved surfaces and run off.

What You Can Do In Your Community

By working together, the people in a community can plan and create effective systems for managing hazardous wastes. Many communities have begun to sponsor Household Hazardous Waste collection days. These efforts have helped reduce the amount of hazardous waste in many areas while heightening public awareness of the problem.

Successful collection efforts in many cities have helped officials protect their community's wastewater treatment plants and groundwater from hazardous waste contamination. Many communities were able to collect large quantities of hazardous materials on the strength of a one or two day effort. If your community has a program for disposal of hazardous wastes, please support it.

We also encourage you to:

- Learn as much as you can about your wastewater treatment plant and share that information with your family and friends. Clean water is for everyone.
- Learn about your community's landfill system and special programs for the disposal of hazardous wastes.

- Contact your area's hazardous waste agency. They can provide information on companies which are licensed to handle hazardous wastes along with possible funding sources for such efforts.

WHAT THE FUTURE HOLDS

In Pennsylvania we are blessed with an abundance of springs, lakes, and streams. We have come to expect clean water and a safe environment as a part of our everyday lives. The PA Department of Environmental Protection provides support for Household Hazardous Waste Collection programs throughout the Commonwealth. These programs include the licensing of contractors, the registration of projects, and grants to municipalities. For additional information on the safe use, storage, and disposal of hazardous household products, contact:

Pennsylvania Environmental Council, Inc.
Household Hazardous Waste Hotline
1-800-322-9214

One of the DEP Regional Offices, as shown below:

* Southeast Regional Office
Lee Park Suite 6010 - 555 North Lane
Conshohocken, PA 19428-2233
(610) 832-6212

* Northeast Regional Office
Two Public Square
Wilkes-Barre, PA 18711-0790
(717) 826-2516

* Southcentral Regional Office
One Ararat Boulevard
Harrisburg, PA 17110
(717) 657-4588

* Northcentral Regional Office
Suite 101, 208 West Third Street
Williamsport, PA 17701
(717) 327-3653

* Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
(412) 442-4120

* Northwest Regional Office
230 Chestnut Street
Meadville, PA 16335-3481
(814) 332-6348

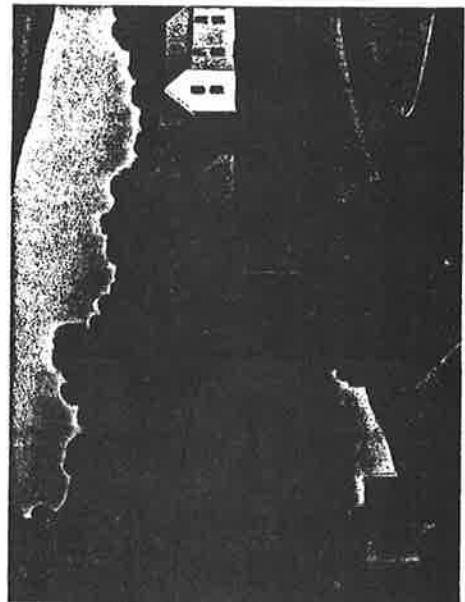
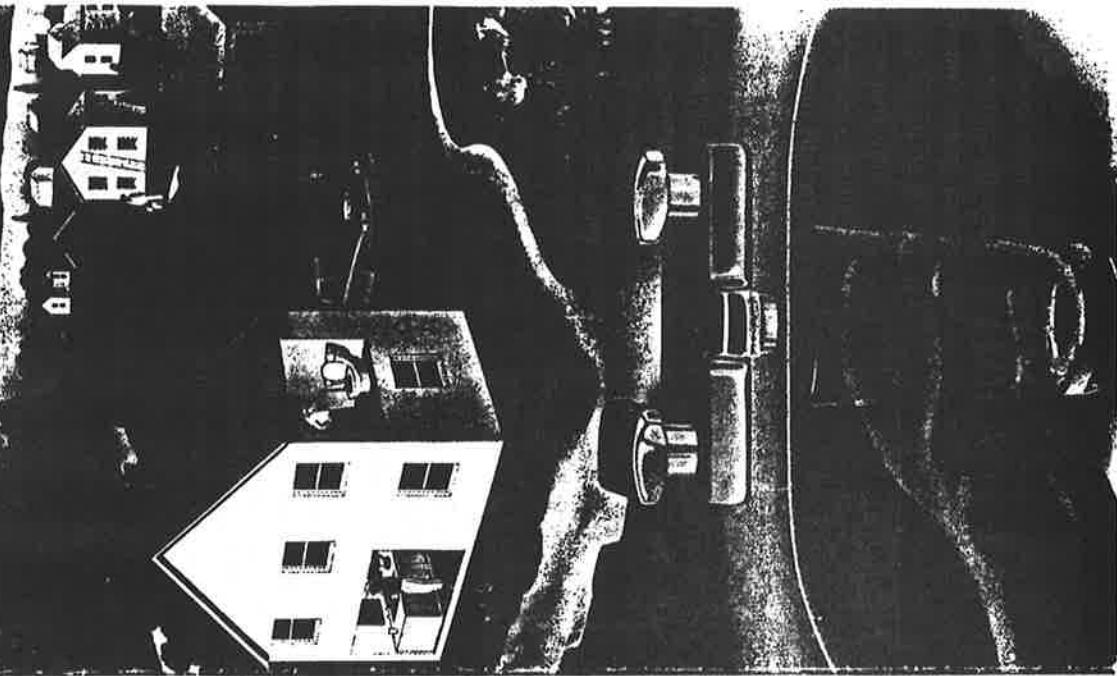
Department of Environmental Protection
Bureau of Land Recycling and Waste Management
Division of Hazardous Waste Mgmt.
P.O. Box 6471
Harrisburg, PA 17105-8471
(717) 787-6239

Information on the waste chart is general in nature. The state and local governments may have requirements and/or restrictions which may be different from those shown on the chart.

Tom Ridge
Governor

James M. Seif
Secretary

HOUSEHOLD DANGERS WASTE

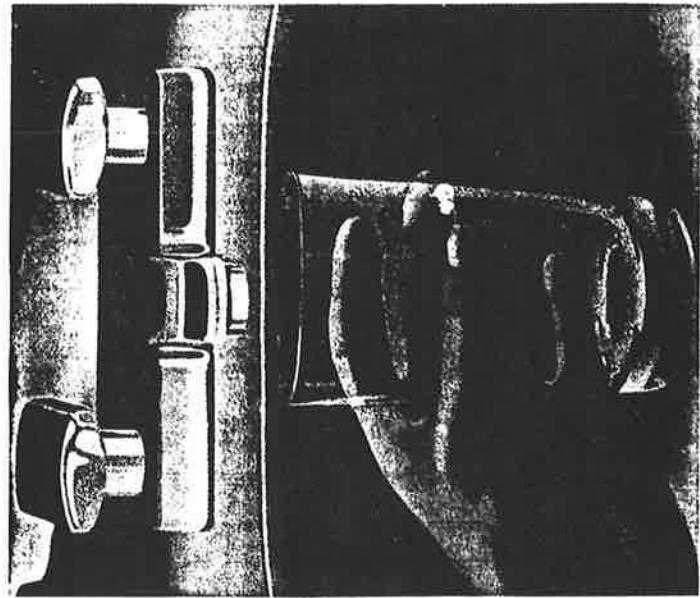


Are You Poisoning Your Water?

If someone were to drop a poisonous substance into your community's water supply, the act would be considered a serious crime and a state of public emergency would be declared.

But when you dump a can of paint thinner down the drain or throw out an old car battery with the trash, no alarms are sounded, no news flashes are issued. Yet, the impact on your water resources could be just as disastrous.

That is not a far-fetched statement. The average household contains between three and ten gallons or ten to forty liters of materials that are hazardous to human health or to the natural environment. Collectively, these materials can poison our water if they are not stored carefully and disposed of properly.



What Is A Hazardous Material?

Many government environmental agencies consider a substance hazardous if it can catch fire, if it can react or explode when mixed with other substances, if it is corrosive, or if it is toxic.

This definition includes many things that you probably are storing right now in your garage, basement, bathroom, or kitchen. Some, like paint thinner or car batteries, are pretty obvious, but there are many that you might not ordinarily think of such as polishes, insecticides and glues.

Dangers Of Hazardous Waste

The improper disposal of household wastes can cause problems for the entire community. Wastes can be explosive or highly flammable. Sewers have exploded and garbage trucks have burned because people have carelessly discarded flammable or reactive wastes.

Hazardous wastes can also be corrosive. The acid from discarded auto batteries can eat away many substances. Some wastes are poisonous to humans or wildlife, while others can cause cancer, birth defects or other serious medical problems.

First: Reduce The Amount

You do not need a Ph.D. in chemistry to reduce the use of hazardous wastes in your home. The following suggestions can help:

- Before you buy a product, read the label and make sure that it will do what you want. Once you buy something you are responsible for disposing of it properly.
- Do not buy more than you need. That way, you will not need to dispose of the surplus.
- Read and follow directions on how to use a product and dispose of the container. (There is a good reason why the labels say "do not incinerate" or "do not mix with bleach.")
- Use safer substitutes when they are available.

Second: Take Care Of The Wastes

Even if you reduce the wastes that must be dealt with as outlined above there is still the question of what to do with what is left over.

Recycling is an excellent way of handling some hazardous wastes. Used motor oil, paint thinners and some other solvents can be refined and reused just as aluminum cans are. Local civic groups can help you identify recycling programs.

Municipal or commercial incineration is another effective means of dealing with some hazardous wastes. However, a specially designed incinerator is needed to destroy hazardous materials. "Incinerators" in your home, such as your fireplace or woodstove, can not get hot enough to destroy hazardous wastes and should never be used to destroy wastes.

Take your household hazardous wastes to a licensed contractor or recycling agency which may be located through the yellow pages. If such a group does not exist, your local wastewater treatment operator may be able to give you more information on the disposal of liquid waste. Your local sanitation department may be able to give you more information on the disposal of solid wastes.

The **Household Hazardous Waste Chart** will guide you in disposing of potentially hazardous material around your home. You should display this chart in a convenient location. Remember to never dump hazardous wastes on the ground, and always check the chart before pouring them down the drain.

Where Do We Put Them?

One of the worst ways to dispose of many hazardous materials is to "just dump them down the drain." Wastewater treatment plants are not designed to handle certain types of hazardous wastes.

Unfortunately, disposing of wastes in a landfill has not proven an effective solution either. Without special design, the modern sanitary landfill is not equipped to accept hazardous wastes. Hazardous wastes improperly disposed of in a landfill can pollute the environment through the groundwater, surface water and air. If the public cannot dispose of most hazardous wastes in the sewer system or a landfill, what can be done?

This brochure describes some preventive measures you can take in your home to reduce the quantity of waste you must dispose. The **Household Hazardous Waste Chart** indicates the best way of dealing with most hazardous materials found in the home.

About the Chesapeake Bay Program

The Chesapeake Bay Program is leading the way in the protection and restoration of the nation's largest estuary - the Chesapeake Bay. This unique partnership includes the states of Maryland, Pennsylvania, Virginia; the District of Columbia; U.S. Environmental Protection Agency representing the federal government; the Chesapeake Bay Commission, a tri-state legislative body, and participating advisory committees.

In the historic 1987 Chesapeake Bay Agreement, the Chesapeake Bay Program partners set a goal to reduce the nutrients nitrogen and phosphorus entering the Bay by 40 percent by the year 2000. In the 1992 Amendments to the Chesapeake Bay Agreement, partners agreed to maintain the 40 percent goal beyond the year 2000 and to attack nutrients at their source - up stream in the tributaries. The goal of reducing nutrients in the Chesapeake Bay is intended to help achieve the Chesapeake Bay Program's primary mission - to restore and protect the Bay's living resources.

The Toxics Subcommittee of the Chesapeake Bay Program is leading the effort to reduce chemical contaminants from entering the Bay with an ultimate goal of a "Bay Free of Toxics". This goal was set by the Chesapeake Bay Program in 1994 as part of its *Chesapeake Bay Basinwide Toxics Reduction and Prevention Strategy*. The Strategy recognizes the importance and encourages the implementation of pollution prevention activities to achieve this goal.

The Chesapeake Bay Program Local Government Advisory Committee encourages local government action to protect and restore the Chesapeake Bay and its rivers. The Local Government Advisory Committee seeks to improve communication by providing information and technical assistance to the 1,650 local governments in the Bay region, and serves as the local government voice in the Bay Program. In 1996, with the Chesapeake Bay Program's adoption of the *Local Government Participation Action Plan*, the LGAC is supporting the development of tools and techniques that will assist local governments in their efforts to protect local natural resources and contribute to the protection and restoration of the Chesapeake Bay.

Acknowledgments

The Chesapeake Bay Program's Toxics Subcommittee and the Chesapeake Bay Local Government Advisory Committee would like to thank members of the Local Government Pollution Prevention Focus Group for their insight and input into the development of the Local Government Pollution Prevention Toolkit. Members of the Focus Group include **Jeanne Armacost**, Baltimore County, Maryland, **Marc Aveni**, Prince William County Cooperative Extension Service, Virginia, **Sharon Baxter**, Office of Pollution Prevention, Virginia Department of Environmental Quality, **Michele Blake**, Office of Pollution Prevention and Compliance Assistance, Pennsylvania Department of Environmental Protection, **Benji Brackman**, Fauquier County, Virginia, **Larry Coffman**, Prince George's County, Maryland, **Kelly Eisenman**, U.S. Environmental Protection Agency Chesapeake Bay Program Office, **Naomi Friedman**, National Association of Counties, **Tom Griffin**, Office of Pollution Prevention, Virginia Department of Environmental Quality, **Bicky Redman**, Adams County, Pennsylvania, **Sarah Richardson**, Alliance for the Chesapeake Bay, **Aron Trombka**, Montgomery County, Maryland, and **James Wheeler**, Pennsylvania Association of Township Supervisors.

We would also like to thank the Toxics Subcommittee's Pollution Prevention Workgroup and those local government representatives that provided information that contributed to the case studies and local government highlights that are included throughout the Toolkit.



The Chesapeake Bay Program is the cooperative partnership among the states of Maryland, Pennsylvania, Virginia; the District of Columbia; the Chesapeake Bay Commission, a tri-state legislative body; the U.S. Environmental Protection Agency, representing the federal government; and participating citizen advisory groups.

www.chesapeakebay.net/bayprogram