Pollution Prevention Toolkit

POLLUTION PREVENTION, also known as **P2**, is the best way to keep the environment clean and protect your family's health, as well as reduce waste and conserve resources.

Pollution Prevention:

- Saves money
- Protects the quality of Colorado's air, water and land
- Makes homes and neighborhoods healthier
- Saves resources
- Improves quality of life

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What Is Pollution Prevention?

the best way to keep the environment clean and protect your family's health, as well as save money, reduce waste and conserve resources. Pollution and waste are not created to begin with, so nothing has to be reused, recycled or thrown away.

It's like eating ice cream from a cone. That way, there is no waste. Although pollution prevention is preferred, reuse and recycling are still good alternatives. For example, eating

ice cream from a reusable or recyclable bowl is far better than using a disposable bowl that must be thrown away.

Energy Flows - You Have the Power

To save money, conserve natural resources and prevent pollution:

Consider switching to compact fluorescent lamps, which use about 75% less energy than incandescent lamps, emit 90% less heat and last longer.

- Install an evaporative cooler, which uses about one-fourth the energy of a conventional air conditioner.
- Set your water heater to 120°. Insulate it and hot water pipes.
- Use shades or plant trees to shade windows, lowering indoor temperatures by as much as 20°
- In the cooler months, lower your thermostat by 1° for every hour you will be away from home.

- Buy energy-efficient (Energy Star®) appliances, computers, and office machines.
- Buy electricity from renewable sources.
- Maintain heating and cooling systems.
- Use cold water in clothes washer when possible.
- Install energy-efficient windows and storm doors.
- Replace furnace filters regularly and clean unit periodically.
- Buy an energy-efficient vehicle.

Contact your local utility company
for a free or low-cost energy audit or visit:
http://homeenergysaver.lbl.gov for a do-it-yourself home energy audit.

Visit www.simplyinsulate.com/howmuch.html to determine your home's insulation needs.

Water Conservation

INDOORS:

- Repair dripping faucets. At a rate of one drop per second, you can expect to waste 2700 gallons of water per year.
- Detect a leak in your toilet by adding 4 or 5 drops of food coloring to the tank. If color appears in the bowl without flushing, the tank is leaking.
- Operate automatic dishwashers only when they are fully loaded.
- When doing laundry, set the water level of the washing machine for the size of load.
- Don't let water run while shaving or washing your face. Brush your teeth while waiting for the water to get hot.
- Consider low-flow toilets.
- Install water-saving shower fixtures and faucet aerators.

OUTDOORS:

- Adjust your sprinklers to water only the lawn and garden not your house, sidewalk, driveway or street.
- Don't hose off your sidewalks and driveway. Use a broom instead.
- Use a rain gauge to determine how much rain or watering your lawn has received. Only water when needed.
- Consider taking your car to a commercial car wash, which will use, on average, less than half the water of washing it with a hose in the driveway. Car washes also treat or recycle the dirty wash water.
- If washing a car at home, use biodegradable, phosphate-free soap and water from a bucket. Use a hose only for the final rinse.
- Wash your car over lawn or gravel to prevent polluted runoff from entering storm drains.
- Raise your lawn mower to its highest level. Longer grass shades roots and requires less water.

Pollated Ranoff

Urban and suburban residents in Colorado can play a major role in preventing water pollution. Home chores that often start out innocently enough — like fertilizing the lawn and applying pesticides, changing the car's oil or walking the dog — can pollute the state's water resources.

When not performed with care, contaminants from these activities can be picked up from yards and

streets by rainwater, snowmelt and overwatering, then carried off to be deposited in lakes, rivers and streams. Sometimes they flow directly to these bodies of water; sometimes they first travel through storm drains. Either way, there is no treatment process along the way.

For more information contact the Colorado Water Protection Project at 303-861-5195 or www.ourwater.org.

Landscaping

When landscaping your yard, take steps to prevent polluted runoff.

- Replace high-maintenance lawn with drought-resistant grass strains.
- Select native plants, which require less water, fertilizer and pesticide.
- Plant pest-resistant species and species that attract beneficial insects.
- Incorporate a wide variety of plants to disperse potential pest problems.
- Use mulch to reduce weeds and conserve water.
- Consider a Xeriscape™ yard or garden.

Contact Colorado State University Cooperative Extension at 970-491-6281 or visit www.cerc.colostate.edu/titles/Guides4.pdf for information on protecting water quality.

Lawn & Garden Maintenance

Follow earth-friendly yard and garden maintenance practices.

- Hand pull weeds, especially before seeds are produced.
- Remove insects by hand or use insecticidal soap.
- Never wash lawn clippings or leaves down the storm drain. Yard waste can clog storm sewers as well as add excess organic matter to local water resources.
- Consider composting lawn waste.
- Consider biological pest control, such as beneficial insects.
- Water your lawn in the early morning or late evening.
- Leave lawn clippings on the yard to act as a natural fertilizer.



Visit www.cerc.colostate.edu/titles/Guides3.pdf for information on fertilizing and www.cerc.colostate.edu/titles/Guides2.pdf for information on alternative pest management.

Lawn & Garden Products

- Use pesticides, herbicides and fertilizers only as directed. Excess amounts can flow off the land and into local water resources with the next rainfall.
- Always follow label directions for use and disposal. Remember, the label is the law. For more information contact the Hazardous Waste Hotline at 303-692-3320.
- Do not apply yard and garden products if rain is likely since most will be washed away. Also, avoid overwatering after application.
- Sweep any product from sidewalks and driveways back onto the yard where it can do its work.
- Consider using natural fertilizers such as compost or bone meal.
- Consider using slow-release nitrogen fertilizer.

Visit www.cerc.colostate.edu/titles/Guides1.pdf for information on pest management.

Air Pollation

- Consider retrofitting your wood-burning fireplace with natural gas.
- Keep your car well tuned.
- Don't overfill your gas tank stop at the click.
 - Report smoking vehicles by calling 303-692-3211.

Keep lawn equipment well maintained or use manual tools.

Buy water-based paint, stains and cleaning products.

Check your home for radon using a kit available at hardware stores.

Transportation

- Reduce the use of your car.
- Use public transportation or share a ride.
- Walk or ride a bike.
- Telecommute to work.
- Live close to work.
- Group several errands into one trip.

Reduce your transportation-related environmental impacts.

- Keep your tires properly inflated.
- Empty your trunk of unneeded items and weight to improve mileage.
- Recycle used motor oil.
- Dispose of used automobile products like antifreeze, transmission fluid and battery acid at your community's household hazardous waste center. (See page 21 for more information.)
- Use kitty litter to soak up oil spills.

Solid Waste

- When making purchases, buy only what you will use.
- Repair, rather than replace, broken items.
- Use reusable gift bags.
- Use cloth napkins instead of paper.
- Avoid disposable items.
- Consider "green" gifts such as rechargeable batteries or a programmable thermostat.
- Reduce unwanted junk mail by sending your name(s) and home address with your signature to:
 - Mail Preference Service Direct Marketing Association P.O. Box 9008 Farmingdale, NY 11735-9008

Household Hazardous Waste

Know your labels: Choose the least toxic product for the job.

Poison—highly toxic or poisonous

Danger—extremely flammable, corrosive or highly toxic

Warning or Caution—moderately or slightly toxic



- Follow disposal directions for empty containers.
- Never mix household cleaners.
- Buy household products in concentrated form to reduce packaging waste.
- Buy multipurpose cleaners.
- Buy only what you will use.

For alternative, nature-friendly cleaners, contact the Colorado Pollution Prevention Program at 303-692-2977.

Visit www.cdphe.state.co.us/hm/hhwcollect.asp for information about household hazardous waste programs in your community.



Consumer Awareness



REMEMBER: WHEN YOU SHOP, PAY FOR THE PRODUCT, NOT THE PACKAGE.

- Buy quality products that will last.
 - Call stores before you shop to check product availability.
- Take your own bags when shopping.
- Buy clothes and other items from a charitable organization.
- Buy articles made with recycled materials.
- Ask that stores carry articles made from recycled materials.
- Consider organic foods.
- Donate unwanted items to charity.
- Buy from local sources to reduce transportation-related pollution.

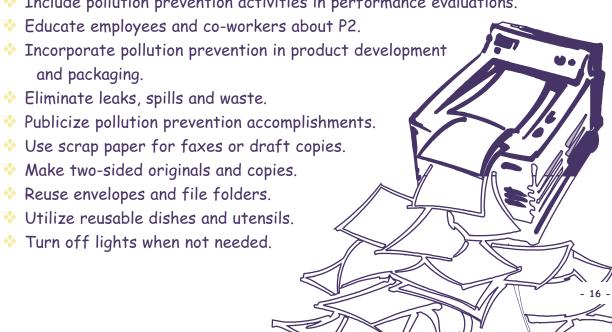
Outdoor Activities

- Practice "leave-no-trace" camping. For hints visit www.lnt.org.
- Always pick up pet waste and dispose of it by wrapping securely and putting it in the trash or flushing it down the toilet.
- Vacation close to home.
- Use an electric barbecue lighter.
- Keep boats and recreational vehicles well tuned.
- Use nontoxic pest traps.
- Share camping equipment with friends and neighbors.
- Stay on marked trails.
- Pick up your trash at home and away.
- Obey all fire restrictions.
- Adopt a stream, trail or highway.

Pollation Prevention in the Workplace

Use electronic communication such as e-mail, instead of paper.

Include pollution prevention activities in performance evaluations.



- Buy recycled-content products.
- Support flexible scheduling.
- Support telecommuting for employees.
- Consider a conference call instead of a meeting.
- Buy Energy Star®-rated office equipment.
- Encourage vendors to practice P2.
- ♦ Xeriscape[™] outdoor areas.
- Turn off computer equipment overnight and on weekends.
- Explore an Environmental Management System (EMS) for your organization.

Contact the Colorado Pollution Prevention Program at 303-692-2977 for pollution prevention information or a free energy assessment.

Just for Kids

- Walk, ride your bike, carpool or take the bus to school and activities.
- Donate outgrown clothes and toys to charity.
- Start or join an environmental club.
- Buy pre-owned clothes.
- Buy used books or use the library.



- Buy toys that last a long time.
- Reuse lunch containers.
- Encourage P2 activities in your home.



Be a P2 Champion

- Ask your grocer to stock products with less packaging.
- Support organizations that promote pollution prevention.
- Support hazardous waste collection and recycling programs.
- Talk to friends and neighbors about P2 choices.
- Educate local businesses about pollution prevention.

Teach children to respect the environment and encourage them to spend time outdoors.

Learn where your food comes from and how it is produced.

Buy from local sources.



P2 Isn't New

- Haste makes waste.
- A stitch in time saves nine.
- A penny saved is a penny earned.
- Use up, wear out, make do or do without.
- Less is more.
- Think before you act.
- Clean up as you go along.
- A person who knows enough is enough has enough.



For More Information

AIR POLLUTION

Indoor Air Hotline 800-438-4318 www.epa.gov/iaq/iaqinfo.html

ENERGY

U.S. Department of Energy www.eren.doe.gov/consumerinfo

Colorado Governor's Office of Energy Management and Conservation www.state.co.us/oemc

Xcel Energy Windsource 1-800-824-1688

Energy Star Information 1-888-STAR-YES www.energystar.gov

HOUSEHOLD HAZARDOUS WASTE

www.cdphe.state.co.us/hm/hhwcollect.asp 303-692-3320

JUST FOR KIDS

www.epa.gov/students www.epa.gov/kids

SOLID WASTE

Colorado Recycles 303-231-9972 www.colorado-recycles.org

TRANSPORTATION

U.S. Environmental Protection Agency www.epa.gov/epahome/trans.htm

WATER QUALITY AND CONSERVATION

Colorado Nonpoint Source Program 303-692-3570 www.cdphe.state.co.us/wq/nps/npshom.asp

YARD AND GARDEN

 $Xeriscape^{TM}$ Colorado!, Inc. www.xeriscape.org

C.S.U. Cooperative Extension www.ext.colostate.edu

Colorado Water Protection Project

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