



Environmental Achievement for Restaurants

What is PACE?

The **PACE Program** provides education and recognition for environmental achievement. Businesses and municipalities in Boulder County and portions of Weld County in Erie and Longmont can join. PACE offers:

- Free assessments to identify waste reduction, water conservation, and energy efficiency options.
- Information and assistance to meet your business needs.
- Public recognition for your



environmental efforts.

Why Participate?

Compliance - Safe food handling, preparation, and storage help prevent waste and keep you in compliance with food safety regulations.

Cost Savings - Less waste means lower disposal and operating costs. Efficient use of water, energy, and materials saves money.

Public Image - Environmental practices affect your image with customers, the community, and regulatory agencies.

How Do We Become PACE-Certified?

PACE recognizes businesses that complete all of the mandatory criteria and at least two of the elective criteria listed below:

Mandatory Criteria

- **Recycle** all of the following that your business generates: glass bottles, plastic bottles, aluminum cans, newspapers, office paper, and cardboard.
- **Use reusable cloth towels** for cleaning instead of paper products.
- **Use less toxic, multipurpose cleaners** and buy in concentrate form.
- **Train** appropriate staff on good environmental practices including safe use of cleaning products, waste reduction, and recycling.
- **Use best management practices for grease**, including:
 - Keep fatty liquids from going down the drain.
 - Wipe up grease spills - do not hose grease down the floor drain.
 - If grease is a problem, install a grease interceptor or trap to collect grease from wastewater. Pump out grease and solids from the interceptor/trap regularly (when 2/3 full or every four months).
 - Have waste oil and grease picked up by a rendering company. Keep grease container covered, and fix all leaks.
- Implement at least one *energy conservation* measure.
- Implement at least one *water conservation* measure.
- Commit to a follow-up pollution prevention visit each year.
- Share pollution prevention ideas with at least one other business.
- Confirm that your business is in compliance with local, state, and federal environmental and health regulations, including the *Colorado Retail Food Establishment Rules and Regulations*.

Elective Criteria

- Buy condiments in bulk and use public health-approved refillable dispensers instead of individual packets (salt, pepper, sugar, catsup, etc.).
- Purchase paper or plastic products made from recycled materials.
- Use reusable linen and dinnerware, and create incentives to reduce breakage and accidental disposal.
- Offer discounts for customers to use refillable mugs, cups, or to-go containers. Have employees use reusable mugs and cups.
- Have food wastes collected by local farmers or haulers for composting.
- Donate acceptable food to a local food bank or relief program.
- Reward employees for waste reduction and resource conservation ideas.

- Use recyclable to-go containers.



Local Restaurants Get Environmental Results

Recycling Cuts Trash in Half

For the **Flagstaff House**, located up a winding mountain road in Boulder, recycling didn't seem to be an option. But PACE staff did the legwork to find a local recycling contractor who would make the trip. Since the Flagstaff House was new to recycling, the restaurant qualified for the city of Boulder's "three months free" recycling incentive. Employees quickly learned to separate recyclables, including commingled containers, mixed paper, cardboard, and newspaper. Within one month, the restaurant had reduced its trash volume by over 50 percent!

Humidity Affects Energy Use

By installing humidity control units in walk-in coolers, **Applebee's** restaurants in the region have decreased energy costs and increased food shelf life. The units remove excess moisture and help to decrease the workload on the cooler to maintain the proper temperature. Reduced moisture also inhibits bacteria growth, keeping food safer and fresher.

At Applebee's in Louisville, the walk-in temperature went down by 4° after the humidity control units were in place. Applebee's met the new Colorado food safety regulations reducing refrigerated food temperatures from 45° to 41° without increasing energy usage.

14 Waste Reduction Tips

Purchasing

- Let suppliers know you are serious about reducing waste. Ask them to minimize packaging, take back shipping boxes for reuse, and use reusable containers.
- Buy in bulk when sales volume and storage space allow. Examples:
 - Buy shelf-stable food supplies
 - Buy meats in bulk or uncut form and cut to size whenever the yield is greater than or equal to that of pre-portioned meats.
 - Buy shelled, pasteurized eggs in bulk if using 3 or more cases per week (hand-shelled eggs can waste up to 30% of the egg white)
- Serve beverages from a beverage gun or dispenser, and buy bar mixes in concentrate form.
- Buy items like pickles, mayonnaise, and salad dressings in plastic-lined cardboard, Cry-o-vac, or foil pouches instead of hard plastic pails or buckets, unless buckets are reusable.
- Find reusable alternatives to disposable products such as coasters, ashtrays, and placemats.

Inventory

- Check deliveries for rotten or damaged product, and return any substandard product. Contents of dented cans may not be safe to use.
- Use older stock first (first in, first out), and arrange storage areas to allow labeling and easy access to products.
- Clean storage areas, coolers, and freezers regularly to recover food that has fallen behind shelves.

Food Preparation and Storage

- Store raw vegetables, freezer foods, and other perishables in reusable airtight containers to prevent dehydration, freezer burn, and spoilage.
- Revitalize wilted vegetables by trimming off the bottom of the stalk and immersing in warm water (100° F) for 15 to 20 minutes.
- Track business volume and customer preferences to avoid over-prepping and waste. Adjust portion size if meals are consistently returned unfinished.
- Find other uses for leftover food (e.g. stale bread for croutons or bread pudding, meat and vegetable trimmings for soup stock).
- Use public health-approved techniques for keeping hot and cold food stored at proper temperatures to minimize waste due to spoilage.
- Cool hot foods in an ice bath before refrigerating to get them to the proper temperature and keep the cooler from working overtime.

The key to a successful environmental program is **training and involving employees**. Teach new employees your recycling and waste reduction procedures. Encourage staff to make suggestions for reducing waste. This will result in higher productivity, better morale, and cost savings.

Keep it Clean, Inside and Out

Many cleaning products contain hazardous chemicals that can harm the person using the product. Common ingredients such as degreasers, bleach, and ammonia can cause eye and skin irritation and burns. Cleaning wastes can also cause water pollution. Follow the tips below and in the *Stormwater Quality Protection* section on the back of this page to reduce waste and protect employee health and water quality.

- Avoid using bleach for cleaning except on surfaces that must be sanitized to meet Boulder County Public Health standards.
- Clean and service equipment regularly to keep it in good working order and reduce energy costs.
- Clean fryers and filter the oil daily. Built-up carbon deposits on the bottom of the fryer act as an insulator that forces the fryer to heat longer, wasting energy and causing oil to break down sooner.
- Do not wash floor mats or kitchen equipment outside. Take floor mats to a local car wash or run them through the dishwasher for cleaning.
- Dump mop water down a drain connected to the sewer, never outside.

“Greener” Cleaning at the University of Colorado

The University of Colorado at Boulder (CU Boulder) Department of Housing is taking steps to use less toxic, more environmentally friendly cleaning products in its residence halls and dining facilities. They have researched alternatives for their all-purpose cleaner, degreaser, glass cleaner, oven cleaner, and lime remover. After reviewing a lot of material safety data sheets (MSDS) to verify company claims, they have found very few “green” kitchen cleaning products. Two product lines, Rochester Midland’s EnviroCare and Naturally Yours, have been good enough to put to a longer-term test. The department also is considering making its own non-toxic glass cleaner using vinegar and water. Department of Housing staff will evaluate the performance and costs of the different products, and hope to make a permanent switch to less hazardous products early in 2004.



Biological Treatment of Grease Traps: Any Environmental Concerns?

The Problem with Grease

Grease and oily wastewater from food service facilities can clog sewer drains, causing sewer backups and health and environmental concerns. Restaurants must clean grease traps and interceptors regularly to prevent blockages. Cleaning should include removal of the upper “floating” grease layer, as well as solids that have built up on the floor of the trap or interceptor.

Biological Do’s & Don’ts

Many restaurants have begun to use regular biological treatment, also called bioaugmentation, to degrade grease and reduce buildup. These products can help to reduce grease problems if you follow some guidelines to avoid pushing grease down the line.

DO carefully review the product information and Material Safety Data Sheet (MSDS).

DO consider only products that are not highly acidic or basic (look for a pH between 6 and 10).

DON’T use products that rely on solvents, surfactants, enzymes, or emulsifiers. These products liquefy the grease so that it flows downstream, where the grease resolidifies on sewer system walls, causing blockages.

DO continue regular cleaning and removal of grease and solids from the grease trap or interceptor. The biological treatment may allow reducing the cleaning frequency.

Stormwater Quality Protection

Rainwater and snow melt flow through storm drains directly to local water sources without any treatment. Stormwater can pick up pollutants such as grease and trash as it travels through alleys and across parking lots, causing water pollution in our local streams and waterways. Businesses can be fined for dumping or allowing wastes to flow into the storm drain.

Only rainwater and snow melt should go down the storm drain!

Best Management Practices

Best Management Practices (BMPs) are specific steps to prevent stormwater pollution. The BMPs address not only direct flow of pollutants to storm drains, but also “threatened discharges” where there is a high probability for stormwater pollution (such as a leaking grease bin or any spills or wastes that are not actively being cleaned up).

All restaurant staff should follow these BMPs and take steps to prevent pollutants from going down the storm drain:

- Use only “dry” clean-up methods outside such as sweeping up debris, using absorbents, or collecting and wet-vacuuming liquid waste. Never hose down dumpster areas, mats, alleys, sidewalks, or outdoor spills.
- Do not pour or dispose of any liquids or materials outside on the ground, in the street, or down storm drains. Non-hazardous liquid wastes should go down an indoor drain connected to the sanitary sewer.
- Clean all equipment including floor mats indoors or at a professional facility. Floor mats can be cleaned in the dishwasher or at a car wash.
- Keep outdoor areas neat and clean. Sweep around work areas after each shift. Bag and dispose of non-hazardous solid waste in the trash. Keep dumpster and grease bin lids closed.
- Clean up spills or leaks quickly and thoroughly. For spills of liquids, use the “3-Step Method”:
 - 1) Spread absorbents on the spill.
 - 2) Sweep up the absorbed material and dispose of the wastes properly.
 - 3) If residues remain, mop up and dispose of mop water into a sanitary sewer.
- Work with PACE to stencil storm drains close to the restaurant to educate employees that wastes will flow directly to the creek.
- Specify in all service contracts and property leases that contractors and lessees must comply with applicable stormwater BMPs in the conduct of their services or occupancy.

Watershed Approach to Stream Health (WASH)

Several municipal governments in the Boulder Creek and St. Vrain watersheds formed the Watershed Approach to Stream Health (WASH) Project to cost-effectively meet stormwater regulations and the region’s water quality needs. Participants include Boulder County; the cities of Boulder, Longmont and



Louisville; and the towns of Superior and Erie. WASH is partnering with the PACE Program to help municipal operations and businesses implement stormwater BMPs.

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Waste Reduction Resources

EPA EnergyStar Small Business
1-888-STAR YES

www.epa.gov/smallbiz/

National Restaurant Association
1-800-424-5156

www.restaurant.org

Food Service Pollution Prevention

<http://wrrc.p2pays.org/p2rx>

Recipes to Prevent Waste in the
Restaurant, King County WA

www.p2pays.org/ref/20/19006.pdf

Restaurant Guide to Waste Reduction
and Recycling, published by
City/County of San Francisco

[www.ciwm.ca.gov/Publications/Biz
Waste/44198016.pdf](http://www.ciwm.ca.gov/Publications/BizWaste/44198016.pdf)

Colorado Guide to Environmental
Regulations for Restaurants and Food
Service Businesses

[http://www.cdph.state.co.us/ap/down/r
estguideweb.pdf](http://www.cdph.state.co.us/ap/down/restguideweb.pdf)

Grease Information – Contact PACE
for a video and an educational Grease
Control poster with text in English
and Spanish.

Water Conservation – Contact PACE for a fact sheet on Water Conservation Measures for Restaurants and other resources